HOUSE OF REPRESENTATIVES
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113TH CONGRESS } HOUSE OF REPRESENTATIVES { REPORT
2nd Session SENATE 113–_____

WATER RESOURCES REFORM AND DEVELOPMENT ACT OF 2014

_____, 2014.—Ordered to be printed

_____, from the committee of conference, submitted the following

CONFERENCE REPORT

[To accompany H. R. 3080]

The committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H. R. 3080), to provide for improvements to the rivers and harbors of the United States, to provide for the conservation and development of water and related resources, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its disagreement to the amendment of the Senate and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the Senate amendment, insert the following:

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Water Resources Reform and Development Act of 2014".

(b) TABLE OF CONTENTS.—

Sec. 1. Short title; table of contents.
Sec. 2. Definition of Secretary.

TITLE I—PROGRAM REFORMS AND STREAMLINING

Sec. 1001. Vertical integration and acceleration of studies.
Sec. 1002. Consolidation of studies.
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Sec. 1004. Removal of duplicative analyses.
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Sec. 1007. Expediting approval of modifications and alterations of projects by non-Federal interests.
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Sec. 1015. Contributions by non-Federal interests.
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Sec. 1017. Acceptance of contributed funds to increase lock operations.
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Sec. 1019. Clarification of in-kind credit authority.
Sec. 1020. Transfer of excess credit.
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Sec. 1023. Additional contributions by non-Federal interests.
Sec. 1024. Authority to accept and use materials and services.
Sec. 1025. Water resources projects on Federal land.
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Sec. 1049. Applicability of spill prevention, control, and countermeasure rule.
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Sec. 1051. Interstate water agreements and compacts.
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Sec. 2002. Project delivery process reforms.
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Sec. 2007. Inland waterways oversight.
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SEC. 2. DEFINITION OF SECRETARY.

In this Act, the term "Secretary" means the Secretary of the Army.

TITLE I—PROGRAM REFORMS AND STREAMLINING

SEC. 1001. VERTICAL INTEGRATION AND ACCELERATION OF STUDIES.

(a) IN GENERAL.—To the extent practicable, a feasibility study initiated by the Secretary, after the date of enactment of this Act, under section 905(a) of the Water Resources Development Act of 1986 (33 U.S.C. 2282(a)) shall—

(1) result in the completion of a final feasibility report not later than 3 years after the date of initiation;

(2) have a maximum Federal cost of $3,000,000; and

(3) ensure that personnel from the district, division, and headquarters levels of the Corps of Engineers concurrently conduct the review required under that section.

(b) EXTENSION.—If the Secretary determines that a feasibility study described in subsection (a) will not be conducted in accordance with subsection (a), the Secretary, not later than 30 days after the date of making the determination, shall—

(1) prepare an updated feasibility study schedule and cost estimate;

(2) notify the non-Federal feasibility cost-sharing partner that the feasibility study has been delayed; and

(3) provide written notice to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives as to the reasons the requirements of subsection (a) are not attainable.

(c) TERMINATION OF AUTHORIZATION.—A feasibility study for which the Secretary has issued a determination under subsection (b) is not authorized after the last day of the 1-year period beginning

on the date of the determination if the Secretary has not completed the study on or before such last day.

(d) EXCEPTION.—

(1) IN GENERAL.—Notwithstanding the requirements of subsection (c), the Secretary may extend the timeline of a study by a period not to exceed 3 years, if the Secretary determines that the feasibility study is too complex to comply with the requirements of subsections (a) and (c).

(2) FACTORS.—In making a determination that a study is too complex to comply with the requirements of subsections (a) and (c), the Secretary shall consider—

(A) the type, size, location, scope, and overall cost of the project;

(B) whether the project will use any innovative design or construction techniques;

(C) whether the project will require significant action by other Federal, State, or local agencies;

(D) whether there is significant public dispute as to the nature or effects of the project; and

(E) whether there is significant public dispute as to the economic or environmental costs or benefits of the project.

(3) NOTIFICATION.—Each time the Secretary makes a determination under this subsection, the Secretary shall provide written notice to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives as to the results of that determination, including an identification of the specific 1 or more factors used in making the determination that the project is complex.

(4) LIMITATION.—The Secretary shall not extend the timeline for a feasibility study for a period of more than 7 years, and any feasibility study that is not completed before that date shall no longer be authorized.

(e) REVIEWS.—Not later than 90 days after the date of the initiation of a study described in subsection (a) for a project, the Secretary shall—

(1) take all steps necessary to initiate the process for completing federally mandated reviews that the Secretary is required to complete as part of the study, including the environmental review process under section 1005;

(2) convene a meeting of all Federal, tribal, and State agencies identified under section 2045(e) of the Water Resources Development Act of 2007 (33 U.S.C. 2348(e)) that may be required by law to conduct or issue a review, analysis, or opinion on or to make a determination concerning a permit or license for the study; and

(3) take all steps necessary to provide information that will enable required reviews and analyses related to the project to be conducted by other agencies in a thorough and timely manner.

(f) INTERIM REPORT.—Not later than 18 months after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of

Representatives and make publicly available a report that describes—

(1) the status of the implementation of the planning process under this section, including the number of participating projects;

(2) a review of project delivery schedules, including a description of any delays on those studies participating in the planning process under this section; and

(3) any recommendations for additional authority necessary to support efforts to expedite the feasibility study process for water resource projects.

(g) FINAL REPORT.—Not later than 4 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report that describes—

(1) the status of the implementation of this section, including a description of each feasibility study subject to the requirements of this section;

(2) the amount of time taken to complete each feasibility study; and

(3) any recommendations for additional authority necessary to support efforts to expedite the feasibility study process, including an analysis of whether the limitation established by subsection (a)(2) needs to be adjusted to address the impacts of inflation.

SEC. 1002. CONSOLIDATION OF STUDIES.

(a) IN GENERAL.—

(1) REPEAL.—Section 905(b) of the Water Resources Development Act of 1986 (33 U.S.C. 2282(b)) is repealed.

(2) CONFORMING AMENDMENT.—Section 905(a)(1) of the Water Resources Development Act of 1986 (33 U.S.C. 2282(a)(1)) is amended by striking "perform a reconnaissance study and".

(b) CONTENTS OF FEASIBILITY REPORTS.—Section 905(a)(2) of the Water Resources Development Act of 1986 (33 U.S.C. 2282(a)(2)) is amended by adding at the end the following: "A feasibility report shall include a preliminary analysis of the Federal interest and the costs, benefits, and environmental impacts of the project.".

(c) FEASIBILITY STUDIES.—Section 905 of the Water Resources Development Act of 1986 (33 U.S.C. 2282) is amended by adding at the end the following:

"(g) DETAILED PROJECT SCHEDULE.—

"(1) IN GENERAL.—Not later than 180 days after the date of enactment of this subsection, the Secretary shall determine a set of milestones needed for the completion of a feasibility study under this subsection, including all major actions, report submissions and responses, reviews, and comment periods.

"(2) DETAILED PROJECT SCHEDULE MILESTONES.—Each District Engineer shall, to the maximum extent practicable, establish a detailed project schedule, based on full funding capability, that lists all deadlines for milestones relating to feasibility studies in the District developed by the Secretary under paragraph (1).

"(3) NON-FEDERAL INTEREST NOTIFICATION.—Each District Engineer shall submit by certified mail the detailed project schedule under paragraph (2) to each relevant non-Federal interest—

"(A) for projects that have received funding from the General Investigations Account of the Corps of Engineers in the period beginning on October 1, 2009, and ending on the date of enactment of this subsection, not later than 180 days after the establishment of milestones under paragraph (1); and

"(B) for projects for which a feasibility cost-sharing agreement is executed after the establishment of milestones under paragraph (1), not later than 90 days after the date on which the agreement is executed.

"(4) CONGRESSIONAL AND PUBLIC NOTIFICATION.—Beginning in the first full fiscal year after the date of enactment of this subsection, the Secretary shall—

"(A) submit an annual report that lists all detailed project schedules under paragraph (2) and an explanation of any missed deadlines to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives; and

"(B) make publicly available, including on the Internet, a copy of the annual report described in subparagraph (A) not later than 14 days after date on which a report is submitted to Congress.

"(5) FAILURE TO ACT.—If a District Engineer fails to meet any of the deadlines in the project schedule under paragraph (2), the District Engineer shall—

"(A) not later than 30 days after each missed deadline, submit to the non-Federal interest a report detailing—

"(i) why the District Engineer failed to meet the deadline; and

"(ii) a revised project schedule reflecting amended deadlines for the feasibility study; and

"(B) not later than 30 days after each missed deadline, make publicly available, including on the Internet, a copy of the amended project schedule described in subparagraph (A)(ii).".

(d) APPLICABILITY.—The Secretary shall continue to carry out a study for which a reconnaissance level investigation has been initiated before the date of enactment of this Act as if this section, including the amendments made by this section, had not been enacted.

SEC. 1003. EXPEDITED COMPLETION OF REPORTS.

The Secretary shall—

(1) expedite the completion of any on-going feasibility study for a project initiated before the date of enactment of this Act; and

(2) if the Secretary determines that the project is justified in a completed report, proceed directly to preconstruction planning, engineering, and design of the project in accordance with section 910 of the Water Resources Development Act of 1986 (33 U.S.C. 2287).

SEC. 1004. REMOVAL OF DUPLICATIVE ANALYSES.

Section 911 of the Water Resources Development Act of 1986 (33 U.S.C. 2288) is repealed.

SEC. 1005. PROJECT ACCELERATION.

(a) PROJECT ACCELERATION.—

(1) AMENDMENT.—Section 2045 of the Water Resources Development Act of 2007 (33 U.S.C. 2348) is amended to read as follows:

"SEC. 2045. PROJECT ACCELERATION.

"(a) DEFINITIONS.—In this section:

"(1) ENVIRONMENTAL IMPACT STATEMENT.—The term 'environmental impact statement' means the detailed statement of environmental impacts of a project required to be prepared pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

"(2) ENVIRONMENTAL REVIEW PROCESS.—

"(A) IN GENERAL.—The term 'environmental review process' means the process of preparing an environmental impact statement, environmental assessment, categorical exclusion, or other document under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) for a project study.

"(B) INCLUSIONS.—The term 'environmental review process' includes the process for and completion of any environmental permit, approval, review, or study required for a project study under any Federal law other than the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

"(3) FEDERAL JURISDICTIONAL AGENCY.—The term 'Federal jurisdictional agency' means a Federal agency with jurisdiction delegated by law, regulation, order, or otherwise over a review, analysis, opinion, statement, permit, license, or other approval or decision required for a project study under applicable Federal laws (including regulations).

"(4) FEDERAL LEAD AGENCY.—The term 'Federal lead agency' means the Corps of Engineers.

"(5) PROJECT.—The term 'project' means a water resources development project to be carried out by the Secretary.

"(6) PROJECT SPONSOR.—The term 'project sponsor' has the meaning given the term 'non-Federal interest' in section 221(b) of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b(b)).

"(7) PROJECT STUDY.—The term 'project study' means a feasibility study for a project carried out pursuant to section 905 of the Water Resources Development Act of 1986 (33 U.S.C. 2282).

"(b) APPLICABILITY.—

"(1) IN GENERAL.—This section—

"(A) shall apply to each project study that is initiated after the date of enactment of the Water Resources Reform and Development Act of 2014 and for which an environmental impact statement is prepared under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.); and

"(B) may be applied, to the extent determined appropriate by the Secretary, to other project studies initiated after such date of enactment and for which an environmental review process document is prepared under that Act.

"(2) FLEXIBILITY.—Any authority granted under this section may be exercised, and any requirement established under this section may be satisfied, for the conduct of an environmental review process for a project study, a class of project studies, or a program of project studies.

"(3) LIST OF PROJECT STUDIES.—

"(A) IN GENERAL.—The Secretary shall annually prepare, and make publicly available, a separate list of each study that the Secretary has determined—

"(i) meets the standards described in paragraph (1); and

"(ii) does not have adequate funding to make substantial progress toward the completion of the project study.

"(B) INCLUSIONS.—The Secretary shall include for each project study on the list under subparagraph (A) a description of the estimated amounts necessary to make substantial progress on the project study.

"(c) PROJECT REVIEW PROCESS.—

"(1) IN GENERAL.—The Secretary shall develop and implement a coordinated environmental review process for the development of project studies.

"(2) COORDINATED REVIEW.—The coordinated environmental review process described in paragraph (1) shall require that any review, analysis, opinion, statement, permit, license, or other approval or decision issued or made by a Federal, State, or local governmental agency or an Indian tribe for a project study described in subsection (b) be conducted, to the maximum extent practicable, concurrently with any other applicable governmental agency or Indian tribe.

"(3) TIMING.—The coordinated environmental review process under this subsection shall be completed not later than the date on which the Secretary, in consultation and concurrence with the agencies identified under subsection (e), establishes with respect to the project study.

"(d) LEAD AGENCIES.—

"(1) JOINT LEAD AGENCIES.—

"(A) IN GENERAL.—At the discretion of the Secretary and subject to the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and the requirements of section 1506.8 of title 40, Code of Federal Regulations (or successor regulations), including the concurrence of the proposed joint lead agency, a project sponsor may serve as the joint lead agency.

"(B) PROJECT SPONSOR AS JOINT LEAD AGENCY.—A project sponsor that is a State or local governmental entity may—

"(i) with the concurrence of the Secretary, serve as a joint lead agency with the Federal lead agency for purposes of preparing any environmental document

under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.); and

"(ii) prepare any environmental review process document under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) required in support of any action or approval by the Secretary if—

"(I) the Secretary provides guidance in the preparation process and independently evaluates that document;

"(II) the project sponsor complies with all requirements applicable to the Secretary under—

"(aa) the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);

"(bb) any regulation implementing that Act; and

"(cc) any other applicable Federal law; and

"(III) the Secretary approves and adopts the document before the Secretary takes any subsequent action or makes any approval based on that document, regardless of whether the action or approval of the Secretary results in Federal funding.

"(2) DUTIES.—The Secretary shall ensure that—

"(A) the project sponsor complies with all design and mitigation commitments made jointly by the Secretary and the project sponsor in any environmental document prepared by the project sponsor in accordance with this subsection; and

"(B) any environmental document prepared by the project sponsor is appropriately supplemented to address any changes to the project the Secretary determines are necessary.

"(3) ADOPTION AND USE OF DOCUMENTS.—Any environmental document prepared in accordance with this subsection shall be adopted and used by any Federal agency making any determination related to the project study to the same extent that the Federal agency could adopt or use a document prepared by another Federal agency under—

"(A) the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.); and

"(B) parts 1500 through 1508 of title 40, Code of Federal Regulations (or successor regulations).

"(4) ROLES AND RESPONSIBILITY OF LEAD AGENCY.—With respect to the environmental review process for any project study, the Federal lead agency shall have authority and responsibility—

"(A) to take such actions as are necessary and proper and within the authority of the Federal lead agency to facilitate the expeditious resolution of the environmental review process for the project study; and

"(B) to prepare or ensure that any required environmental impact statement or other environmental review document for a project study required to be completed under the National Environmental Policy Act of 1969 (42

U.S.C. 4321 et seq.) is completed in accordance with this section and applicable Federal law.

"(e) PARTICIPATING AND COOPERATING AGENCIES.—

"(1) IDENTIFICATION OF JURISDICTIONAL AGENCIES.—With respect to carrying out the environmental review process for a project study, the Secretary shall identify, as early as practicable in the environmental review process, all Federal, State, and local government agencies and Indian tribes that may—

"(A) have jurisdiction over the project;

"(B) be required by law to conduct or issue a review, analysis, opinion, or statement for the project study; or

"(C) be required to make a determination on issuing a permit, license, or other approval or decision for the project study.

"(2) STATE AUTHORITY.—If the environmental review process is being implemented by the Secretary for a project study within the boundaries of a State, the State, consistent with State law, may choose to participate in the process and to make subject to the process all State agencies that—

"(A) have jurisdiction over the project;

"(B) are required to conduct or issue a review, analysis, opinion, or statement for the project study; or

"(C) are required to make a determination on issuing a permit, license, or other approval or decision for the project study.

"(3) INVITATION.—

"(A) IN GENERAL.—The Federal lead agency shall invite, as early as practicable in the environmental review process, any agency identified under paragraph (1) to become a participating or cooperating agency, as applicable, in the environmental review process for the project study.

"(B) DEADLINE.—An invitation to participate issued under subparagraph (A) shall set a deadline by which a response to the invitation shall be submitted, which may be extended by the Federal lead agency for good cause.

"(4) PROCEDURES.—Section 1501.6 of title 40, Code of Federal Regulations (as in effect on the date of enactment of the Water Resources Reform and Development Act of 2014) shall govern the identification and the participation of a cooperating agency.

"(5) FEDERAL COOPERATING AGENCIES.—Any Federal agency that is invited by the Federal lead agency to participate in the environmental review process for a project study shall be designated as a cooperating agency by the Federal lead agency unless the invited agency informs the Federal lead agency, in writing, by the deadline specified in the invitation that the invited agency—

"(A)(i)(I) has no jurisdiction or authority with respect to the project;

"(II) has no expertise or information relevant to the project; or

"(III) does not have adequate funds to participate in the project; and

"(ii) does not intend to submit comments on the project; or

"(B) does not intend to submit comments on the project.

"(6) ADMINISTRATION.—A participating or cooperating agency shall comply with this section and any schedule established under this section.

"(7) EFFECT OF DESIGNATION.—Designation as a participating or cooperating agency under this subsection shall not imply that the participating or cooperating agency—

"(A) supports a proposed project; or

"(B) has any jurisdiction over, or special expertise with respect to evaluation of, the project.

"(8) CONCURRENT REVIEWS.—Each participating or cooperating agency shall—

"(A) carry out the obligations of that agency under other applicable law concurrently and in conjunction with the required environmental review process, unless doing so would prevent the participating or cooperating agency from conducting needed analysis or otherwise carrying out those obligations; and

"(B) formulate and implement administrative, policy, and procedural mechanisms to enable the agency to ensure completion of the environmental review process in a timely, coordinated, and environmentally responsible manner.

"(f) PROGRAMMATIC COMPLIANCE.—

"(1) IN GENERAL.—The Secretary shall issue guidance regarding the use of programmatic approaches to carry out the environmental review process that—

"(A) eliminates repetitive discussions of the same issues;

"(B) focuses on the actual issues ripe for analyses at each level of review;

"(C) establishes a formal process for coordinating with participating and cooperating agencies, including the creation of a list of all data that is needed to carry out an environmental review process; and

"(D) complies with—

"(i) the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.); and

"(ii) all other applicable laws.

"(2) REQUIREMENTS.—In carrying out paragraph (1), the Secretary shall—

"(A) as the first step in drafting guidance under that paragraph, consult with relevant Federal, State, and local governmental agencies, Indian tribes, and the public on the appropriate use and scope of the programmatic approaches;

"(B) emphasize the importance of collaboration among relevant Federal, State, and local governmental agencies, and Indian tribes in undertaking programmatic reviews, especially with respect to including reviews with a broad geographical scope;

"(C) ensure that the programmatic reviews—

"(i) promote transparency, including of the analyses and data used in the environmental review process, the treatment of any deferred issues raised by Federal, State, and local governmental agencies, Indian

tribes, or the public, and the temporal and special scales to be used to analyze those issues;

"(ii) use accurate and timely information in the environmental review process, including—

"(I) criteria for determining the general duration of the usefulness of the review; and

"(II) the timeline for updating any out-of-date review;

"(iii) describe—

"(I) the relationship between programmatic analysis and future tiered analysis; and

"(II) the role of the public in the creation of future tiered analysis; and

"(iv) are available to other relevant Federal, State, and local governmental agencies, Indian tribes, and the public;

"(D) allow not fewer than 60 days of public notice and comment on any proposed guidance; and

"(E) address any comments received under subparagraph (D).

"(g) COORDINATED REVIEWS.—

"(1) COORDINATION PLAN.—

"(A) ESTABLISHMENT.—

"(i) IN GENERAL.—The Federal lead agency shall, after consultation with and with the concurrence of each participating and cooperating agency and the project sponsor or joint lead agency, as applicable, establish a plan for coordinating public and agency participation in, and comment on, the environmental review process for a project study or a category of project studies.

"(ii) INCORPORATION.—The plan established under clause (i) shall be incorporated into the project schedule milestones set under section 905(g)(2) of the Water Resources Development Act of 1986 (33 U.S.C. 2282(g)(2)).

"(B) SCHEDULE.—

"(i) IN GENERAL.—As soon as practicable but not later than 45 days after the close of the public comment period on a draft environmental impact statement, the Federal lead agency, after consultation with and the concurrence of each participating and cooperating agency and the project sponsor or joint lead agency, as applicable, shall establish, as part of the coordination plan established in subparagraph (A), a schedule for completion of the environmental review process for the project study.

"(ii) FACTORS FOR CONSIDERATION.—In establishing a schedule, the Secretary shall consider factors such as—

"(I) the responsibilities of participating and cooperating agencies under applicable laws;

"(II) the resources available to the project sponsor, joint lead agency, and other relevant Federal and State agencies, as applicable;

"(III) the overall size and complexity of the project;

"(IV) the overall schedule for and cost of the project; and

"(V) the sensitivity of the natural and historical resources that could be affected by the project.

"(iii) MODIFICATIONS.—The Secretary may—

"(I) lengthen a schedule established under clause (i) for good cause; and

"(II) shorten a schedule only with concurrence of the affected participating and cooperating agencies and the project sponsor or joint lead agency, as applicable.

"(iv) DISSEMINATION.—A copy of a schedule established under clause (i) shall be—

"(I) provided to each participating and cooperating agency and the project sponsor or joint lead agency, as applicable; and

"(II) made available to the public.

"(2) COMMENT DEADLINES.—The Federal lead agency shall establish the following deadlines for comment during the environmental review process for a project study:

"(A) DRAFT ENVIRONMENTAL IMPACT STATEMENTS.—For comments by Federal and States agencies and the public on a draft environmental impact statement, a period of not more than 60 days after publication in the Federal Register of notice of the date of public availability of the draft environmental impact statement, unless—

"(i) a different deadline is established by agreement of the Federal lead agency, the project sponsor or joint lead agency, as applicable, and all participating and cooperating agencies; or

"(ii) the deadline is extended by the Federal lead agency for good cause.

"(B) OTHER ENVIRONMENTAL REVIEW PROCESSES.—For all other comment periods established by the Federal lead agency for agency or public comments in the environmental review process, a period of not more than 30 days after the date on which the materials on which comment is requested are made available, unless—

"(i) a different deadline is established by agreement of the Federal lead agency, the project sponsor, or joint lead agency, as applicable, and all participating and cooperating agencies; or

"(ii) the deadline is extended by the Federal lead agency for good cause.

"(3) DEADLINES FOR DECISIONS UNDER OTHER LAWS.—In any case in which a decision under any Federal law relating to a project study, including the issuance or denial of a permit or license, is required to be made by the date described in subsection (h)(5)(B)(ii), the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives—

"(A) as soon as practicable after the 180-day period described in subsection (h)(5)(B)(ii), an initial notice of the failure of the Federal agency to make the decision; and

"(B) every 60 days thereafter until such date as all decisions of the Federal agency relating to the project study have been made by the Federal agency, an additional notice that describes the number of decisions of the Federal agency that remain outstanding as of the date of the additional notice.

"(4) INVOLVEMENT OF THE PUBLIC.—Nothing in this subsection reduces any time period provided for public comment in the environmental review process under applicable Federal law (including regulations).

"(5) TRANSPARENCY REPORTING.—

"(A) REPORTING REQUIREMENTS.—Not later than 1 year after the date of enactment of the Water Resources Reform and Development Act of 2014, the Secretary shall establish and maintain an electronic database and, in coordination with other Federal and State agencies, issue reporting requirements to make publicly available the status and progress with respect to compliance with applicable requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et. seq.) and any other Federal, State, or local approval or action required for a project study for which this section is applicable.

"(B) PROJECT STUDY TRANSPARENCY.—Consistent with the requirements established under subparagraph (A), the Secretary shall publish the status and progress of any Federal, State, or local decision, action, or approval required under applicable laws for each project study for which this section is applicable.

"(h) ISSUE IDENTIFICATION AND RESOLUTION.—

"(1) COOPERATION.—The Federal lead agency, the cooperating agencies, and any participating agencies shall work cooperatively in accordance with this section to identify and resolve issues that could delay completion of the environmental review process or result in the denial of any approval required for the project study under applicable laws.

"(2) FEDERAL LEAD AGENCY RESPONSIBILITIES.—

"(A) IN GENERAL.—The Federal lead agency shall make information available to the cooperating agencies and participating agencies as early as practicable in the environmental review process regarding the environmental and socioeconomic resources located within the project area and the general locations of the alternatives under consideration.

"(B) DATA SOURCES.—The information under subparagraph (A) may be based on existing data sources, including geographic information systems mapping.

"(3) COOPERATING AND PARTICIPATING AGENCY RESPONSIBILITIES.—Based on information received from the Federal lead agency, cooperating and participating agencies shall identify, as early as practicable, any issues of concern regarding the potential environmental or socioeconomic impacts of the project, including any issues that could substantially delay or prevent

an agency from granting a permit or other approval that is needed for the project study.

"(4) ACCELERATED ISSUE RESOLUTION AND ELEVATION.—

"(A) IN GENERAL.—On the request of a participating or cooperating agency or project sponsor, the Secretary shall convene an issue resolution meeting with the relevant participating and cooperating agencies and the project sponsor or joint lead agency, as applicable, to resolve issues that may—

"(i) delay completion of the environmental review process; or

"(ii) result in denial of any approval required for the project study under applicable laws.

"(B) MEETING DATE.—A meeting requested under this paragraph shall be held not later than 21 days after the date on which the Secretary receives the request for the meeting, unless the Secretary determines that there is good cause to extend that deadline.

"(C) NOTIFICATION.—On receipt of a request for a meeting under this paragraph, the Secretary shall notify all relevant participating and cooperating agencies of the request, including the issue to be resolved and the date for the meeting.

"(D) ELEVATION OF ISSUE RESOLUTION.—If a resolution cannot be achieved within the 30 day-period beginning on the date of a meeting under this paragraph and a determination is made by the Secretary that all information necessary to resolve the issue has been obtained, the Secretary shall forward the dispute to the heads of the relevant agencies for resolution.

"(E) CONVENTION BY SECRETARY.—The Secretary may convene an issue resolution meeting under this paragraph at any time, at the discretion of the Secretary, regardless of whether a meeting is requested under subparagraph (A).

"(5) FINANCIAL PENALTY PROVISIONS.—

"(A) IN GENERAL.—A Federal jurisdictional agency shall complete any required approval or decision for the environmental review process on an expeditious basis using the shortest existing applicable process.

"(B) FAILURE TO DECIDE.—

"(i) IN GENERAL.—If a Federal jurisdictional agency fails to render a decision required under any Federal law relating to a project study that requires the preparation of an environmental impact statement or environmental assessment, including the issuance or denial of a permit, license, statement, opinion, or other approval by the date described in clause (ii), the amount of funds made available to support the office of the head of the Federal jurisdictional agency shall be reduced by an amount of funding equal to the amounts specified in subclause (I) or (II) and those funds shall be made available to the division of the Federal jurisdictional agency charged with rendering the decision by not later than 1 day after the applicable date under clause (ii), and once each week thereafter

until a final decision is rendered, subject to subparagraph (C)—

"(I) $20,000 for any project study requiring the preparation of an environmental assessment or environmental impact statement; or

"(II) $10,000 for any project study requiring any type of review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) other than an environmental assessment or environmental impact statement.

"(ii) DESCRIPTION OF DATE.—The date referred to in clause (i) is the later of—

"(I) the date that is 180 days after the date on which an application for the permit, license, or approval is complete; and

"(II) the date that is 180 days after the date on which the Federal lead agency issues a decision on the project under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

"(C) LIMITATIONS.—

"(i) IN GENERAL.—No transfer of funds under subparagraph (B) relating to an individual project study shall exceed, in any fiscal year, an amount equal to 1 percent of the funds made available for the applicable agency office.

"(ii) FAILURE TO DECIDE.—The total amount transferred in a fiscal year as a result of a failure by an agency to make a decision by an applicable deadline shall not exceed an amount equal to 5 percent of the funds made available for the applicable agency office for that fiscal year.

"(iii) AGGREGATE.—Notwithstanding any other provision of law, for each fiscal year, the aggregate amount of financial penalties assessed against each applicable agency office under the Water Resources Reform and Development Act of 2014 and any other Federal law as a result of a failure of the agency to make a decision by an applicable deadline for environmental review, including the total amount transferred under this paragraph, shall not exceed an amount equal to 9.5 percent of the funds made available for the agency office for that fiscal year.

"(D) NO FAULT OF AGENCY.—

"(i) IN GENERAL.—A transfer of funds under this paragraph shall not be made if the applicable agency described in subparagraph (A) notifies, with a supporting explanation, the Federal lead agency, cooperating agencies, and project sponsor, as applicable, that—

"(I) the agency has not received necessary information or approvals from another entity in a manner that affects the ability of the agency to meet any requirements under Federal, State, or local law;

"(II) significant new information, including from public comments, or circumstances, including a major modification to an aspect of the project, requires additional analysis for the agency to make a decision on the project application; or

"(III) the agency lacks the financial resources to complete the review under the scheduled time frame, including a description of the number of full-time employees required to complete the review, the amount of funding required to complete the review, and a justification as to why not enough funding is available to complete the review by the deadline.

"(ii) LACK OF FINANCIAL RESOURCES.—If the agency provides notice under clause (i)(III), the Inspector General of the agency shall—

"(I) conduct a financial audit to review the notice; and

"(II) not later than 90 days after the date on which the review described in subclause (I) is completed, submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report on the notice.

"(E) LIMITATION.—The Federal agency from which funds are transferred pursuant to this paragraph shall not reprogram funds to the office of the head of the agency, or equivalent office, to reimburse that office for the loss of the funds.

"(F) EFFECT OF PARAGRAPH.—Nothing in this paragraph affects or limits the application of, or obligation to comply with, any Federal, State, local, or tribal law.

"(i) MEMORANDUM OF AGREEMENTS FOR EARLY COORDINATION.—

"(1) SENSE OF CONGRESS.—It is the sense of Congress that—

"(A) the Secretary and other Federal agencies with relevant jurisdiction in the environmental review process should cooperate with each other, State agencies, and Indian tribes on environmental review and project delivery activities at the earliest practicable time to avoid delays and duplication of effort later in the process, prevent potential conflicts, and ensure that planning and project development decisions reflect environmental values; and

"(B) the cooperation referred to in subparagraph (A) should include the development of policies and the designation of staff that advise planning agencies and project sponsors of studies or other information foreseeably required for later Federal action and early consultation with appropriate State and local agencies and Indian tribes.

"(2) TECHNICAL ASSISTANCE.—If requested at any time by a State or project sponsor, the Secretary and other Federal agencies with relevant jurisdiction in the environmental review process, shall, to the maximum extent practicable and appropriate, as determined by the agencies, provide technical assistance to

the State or project sponsor in carrying out early coordination activities.

"(3) MEMORANDUM OF AGENCY AGREEMENT.—If requested at any time by a State or project sponsor, the Federal lead agency, in consultation with other Federal agencies with relevant jurisdiction in the environmental review process, may establish memoranda of agreement with the project sponsor, Indian tribe, State and local governments, and other appropriate entities to carry out the early coordination activities, including providing technical assistance in identifying potential impacts and mitigation issues in an integrated fashion.

"(j) LIMITATIONS.—Nothing in this section preempts or interferes with—

"(1) any obligation to comply with the provisions of any Federal law, including—

"(A) the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.); and

"(B) any other Federal environmental law;

"(2) the reviewability of any final Federal agency action in a court of the United States or in the court of any State;

"(3) any requirement for seeking, considering, or responding to public comment; or

"(4) any power, jurisdiction, responsibility, duty, or authority that a Federal, State, or local governmental agency, Indian tribe, or project sponsor has with respect to carrying out a project or any other provision of law applicable to projects.

"(k) TIMING OF CLAIMS.—

"(1) TIMING.—

"(A) IN GENERAL.—Notwithstanding any other provision of law, a claim arising under Federal law seeking judicial review of a permit, license, or other approval issued by a Federal agency for a project study shall be barred unless the claim is filed not later than 3 years after publication of a notice in the Federal Register announcing that the permit, license, or other approval is final pursuant to the law under which the agency action is taken, unless a shorter time is specified in the Federal law that allows judicial review.

"(B) APPLICABILITY.—Nothing in this subsection creates a right to judicial review or places any limit on filing a claim that a person has violated the terms of a permit, license, or other approval.

"(2) NEW INFORMATION.—

"(A) IN GENERAL.—The Secretary shall consider new information received after the close of a comment period if the information satisfies the requirements for a supplemental environmental impact statement under title 40, Code of Federal Regulations (including successor regulations).

"(B) SEPARATE ACTION.—The preparation of a supplemental environmental impact statement or other environmental document, if required under this section, shall be considered a separate final agency action and the deadline for filing a claim for judicial review of the action shall be 3 years after the date of publication of a notice in the Fed-

eral Register announcing the action relating to such supplemental environmental impact statement or other environmental document.

"(l) CATEGORICAL EXCLUSIONS.—

"(1) IN GENERAL.—Not later than 180 days after the date of enactment of the Water Resources Reform and Development Act of 2014, the Secretary shall—

"(A) survey the use by the Corps of Engineers of categorical exclusions in projects since 2005;

"(B) publish a review of the survey that includes a description of—

"(i) the types of actions that were categorically excluded or could be the basis for developing a new categorical exclusion; and

"(ii) any requests previously received by the Secretary for new categorical exclusions; and

"(C) solicit requests from other Federal agencies and project sponsors for new categorical exclusions.

"(2) NEW CATEGORICAL EXCLUSIONS.—Not later than 1 year after the date of enactment of the Water Resources Reform and Development Act of 2014, if the Secretary has identified a category of activities that merit establishing a categorical exclusion that did not exist on the day before the date of enactment of the Water Resources Reform and Development Act of 2014 based on the review under paragraph (1), the Secretary shall publish a notice of proposed rulemaking to propose that new categorical exclusion, to the extent that the categorical exclusion meets the criteria for a categorical exclusion under section 1508.4 of title 40, Code of Federal Regulations (or successor regulation).

"(m) REVIEW OF PROJECT ACCELERATION REFORMS.—

"(1) IN GENERAL.—The Comptroller General of the United States shall—

"(A) assess the reforms carried out under this section; and

"(B) not later than 5 years and not later than 10 years after the date of enactment of the Water Resources Reform and Development Act of 2014, submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report that describes the results of the assessment.

"(2) CONTENTS.—The reports under paragraph (1) shall include an evaluation of impacts of the reforms carried out under this section on—

"(A) project delivery;

"(B) compliance with environmental laws; and

"(C) the environmental impact of projects.

"(n) PERFORMANCE MEASUREMENT.—The Secretary shall establish a program to measure and report on progress made toward improving and expediting the planning and environmental review process.

"(o) IMPLEMENTATION GUIDANCE.—The Secretary shall prepare, in consultation with the Council on Environmental Quality and other Federal agencies with jurisdiction over actions or resources that may be impacted by a project, guidance documents that de-

scribe the coordinated environmental review processes that the Secretary intends to use to implement this section for the planning of projects, in accordance with the civil works program of the Corps of Engineers and all applicable law.".

(2) CLERICAL AMENDMENT.—The table of contents contained in section 1(b) of the Water Resources Development Act of 2007 (121 Stat. 1042) is amended by striking the item relating to section 2045 and inserting the following:

"Sec. 2045. Project acceleration.".

(b) CATEGORICAL EXCLUSIONS IN EMERGENCIES.—For the repair, reconstruction, or rehabilitation of a water resources project that is in operation or under construction when damaged by an event or incident that results in a declaration by the President of a major disaster or emergency pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.), the Secretary shall treat such repair, reconstruction, or rehabilitation activity as a class of action categorically excluded from the requirements relating to environmental assessments or environmental impact statements under section 1508.4 of title 40, Code of Federal Regulations (or successor regulations), if the repair or reconstruction activity is—

(1) in the same location with the same capacity, dimensions, and design as the original water resources project as before the declaration described in this section; and

(2) commenced within a 2-year period beginning on the date of a declaration described in this subsection.

SEC. 1006. EXPEDITING THE EVALUATION AND PROCESSING OF PERMITS.

Section 214 of the Water Resources Development Act of 2000 (Public Law 106–541; 33 U.S.C. 2201 note) is amended—

(1) in subsection (a)—

(A) by striking "(a) IN GENERAL.—The Secretary" and inserting the following:

"(a) FUNDING TO PROCESS PERMITS.—

"(1) DEFINITIONS.—In this subsection:

"(A) NATURAL GAS COMPANY.—The term 'natural gas company' has the meaning given the term in section 1262 of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451), except that the term also includes a person engaged in the transportation of natural gas in intrastate commerce.

"(B) PUBLIC-UTILITY COMPANY.—The term 'public-utility company' has the meaning given the term in section 1262 of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451).

"(2) PERMIT PROCESSING.—The Secretary";

(B) in paragraph (2) (as so designated)—

(i) by inserting "or a public-utility company or natural gas company" after "non-Federal public entity"; and

(ii) by inserting "or company" after "that entity"; and

(C) by adding at the end the following:

"(3) LIMITATION FOR PUBLIC-UTILITY AND NATURAL GAS COMPANIES.—The authority provided under paragraph (2) to a public-utility company or natural gas company shall expire on the date that is 7 years after the date of enactment of this paragraph.

"(4) EFFECT ON OTHER ENTITIES.—To the maximum extent practicable, the Secretary shall ensure that expediting the evaluation of a permit through the use of funds accepted and expended under this section does not adversely affect the timeline for evaluation (in the Corps district in which the project or activity is located) of permits under the jurisdiction of the Department of the Army of other entities that have not contributed funds under this section.

"(5) GAO STUDY.—Not later than 4 years after the date of enactment of this paragraph, the Comptroller General of the United States shall carry out a study of the implementation by the Secretary of the authority provided under paragraph (2) to public-utility companies and natural gas companies."; and

(2) by striking subsections (d) and (e) and inserting the following:

"(d) PUBLIC AVAILABILITY.—

"(1) IN GENERAL.—The Secretary shall ensure that all final permit decisions carried out using funds authorized under this section are made available to the public in a common format, including on the Internet, and in a manner that distinguishes final permit decisions under this section from other final actions of the Secretary.

"(2) DECISION DOCUMENT.—The Secretary shall—

"(A) use a standard decision document for evaluating all permits using funds accepted under this section; and

"(B) make the standard decision document, along with all final permit decisions, available to the public, including on the Internet.

"(3) AGREEMENTS.—The Secretary shall make all active agreements to accept funds under this section available on a single public Internet site.

"(e) REPORTING.—

"(1) IN GENERAL.—The Secretary shall prepare an annual report on the implementation of this section, which, at a minimum, shall include for each district of the Corps of Engineers that accepts funds under this section—

"(A) a comprehensive list of any funds accepted under this section during the previous fiscal year;

"(B) a comprehensive list of the permits reviewed and approved using funds accepted under this section during the previous fiscal year, including a description of the size and type of resources impacted and the mitigation required for each permit; and

"(C) a description of the training offered in the previous fiscal year for employees that is funded in whole or in part with funds accepted under this section.

"(2) SUBMISSION.—Not later than 90 days after the end of each fiscal year, the Secretary shall—

"(A) submit to the Committee on Environment and Public Works of the Senate and the Committee on Trans-

portation and Infrastructure of the House of Representatives the annual report described in paragraph (1); and

"(B) make each report received under subparagraph (A) available on a single publicly accessible Internet site.".

SEC. 1007. EXPEDITING APPROVAL OF MODIFICATIONS AND ALTERATIONS OF PROJECTS BY NON-FEDERAL INTERESTS.

(a) SECTION 14 APPLICATION DEFINED.—In this section, the term "section 14 application" means an application submitted by an applicant to the Secretary requesting permission for the temporary occupation or use of a public work, or the alteration or permanent occupation or use of a public work, under section 14 of the Act of March 3, 1899 (commonly known as the "Rivers and Harbors Appropriation Act of 1899") (33 U.S.C. 408).

(b) REVIEW.—Not later than 1 year after the date of enactment of this Act, the Secretary, after providing notice and an opportunity for comment, shall establish a process for the review of section 14 applications in a timely and consistent manner.

(c) BENCHMARK GOALS.—

(1) ESTABLISHMENT OF BENCHMARK GOALS.—In carrying out subsection (b), the Secretary shall—

(A) establish benchmark goals for determining the amount of time it should take the Secretary to determine whether a section 14 application is complete;

(B) establish benchmark goals for determining the amount of time it should take the Secretary to approve or disapprove a section 14 application; and

(C) to the extent practicable, use such benchmark goals to make a decision on section 14 applications in a timely and consistent manner.

(2) BENCHMARK GOALS.—

(A) BENCHMARK GOALS FOR DETERMINING WHETHER SECTION 14 APPLICATIONS ARE COMPLETE.—To the extent practicable, the benchmark goals established under paragraph (1) shall provide that—

(i) the Secretary reach a decision on whether a section 14 application is complete not later than 15 days after the date of receipt of the application; and

(ii) if the Secretary determines that a section 14 application is not complete, the Secretary promptly notify the applicant of the specific information that is missing or the analysis that is needed to complete the application.

(B) BENCHMARK GOALS FOR REVIEWING COMPLETED APPLICATIONS.—To the extent practicable, the benchmark goals established under paragraph (1) shall provide that—

(i) the Secretary generally approve or disapprove a completed section 14 application not later than 45 days after the date of receipt of the completed application; and

(ii) in a case in which the Secretary determines that additional time is needed to review a completed section 14 application due to the type, size, cost, complexity, or impacts of the actions proposed in the application, the Secretary generally approve or disapprove

the application not later than 180 days after the date of receipt of the completed application.

(3) NOTICE.—In any case in which the Secretary determines that it will take the Secretary more than 45 days to review a completed section 14 application, the Secretary shall—

(A) provide written notification to the applicant; and

(B) include in the written notice a best estimate of the Secretary as to the amount of time required for completion of the review.

(d) FAILURE TO ACHIEVE BENCHMARK GOALS.—In any case in which the Secretary fails make a decision on a section 14 application in accordance with the process established under this section, the Secretary shall provide written notice to the applicant, including a detailed description of—

(1) why the Secretary failed to make a decision in accordance with such process;

(2) the additional actions required before the Secretary will issue a decision; and

(3) the amount of time the Secretary will require to issue a decision.

(e) NOTIFICATION.—

(1) SUBMISSION TO CONGRESS.—The Secretary shall provide a copy of any written notice provided under subsection (d) to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives.

(2) PUBLIC AVAILABILITY.—The Secretary shall maintain a publicly available database, including on the Internet, on—

(A) all section 14 applications received by the Secretary; and

(B) the current status of such applications.

SEC. 1008. EXPEDITING HYDROPOWER AT CORPS OF ENGINEERS FACILITIES.

(a) POLICY.—Congress declares that it is the policy of the United States that—

(1) the development of non-Federal hydroelectric power at Corps of Engineers civil works projects, including locks and dams, shall be given priority;

(2) Corps of Engineers approval of non-Federal hydroelectric power at Corps of Engineers civil works projects, including permitting required under section 14 of the Act of March 3, 1899 (33 U.S.C. 408), shall be completed by the Corps of Engineers in a timely and consistent manner; and

(3) approval of hydropower at Corps of Engineers civil works projects shall in no way diminish the other priorities and missions of the Corps of Engineers, including authorized project purposes and habitat and environmental protection.

(b) REPORT.—Not later than 2 years after the date of enactment of this Act and biennially thereafter, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report that, at a minimum, shall include—

(1) a description of initiatives carried out by the Secretary to encourage the development of hydroelectric power by non-Federal entities at Corps of Engineers civil works projects;

(2) a list of all new hydroelectric power activities by non-Federal entities approved at Corps of Engineers civil works projects in that fiscal year, including the length of time the Secretary needed to approve those activities;

(3) a description of the status of each pending application from non-Federal entities for approval to develop hydroelectric power at Corps of Engineers civil works projects;

(4) a description of any benefits or impacts to the environment, recreation, or other uses associated with Corps of Engineers civil works projects at which non-Federal entities have developed hydroelectric power in the previous fiscal year; and

(5) the total annual amount of payments or other services provided to the Corps of Engineers, the Treasury, and any other Federal agency as a result of approved non-Federal hydropower projects at Corps of Engineers civil works projects.

SEC. 1009. ENHANCED USE OF ELECTRONIC COMMERCE IN FEDERAL PROCUREMENT.

(a) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report describing the actions of the Secretary in carrying out section 2301 of title 41, United States Code, regarding the use of electronic commerce in Federal procurement.

(b) CONTENTS.—The report submitted under subsection (a) shall include, with respect to the 2 fiscal years most recently ended before the fiscal year in which the report is submitted—

(1) an identification of the number, type, and dollar value of procurement solicitations with respect to which the public was permitted to respond to the solicitation electronically, which shall differentiate between solicitations that allowed full or partial electronic submission;

(2) an analysis of the information provided under paragraph (1) and actions that could be taken by the Secretary to refine and improve the use of electronic submission for procurement solicitation responses;

(3) an analysis of the potential benefits of and obstacles to full implementation of electronic submission for procurement solicitation responses, including with respect to cost savings, error reduction, paperwork reduction, increased bidder participation, and competition, and expanded use of electronic bid data collection for cost-effective contract management and timely reporting; and

(4) an analysis of the options and technologies available to facilitate expanded implementation of electronic submission for procurement solicitation responses and the suitability of each option and technology for contracts of various types and sizes.

SEC. 1010. DETERMINATION OF PROJECT COMPLETION.

(a) IN GENERAL.—The Secretary shall notify the applicable non-Federal interest when construction of a water resources project or a

functional portion of the project is completed so the non-Federal interest may commence responsibilities, as applicable, for operating and maintaining the project.

(b) NON-FEDERAL INTEREST APPEAL OF DETERMINATION.—

(1) IN GENERAL.—Not later than 7 days after receiving a notification under subsection (a), the non-Federal interest may appeal the completion determination of the Secretary in writing with a detailed explanation of the basis for questioning the completeness of the project or functional portion of the project.

(2) INDEPENDENT REVIEW.—

(A) IN GENERAL.—On notification that a non-Federal interest has submitted an appeal under paragraph (1), the Secretary shall contract with 1 or more independent, non-Federal experts to evaluate whether the applicable water resources project or functional portion of the project is complete.

(B) TIMELINE.—An independent review carried out under subparagraph (A) shall be completed not later than 180 days after the date on which the Secretary receives an appeal from a non-Federal interest under paragraph (1).

SEC. 1011. PRIORITIZATION.

(a) PRIORITIZATION OF HURRICANE AND STORM DAMAGE RISK REDUCTION EFFORTS.—

(1) PRIORITY.—For authorized projects and ongoing feasibility studies with a primary purpose of hurricane and storm damage risk reduction, the Secretary shall give funding priority to projects and ongoing studies that—

(A) address an imminent threat to life and property;

(B) prevent storm surge from inundating populated areas;

(C) prevent the loss of coastal wetlands that help reduce the impact of storm surge;

(D) protect emergency hurricane evacuation routes or shelters;

(E) prevent adverse impacts to publicly owned or funded infrastructure and assets;

(F) minimize disaster relief costs to the Federal Government; and

(G) address hurricane and storm damage risk reduction in an area for which the President declared a major disaster in accordance with section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5170).

(2) EXPEDITED CONSIDERATION OF CURRENTLY AUTHORIZED PROJECTS.—Not later than 180 days after the date of enactment of this Act, the Secretary shall—

(A) submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a list of all—

(i) ongoing hurricane and storm damage reduction feasibility studies that have signed feasibility cost-share agreements and have received Federal funds since 2009; and

(ii) authorized hurricane and storm damage reduction projects that—

(I) have been authorized for more than 20 years but are less than 75 percent complete; or

(II) are undergoing a post-authorization change report, general reevaluation report, or limited reevaluation report;

(B) identify those projects on the list required under subparagraph (A) that meet the criteria described in paragraph (1); and

(C) provide a plan for expeditiously completing the projects identified under subparagraph (B), subject to available funding.

(b) PRIORITIZATION OF ECOSYSTEM RESTORATION EFFORTS.—For authorized projects with a primary purpose of ecosystem restoration, the Secretary shall give funding priority to projects—

(1) that—

(A) address an identified threat to public health, safety, or welfare;

(B) preserve or restore ecosystems of national significance; or

(C) preserve or restore habitats of importance for federally protected species, including migratory birds; and

(2) for which the restoration activities will contribute to other ongoing or planned Federal, State, or local restoration initiatives.

SEC. 1012. TRANSPARENCY IN ACCOUNTING AND ADMINISTRATIVE EXPENSES.

(a) IN GENERAL.—On the request of a non-Federal interest, the Secretary shall provide to the non-Federal interest a detailed accounting of the Federal expenses associated with a water resources project.

(b) STUDY.—

(1) IN GENERAL.—The Secretary shall contract with the National Academy of Public Administration to carry out a study on the efficiency of the Corps Engineers current staff salaries and administrative expense procedures as compared to using a separate administrative expense account.

(2) CONTENTS.—The study under paragraph (1) shall include any recommendations of the National Academy of Public Administration for improvements to the budgeting and administrative processes that will increase the efficiency of the Corps of Engineers project delivery.

SEC. 1013. EVALUATION OF PROJECT PARTNERSHIP AGREEMENTS.

(a) IN GENERAL.—The Secretary shall contract with the National Academy of Public Administration to carry out a comprehensive review of the process for preparing, negotiating, and approving Project Partnership Agreements and the Project Partnership Agreement template, which shall include—

(1) an evaluation of the process for preparing, negotiating, and approving Project Partnership Agreements, as in effect on the day before the date of enactment of this Act, including suggested modifications to the process provided by non-Federal interests; and

(2) recommendations based on the evaluation under paragraph (1) to improve the Project Partnership Agreement template and the process for preparing, negotiating, and approving Project Partnership Agreements.

(b) SUBMISSION TO CONGRESS.—

(1) IN GENERAL.—The Secretary shall submit the findings of the National Academy of Public Administration to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives.

(2) REPORT.—Not later than 180 days after the date on which the findings are received under paragraph (1), the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a detailed response, including any recommendations the Secretary plans to implement, on the process for preparing, negotiating, and approving Project Partnership Agreements and the Project Partnership Agreement template.

SEC. 1014. STUDY AND CONSTRUCTION OF WATER RESOURCES DEVELOPMENT PROJECTS BY NON-FEDERAL INTERESTS.

(a) STUDIES.—Section 203 of the Water Resources Development Act of 1986 (33 U.S.C. 2231) is amended to read as follows:

"SEC. 203. STUDY OF WATER RESOURCES DEVELOPMENT PROJECTS BY NON-FEDERAL INTERESTS.

"(a) SUBMISSION TO SECRETARY.—

"(1) IN GENERAL.—A non-Federal interest may undertake a feasibility study of a proposed water resources development project and submit the study to the Secretary.

"(2) GUIDELINES.—To assist non-Federal interests, the Secretary, as soon as practicable, shall issue guidelines for feasibility studies of water resources development projects to provide sufficient information for the formulation of the studies.

"(b) REVIEW BY SECRETARY.—The Secretary shall review each feasibility study received under subsection (a)(1) for the purpose of determining whether or not the study, and the process under which the study was developed, each comply with Federal laws and regulations applicable to feasibility studies of water resources development projects.

"(c) SUBMISSION TO CONGRESS.—Not later than 180 days after the date of receipt of a feasibility study of a project under subsection (a)(1), the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report that describes—

"(1) the results of the Secretary's review of the study under subsection (b), including a determination of whether the project is feasible;

"(2) any recommendations the Secretary may have concerning the plan or design of the project; and

"(3) any conditions the Secretary may require for construction of the project.

"(d) CREDIT.—If a project for which a feasibility study has been submitted under subsection (a)(1) is authorized by a Federal law enacted after the date of the submission to Congress under subsection

(c), the Secretary shall credit toward the non-Federal share of the cost of construction of the project an amount equal to the portion of the cost of developing the study that would have been the responsibility of the United States if the study had been developed by the Secretary.".

(b) CONSTRUCTION.—

(1) IN GENERAL.—Section 204 of the Water Resources Development Act of 1986 (33 U.S.C. 2232) is amended to read as follows:

"SEC. 204. CONSTRUCTION OF WATER RESOURCES DEVELOPMENT PROJECTS BY NON-FEDERAL INTERESTS.

"(a) WATER RESOURCES DEVELOPMENT PROJECT DEFINED.—In this section, the term 'water resources development project' means a project recommendation that results from—

"(1) a feasibility report, as such term is defined in section 7001(f) of the Water Resources Reform and Development Act of 2014;

"(2) a completed feasibility study developed under section 203; or

"(3) a final feasibility study for water resources development and conservation and other purposes that is specifically authorized by Congress to be carried out by the Secretary.

"(b) AUTHORITY.—

"(1) IN GENERAL.—A non-Federal interest may carry out a water resources development project, or separable element thereof—

"(A) in accordance with a plan approved by the Secretary for the project or separable element; and

"(B) subject to any conditions that the Secretary may require, including any conditions specified under section 203(c)(3).

"(2) CONDITIONS.—Before carrying out a water resources development project, or separable element thereof, under this section, a non-Federal interest shall—

"(A) obtain any permit or approval required in connection with the project or separable element under Federal or State law; and

"(B) ensure that a final environmental impact statement or environmental assessment, as appropriate, for the project or separable element has been filed.

"(c) STUDIES AND ENGINEERING.—When requested by an appropriate non-Federal interest, the Secretary may undertake all necessary studies and engineering for any construction to be undertaken under subsection (b), and provide technical assistance in obtaining all necessary permits for the construction, if the non-Federal interest contracts with the Secretary to furnish the United States funds for the studies, engineering, or technical assistance in the period during which the studies and engineering are being conducted.

"(d) CREDIT OR REIMBURSEMENT.—

"(1) GENERAL RULE.—Subject to paragraph (3), a project or separable element of a project carried out by a non-Federal interest under this section shall be eligible for credit or reimbursement for the Federal share of work carried out on a project or separable element of a project if—

"(A) before initiation of construction of the project or separable element—

"(i) the Secretary approves the plans for construction of the project or separable element of the project by the non-Federal interest;

"(ii) the Secretary determines, before approval of the plans, that the project or separable element of the project is feasible; and

"(iii) the non-Federal interest enters into a written agreement with the Secretary under section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b), including an agreement to pay the non-Federal share, if any, of the cost of operation and maintenance of the project; and

"(B) the Secretary determines that all Federal laws and regulations applicable to the construction of a water resources development project, and any conditions identified under subsection (b)(1)(B), were complied with by the non-Federal interest during construction of the project or separable element of the project.

"(2) APPLICATION OF CREDIT.—The Secretary may apply credit toward—

"(A) the non-Federal share of authorized separable elements of the same project; or

"(B) subject to the requirements of this section and section 1020 of the Water Resources Reform and Development Act of 2014, at the request of the non-Federal interest, the non-Federal share of a different water resources development project.

"(3) REQUIREMENTS.—The Secretary may only apply credit or provide reimbursement under paragraph (1) if—

"(A) Congress has authorized construction of the project or separable element of the project; and

"(B) the Secretary certifies that the project has been constructed in accordance with—

"(i) all applicable permits or approvals; and

"(ii) this section.

"(4) MONITORING.—The Secretary shall regularly monitor and audit any water resources development project, or separable element of a water resources development project, constructed by a non-Federal interest under this section to ensure that—

"(A) the construction is carried out in compliance with the requirements of this section; and

"(B) the costs of the construction are reasonable.

"(e) NOTIFICATION OF COMMITTEES.—If a non-Federal interest notifies the Secretary that the non-Federal interest intends to carry out a project, or separable element thereof, under this section, the Secretary shall provide written notice to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives concerning the intent of the non-Federal interest.

"(f) OPERATION AND MAINTENANCE.—Whenever a non-Federal interest carries out improvements to a federally authorized harbor

or inland harbor, the Secretary shall be responsible for operation and maintenance in accordance with section 101(b) if—

"(1) before construction of the improvements—

"(A) the Secretary determines that the improvements are feasible and consistent with the purposes of this title; and

"(B) the Secretary and the non-Federal interest execute a written agreement relating to operation and maintenance of the improvements;

"(2) the Secretary certifies that the project or separable element of the project is constructed in accordance with applicable permits and appropriate engineering and design standards; and

"(3) the Secretary does not find that the project or separable element is no longer feasible.".

(c) REPEALS.—The following provisions are repealed:

(1) Section 404 of the Water Resources Development Act of 1990 (33 U.S.C. 2232 note; 104 Stat. 4646) and the item relating to that section in the table of contents contained in section 1(b) of that Act.

(2) Section 206 of the Water Resources Development Act of 1992 (33 U.S.C. 426i–1) and the item relating to that section in the table of contents contained in section 1(b) of that Act.

(3) Section 211 of the Water Resources Development Act of 1996 (33 U.S.C. 701b–13) and the item relating to that section in the table of contents contained in section 1(b) of that Act.

(d) SAVINGS PROVISION.—Nothing in this section may be construed to affect an agreement in effect on the date of enactment of this Act, or an agreement that is finalized between the Corps of Engineers and a non-Federal interest on or before December 31, 2014, under any of the following sections (as such sections were in effect on the day before such date of enactment):

(1) Section 204 of the Water Resources Development Act of 1986 (33 U.S.C. 2232).

(2) Section 206 of the Water Resources Development Act of 1992 (33 U.S.C. 426i–1).

(3) Section 211 of the Water Resources Development Act of 1996 (33 U.S.C. 701b–13).

SEC. 1015. CONTRIBUTIONS BY NON-FEDERAL INTERESTS.

(a) IN GENERAL.—Section 5 of the Act of June 22, 1936 (33 U.S.C. 701h), is amended—

(1) by inserting "and other non-Federal interests" after "States and political subdivisions thereof" each place it appears;

(2) by inserting ", including a project for navigation on the inland waterways," after "study or project";

(3) by striking "Provided, That when" and inserting "Provided, That the Secretary is authorized to receive and expend funds from a State or a political subdivision thereof, and other non-Federal interests or private entities, to operate a hurricane barrier project to support recreational activities at or in the vicinity of the project, at no cost to the Federal Government, if the Secretary determines that operation for such purpose is not inconsistent with the operation and maintenance of the project for the authorized purposes of the project: Provided further, That when"; and

(4) by striking the period at the end and inserting the following: ": Provided further, That the term 'non-Federal interest' has the meaning given that term in section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b).".

(b) NOTIFICATION FOR CONTRIBUTED FUNDS.—Prior to accepting funds contributed under section 5 of the Act of June 22, 1936 (33 U.S.C. 701h), the Secretary shall provide written notice of the funds to the Committee on Environment and Public Works and the Committee on Appropriations of the Senate and the Committee on Transportation and Infrastructure and the Committee on Appropriations of the House of Representatives.

(c) TECHNICAL AMENDMENT.—Section 111(b) of the Energy and Water Development and Related Agencies Appropriations Act, 2012 (125 Stat. 858) is repealed.

SEC. 1016. OPERATION AND MAINTENANCE OF CERTAIN PROJECTS.

The Secretary may assume responsibility for operation and maintenance in accordance with section 101(b) of the Water Resources Development Act of 1986 (33 U.S.C. 2211(b)) (as amended by section 2102(b)) for improvements to a federally authorized harbor or inland harbor that are carried out by a non-Federal interest prior to December 31, 2014, if the Secretary determines that the requirements under paragraphs (2) and (3) of section 204(f) of the Water Resources Development Act of 1986 (33 U.S.C. 2232(f)) are met.

SEC. 1017. ACCEPTANCE OF CONTRIBUTED FUNDS TO INCREASE LOCK OPERATIONS.

(a) IN GENERAL.—The Secretary, after providing public notice, shall establish a pilot program for the acceptance and expenditure of funds contributed by non-Federal interests to increase the hours of operation of locks at water resources development projects.

(b) APPLICABILITY.—The establishment of the pilot program under this section shall not affect the periodic review and adjustment of hours of operation of locks based on increases in commercial traffic carried out by the Secretary.

(c) PUBLIC COMMENT.—Not later than 180 days before a proposed modification to the operation of a lock at a water resources development project will be carried out, the Secretary shall—

(1) publish the proposed modification in the Federal Register; and

(2) accept public comment on the proposed modification.

(d) REPORTS.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report that evaluates the cost-savings resulting from reduced lock hours and any economic impacts of modifying lock operations.

(2) REVIEW OF PILOT PROGRAM.—Not later than September 30, 2017, and each year thereafter, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report that describes the effectiveness of the pilot program under this section.

(e) ANNUAL REVIEW.—The Secretary shall carry out an annual review of the commercial use of locks and make any necessary adjustments to lock operations based on that review.

(f) TERMINATION.—The authority to accept funds under this section shall terminate 5 years after the date of enactment of this Act.

SEC. 1018. CREDIT FOR IN-KIND CONTRIBUTIONS.

(a) IN GENERAL.—Section 221(a)(4) of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b(a)(4)) is amended—

(1) in subparagraph (A), in the matter preceding clause (i), by inserting "or a project under an environmental infrastructure assistance program" after "law";

(2) in subparagraph (C) by striking "In any case" and all that follows through the period at the end and inserting the following:

"(i) CONSTRUCTION.—

"(I) IN GENERAL.—In any case in which the non-Federal interest is to receive credit under subparagraph (A) for the cost of construction carried out by the non-Federal interest before execution of a partnership agreement and that construction has not been carried out as of November 8, 2007, the Secretary and the non-Federal interest shall enter into an agreement under which the non-Federal interest shall carry out such work and shall do so prior to the non-Federal interest initiating construction or issuing a written notice to proceed for the construction.

"(II) ELIGIBILITY.—Construction that is carried out after the execution of an agreement to carry out work described in subclause (I) and any design activities that are required for that construction, even if the design activity is carried out prior to the execution of the agreement to carry out work, shall be eligible for credit.

"(ii) PLANNING.—

"(I) IN GENERAL.—In any case in which the non-Federal interest is to receive credit under subparagraph (A) for the cost of planning carried out by the non-Federal interest before execution of a feasibility cost-sharing agreement, the Secretary and the non-Federal interest shall enter into an agreement under which the non-Federal interest shall carry out such work and shall do so prior to the non-Federal interest initiating that planning.

"(II) ELIGIBILITY.—Planning that is carried out by the non-Federal interest after the execution of an agreement to carry out work described in subclause (I) shall be eligible for credit.";

(3) in subparagraph (D)(iii) by striking "sections 101 and 103" and inserting "sections 101(a)(2) and 103(a)(1)(A) of the Water Resources Development Act of 1986 (33 U.S.C. 2211(a)(2); 33 U.S.C. 2213(a)(1)(A))";

(4) by redesignating subparagraph (E) as subparagraph (H);

(5) by inserting after subparagraph (D) the following:

"(E) ANALYSIS OF COSTS AND BENEFITS.—In the evaluation of the costs and benefits of a project, the Secretary shall not consider construction carried out by a non-Federal interest under this subsection as part of the future without project condition.

"(F) TRANSFER OF CREDIT BETWEEN SEPARABLE ELEMENTS OF A PROJECT.—Credit for in-kind contributions provided by a non-Federal interest that are in excess of the non-Federal cost share for an authorized separable element of a project may be applied toward the non-Federal cost share for a different authorized separable element of the same project.

"(G) APPLICATION OF CREDIT.—

"(i) IN GENERAL.—To the extent that credit for in-kind contributions, as limited by subparagraph (D), and credit for required land, easements, rights-of-way, dredged material disposal areas, and relocations provided by the non-Federal interest exceed the non-Federal share of the cost of construction of a project other than a navigation project, the Secretary, subject to the availability of funds, shall enter into a reimbursement agreement with the non-Federal interest, which shall be in addition to a partnership agreement under subparagraph (A), to reimburse the difference to the non-Federal interest.

"(ii) PRIORITY.—If appropriated funds are insufficient to cover the full cost of all requested reimbursement agreements under clause (i), the Secretary shall enter into reimbursement agreements in the order in which requests for such agreements are received."; and

(6) in subparagraph (H) (as redesignated by paragraph (4))—

(A) in clause (i) by inserting ", and to water resources projects authorized prior to the date of enactment of the Water Resources Development Act of 1986 (Public Law 99–662), if correction of design deficiencies is necessary" before the period at the end; and

(B) by striking clause (ii) and inserting the following:

"(ii) AUTHORIZATION AS ADDITION TO OTHER AUTHORIZATIONS.—The authority of the Secretary to provide credit for in-kind contributions pursuant to this paragraph shall be in addition to any other authorization to provide credit for in-kind contributions and shall not be construed as a limitation on such other authorization. The Secretary shall apply the provisions of this paragraph, in lieu of provisions under other crediting authority, only if so requested by the non-Federal interest.".

(b) APPLICABILITY.—Section 2003(e) of the Water Resources Development Act of 2007 (42 U.S.C. 1962d–5b note) is amended—

(1) by inserting ", or construction of design deficiency corrections on the project," after "construction on the project"; and

(2) by inserting ", or under which construction of the project has not been completed and the work to be performed by the

non-Federal interests has not been carried out and is creditable only toward any remaining non-Federal cost share," after "has not been initiated".

(c) EFFECTIVE DATE.—The amendments made by subsections (a) and (b) take effect on November 8, 2007.

(d) GUIDELINES.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall update any guidance or regulations for carrying out section 221(a)(4) of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b(a)(4)) (as amended by subsection (a)) that are in existence on the date of enactment of this Act or issue new guidelines, as determined to be appropriate by the Secretary.

(2) INCLUSIONS.—Any guidance, regulations, or guidelines updated or issued under paragraph (1) shall include, at a minimum—

(A) the milestone for executing an in-kind memorandum of understanding for construction by a non-Federal interest;

(B) criteria and procedures for evaluating a request to execute an in-kind memorandum of understanding for construction by a non-Federal interest that is earlier than the milestone under subparagraph (A) for that execution; and

(C) criteria and procedures for determining whether work carried out by a non-Federal interest is integral to a project.

(3) PUBLIC AND STAKEHOLDER PARTICIPATION.—Before issuing any new or revised guidance, regulations, or guidelines or any subsequent updates to those documents, the Secretary shall—

(A) consult with affected non-Federal interests;

(B) publish the proposed guidelines developed under this subsection in the Federal Register; and

(C) provide the public with an opportunity to comment on the proposed guidelines.

(e) OTHER CREDIT.—Nothing in section 221(a)(4) of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b(a)(4)) (as amended by subsection (a)) affects any eligibility for credit under section 104 of the Water Resources Development of 1986 (33 U.S.C. 2214) that was approved by the Secretary prior to the date of enactment of this Act.

SEC. 1019. CLARIFICATION OF IN-KIND CREDIT AUTHORITY.

(a) NON-FEDERAL COST SHARE.—Section 7007 of the Water Resources Development Act of 2007 (121 Stat. 1277) is amended—

(1) in subsection (a), by inserting ", on, or after" after "before";

(2) by striking subsection (d) and inserting the following:

"(d) TREATMENT OF CREDIT BETWEEN PROJECTS.—The value of any land, easements, rights-of-way, relocations, and dredged material disposal areas and the costs of planning, design, and construction work provided by the non-Federal interest that exceed the non-Federal cost share for a study or project under this title may be applied toward the non-Federal cost share for any other study or project carried out under this title."; and

(3) by adding at the end the following:

"(g) DEFINITION OF STUDY OR PROJECT.—In this section, the term 'study or project' includes any eligible activity that is—

"(1) carried out pursuant to the coastal Louisiana ecosystem science and technology program authorized under section 7006(a); and

"(2) in accordance with the restoration plan.".

(b) IMPLEMENTATION.—Not later than 90 days after the date of enactment of this Act, the Secretary, in coordination with any relevant agencies of the State of Louisiana, shall establish a process by which to carry out the amendment made by subsection (a)(2).

(c) EFFECTIVE DATE.—The amendments made by subsection (a) take effect on November 8, 2007.

SEC. 1020. TRANSFER OF EXCESS CREDIT.

(a) IN GENERAL.—Subject to subsection (b), the Secretary may apply credit for in-kind contributions provided by a non-Federal interest that are in excess of the required non-Federal cost share for a water resources development study or project toward the required non-Federal cost share for a different water resources development study or project.

(b) RESTRICTIONS.—

(1) IN GENERAL.—Except for subsection (a)(4)(D)(i) of that section, the requirements of section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b) (as amended by section 1018(a)) shall apply to any credit under this section.

(2) CONDITIONS.—Credit in excess of the non-Federal share for a study or project may be approved under this section only if—

(A) the non-Federal interest submits a comprehensive plan to the Secretary that identifies—

(i) the studies and projects for which the non-Federal interest intends to provide in-kind contributions for credit that are in excess of the non-Federal cost share for the study or project; and

(ii) the authorized studies and projects to which that excess credit would be applied;

(B) the Secretary approves the comprehensive plan; and

(C) the total amount of credit does not exceed the total non-Federal share for the studies and projects in the approved comprehensive plan.

(c) ADDITIONAL CRITERIA.—In evaluating a request to apply credit in excess of the non-Federal share for a study or project toward a different study or project, the Secretary shall consider whether applying that credit will—

(1) help to expedite the completion of a project or group of projects;

(2) reduce costs to the Federal Government; and

(3) aid the completion of a project that provides significant flood risk reduction or environmental benefits.

(d) TERMINATION OF AUTHORITY.—The authority provided in this section shall terminate 10 years after the date of enactment of this Act.

(e) REPORT.—

(1) DEADLINES.—

(A) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, and once every 2 years thereafter,

the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available an interim report on the use of the authority under this section.

(B) FINAL REPORT.—Not later than 10 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a final report on the use of the authority under this section.

(2) INCLUSIONS.—The reports described in paragraph (1) shall include—

(A) a description of the use of the authority under this section during the reporting period;

(B) an assessment of the impact of the authority under this section on the time required to complete projects; and

(C) an assessment of the impact of the authority under this section on other water resources projects.

SEC. 1021. CREDITING AUTHORITY FOR FEDERALLY AUTHORIZED NAVIGATION PROJECTS.

A non-Federal interest may carry out operation and maintenance activities for an authorized navigation project, subject to the condition that the non-Federal interest complies with all Federal laws and regulations applicable to such operation and maintenance activities, and may receive credit for the costs incurred by the non-Federal interest in carrying out such activities towards the share of construction costs of that non-Federal interest for another element of the same project or another authorized navigation project, except that in no instance may such credit exceed 20 percent of the total costs associated with construction of the general navigation features of the project for which such credit may be applied pursuant to this section.

SEC. 1022. CREDIT IN LIEU OF REIMBURSEMENT.

(a) REQUESTS FOR CREDITS.—With respect to an authorized flood damage reduction project, or separable element thereof, that has been constructed by a non-Federal interest under section 211 of the Water Resources Development Act of 1996 (33 U.S.C. 701b–13) before the date of enactment of this Act, the Secretary may provide to the non-Federal interest, at the request of the non-Federal interest, a credit in an amount equal to the estimated Federal share of the cost of the project or separable element, in lieu of providing to the non-Federal interest a reimbursement in that amount.

(b) APPLICATION OF CREDITS.—At the request of the non-Federal interest, the Secretary may apply such credit to the share of the cost of the non-Federal interest of carrying out other flood damage reduction projects or studies.

SEC. 1023. ADDITIONAL CONTRIBUTIONS BY NON-FEDERAL INTERESTS.

Section 902 of the Water Resources Development Act of 1986 (33 U.S.C. 2280) is amended—

(1) by striking "In order to insure" and inserting "(a) IN GENERAL.—In order to insure"; and

(2) by adding at the end the following:

"(b) CONTRIBUTIONS BY NON-FEDERAL INTERESTS.—Notwithstanding subsection (a), in accordance with section 5 of the Act of June 22, 1936 (33 U.S.C. 701h), the Secretary may accept funds from a non-Federal interest for any authorized water resources development project that has exceeded its maximum cost under subsection (a), and use such funds to carry out such project, if the use of such funds does not increase the Federal share of the cost of such project.".

SEC. 1024. AUTHORITY TO ACCEPT AND USE MATERIALS AND SERVICES.

(a) IN GENERAL.—Subject to subsection (b), the Secretary is authorized to accept and use materials and services contributed by a non-Federal public entity, a nonprofit entity, or a private entity for the purpose of repairing, restoring, or replacing a water resources development project that has been damaged or destroyed as a result of an emergency if the Secretary determines that the acceptance and use of such materials and services is in the public interest.

(b) LIMITATION.—Any entity that contributes materials or services under subsection (a) shall not be eligible for credit or reimbursement for the value of such materials or services.

(c) REPORT.—Not later than 60 days after initiating an activity under this section, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report that includes—

(1) a description of the activities undertaken, including the costs associated with the activities; and

(2) a comprehensive description of how the activities are necessary for maintaining a safe and reliable water resources project.

SEC. 1025. WATER RESOURCES PROJECTS ON FEDERAL LAND.

(a) IN GENERAL.—Subject to subsection (b), the Secretary may carry out an authorized water resources development project on Federal land that is under the administrative jurisdiction of another Federal agency where the cost of the acquisition of such Federal land has been paid for by the non-Federal interest for the project.

(b) MOU REQUIRED.—The Secretary may carry out a project pursuant to subsection (a) only after the non-Federal interest has entered into a memorandum of understanding with the Federal agency that includes such terms and conditions as the Secretary determines to be necessary.

(c) APPLICABILITY.—Nothing in this section alters any non-Federal cost-sharing requirements for the project.

SEC. 1026. CLARIFICATION OF IMPACTS TO OTHER FEDERAL FACILITIES.

In any case where the modification or construction of a water resources development project carried out by the Secretary adversely impacts other Federal facilities, the Secretary may accept from other Federal agencies such funds as may be necessary to address the adverse impact, including by removing, relocating, or reconstructing those facilities.

SEC. 1027. CLARIFICATION OF MUNITION DISPOSAL AUTHORITIES.

(a) IN GENERAL.—The Secretary may implement any response action the Secretary determines to be necessary at a site where—

(1) the Secretary has carried out a project under civil works authority of the Secretary that includes placing sand on a beach; and

(2) as a result of the project described in paragraph (1), military munitions that were originally released as a result of Department of Defense activities are deposited on the beach, posing a threat to human health or the environment.

(b) RESPONSE ACTION FUNDING.—A response action described in subsection (a) shall be funded from amounts made available to the agency within the Department of Defense responsible for the original release of the munitions.

SEC. 1028. CLARIFICATION OF MITIGATION AUTHORITY.

(a) IN GENERAL.—The Secretary may carry out measures to improve fish species habitat within the boundaries and downstream of a water resources project constructed by the Secretary that includes a fish hatchery if the Secretary—

(1) has been explicitly authorized to compensate for fish losses associated with the project; and

(2) determines that the measures are—

(A) feasible;

(B) consistent with authorized project purposes and the fish hatchery; and

(C) in the public interest.

(b) COST SHARING.—

(1) IN GENERAL.—Subject to paragraph (2), the non-Federal interest shall contribute 35 percent of the total cost of carrying out activities under this section, including the costs relating to the provision or acquisition of required land, easements, rights-of-way, dredged material disposal areas, and relocations.

(2) OPERATION AND MAINTENANCE.—The non-Federal interest shall contribute 100 percent of the costs of operation, maintenance, replacement, repair, and rehabilitation of the measures carried out under this section.

SEC. 1029. CLARIFICATION OF INTERAGENCY SUPPORT AUTHORITIES.

Section 234 of the Water Resources Development Act of 1996 (33 U.S.C. 2323a) is amended—

(1) in subsection (a), by striking "other Federal agencies," and inserting "Federal departments or agencies, nongovernmental organizations,";

(2) in subsection (b), by inserting "or foreign governments" after "organizations";

(3) in subsection (c), by inserting "and restoration" after "protection"; and

(4) in subsection (d)—

(A) in the first sentence, by striking "There is" and inserting "(1) IN GENERAL.—There is"; and

(B) in the second sentence—

(i) by striking "The Secretary" and inserting "(2) ACCEPTANCE OF FUNDS.—The Secretary"; and

(ii) by striking "other Federal agencies," and inserting "Federal departments or agencies, nongovernmental organizations,".

SEC. 1030. CONTINUING AUTHORITY.

(a) CONTINUING AUTHORITY PROGRAMS.—

(1) DEFINITION OF CONTINUING AUTHORITY PROGRAM PROJECT.—In this subsection, the term "continuing authority program" means 1 of the following authorities:

(A) Section 205 of the Flood Control Act of 1948 (33 U.S.C. 701s).

(B) Section 111 of the River and Harbor Act of 1968 (33 U.S.C. 426i).

(C) Section 206 of the Water Resources Development Act of 1996 (33 U.S.C. 2330).

(D) Section 1135 of the Water Resources Development Act of 1986 (33 U.S.C. 2309a).

(E) Section 107 of the River and Harbor Act of 1960 (33 U.S.C. 577).

(F) Section 3 of the Act of August 13, 1946 (33 U.S.C. 426g).

(G) Section 14 of the Flood Control Act of 1946 (33 U.S.C. 701r).

(H) Section 103 of the River and Harbor Act of 1962 (Public Law 87–874; 76 Stat. 1178).

(I) Section 204(e) of the Water Resources Development Act of 1992 (33 U.S.C. 2326(e)).

(J) Section 208 of the Flood Control Act of 1958 (33 U.S.C. 701b–8a).

(K) Section 104(a) of the River and Harbor Act of 1958 (33 U.S.C. 610(a)).

(2) PRIORITIZATION.—Not later than 1 year after the date of enactment of this Act, the Secretary shall publish in the Federal Register and on a publicly available website, the criteria the Secretary uses for prioritizing annual funding for continuing authority program projects.

(3) ANNUAL REPORT.—Not later than 1 year after the date of enactment of this Act and each year thereafter, the Secretary shall publish in the Federal Register and on a publicly available website, a report on the status of each continuing authority program, which, at a minimum, shall include—

(A) the name and a short description of each active continuing authority program project;

(B) the cost estimate to complete each active project; and

(C) the funding available in that fiscal year for each continuing authority program.

(4) CONGRESSIONAL NOTIFICATION.—On publication in the Federal Register under paragraphs (2) and (3), the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a copy of all information published under those paragraphs.

(b) SMALL RIVER AND HARBOR IMPROVEMENT PROJECTS.—Section 107 of the River and Harbor Act of 1960 (33 U.S.C. 577) is amended—

(1) in subsection (a), by striking "$35,000,000" and inserting "$50,000,000"; and

(2) in subsection (b), by striking "$7,000,000" and inserting "$10,000,000".

(c) SHORE DAMAGE PREVENTION OR MITIGATION.—Section 111(c) of the River and Harbor Act of 1968 (33 U.S.C. 426i(c)) is amended by striking "$5,000,000" and inserting "$10,000,000".

(d) REGIONAL SEDIMENT MANAGEMENT.—

(1) IN GENERAL.—Section 204 of the Water Resources Development Act of 1992 (33 U.S.C. 2326) is amended—

(A) in subsection (c)(1)(C), by striking "$5,000,000" and inserting "$10,000,000"; and

(B) in subsection (g), by striking "$30,000,000" and inserting "$50,000,000".

(2) APPLICABILITY.—Section 2037 of the Water Resources Development Act of 2007 (121 Stat. 1094) is amended by adding at the end the following:

"(c) APPLICABILITY.—The amendment made by subsection (a) shall not apply to any project authorized under this Act if a report of the Chief of Engineers for the project was completed prior to the date of enactment of this Act.".

(e) SMALL FLOOD CONTROL PROJECTS.—Section 205 of the Flood Control Act of 1948 (33 U.S.C. 701s) is amended in the third sentence by striking "$7,000,000" and inserting "$10,000,000".

(f) PROJECT MODIFICATIONS FOR IMPROVEMENT OF ENVIRONMENT.—Section 1135(d) of the Water Resources Development Act of 1986 (33 U.S.C. 2309a(d)) is amended—

(1) in the second sentence, by striking "Not more than 80 percent of the non-Federal share may be" and inserting "The non-Federal share may be provided"; and

(2) in the third sentence, by striking "$5,000,000" and inserting "$10,000,000".

(g) AQUATIC ECOSYSTEM RESTORATION.—Section 206(d) of the Water Resources Development Act of 1996 (33 U.S.C. 2330(d)) is amended by striking "$5,000,000" and inserting "$10,000,000".

(h) FLOODPLAIN MANAGEMENT SERVICES.—Section 206(d) of the Flood Control Act of 1960 (33 U.S.C. 709a(d)) is amended by striking "$15,000,000" and inserting "$50,000,000".

(i) EMERGENCY STREAMBANK AND SHORELINE PROTECTION.—Section 14 of the Flood Control Act of 1946 (33 U.S.C. 701r) is amended—

(1) by striking "$15,000,000" and inserting "$20,000,000"; and

(2) by striking "$1,500,000" and inserting "$5,000,000".

SEC. 1031. TRIBAL PARTNERSHIP PROGRAM.

(a) IN GENERAL.—Section 203 of the Water Resources Development Act of 2000 (33 U.S.C. 2269) is amended—

(1) in subsection (d)(1)(B)—

(A) by striking "The ability" and inserting the following:

"(i) IN GENERAL.—The ability"; and

(B) by adding at the end the following:

"(ii) DETERMINATION.—Not later than 180 days after the date of enactment of this clause, the Secretary

shall issue guidance on the procedures described in clause (i).”; and

(2) by striking subsection (e) and inserting the following:

“(e) RESTRICTIONS.—The Secretary is authorized to carry out activities under this section for fiscal years 2015 through 2024.”.

(b) COOPERATIVE AGREEMENTS WITH INDIAN TRIBES.—The Secretary may enter into a cooperative agreement with an Indian tribe (or a designated representative of an Indian tribe) to carry out authorized activities of the Corps of Engineers to protect fish, wildlife, water quality, and cultural resources.

SEC. 1032. TERRITORIES OF THE UNITED STATES.

Section 1156 of the Water Resources Development Act of 1986 (33 U.S.C. 2310) is amended—

(1) by striking “The Secretary shall waive” and inserting “(a) IN GENERAL.—The Secretary shall waive”;

(2) in subsection (a) (as so designated), by inserting “Puerto Rico,” before “and the Trust Territory of the Pacific Islands”; and

(3) by adding at the end the following:

“(b) INFLATION ADJUSTMENT.—The Secretary shall adjust the dollar amount specified in subsection (a) for inflation for the period beginning on November 17, 1986, and ending on the date of enactment of this subsection.”.

SEC. 1033. CORROSION PREVENTION.

(a) IN GENERAL.—To the greatest extent practicable, the Secretary shall encourage and incorporate corrosion prevention activities at water resources development projects.

(b) ACTIVITIES.—In carrying out subsection (a), the Secretary, to the greatest extent practicable, shall ensure that contractors performing work for water resources development projects—

(1) use best practices to carry out corrosion prevention activities in the field;

(2) use industry-recognized standards and corrosion mitigation and prevention methods when—

(A) determining protective coatings;

(B) selecting materials; and

(C) determining methods of cathodic protection, design, and engineering for corrosion prevention;

(3) use certified coating application specialists and cathodic protection technicians and engineers;

(4) use best practices in environmental protection to prevent environmental degradation and to ensure careful handling of all hazardous materials;

(5) demonstrate a history of employing industry-certified inspectors to ensure adherence to best practices and standards; and

(6) demonstrate a history of compliance with applicable requirements of the Occupational Safety and Health Administration.

(c) CORROSION PREVENTION ACTIVITIES DEFINED.—In this section, the term “corrosion prevention activities” means—

(1) the application and inspection of protective coatings for complex work involving steel and cementitious structures, including structures that will be exposed in immersion;

(2) the installation, testing, and inspection of cathodic protection systems; and

(3) any other activities related to corrosion prevention the Secretary determines appropriate.

SEC. 1034. ADVANCED MODELING TECHNOLOGIES.

(a) IN GENERAL.—To the greatest extent practicable, the Secretary shall encourage and incorporate advanced modeling technologies, including 3-dimensional digital modeling, that can expedite project delivery or improve the evaluation of water resources development projects that receive Federal funding by—

(1) accelerating and improving the environmental review process;

(2) increasing effective public participation;

(3) enhancing the detail and accuracy of project designs;

(4) increasing safety;

(5) accelerating construction and reducing construction costs; or

(6) otherwise achieving the purposes described in paragraphs (1) through (5).

(b) ACTIVITIES.—In carrying out subsection (a), the Secretary, to the greatest extent practicable, shall—

(1) compile information related to advanced modeling technologies, including industry best practices with respect to the use of the technologies;

(2) disseminate to non-Federal interests the information described in paragraph (1); and

(3) promote the use of advanced modeling technologies.

SEC. 1035. RECREATIONAL ACCESS.

(a) DEFINITION OF FLOATING CABIN.—In this section, the term "floating cabin" means a vessel (as defined in section 3 of title 1, United States Code) that has overnight accommodations.

(b) RECREATIONAL ACCESS.—The Secretary shall allow the use of a floating cabin on waters under the jurisdiction of the Secretary in the Cumberland River basin if—

(1) the floating cabin—

(A) is in compliance with regulations for recreational vessels issued under chapter 43 of title 46, United States Code, and section 312 of the Federal Water Pollution Control Act (33 U.S.C. 1322);

(B) is located at a marina leased by the Corps of Engineers; and

(C) is maintained by the owner to required health and safety standards; and

(2) the Secretary has authorized the use of recreational vessels on such waters.

SEC. 1036. NON-FEDERAL PLANS TO PROVIDE ADDITIONAL FLOOD RISK REDUCTION.

(a) IN GENERAL.—If requested by a non-Federal interest, the Secretary shall carry out a locally preferred plan that provides a higher level of protection than a flood risk management project authorized under this Act if the Secretary determines that—

(1) the plan is technically feasible and environmentally acceptable; and

(2) the benefits of the plan exceed the costs of the plan.

(b) NON-FEDERAL COST SHARE.—If the Secretary carries out a locally preferred plan under subsection (a), the Federal share of the cost of the project shall be not greater than the share as provided by law for elements of the national economic development plan.

SEC. 1037. HURRICANE AND STORM DAMAGE REDUCTION.

(a) IN GENERAL.—Section 156 of the Water Resources Development Act of 1976 (42 U.S.C. 1962d–5f) is amended—

(1) by striking "The Secretary" and inserting the following: "(a) IN GENERAL.—The Secretary"; and

(2) by adding at the end the following:

"(b) REVIEW.—Notwithstanding subsection (a), the Secretary shall, at the request of the non-Federal interest, carry out a study to determine the feasibility of extending the period of nourishment described in subsection (a) for a period not to exceed 15 additional years beyond the maximum period described in subsection (a).

"(c) PLAN FOR REDUCING RISK TO PEOPLE AND PROPERTY.—

"(1) IN GENERAL.—As part of the review described in subsection (b), the non-Federal interest shall submit to the Secretary a plan for reducing risk to people and property during the life of the project.

"(2) INCLUSION OF PLAN IN RECOMMENDATION TO CONGRESS.—The Secretary shall include the plan described in subsection (a) in the recommendations to Congress described in subsection (d).

"(d) REPORT TO CONGRESS.—Upon completion of the review described in subsection (b), the Secretary shall—

"(1) submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives any recommendations of the Secretary related to the review; and

"(2) include in the subsequent annual report to Congress required under section 7001 of the Water Resources Reform and Development Act of 2014, any recommendations that require specific congressional authorization.

"(e) SPECIAL RULE.—Notwithstanding any other provision of this section, for any existing authorized water resources development project for which the maximum period for nourishment described in subsection (a) will expire within the 5 year-period beginning on the date of enactment of the Water Resources Reform and Development Act of 2014, that project shall remain eligible for nourishment for an additional 3 years after the expiration of such period.".

(b) REVIEW OF AUTHORIZED PERIODIC NOURISHMENT AUTHORITY.—

(1) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Secretary shall initiate a review of all authorized water resources development projects for which the Secretary is authorized to provide periodic nourishment under section 156 of the Water Resources Development Act of 1976 (42 U.S.C. 1962d–5f).

(2) SCOPE OF REVIEW.—In carrying out the review under paragraph (1), the Secretary shall assess the Federal costs associated with that nourishment authority and the projected benefits of each project.

(3) REPORT TO CONGRESS.—Upon completion of the review under paragraph (1), the Secretary shall issue to the Committee

on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report on the results of that review, including any proposed changes the Secretary may recommend to the nourishment authority.

SEC. 1038. REDUCTION OF FEDERAL COSTS FOR HURRICANE AND STORM DAMAGE REDUCTION PROJECTS.

Section 204 of the Water Resources Development Act of 1992 (33 U.S.C. 2326) (as amended by section 1030(d)(1)) is amended—

(1) in subsection (a)—

(A) in paragraph (1), by inserting "or used in" after "obtained through";

(B) in paragraph (3)(C), by inserting "for the purposes of improving environmental conditions in marsh and littoral systems, stabilizing stream channels, enhancing shorelines, and supporting State and local risk management adaptation strategies" before the period at the end; and

(C) by adding at the end the following:

"(4) REDUCING COSTS.—To reduce or avoid Federal costs, the Secretary shall consider the beneficial use of dredged material in a manner that contributes to the maintenance of sediment resources in the nearby coastal system.";

(2) in subsection (d)—

(A) by striking the subsection designation and heading and inserting the following:

"(d) SELECTION OF DREDGED MATERIAL DISPOSAL METHOD FOR PURPOSES RELATED TO ENVIRONMENTAL RESTORATION OR STORM DAMAGE AND FLOOD REDUCTION.—"; and

(B) in paragraph (1), by striking "in relation to" and all that follows through the period at the end and inserting "in relation to—

"(A) the environmental benefits, including the benefits to the aquatic environment to be derived from the creation of wetlands and control of shoreline erosion; or

"(B) the flood and storm damage and flood reduction benefits, including shoreline protection, protection against loss of life, and damage to improved property."; and

(3) in subsection (e), by striking paragraph (1) and inserting the following:

"(1) cooperate with any State or group of States in the preparation of a comprehensive State or regional sediment management plan within the boundaries of the State or among States;".

SEC. 1039. INVASIVE SPECIES.

(a) AQUATIC SPECIES REVIEW.—

(1) REVIEW OF AUTHORITIES.—The Secretary, in consultation with the Director of the United States Fish and Wildlife Service, the Chairman of the Tennessee Valley Authority, and other applicable heads of Federal agencies, shall—

(A) carry out a review of existing Federal authorities relating to responding to invasive species, including aquatic weeds, aquatic snails, and other aquatic invasive species, that have an impact on water resources; and

(B) based on the review under subparagraph (A), make any recommendations to Congress and applicable State agencies for improving Federal and State laws to more effectively respond to the threats posed by those invasive species.

(2) FEDERAL INVESTMENT.—

(A) ASSESSMENT.—The Comptroller General of the United States shall conduct an assessment of the Federal costs of, and spending on, aquatic invasive species.

(B) CONTENTS.—The assessment conducted under subparagraph (A) shall include—

(i) identification of current Federal spending on, and projected future Federal costs of, operation and maintenance related to mitigating the impacts of aquatic invasive species on federally owned or operated facilities;

(ii) identification of current Federal spending on aquatic invasive species prevention;

(iii) analysis of whether spending identified in clause (ii) is adequate for the maintenance and protection of services provided by federally owned or operated facilities, based on the current spending and projected future costs identified in clause (i); and

(iv) review of any other aspect of aquatic invasive species prevention or mitigation determined appropriate by the Comptroller General.

(C) FINDINGS.—Not later than 1 year after the date of enactment of this Act, the Comptroller General shall submit to the Committee on Environment and Public Works and the Committee on Energy and Natural Resources of the Senate and the Committee on Transportation and Infrastructure and the Committee on Natural Resources of the House of Representatives a report containing the findings of the assessment conducted under subparagraph (A).

(b) AQUATIC INVASIVE SPECIES PREVENTION.—

(1) MULTIAGENCY EFFORT TO SLOW THE SPREAD OF ASIAN CARP IN THE UPPER MISSISSIPPI AND OHIO RIVER BASINS AND TRIBUTARIES.—

(A) IN GENERAL.—The Director of the United States Fish and Wildlife Service, in coordination with the Secretary, the Director of the National Park Service, and the Director of the United States Geological Survey, shall lead a multiagency effort to slow the spread of Asian carp in the Upper Mississippi and Ohio River basins and tributaries by providing technical assistance, coordination, best practices, and support to State and local governments in carrying out activities designed to slow, and eventually eliminate, the threat posed by Asian carp.

(B) BEST PRACTICES.—To the maximum extent practicable, the multiagency effort shall apply lessons learned and best practices such as those described in the document prepared by the Asian Carp Working Group entitled "Management and Control Plan for Bighead, Black, Grass, and Silver Carps in the United States" and dated November 2007, and the document prepared by the Asian Carp Re-

gional Coordinating Committee entitled "FY 2012 Asian Carp Control Strategy Framework" and dated February 2012.

(2) REPORT TO CONGRESS.—

(A) IN GENERAL.—Not later than December 31 of each year, the Director of the United States Fish and Wildlife Service, in coordination with the Secretary, shall submit to the Committee on Appropriations and the Committee on Environment and Public Works of the Senate and the Committee on Appropriations, the Committee on Natural Resources, and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report describing the coordinated strategies established and progress made toward the goals of controlling and eliminating Asian carp in the Upper Mississippi and Ohio River basins and tributaries.

(B) CONTENTS.—Each report submitted under subparagraph (A) shall include—

(i) any observed changes in the range of Asian carp in the Upper Mississippi and Ohio River basins and tributaries during the 2-year period preceding submission of the report;

(ii) a summary of Federal agency efforts, including cooperative efforts with non-Federal partners, to control the spread of Asian carp in the Upper Mississippi and Ohio River basins and tributaries;

(iii) any research that the Director determines could improve the ability to control the spread of Asian carp;

(iv) any quantitative measures that the Director intends to use to document progress in controlling the spread of Asian carp; and

(v) a cross-cut accounting of Federal and non-Federal expenditures to control the spread of Asian carp.

(c) PREVENTION, GREAT LAKES AND MISSISSIPPI RIVER BASIN.—

(1) IN GENERAL.—The Secretary is authorized to implement measures recommended in the efficacy study authorized under section 3061 of the Water Resources Development Act of 2007 (121 Stat. 1121) or in interim reports, with any modifications or any emergency measures that the Secretary determines to be appropriate to prevent aquatic nuisance species from dispersing into the Great Lakes by way of any hydrologic connection between the Great Lakes and the Mississippi River Basin.

(2) NOTIFICATIONS.—The Secretary shall notify the Committees on Environment and Public Works and Appropriations of the Senate and the Committees on Transportation and Infrastructure and Appropriations of the House of Representatives any emergency actions taken pursuant to this subsection.

(d) PREVENTION AND MANAGEMENT.—Section 104 of the River and Harbor Act of 1958 (33 U.S.C. 610) is amended—

(1) in subsection (a)—

(A) in the first sentence, by striking "There is" and inserting the following:

"(1) IN GENERAL.—There is";

(B) in the second sentence, by striking "Local" and inserting the following:

"(2) LOCAL INTERESTS.—Local";

(C) in the third sentence, by striking "Costs" and inserting the following:

"(3) FEDERAL COSTS.—Costs"; and

(D) in paragraph (1) (as designated by subparagraph (A))—

(i) by striking "control and progressive," and inserting "prevention, control, and progressive"; and

(ii) by inserting "and aquatic invasive species" after "noxious aquatic plant growths";

(2) in subsection (b), in the first sentence, by striking "$15,000,000 annually" and inserting "$40,000,000, of which $20,000,000 shall be made available to implement subsection (d), annually"; and

(3) by inserting after subsection (c) the following:

"(d) WATERCRAFT INSPECTION STATIONS.—

"(1) IN GENERAL.—In carrying out this section, the Secretary may establish watercraft inspection stations in the Columbia River Basin to be located in the States of Idaho, Montana, Oregon, and Washington at locations, as determined by the Secretary, with the highest likelihood of preventing the spread of aquatic invasive species at reservoirs operated and maintained by the Secretary.

"(2) COST SHARE.—The non-Federal share of the cost of constructing, operating, and maintaining watercraft inspection stations described in paragraph (1) (including personnel costs) shall be—

"(A) 50 percent; and

"(B) provided by the State or local governmental entity in which such inspection station is located.

"(3) COORDINATION.—In carrying out this subsection, the Secretary shall consult and coordinate with—

"(A) the States described in paragraph (1);

"(B) Indian tribes; and

"(C) other Federal agencies, including—

"(i) the Department of Agriculture;

"(ii) the Department of Energy;

"(iii) the Department of Homeland Security;

"(iv) the Department of Commerce; and

"(v) the Department of the Interior.

"(e) MONITORING AND CONTINGENCY PLANNING.—In carrying out this section, the Secretary may—

"(1) carry out risk assessments of water resources facilities;

"(2) monitor for aquatic invasive species;

"(3) establish watershed-wide plans for expedited response to an infestation of aquatic invasive species; and

"(4) monitor water quality, including sediment cores and fish tissue samples.".

SEC. 1040. FISH AND WILDLIFE MITIGATION.

(a) IN GENERAL.—Section 906 of the Water Resources Development Act of 1986 (33 U.S.C. 2283) is amended—

(1) in subsection (d)—

(A) in paragraph (1)—

(i) in the first sentence—

(I) by inserting "for damages to ecological resources, including terrestrial and aquatic resources, and" after "mitigate";

(II) by inserting "ecological resources and" after "impact on"; and

(III) by inserting "without the implementation of mitigation measures" before the period; and

(ii) by inserting before the last sentence the following: "If the Secretary determines that mitigation to in-kind conditions is not possible, the Secretary shall identify in the report the basis for that determination and the mitigation measures that will be implemented to meet the requirements of this section and the goals of section 307(a)(1) of the Water Resources Development Act of 1990 (33 U.S.C. 2317(a)(1)).";

(B) in paragraph (2)—

(i) in the heading, by striking "DESIGN" and inserting "SELECTION AND DESIGN";

(ii) by inserting "select and" after "shall"; and

(iii) by inserting "using a watershed approach" after "projects"; and

(C) in paragraph (3)—

(i) in subparagraph (A), by inserting ", at a minimum," after "complies with"; and

(ii) in subparagraph (B)—

(I) by striking clause (iii);

(II) by redesignating clauses (iv) and (v) as clauses (v) and (vi), respectively; and

(III) by inserting after clause (ii) the following:

"(iii) for projects where mitigation will be carried out by the Secretary—

"(I) a description of the land and interest in land to be acquired for the mitigation plan;

"(II) the basis for a determination that the land and interests are available for acquisition; and

"(III) a determination that the proposed interest sought does not exceed the minimum interest in land necessary to meet the mitigation requirements for the project;

"(iv) for projects where mitigation will be carried out through a third party mitigation arrangement in accordance with subsection (i)—

"(I) a description of the third party mitigation instrument to be used; and

"(II) the basis for a determination that the mitigation instrument can meet the mitigation requirements for the project;"; and

(2) by adding at the end the following:

"(h) PROGRAMMATIC MITIGATION PLANS.—

"(1) IN GENERAL.—The Secretary may develop programmatic mitigation plans to address the potential impacts to ecological resources, fish, and wildlife associated with existing or future Federal water resources development projects.

"(2) USE OF MITIGATION PLANS.—The Secretary shall, to the maximum extent practicable, use programmatic mitigation plans developed in accordance with this subsection to guide the development of a mitigation plan under subsection (d).

"(3) NON-FEDERAL PLANS.—The Secretary shall, to the maximum extent practicable and subject to all conditions of this subsection, use programmatic environmental plans developed by a State, a body politic of the State, which derives its powers from a State constitution, a government entity created by State legislation, or a local government, that meet the requirements of this subsection to address the potential environmental impacts of existing or future water resources development projects.

"(4) SCOPE.—A programmatic mitigation plan developed by the Secretary or an entity described in paragraph (3) to address potential impacts of existing or future water resources development projects shall, to the maximum extent practicable—

"(A) be developed on a regional, ecosystem, watershed, or statewide scale;

"(B) include specific goals for aquatic resource and fish and wildlife habitat restoration, establishment, enhancement, or preservation;

"(C) identify priority areas for aquatic resource and fish and wildlife habitat protection or restoration;

"(D) encompass multiple environmental resources within a defined geographical area or focus on a specific resource, such as aquatic resources or wildlife habitat; and

"(E) address impacts from all projects in a defined geographical area or focus on a specific type of project.

"(5) CONSULTATION.—The scope of the plan shall be determined by the Secretary or an entity described in paragraph (3), as appropriate, in consultation with the agency with jurisdiction over the resources being addressed in the environmental mitigation plan.

"(6) CONTENTS.—A programmatic environmental mitigation plan may include—

"(A) an assessment of the condition of environmental resources in the geographical area covered by the plan, including an assessment of recent trends and any potential threats to those resources;

"(B) an assessment of potential opportunities to improve the overall quality of environmental resources in the geographical area covered by the plan through strategic mitigation for impacts of water resources development projects;

"(C) standard measures for mitigating certain types of impacts;

"(D) parameters for determining appropriate mitigation for certain types of impacts, such as mitigation ratios or criteria for determining appropriate mitigation sites;

"(E) adaptive management procedures, such as protocols that involve monitoring predicted impacts over time and adjusting mitigation measures in response to information gathered through the monitoring;

"(F) acknowledgment of specific statutory or regulatory requirements that must be satisfied when determining appropriate mitigation for certain types of resources; and

"(G) any offsetting benefits of self-mitigating projects, such as ecosystem or resource restoration and protection.

"(7) PROCESS.—Before adopting a programmatic environmental mitigation plan for use under this subsection, the Secretary shall—

"(A) for a plan developed by the Secretary—

"(i) make a draft of the plan available for review and comment by applicable environmental resource agencies and the public; and

"(ii) consider any comments received from those agencies and the public on the draft plan; and

"(B) for a plan developed under paragraph (3), determine, not later than 180 days after receiving the plan, whether the plan meets the requirements of paragraphs (4) through (6) and was made available for public comment.

"(8) INTEGRATION WITH OTHER PLANS.—A programmatic environmental mitigation plan may be integrated with other plans, including watershed plans, ecosystem plans, species recovery plans, growth management plans, and land use plans.

"(9) CONSIDERATION IN PROJECT DEVELOPMENT AND PERMITTING.—If a programmatic environmental mitigation plan has been developed under this subsection, any Federal agency responsible for environmental reviews, permits, or approvals for a water resources development project may use the recommendations in that programmatic environmental mitigation plan when carrying out the responsibilities of the agency under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

"(10) PRESERVATION OF EXISTING AUTHORITIES.—Nothing in this subsection limits the use of programmatic approaches to reviews under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

"(11) MITIGATION FOR EXISTING PROJECTS.—Nothing in this subsection requires the Secretary to undertake additional mitigation for existing projects for which mitigation has already been initiated.

"(i) THIRD-PARTY MITIGATION ARRANGEMENTS.—

"(1) ELIGIBLE ACTIVITIES.—In accordance with all applicable Federal laws (including regulations), mitigation efforts carried out under this section may include—

"(A) participation in mitigation banking or other third-party mitigation arrangements, such as—

"(i) the purchase of credits from commercial or State, regional, or local agency-sponsored mitigation banks; and

"(ii) the purchase of credits from in-lieu fee mitigation programs; and

"(B) contributions to statewide and regional efforts to conserve, restore, enhance, and create natural habitats and wetlands if the Secretary determines that the contributions will ensure that the mitigation requirements of this section

and the goals of section 307(a)(1) of the Water Resources Development Act of 1990 (33 U.S.C. 2317(a)(1)) will be met.

"(2) INCLUSION OF OTHER ACTIVITIES.—The banks, programs, and efforts described in paragraph (1) include any banks, programs, and efforts developed in accordance with applicable law (including regulations).

"(3) TERMS AND CONDITIONS.—In carrying out natural habitat and wetlands mitigation efforts under this section, contributions to the mitigation effort may—

"(A) take place concurrent with, or in advance of, the commitment of funding to a project; and

"(B) occur in advance of project construction only if the efforts are consistent with all applicable requirements of Federal law (including regulations) and water resources development planning processes.

"(4) PREFERENCE.—At the request of the non-Federal project sponsor, preference may be given, to the maximum extent practicable, to mitigating an environmental impact through the use of a mitigation bank, in-lieu fee, or other third-party mitigation arrangement, if the use of credits from the mitigation bank or in-lieu fee, or the other third-party mitigation arrangement for the project has been approved by the applicable Federal agency.".

(b) APPLICATION.—The amendments made by subsection (a) shall not apply to a project for which a mitigation plan has been completed as of the date of enactment of this Act.

(c) TECHNICAL ASSISTANCE.—

(1) IN GENERAL.—The Secretary may provide technical assistance to States and local governments to establish third-party mitigation instruments, including mitigation banks and in-lieu fee programs, that will help to target mitigation payments to high-priority ecosystem restoration actions.

(2) REQUIREMENTS.—In providing technical assistance under this subsection, the Secretary shall give priority to States and local governments that have developed State, regional, or watershed-based plans identifying priority restoration actions.

(3) MITIGATION INSTRUMENTS.—The Secretary shall seek to ensure any technical assistance provided under this subsection will support the establishment of mitigation instruments that will result in restoration of high-priority areas identified in the plans under paragraph (2).

SEC. 1041. MITIGATION STATUS REPORT.

Section 2036(b) of the Water Resources Development Act of 2007 (33 U.S.C. 2283a) is amended—

(1) by redesignating paragraph (3) as paragraph (4); and

(2) by inserting after paragraph (2) the following:

"(3) INFORMATION INCLUDED.—In reporting the status of all projects included in the report, the Secretary shall—

"(A) use a uniform methodology for determining the status of all projects included in the report;

"(B) use a methodology that describes both a qualitative and quantitative status for all projects in the report; and

"(C) provide specific dates for participation in the consultations required under section 906(d)(4)(B) of the Water

Resources Development Act of 1986 (33 U.S.C. 2283(d)(4)(B)).".

SEC. 1042. REPORTS TO CONGRESS.

(a) IN GENERAL.—Subject to the availability of appropriations, the Secretary shall complete and submit to Congress by the applicable date required the reports that address public safety and enhanced local participation in project delivery described in subsection (b).

(b) REPORTS.—The reports referred to in subsection (a) are the reports required under—

(1) subparagraphs (A) and (B) of section 1043(a)(5);

(2) section 1046(a)(2)(B);

(3) section 210(e)(3) of the Water Resources Development Act of 1986 (33 U.S.C. 2238(e)(3)) (as amended by section 2102(a)); and

(4) section 7001.

(c) FAILURE TO PROVIDE A COMPLETED REPORT.—

(1) IN GENERAL.—Subject to subsection (d), if the Secretary fails to provide a report listed under subsection (b) by the date that is 180 days after the applicable date required for that report, $5,000 shall be reprogrammed from the General Expenses account of the civil works program of the Army Corps of Engineers into the account of the division of the Army Corps of Engineers with responsibility for completing that report.

(2) SUBSEQUENT REPROGRAMMING.—Subject to subsection (d), for each additional week after the date described in paragraph (1) in which a report described in that paragraph remains uncompleted and unsubmitted to Congress, $5,000 shall be reprogrammed from the General Expenses account of the civil works program of the Army Corps of Engineers into the account of the division of the Secretary of the Army with responsibility for completing that report.

(d) LIMITATIONS.—

(1) IN GENERAL.—For each report, the total amounts reprogrammed under subsection (c) shall not exceed, in any fiscal year, $50,000.

(2) AGGREGATE LIMITATION.—The total amount reprogrammed under subsection (c) in a fiscal year shall not exceed $200,000.

(e) NO FAULT OF THE SECRETARY.—Amounts shall not be reprogrammed under subsection (c) if the Secretary certifies in a letter to the applicable committees of Congress that—

(1) a major modification has been made to the content of the report that requires additional analysis for the Secretary to make a final decision on the report;

(2) amounts have not been appropriated to the agency under this Act or any other Act to carry out the report; or

(3) additional information is required from an entity other than the Corps of Engineers and is not available in a timely manner to complete the report by the deadline.

(f) LIMITATION.—The Secretary shall not reprogram funds to the General Expenses account of the civil works program of the Corps of Engineers for the loss of the funds.

SEC. 1043. NON-FEDERAL IMPLEMENTATION PILOT PROGRAM.

(a) NON-FEDERAL IMPLEMENTATION OF FEASIBILITY STUDIES.—

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish and implement a pilot program to evaluate the cost-effectiveness and project delivery efficiency of allowing non-Federal interests to carry out feasibility studies for flood risk management, hurricane and storm damage reduction, aquatic ecosystem restoration, and coastal harbor and channel and inland navigation.

(2) PURPOSES.—The purposes of the pilot program are—

(A) to identify project delivery and cost-saving alternatives to the existing feasibility study process;

(B) to evaluate the technical, financial, and organizational efficiencies of a non-Federal interest carrying out a feasibility study of 1 or more projects; and

(C) to evaluate alternatives for the decentralization of the project planning, management, and operational decisionmaking process of the Corps of Engineers.

(3) ADMINISTRATION.—

(A) IN GENERAL.—On the request of a non-Federal interest, the Secretary may enter into an agreement with the non-Federal interest for the non-Federal interest to provide full project management control of a feasibility study for a project for—

(i) flood risk management;

(ii) hurricane and storm damage reduction, including levees, floodwalls, flood control channels, and water control structures;

(iii) coastal harbor and channel and inland navigation; and

(iv) aquatic ecosystem restoration.

(B) USE OF NON-FEDERAL FUNDS.—

(i) IN GENERAL.—A non-Federal interest that has entered into an agreement with the Secretary pursuant to subparagraph (A) may use non-Federal funds to carry out the feasibility study.

(ii) CREDIT.—The Secretary shall credit towards the non-Federal share of the cost of construction of a project for which a feasibility study is carried out under this subsection an amount equal to the portion of the cost of developing the study that would have been the responsibility of the Secretary, if the study were carried out by the Secretary, subject to the conditions that—

(I) non-Federal funds were used to carry out the activities that would have been the responsibility of the Secretary;

(II) the Secretary determines that the feasibility study complies with all applicable Federal laws and regulations; and

(III) the project is authorized by any provision of Federal law enacted after the date on which an agreement is entered into under subparagraph (A).

(C) TRANSFER OF FUNDS.—

(i) IN GENERAL.—After the date on which an agreement is executed pursuant to subparagraph (A), the Secretary may transfer to the non-Federal interest to carry out the feasibility study—

(I) if applicable, the balance of any unobligated amounts appropriated for the study, except that the Secretary shall retain sufficient amounts for the Corps of Engineers to carry out any responsibilities of the Corps of Engineers relating to the project and pilot program; and

(II) additional amounts, as determined by the Secretary, from amounts made available under paragraph (8), except that the total amount transferred to the non-Federal interest shall not exceed the updated estimate of the Federal share of the cost of the feasibility study.

(ii) ADMINISTRATION.—The Secretary shall include such provisions as the Secretary determines to be necessary in an agreement under subparagraph (A) to ensure that a non-Federal interest receiving Federal funds under this paragraph—

(I) has the necessary qualifications to administer those funds; and

(II) will comply with all applicable Federal laws (including regulations) relating to the use of those funds.

(D) NOTIFICATION.—The Secretary shall notify the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives on the initiation of each feasibility study under the pilot program.

(E) AUDITING.—The Secretary shall regularly monitor and audit each feasibility study carried out by a non-Federal interest under this section to ensure that the use of any funds transferred under subparagraph (C) are used in compliance with the agreement signed under subparagraph (A).

(F) TECHNICAL ASSISTANCE.—On the request of a non-Federal interest, the Secretary may provide technical assistance to the non-Federal interest relating to any aspect of the feasibility study, if the non-Federal interest contracts with the Secretary for the technical assistance and compensates the Secretary for the technical assistance.

(G) DETAILED PROJECT SCHEDULE.—Not later than 180 days after entering into an agreement under subparagraph (A), each non-Federal interest, to the maximum extent practicable, shall submit to the Secretary a detailed project schedule, based on full funding capability, that lists all deadlines for milestones relating to the feasibility study.

(4) COST SHARE.—Nothing in this subsection affects the cost-sharing requirement applicable on the day before the date of enactment of this Act to a feasibility study carried out under this subsection.

(5) REPORT.—

(A) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to the

Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report detailing the results of the pilot program carried out under this section, including—

(i) a description of the progress of the non-Federal interests in meeting milestones in detailed project schedules developed pursuant to paragraph (3)(G); and

(ii) any recommendations of the Secretary concerning whether the program or any component of the program should be implemented on a national basis.

(B) UPDATE.—Not later than 5 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives an update of the report described in subparagraph (A).

(C) FAILURE TO MEET DEADLINE.—If the Secretary fails to submit a report by the required deadline under this paragraph, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a detailed explanation of why the deadline was missed and a projected date for submission of the report.

(6) ADMINISTRATION.—All laws and regulations that would apply to the Secretary if the Secretary were carrying out the feasibility study shall apply to a non-Federal interest carrying out a feasibility study under this subsection.

(7) TERMINATION OF AUTHORITY.—The authority to commence a feasibility study under this subsection terminates on the date that is 5 years after the date of enactment of this Act.

(8) AUTHORIZATION OF APPROPRIATIONS.—In addition to any amounts appropriated for a specific project, there is authorized to be appropriated to the Secretary to carry out the pilot program under this subsection, including the costs of administration of the Secretary, $25,000,000 for each of fiscal years 2015 through 2019.

(b) NON-FEDERAL PROJECT IMPLEMENTATION PILOT PROGRAM.—

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish and implement a pilot program to evaluate the cost-effectiveness and project delivery efficiency of allowing non-Federal interests to carry out flood risk management, hurricane and storm damage reduction, coastal harbor and channel inland navigation, and aquatic ecosystem restoration projects.

(2) PURPOSES.—The purposes of the pilot program are—

(A) to identify project delivery and cost-saving alternatives that reduce the backlog of authorized Corps of Engineers projects;

(B) to evaluate the technical, financial, and organizational efficiencies of a non-Federal interest carrying out the design, execution, management, and construction of 1 or more projects; and

(C) to evaluate alternatives for the decentralization of the project management, design, and construction for authorized Corps of Engineers water resources projects.

(3) ADMINISTRATION.—

(A) IN GENERAL.—In carrying out the pilot program, the Secretary shall—

(i) identify a total of not more than 15 projects for flood risk management, hurricane and storm damage reduction (including levees, floodwalls, flood control channels, and water control structures), coastal harbor and channels, inland navigation, and aquatic ecosystem restoration that have been authorized for construction prior to the date of enactment of this Act, including—

(I) not more than 12 projects that—

(aa)(AA) have received Federal funds prior to the date of enactment of this Act; or

(BB) for more than 2 consecutive fiscal years, have an unobligated funding balance for that project in the Corps of Engineers construction account; and

(bb) to the maximum extent practicable, are located in each of the divisions of the Corps of Engineers; and

(II) not more than 3 projects that have not received Federal funds in the period beginning on the date on which the project was authorized and ending on the date of enactment of this Act;

(ii) notify the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives on the identification of each project under the pilot program;

(iii) in collaboration with the non-Federal interest, develop a detailed project management plan for each identified project that outlines the scope, budget, design, and construction resource requirements necessary for the non-Federal interest to execute the project, or a separable element of the project;

(iv) on the request of the non-Federal interest, enter into a project partnership agreement with the non-Federal interest for the non-Federal interest to provide full project management control for construction of the project, or a separable element of the project, in accordance with plans approved by the Secretary;

(v) following execution of the project partnership agreement, transfer to the non-Federal interest to carry out construction of the project, or a separable element of the project—

(I) if applicable, the balance of the unobligated amounts appropriated for the project, except that the Secretary shall retain sufficient amounts for the Corps of Engineers to carry out any responsibilities of the Corps of Engineers relating to the project and pilot program; and

(II) additional amounts, as determined by the Secretary, from amounts made available under paragraph (8), except that the total amount transferred to the non-Federal interest shall not exceed the updated estimate of the Federal share of the cost of construction, including any required design; and

(vi) regularly monitor and audit each project being constructed by a non-Federal interest under this section to ensure that the construction activities are carried out in compliance with the plans approved by the Secretary and that the construction costs are reasonable.

(B) DETAILED PROJECT SCHEDULE.—Not later than 180 days after entering into an agreement under subparagraph (A)(iv), each non-Federal interest, to the maximum extent practicable, shall submit to the Secretary a detailed project schedule, based on estimated funding levels, that lists all deadlines for each milestone in the construction of the project.

(C) TECHNICAL ASSISTANCE.—On the request of a non-Federal interest, the Secretary may provide technical assistance to the non-Federal interest, if the non-Federal interest contracts with and compensates the Secretary for the technical assistance relating to—

(i) any study, engineering activity, and design activity for construction carried out by the non-Federal interest under this subsection; and

(ii) expeditiously obtaining any permits necessary for the project.

(4) COST SHARE.—Nothing in this subsection affects the cost-sharing requirement applicable on the day before the date of enactment of this Act to a project carried out under this subsection.

(5) REPORT.—

(A) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report detailing the results of the pilot program carried out under this subsection, including—

(i) a description of the progress of non-Federal interests in meeting milestones in detailed project schedules developed pursuant to paragraph (2)(B); and

(ii) any recommendations of the Secretary concerning whether the program or any component of the program should be implemented on a national basis.

(B) UPDATE.—Not later than 5 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives an update of the report described in subparagraph (A).

(C) FAILURE TO MEET DEADLINE.—If the Secretary fails to submit a report by the required deadline under this

paragraph, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a detailed explanation of why the deadline was missed and a projected date for submission of the report.

(6) ADMINISTRATION.—All laws and regulations that would apply to the Secretary if the Secretary were carrying out the project shall apply to a non-Federal interest carrying out a project under this subsection.

(7) TERMINATION OF AUTHORITY.—The authority to commence a project under this subsection terminates on the date that is 5 years after the date of enactment of this Act.

(8) AUTHORIZATION OF APPROPRIATIONS.—In addition to any amounts appropriated for a specific project, there is authorized to be appropriated to the Secretary to carry out the pilot program under this subsection, including the costs of administration of the Secretary, $25,000,000 for each of fiscal years 2015 through 2019.

SEC. 1044. INDEPENDENT PEER REVIEW.

(a) MANDATORY PROJECT STUDIES SUBJECT TO PEER REVIEW.—Section 2034(a)(3)(A)(i) of the Water Resources Development Act of 2007 (33 U.S.C. 2343(a)(3)(A)(i)) is amended by striking "$45,000,000" and inserting "$200,000,000".

(b) TIMING OF PEER REVIEW.—Section 2034(b) of the Water Resources Development Act of 2007 (33 U.S.C. 2343(b)) is amended—

(1) by redesignating paragraph (3) as paragraph (4); and

(2) by inserting after paragraph (2) the following:

"(3) REASONS FOR TIMING.—If the Chief of Engineers does not initiate a peer review for a project study at a time described in paragraph (2), the Chief shall—

"(A) not later than 7 days after the date on which the Chief of Engineers determines not to initiate a peer review—

"(i) notify the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives of that decision; and

"(ii) make publicly available, including on the Internet, the reasons for not conducting the review; and

"(B) include the reasons for not conducting the review in the decision document for the project study.".

(c) ESTABLISHMENT OF PANELS.—Section 2034(c) of the Water Resources Development Act of 2007 (33 U.S.C. 2343(c)) is amended by striking paragraph (4) and inserting the following:

"(4) CONGRESSIONAL AND PUBLIC NOTIFICATION.—Following the identification of a project study for peer review under this section, but prior to initiation of the review by the panel of experts, the Chief of Engineers shall, not later than 7 days after the date on which the Chief of Engineers determines to conduct a review—

"(A) notify the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives of the review conducted under this section; and

"(B) make publicly available, including on the Internet, information on—

"(i) the dates scheduled for beginning and ending the review;

"(ii) the entity that has the contract for the review; and

"(iii) the names and qualifications of the panel of experts.".

(d) RECOMMENDATIONS OF PANEL.—Section 2034(f) of the Water Resources Development Act of 2007 (33 U.S.C. 2343(f)) is amended by striking paragraph (2) and inserting the following:

"(2) PUBLIC AVAILABILITY AND SUBMISSION TO CONGRESS.—After receiving a report on a project study from a panel of experts under this section, the Chief of Engineers shall make available to the public, including on the Internet, and submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives—

"(A) a copy of the report not later than 7 days after the date on which the report is delivered to the Chief of Engineers; and

"(B) a copy of any written response of the Chief of Engineers on recommendations contained in the report not later than 3 days after the date on which the response is delivered to the Chief of Engineers.

"(3) INCLUSION IN PROJECT STUDY.—A report on a project study from a panel of experts under this section and the written response of the Chief of Engineers shall be included in the final decision document for the project study.".

(e) APPLICABILITY.—Section 2034(h)(2) of the Water Resources Development Act of 2007 (33 U.S.C. 2343(h)(2)) is amended by striking "7 years" and inserting "12 years".

SEC. 1045. REPORT ON SURFACE ELEVATIONS AT DROUGHT AFFECTED LAKES.

(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary, in coordination with the Federal Energy Regulatory Commission (referred to in this section as "FERC"), shall initiate an assessment of the effects of drought conditions on lakes managed by the Secretary that are affected by FERC-licensed reservoirs, which shall include an assessment of—

(1) lake levels and rule curves in areas of previous, current, and prolonged drought; and

(2) the effect the long-term FERC licenses have on the ability of the Secretary to manage lakes for hydropower generation, navigation, flood protection, water supply, fish and wildlife, and recreation.

(b) REPORT.—The Secretary, in coordination with the FERC, shall submit to Congress and make publicly available a report on the assessment carried out under subsection (a).

SEC. 1046. RESERVOIR OPERATIONS AND WATER SUPPLY.

(a) DAM OPTIMIZATION.—

(1) DEFINITION OF PROJECT.—In this subsection, the term "project" means a water resources development project that is operated and maintained by the Secretary.

(2) REPORTS.—

(A) ASSESSMENT OF WATER SUPPLY IN ARID REGIONS.—

(i) IN GENERAL.—The Secretary shall conduct an assessment of the management practices, priorities, and authorized purposes at Corps of Engineers reservoirs in arid regions to determine the effects of such practices, priorities, and purposes on water supply during periods of drought.

(ii) INCLUSIONS.—The assessment under clause (i) shall identify actions that can be carried out within the scope of existing authorities of the Secretary to increase project flexibility for the purpose of mitigating drought impacts.

(iii) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report on the results of the assessment.

(B) UPDATED REPORT.—

(i) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Secretary shall update and make publicly available the report entitled "Authorized and Operating Purposes of Corps of Engineers Reservoirs" and dated July 1992, which was produced pursuant to section 311 of the Water Resources Development Act of 1990 (104 Stat. 4639).

(ii) INCLUSIONS.—The updated report described in clause (i) shall—

(I) include—

(aa) the date on which the most recent review of project operations was conducted and any recommendations of the Secretary relating to that review the Secretary determines to be significant;

(bb) the activities carried out pursuant to each such review to improve the efficiency of operations and maintenance and to improve project benefits consistent with authorized purposes;

(cc) the degree to which reviews of project operations and subsequent activities pursuant to completed reviews complied with the policies and requirements of applicable law and regulations; and

(dd) a plan for reviewing the operations of individual projects, including a detailed schedule for future reviews of project operations, that—

(AA) complies with the polices and requirements of applicable law and regulations;

(BB) gives priority to reviews and activities carried out pursuant to such plan

where the Secretary determines that there is support for carrying out those reviews and activities; and

(CC) ensures that reviews and activities are carried out pursuant to such plan;

(II) be coordinated with appropriate Federal, State, and local agencies and those public and private entities that the Secretary determines may be affected by those reviews or activities;

(III) not supersede or modify any written agreement between the Federal Government and a non-Federal interest that is in effect on the date of enactment of this Act;

(IV) not supersede or authorize any amendment to a multistate water control plan, including the Missouri River Master Water Control Manual (as in effect on the date of enactment of this Act);

(V) not affect any water right in existence on the date of enactment of this Act;

(VI) not preempt or affect any State water law or interstate compact governing water;

(VII) not affect any authority of a State, as in effect on the date of enactment of this Act, to manage water resources within that State; and

(VIII) comply with section 301 of the Water Supply Act of 1958 (43 U.S.C. 390b).

(3) GENERAL ACCOUNTABILITY OFFICE REPORT TO CONGRESS.—The Comptroller General shall—

(A) conduct an audit to determine—

(i) whether reviews of project operations carried out by the Secretary prior to the date of enactment of this Act complied with the policies and requirements of applicable law and regulations; and

(ii) whether the plan developed by the Secretary pursuant to paragraph (2)(B)(ii)(I)(dd) complies with this subsection and with the policies and requirements of applicable law and regulation; and

(B) not later than 2 years after the date of enactment of this Act, submit to Congress a report that—

(i) summarizes the results of the audit required by subparagraph (A);

(ii) includes an assessment of whether existing practices for managing and reviewing project operations could result in greater efficiencies that would enable the Corps of Engineers to better prepare for, contain, and respond to flood, storm, and drought conditions; and

(iii) includes recommendations for improving the review of project operations to improve the efficiency and effectiveness of such operations and to better achieve authorized purposes while enhancing overall project benefits.

(4) INTERAGENCY AND COOPERATIVE AGREEMENTS.—The Secretary may enter into interagency agreements with other Federal agencies and cooperative agreements with non-Federal

entities to carry out this subsection and reviews of project operations or activities resulting from those reviews.

(5) FUNDING.—

(A) IN GENERAL.—The Secretary may use to carry out this subsection, including any reviews of project operations identified in the plan developed under paragraph (2)(B)(ii)(I)(dd), amounts made available to the Secretary.

(B) FUNDING FROM OTHER SOURCES.—The Secretary may accept and expend amounts from non-Federal entities and other Federal agencies to carry out this subsection and reviews of project operations or activities resulting from those reviews.

(6) EFFECT OF SUBSECTION.—

(A) IN GENERAL.—Nothing in this subsection changes the authorized purpose of any Corps of Engineers dam or reservoir.

(B) ADMINISTRATION.—The Secretary may carry out any recommendations and activities under this subsection pursuant to existing law.

(b) IMPROVING PLANNING AND ADMINISTRATION OF WATER SUPPLY STORAGE.—

(1) IN GENERAL.—For each water supply feature of a reservoir managed by the Secretary, the Secretary shall notify the applicable non-Federal interests before each fiscal year of the anticipated operation and maintenance activities for that fiscal year and each of the subsequent 4 fiscal years (including the cost of those activities) for which the non-Federal interests are required to contribute amounts.

(2) CLARIFICATION.—The information provided to a non-Federal interest under paragraph (1) shall—

(A) be an estimate which the non-Federal interest may use for planning purposes; and

(B) not be construed as or relied upon by the non-Federal interest as the actual amounts that the non-Federal interest will be required to contribute.

(c) SURPLUS WATER STORAGE.—

(1) IN GENERAL.—The Secretary shall not charge a fee for surplus water under a contract entered into pursuant to section 6 of the Act of December 22, 1944 (commonly known as the "Flood Control Act of 1944") (33 U.S.C. 708) if the contract is for surplus water stored in the Upper Missouri Mainstem Reservoirs.

(2) OFFSET.—

(A) IN GENERAL.—Subject to subparagraph (B), of any amounts made available to the Secretary to carry out activities under the heading "OPERATION AND MAINTENANCE" under the heading "CORPS OF ENGINEERS–CIVIL" that remain unobligated as of the date of enactment of this Act, $5,000,000 is rescinded.

(B) RESTRICTION.—No amounts that have been designated by Congress as being for emergency requirements pursuant to section 251(b)(2)(A)(i) of the Balanced Budget and Emergency Deficit Control Act of 1985 (2 U.S.C. 901(b)(2)(A)(i)) shall be rescinded under subparagraph (A).

(3) LIMITATION.—The limitation provided under paragraph (1) shall expire on the date that is 10 years after the date of enactment of this Act.

(4) APPLICABILITY.—Nothing in this subsection—

(A) affects the authority of the Secretary under section 2695 of title 10, United States Code, to accept funds or to cover the administrative expenses relating to certain real property transactions; or

(B) affects the application of section 6 of the Act of December 22, 1944 (commonly known as the "Flood Control Act of 1944") (33 U.S.C. 708) to surplus water stored outside of the Upper Missouri Mainstem Reservoirs.

(d) FUTURE WATER SUPPLY.—Section 301 of the Water Supply Act of 1958 (43 U.S.C. 390b) is amended—

(1) by redesignating subsections (c) and (d) as subsections (d) and (e), respectively; and

(2) by inserting after subsection (b) the following:

"(c) RELEASE OF FUTURE WATER STORAGE.—

"(1) ESTABLISHMENT OF 10-YEAR PLANS FOR THE UTILIZATION OF FUTURE STORAGE.—

"(A) IN GENERAL.—For the period beginning 180 days after the date of enactment of this paragraph and ending on January 1, 2016, the Secretary may accept from a State or local interest a plan for the utilization of allocated water storage for future use under this Act.

"(B) CONTENTS.—A plan submitted under subparagraph (A) shall include—

"(i) a 10-year timetable for the conversion of future use storage to present use; and

"(ii) a schedule of actions that the State or local interest agrees to carry out over a 10-year period, in cooperation with the Secretary, to seek new and alternative users of future water storage that is contracted to the State or local interest on the date of enactment of this paragraph.

"(2) FUTURE WATER STORAGE.—For water resource development projects managed by the Secretary, a State or local interest that the Secretary determines has complied with paragraph (1) may request from the Secretary a release to the United States of any right of the State or local interest to future water storage under this Act that was allocated for future use water supply prior to November 17, 1986.

"(3) ADMINISTRATION.—

"(A) IN GENERAL.—Not later than 180 days after receiving a request under paragraph (2), the Secretary shall provide to the applicable State or local interest a written decision on whether the Secretary recommends releasing future water storage rights.

"(B) RECOMMENDATION.—If the Secretary recommends releasing future water storage rights, the Secretary shall include that recommendation in the annual plan submitted under section 7001 of the Water Resources Reform and Development Act of 2014.

"(4) SAVINGS CLAUSE.—Nothing in this subsection authorizes the Secretary to release a State or local interest from a contractual obligation unless specifically authorized by Congress.".

SEC. 1047. SPECIAL USE PERMITS.

(a) SPECIAL USE PERMITS.—

(1) IN GENERAL.—The Secretary may issue special permits for uses such as group activities, recreation events, motorized recreation vehicles, and such other specialized recreation uses as the Secretary determines to be appropriate, subject to such terms and conditions as the Secretary determines to be in the best interest of the Federal Government.

(2) FEES.—

(A) IN GENERAL.—In carrying out this subsection, the Secretary may—

(i) establish and collect fees associated with the issuance of the permits described in paragraph (1); or

(ii) accept in-kind services in lieu of those fees.

(B) OUTDOOR RECREATION EQUIPMENT.—The Secretary may establish and collect fees for the provision of outdoor recreation equipment and services for activities described in paragraph (1) at public recreation areas located at lakes and reservoirs operated by the Corps of Engineers.

(C) USE OF FEES.—Any fees generated pursuant to this subsection shall be—

(i) retained at the site collected; and

(ii) available for use, without further appropriation, solely for administering the special permits under this subsection and carrying out related operation and maintenance activities at the site at which the fees are collected.

(b) COOPERATIVE MANAGEMENT.—

(1) PROGRAM.—

(A) IN GENERAL.—Subject to subparagraph (B), the Secretary may enter into an agreement with a State or local government to provide for the cooperative management of a public recreation area if—

(i) the public recreation area is located—

(I) at a lake or reservoir operated by the Corps of Engineers; and

(II) adjacent to or near a State or local park or recreation area; and

(ii) the Secretary determines that cooperative management between the Corps of Engineers and a State or local government agency of a portion of the Corps of Engineers recreation area or State or local park or recreation area will allow for more effective and efficient management of those areas.

(B) RESTRICTION.—The Secretary may not transfer administration responsibilities for any public recreation area operated by the Corps of Engineers.

(2) ACQUISITION OF GOODS AND SERVICES.—The Secretary may acquire from or provide to a State or local government with which the Secretary has entered into a cooperative agreement under paragraph (1) goods and services to be used by the

Secretary and the State or local government in the cooperative management of the areas covered by the agreement.

(3) ADMINISTRATION.—The Secretary may enter into 1 or more cooperative management agreements or such other arrangements as the Secretary determines to be appropriate, including leases or licenses, with non-Federal interests to share the costs of operation, maintenance, and management of recreation facilities and natural resources at recreation areas that are jointly managed and funded under this subsection.

(c) USE OF FUNDS.—

(1) IN GENERAL.—If the Secretary determines that it is in the public interest for purposes of enhancing recreation opportunities at Corps of Engineers water resources development projects, the Secretary may use funds made available to the Secretary to support activities carried out by State, local, and tribal governments and such other public or private nonprofit entities as the Secretary determines to be appropriate.

(2) COOPERATIVE AGREEMENTS.—Any use of funds pursuant to this subsection shall be carried out through the execution of a cooperative agreement, which shall contain such terms and conditions as the Secretary determines to be necessary in the public interest.

(d) SERVICES OF VOLUNTEERS.—Chapter IV of title I of Public Law 98–63 (33 U.S.C. 569c) is amended in the first sentence by inserting ", including expenses relating to uniforms, transportation, lodging, and the subsistence of those volunteers," after "incidental expenses".

(e) TRAINING AND EDUCATIONAL ACTIVITIES.—Section 213(a) of the Water Resources Development Act of 2000 (33 U.S.C. 2339) is amended by striking "at" and inserting "about".

SEC. 1048. AMERICA THE BEAUTIFUL NATIONAL PARKS AND FEDERAL RECREATIONAL LANDS PASS PROGRAM.

The Secretary may participate in the America the Beautiful National Parks and Federal Recreational Lands Pass program in the same manner as the National Park Service, the Bureau of Land Management, the United States Fish and Wildlife Service, the Forest Service, and the Bureau of Reclamation, including the provision of free annual passes to active duty military personnel and dependents.

SEC. 1049. APPLICABILITY OF SPILL PREVENTION, CONTROL, AND COUNTERMEASURE RULE.

(a) DEFINITIONS.—In this section:

(1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency.

(2) FARM.—The term "farm" has the meaning given the term in section 112.2 of title 40, Code of Federal Regulations (or successor regulations).

(3) GALLON.—The term "gallon" means a United States gallon.

(4) OIL.—The term "oil" has the meaning given the term in section 112.2 of title 40, Code of Federal Regulations (or successor regulations).

(5) OIL DISCHARGE.—The term "oil discharge" has the meaning given the term "discharge" in section 112.2 of title 40, Code of Federal Regulations (or successor regulations).

(6) REPORTABLE OIL DISCHARGE HISTORY.—

(A) IN GENERAL.—Subject to subparagraph (B), the term "reportable oil discharge history" means a single oil discharge, as described in section 112.1(b) of title 40, Code of Federal Regulations (including successor regulations), that exceeds 1,000 gallons or 2 oil discharges, as described in section 112.1(b) of title 40, Code of Federal Regulations (including successor regulations), that each exceed 42 gallons within any 12-month period—

(i) in the 3 years prior to the certification date of the Spill Prevention, Control, and Countermeasure plan (as described in section 112.3 of title 40, Code of Federal Regulations (including successor regulations); or

(ii) since becoming subject to part 112 of title 40, Code of Federal Regulations, if the facility has been in operation for less than 3 years.

(B) EXCLUSIONS.—The term "reportable oil discharge history" does not include an oil discharge, as described in section 112.1(b) of title 40, Code of Federal Regulations (including successor regulations), that is the result of a natural disaster, an act of war, or terrorism.

(7) SPILL PREVENTION, CONTROL, AND COUNTERMEASURE RULE.—The term "Spill Prevention, Control, and Countermeasure rule" means the regulation, including amendments, promulgated by the Administrator under part 112 of title 40, Code of Federal Regulations (or successor regulations).

(b) CERTIFICATION.—In implementing the Spill Prevention, Control, and Countermeasure rule with respect to any farm, the Administrator shall—

(1) require certification by a professional engineer for a farm with—

(A) an individual tank with an aboveground storage capacity greater than 10,000 gallons;

(B) an aggregate aboveground storage capacity greater than or equal to 20,000 gallons; or

(C) a reportable oil discharge history; or

(2) allow certification by the owner or operator of the farm (via self-certification) for a farm with—

(A) an aggregate aboveground storage capacity less than 20,000 gallons and greater than the lesser of—

(i) 6,000 gallons; and

(ii) the adjustment quantity established under subsection (d)(2); and

(B) no reportable oil discharge history; and

(3) not require compliance with the rule by any farm—

(A) with an aggregate aboveground storage capacity greater than 2,500 gallons and less than the lesser of—

(i) 6,000 gallons; and

(ii) the adjustment quantity established under subsection (d)(2); and

(B) no reportable oil discharge history; and

(4) not require compliance with the rule by any farm with an aggregate aboveground storage capacity of less than 2,500 gallons.

(c) CALCULATION OF AGGREGATE ABOVEGROUND STORAGE CAPACITY.—For purposes of subsection (b), the aggregate aboveground storage capacity of a farm excludes—

(1) all containers on separate parcels that have a capacity that is 1,000 gallons or less; and

(2) all containers holding animal feed ingredients approved for use in livestock feed by the Commissioner of Food and Drugs.

(d) STUDY.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator, in consultation with the Secretary of Agriculture, shall conduct a study to determine the appropriate exemption under paragraphs (2) and (3) of subsection (b), which shall be not more than 6,000 gallons and not less than 2,500 gallons, based on a significant risk of discharge to water.

(2) ADJUSTMENT.—Not later than 18 months after the date on which the study described in paragraph (1) is complete, the Administrator, in consultation with the Secretary of Agriculture, shall promulgate a rule to adjust the exemption levels described in paragraphs (2) and (3) of subsection (b) in accordance with the study.

SEC. 1050. NAMINGS.

(a) DONALD G. WALDON LOCK AND DAM.—It is the sense of Congress that, at an appropriate time and in accordance with the rules of the Senate and the House of Representatives, to recognize the contributions of Donald G. Waldon, whose selfless determination and tireless work, while serving as administrator of the Tennessee-Tombigbee Waterway for 21 years, contributed greatly to the realization and success of the Tennessee-Tombigbee Waterway Development Compact, that the lock and dam located at mile 357.5 on the Tennessee-Tombigbee Waterway should be known and designated as the "Donald G. Waldon Lock and Dam".

(b) REDESIGNATION OF LOWER MISSISSIPPI RIVER MUSEUM AND RIVERFRONT INTERPRETIVE SITE.—

(1) IN GENERAL.—Section 103(c)(1) of the Water Resources Development Act of 1992 (106 Stat. 4811) is amended by striking "Lower Mississippi River Museum and Riverfront Interpretive Site" and inserting "Jesse Brent Lower Mississippi River Museum and Riverfront Interpretive Site".

(2) REFERENCES.—Any reference in a law, map, regulation, document, paper, or other record of the United States to the museum and interpretive site referred to in paragraph (1) shall be deemed to be a reference to the "Jesse Brent Lower Mississippi River Museum and Riverfront Interpretive Site".

(c) JERRY F. COSTELLO LOCK AND DAM.—

(1) REDESIGNATION.—The lock and dam located in Modoc, Illinois, authorized by the Act of July 3, 1930 (46 Stat. 927), and commonly known as the Kaskaskia Lock and Dam, is redesignated as the "Jerry F. Costello Lock and Dam".

(2) REFERENCES.—Any reference in a law, map, regulation, document, paper, or other record of the United States to the lock and dam referred to in section 1 shall be deemed to be a reference to the "Jerry F. Costello Lock and Dam".

SEC. 1051. INTERSTATE WATER AGREEMENTS AND COMPACTS.

(a) WATER SUPPLY.—Section 301 of the Water Supply Act of 1958 (43 U.S.C. 390b) (as amended by section 1046(d)) is amended by adding at the end the following:

"(f) The Committees of jurisdiction are very concerned about the operation of projects in the Apalachicola-Chattahoochee-Flint River System and the Alabama-Coosa-Tallapoosa River System, and further, the Committees of jurisdiction recognize that this ongoing water resources dispute raises serious concerns related to the authority of the Secretary of the Army to allocate substantial storage at projects to provide local water supply pursuant to the Water Supply Act of 1958 absent congressional approval. Interstate water disputes of this nature are more properly addressed through interstate water agreements that take into consideration the concerns of all affected States including impacts to other authorized uses of the projects, water supply for communities and major cities in the region, water quality, freshwater flows to communities, rivers, lakes, estuaries, and bays located downstream of projects, agricultural uses, economic development, and other appropriate concerns. To that end, the Committees of jurisdiction strongly urge the Governors of the affected States to reach agreement on an interstate water compact as soon as possible, and we pledge our commitment to work with the affected States to ensure prompt consideration and approval of any such agreement. Absent such action, the Committees of jurisdiction should consider appropriate legislation to address these matters including any necessary clarifications to the Water Supply Act of 1958 or other law. This subsection does not alter existing rights or obligations under law.".

(b) SENSE OF CONGRESS REGARDING INTERSTATE WATER AGREEMENTS AND COMPACTS.—

(1) FINDINGS.—Congress finds the following:

(A) States and local interests have primary responsibility for developing water supplies for domestic, municipal, industrial, and other purposes.

(B) The Federal Government cooperates with States and local interests in developing water supplies through the construction, maintenance, and operation of Federal water resources development projects.

(C) Interstate water disputes are most properly addressed through interstate water agreements or compacts that take into consideration the concerns of all affected States.

(2) SENSE OF CONGRESS.—It is the sense of Congress that—

(A) Congress and the Secretary should urge States to reach agreement on interstate water agreements and compacts;

(B) at the request of the Governor of a State, the Secretary should facilitate and assist in the development of an interstate water agreement or compact;

(C) Congress should provide prompt consideration of interstate water agreements and compacts; and

(D) the Secretary should adopt policies and implement procedures for the operation of reservoirs of the Corps of Engineers that are consistent with interstate water agreements and compacts.

SEC. 1052. SENSE OF CONGRESS REGARDING WATER RESOURCES DEVELOPMENT BILLS.

It is the sense of Congress that, because the missions of the Corps of Engineers are unique and benefit all individuals in the United States and because water resources development projects are critical to maintaining economic prosperity, national security, and environmental protection, Congress should consider a water resources development bill not less than once every Congress.

TITLE II—NAVIGATION

Subtitle A—Inland Waterways

SEC. 2001. DEFINITIONS.

In this title:

(1) INLAND WATERWAYS TRUST FUND.—The term "Inland Waterways Trust Fund" means the Inland Waterways Trust Fund established by section 9506(a) of the Internal Revenue Code of 1986.

(2) QUALIFYING PROJECT.—The term "qualifying project" means any construction or major rehabilitation project for navigation infrastructure of the inland and intracoastal waterways that is—

(A) authorized before, on, or after the date of enactment of this Act;

(B) not completed on the date of enactment of this Act; and

(C) funded at least in part from the Inland Waterways Trust Fund.

SEC. 2002. PROJECT DELIVERY PROCESS REFORMS.

(a) REQUIREMENTS FOR QUALIFYING PROJECTS.—With respect to each qualifying project, the Secretary shall require—

(1) for each project manager, that—

(A) the project manager have formal project management training and certification; and

(B) the project manager be assigned from among personnel certified by the Chief of Engineers; and

(2) for an applicable cost estimation, that—

(A) the Secretary utilize a risk-based cost estimate with a confidence level of at least 80 percent; and

(B) the cost estimate be developed—

(i) for a qualifying project that requires an increase in the authorized amount in accordance with section 902 of the Water Resources Development Act of 1986 (33 U.S.C. 2280), during the preparation of a post-authorization change report or other similar decision document;

(ii) for a qualifying project for which the first construction contract has not been awarded, prior to the award of the first construction contract;

(iii) for a qualifying project without a completed feasibility report in accordance with section 905 of the Water Resources Development Act of 1986 (33 U.S.C. 2282), prior to the completion of such a report; and

(iv) for a qualifying project with a completed feasibility report in accordance with section 905 of the Water Resources Development Act of 1986 (33 U.S.C. 2282) that has not yet been authorized, during design for the qualifying project.

(b) ADDITIONAL PROJECT DELIVERY PROCESS REFORMS.—Not later than 18 months after the date of enactment of this Act, the Secretary shall—

(1) establish a system to identify and apply on a continuing basis best management practices from prior or ongoing qualifying projects to improve the likelihood of on-time and on-budget completion of qualifying projects;

(2) evaluate early contractor involvement acquisition procedures to improve on-time and on-budget project delivery performance; and

(3) implement any additional measures that the Secretary determines will achieve the purposes of this subtitle, including—

(A) the implementation of applicable practices and procedures developed pursuant to management by the Secretary of an applicable military construction program;

(B) the development and use of a portfolio of standard designs for inland navigation locks, incorporating the use of a center of expertise for the design and review of qualifying projects;

(C) the use of full-funding contracts or formulation of a revised continuing contracts clause; and

(D) the establishment of procedures for recommending new project construction starts using a capital projects business model.

(c) PILOT PROJECTS.—

(1) IN GENERAL.—Subject to paragraph (2), the Secretary may carry out pilot projects to evaluate processes and procedures for the study, design, and construction of qualifying projects.

(2) INCLUSIONS.—At a minimum, the Secretary shall carry out pilot projects under this subsection to evaluate—

(A) early contractor involvement in the development of features and components;

(B) an appropriate use of continuing contracts for the construction of features and components; and

(C) applicable principles, procedures, and processes used for military construction projects.

(d) INLAND WATERWAYS USERS BOARD.—Section 302 of the Water Resources Development Act of 1986 (33 U.S.C. 2251) is amended—

(1) by striking subsection (b) and inserting the following:

"(b) DUTIES OF USERS BOARD.—

"(1) IN GENERAL.—The Users Board shall meet not less frequently than semiannually to develop and make recommendations to the Secretary and Congress regarding the inland waterways and inland harbors of the United States.

"(2) ADVICE AND RECOMMENDATIONS.—For commercial navigation features and components of the inland waterways

and inland harbors of the United States, the Users Board shall provide—

"(A) prior to the development of the budget proposal of the President for a given fiscal year, advice and recommendations to the Secretary regarding construction and rehabilitation priorities and spending levels;

"(B) advice and recommendations to Congress regarding any feasibility report for a project on the inland waterway system that has been submitted to Congress pursuant to section 7001 of the Water Resources Reform and Development Act of 2014;

"(C) advice and recommendations to Congress regarding an increase in the authorized cost of those features and components;

"(D) not later than 60 days after the date of the submission of the budget proposal of the President to Congress, advice and recommendations to Congress regarding construction and rehabilitation priorities and spending levels; and

"(E) advice and recommendations on the development of a long-term capital investment program in accordance with subsection (d).

"(3) PROJECT DEVELOPMENT TEAMS.—The chairperson of the Users Board shall appoint a representative of the Users Board to serve as an advisor to the project development team for a qualifying project or the study or design of a commercial navigation feature or component of the inland waterways and inland harbors of the United States.

"(4) INDEPENDENT JUDGMENT.—Any advice or recommendation made by the Users Board to the Secretary shall reflect the independent judgment of the Users Board.";

(2) by striking subsection (c) and inserting the following:

"(c) DUTIES OF SECRETARY.—The Secretary shall—

"(1) communicate not less frequently than once each quarter to the Users Board the status of the study, design, or construction of all commercial navigation features or components of the inland waterways or inland harbors of the United States; and

"(2) submit to the Users Board a courtesy copy of all completed feasibility reports relating to a commercial navigation feature or component of the inland waterways or inland harbors of the United States.

"(d) CAPITAL INVESTMENT PROGRAM.—

"(1) IN GENERAL.—Not later than 1 year after the date of enactment of this subsection, the Secretary, in coordination with the Users Board, shall develop and submit to Congress a report describing a 20-year program for making capital investments on the inland and intracoastal waterways based on the application of objective, national project selection prioritization criteria.

"(2) CONSIDERATION.—In developing the program under paragraph (1), the Secretary shall take into consideration the 20-year capital investment strategy contained in the Inland Marine Transportation System (IMTS) Capital Projects Business Model, Final Report published on April 13, 2010, as approved by the Users Board.

"(3) CRITERIA.—In developing the plan and prioritization criteria under paragraph (1), the Secretary shall ensure, to the maximum extent practicable, that investments made under the 20-year program described in paragraph (1)—

"(A) are made in all geographical areas of the inland waterways system; and

"(B) ensure efficient funding of inland waterways projects.

"(4) STRATEGIC REVIEW AND UPDATE.—Not later than 5 years after the date of enactment of this subsection, and not less frequently than once every 5 years thereafter, the Secretary, in coordination with the Users Board, shall—

"(A) submit to Congress and make publicly available a strategic review of the 20-year program in effect under this subsection, which shall identify and explain any changes to the project-specific recommendations contained in the previous 20-year program (including any changes to the prioritization criteria used to develop the updated recommendations); and

"(B) make revisions to the program, as appropriate.

"(e) PROJECT MANAGEMENT PLANS.—The chairperson of the Users Board and the project development team member appointed by the chairperson under subsection (b)(3) may sign the project management plan for the qualifying project or the study or design of a commercial navigation feature or component of the inland waterways and inland harbors of the United States.

"(f) ADMINISTRATION.—

"(1) IN GENERAL.—The Users Board shall be subject to the Federal Advisory Committee Act (5 U.S.C. App.), other than section 14, and, with the consent of the appropriate agency head, the Users Board may use the facilities and services of any Federal agency.

"(2) MEMBERS NOT CONSIDERED SPECIAL GOVERNMENT EMPLOYEES.—For the purposes of complying with the Federal Advisory Committee Act (5 U.S.C. App.), the members of the Users Board shall not be considered special Government employees (as defined in section 202 of title 18, United States Code).

"(3) TRAVEL EXPENSES.—Non-Federal members of the Users Board while engaged in the performance of their duties away from their homes or regular places of business, may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, United States Code.".

SEC. 2003. EFFICIENCY OF REVENUE COLLECTION.

Not later than 2 years after the date of enactment of this Act, the Comptroller General of the United States shall prepare a report on the efficiency of collecting the fuel tax for the Inland Waterways Trust Fund, which shall include—

(1) an evaluation of whether current methods of collection of the fuel tax result in full compliance with requirements of the law;

(2) whether alternative methods of collection would result in increased revenues into the Inland Waterways Trust Fund; and

(3) an evaluation of alternative collection options.

SEC. 2004. INLAND WATERWAYS REVENUE STUDIES.

(a) INLAND WATERWAYS CONSTRUCTION BONDS STUDY.—

(1) STUDY.—The Secretary, in coordination with the heads of appropriate Federal agencies, shall conduct a study on the potential benefits and implications of authorizing the issuance of federally tax-exempt bonds secured against the available proceeds, including projected annual receipts, in the Inland Waterways Trust Fund established by section 9506(a) of the Internal Revenue Code of 1986.

(2) CONTENTS.—In carrying out the study, the Secretary shall examine the implications of issuing such bonds, including the potential revenues that could be generated and the projected net cost to the Treasury, including loss of potential revenue.

(3) CONSULTATION.—In carrying out the study, the Secretary, at a minimum, shall consult with—

(A) representatives of the Inland Waterway Users Board established by section 302 of the Water Resources Development Act of 1986 (33 U.S.C. 2251);

(B) representatives of the commodities and bulk cargos that are currently shipped for commercial purposes on the segments of the inland and intracoastal waterways listed in section 206 of the Inland Waterways Revenue Act of 1978 (33 U.S.C. 1804);

(C) representatives of other users of locks and dams on the inland and intracoastal waterways, including persons owning, operating, using, or otherwise benefitting from—

(i) hydropower generation facilities;

(ii) electric utilities that rely on the waterways for cooling of existing electricity generation facilities;

(iii) municipal and industrial water supply;

(iv) recreation;

(v) irrigation water supply; or

(vi) flood damage reduction; and

(D) other stakeholders associated with the inland and intracoastal waterways, as identified by the Secretary.

(4) REPORT TO CONGRESS.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works, the Committee on Finance, and the Committee on the Budget of the Senate and the Committee on Transportation and Infrastructure, the Committee on Ways and Means, and the Committee on the Budget of the House of Representatives, and make publicly available, a report on the results of the study.

(B) IDENTIFICATION OF ISSUES.—As part of the report, the Secretary shall identify any potential benefits or other implications of the issuance of bonds described in subsection (a)(1), including any potential changes in Federal or State law that may be necessary to provide such benefits or to address such implications.

(b) POTENTIAL REVENUE SOURCES FOR INLAND AND INTRACOASTAL WATERWAYS INFRASTRUCTURE.—

(1) IN GENERAL.—The Secretary shall conduct a study and submit to Congress a report on potential revenue sources from

which funds could be collected to generate additional revenues for the Inland Waterways Trust Fund established by section 9506(a) of the Internal Revenue Code of 1986.

(2) SCOPE OF STUDY.—

(A) IN GENERAL.—In carrying out the study, the Secretary shall evaluate an array of potential revenue sources from which funds could be collected in amounts that, when combined with funds generated by section 4042 of the Internal Revenue Code of 1986, are sufficient to support one-half of annual construction expenditure levels of $380,000,000 for the authorized purposes of the Inland Waterways Trust Fund.

(B) POTENTIAL REVENUE SOURCES FOR STUDY.—In carrying out the study, the Secretary, at a minimum, shall—

(i) evaluate potential revenue sources identified in and documented by known authorities of the Inland Waterways System; and

(ii) review appropriate reports and associated literature related to revenue sources.

(3) CONDUCT OF STUDY.—In carrying out the study, the Secretary shall—

(A) take into consideration whether the potential revenues from other sources—

(i) are equitably associated with the construction, operation, and maintenance of inland and intracoastal waterway infrastructure, including locks, dams, and navigation channels; and

(ii) can be efficiently collected;

(B) consult with, at a minimum—

(i) representatives of the Inland Waterways Users Board; and

(ii) representatives of other nonnavigation beneficiaries of inland and intracoastal waterway infrastructure, including persons benefitting from—

(I) municipal water supply;

(II) hydropower;

(III) recreation;

(IV) industrial water supply;

(V) flood damage reduction;

(VI) agricultural water supply;

(VII) environmental restoration;

(VIII) local and regional economic development; or

(IX) local real estate interests; and

(iii) representatives of other interests, as identified by the Secretary; and

(C) provide the opportunity for public hearings in each of the geographic regions that contain segments of the inland and intracoastal waterways listed in section 206 of the Inland Waterways Revenue Act of 1978 (33 U.S.C. 1804).

(4) REPORT TO CONGRESS.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works, the Committee on Finance, and the Committee on the Budget of the Senate and

the Committee on Transportation and Infrastructure, the Committee on Ways and Means, and the Committee on the Budget of the House of Representatives, and make publicly available, a report on the results of the study.

SEC. 2005. INLAND WATERWAYS STAKEHOLDER ROUNDTABLE.

(a) IN GENERAL.—The Secretary shall conduct an inland waterways stakeholder roundtable to provide for a review and evaluation of issues related to financial management of the inland and intracoastal waterways.

(b) SELECTION OF PARTICIPANTS.—

(1) IN GENERAL.—Not later than 45 days after the date on which the Secretary submits to Congress the report required by section 2004(b), the Secretary, in consultation with the Inland Waterways Users Board, shall select individuals to be invited to participate in the stakeholder roundtable.

(2) COMPOSITION.—The individuals selected under paragraph (1) shall include—

(A) representatives of the primary users, shippers, and suppliers utilizing the inland and intracoastal waterways for commercial purposes;

(B) representatives of State and Federal agencies having a direct and substantial interest in the commercial use of the inland and intracoastal waterways;

(C) representatives of other nonnavigation beneficiaries of the inland and intracoastal waterways infrastructure, including individuals benefitting from—

(i) municipal water supply;
(ii) hydropower;
(iii) recreation;
(iv) industrial water supply;
(v) flood damage reduction;
(vi) agricultural water supply;
(vii) environmental restoration;
(viii) local and regional economic development; or
(ix) local real estate interests; and

(D) other interested individuals with significant financial and engineering expertise and direct knowledge of the inland and coastal waterways.

(c) FRAMEWORK AND AGENDA.—The Secretary shall work with a group of the individuals selected under subsection (b) to develop the framework and agenda for the stakeholder roundtable.

(d) CONDUCT OF STAKEHOLDER ROUNDTABLE.—

(1) IN GENERAL.—Not later than 120 days after the date on which the Secretary submits to Congress the report required by section 2004(b), the Secretary shall conduct the stakeholder roundtable.

(2) ISSUES TO BE DISCUSSED.—The stakeholder roundtable shall provide for the review and evaluation described in subsection (a) and shall include the following:

(A) An evaluation of any recommendations that have been developed to address funding options for the inland and coastal waterways, including any recommendations in the report required under section 2004(b).

(B) An evaluation of the funding status of the inland and coastal waterways.

(C) Identification and evaluation of the ongoing and projected water infrastructure needs of the inland and coastal waterways.

(D) Identification of a process for meeting such needs, with timeline for addressing the funding challenges for the Inland Waterways Trust Fund.

(e) REPORT TO CONGRESS.—Not later than 180 days after the date on which the Secretary submits to Congress the report required by section 2004(b), the Secretary shall submit to Congress and make publicly available a report that contains—

(1) a summary of the stakeholder roundtable, including areas of concurrence on funding approaches and areas of disagreement in meeting funding needs; and

(2) recommendations developed by the Secretary for next steps to address the issues discussed at the stakeholder roundtable.

SEC. 2006. PRESERVING THE INLAND WATERWAY TRUST FUND.

(a) OLMSTED PROJECT REFORM.—

(1) DEFINITION OF OLMSTED PROJECT.—In this subsection, the term "Olmsted Project" means the project for navigation, Lower Ohio River, Locks and Dams 52 and 53, Illinois and Kentucky, authorized by section 3(a)(6) of the Water Resources Development Act of 1988 (102 Stat. 4013).

(2) OLMSTED PROJECT REFORM.—Notwithstanding section 3(a)(6) of the Water Resources Development Act of 1988 (102 Stat. 4013), for each fiscal year beginning after September 30, 2014, 15 percent of the cost of construction for the Olmsted Project shall be paid from amounts appropriated from the Inland Waterways Trust Fund.

(3) SENSE OF CONGRESS.—It is the sense of Congress that the appropriation for the Olmsted Project should be not less than $150,000,000 for each fiscal year until construction of the project is completed.

(4) REHABILITATION OF PROJECTS.—Section 205(1)(E)(ii) of the Water Resources Development Act of 1992 (33 U.S.C. 2327(1)(E)(ii)) is amended by striking "$8,000,000" and inserting "$20,000,000".

SEC. 2007. INLAND WATERWAYS OVERSIGHT.

(a) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report regarding the lessons learned from the experience of planning and constructing the Olmsted Project and how such lessons might apply to future inland waterway studies and projects.

(b) ANNUAL FINANCIAL REVIEW.—For any inland waterways project that the Secretary carries out that has an estimated total cost of $500,000,000 or more, the Secretary shall submit to the congressional committees referred to in subsection (a) an annual financial plan for the project. The plan shall be based on detailed annual estimates of the cost to complete the remaining elements of the project and on reasonable assumptions, as determined by the Secretary, of any future increases of the cost to complete the project.

(c) GOVERNMENT ACCOUNTABILITY OFFICE REPORT.—As soon as practicable after the date of enactment of this Act, the Comptroller General of the United States shall conduct, and submit to Congress a report describing the results of, a study to determine why, and to what extent, the project for navigation, Lower Ohio River, Locks and Dams 52 and 53, Illinois and Kentucky (commonly known as the "Olmsted Locks and Dam project"), authorized by section 3(a)(6) of the Water Resources Development Act of 1988 (102 Stat. 4013), has exceeded the budget for the project and the reasons why the project failed to be completed as scheduled, including an assessment of—

(1) engineering methods used for the project;

(2) the management of the project;

(3) contracting for the project;

(4) the cost to the United States of benefits foregone due to project delays; and

(5) such other contributory factors as the Comptroller General determines to be appropriate.

SEC. 2008. ASSESSMENT OF OPERATION AND MAINTENANCE NEEDS OF THE ATLANTIC INTRACOASTAL WATERWAY AND THE GULF INTRACOASTAL WATERWAY.

(a) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Secretary shall assess the operation and maintenance needs of the Atlantic Intracoastal Waterway and the Gulf Intracoastal Waterway.

(b) TYPES OF ACTIVITIES.—In carrying out subsection (a), the Secretary shall assess the operation and maintenance needs of the Atlantic Intracoastal Waterway and the Gulf Intracoastal Waterway as used for the following purposes:

(1) Commercial navigation.

(2) Commercial fishing.

(3) Subsistence, including utilization by Indian tribes (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b)) for subsistence and ceremonial purposes.

(4) Use as ingress and egress to harbors of refuge.

(5) Transportation of persons.

(6) Purposes relating to domestic energy production, including fabrication, servicing, and supply of domestic offshore energy production facilities.

(7) Activities of the Secretary of the department in which the Coast Guard is operating.

(8) Public health and safety related equipment for responding to coastal and inland emergencies.

(9) Recreation purposes.

(10) Any other authorized purpose.

(c) REPORT TO CONGRESS.—For fiscal year 2015, and biennially thereafter, in conjunction with the annual budget submission by the President to Congress under section 1105(a) of title 31, United States Code, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report that, with respect to the Atlantic Intracoastal Waterway and the Gulf Intracoastal Waterway—

(1) identifies the operation and maintenance costs required to achieve the authorized length, width, and depth;

(2) identifies the amount of funding requested in the President's budget for operation and maintenance costs; and

(3) identifies the unmet operation and maintenance needs of the Atlantic Intracoastal Waterway and the Gulf Intracoastal Waterway.

SEC. 2009. INLAND WATERWAYS RIVERBANK STABILIZATION.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and biennially thereafter, the Secretary shall conduct a study to determine the feasibility of—

(1) carrying out projects for the inland and intracoastal waterways for purposes of—

(A) flood damage reduction;

(B) emergency streambank and shoreline protection; and

(C) prevention and mitigation of shore damages attributable to navigation improvements; and

(2) modifying projects for the inland and intracoastal waterways for the purpose of improving the quality of the environment.

(b) RECOMMENDATIONS.—In conducting the study, the Secretary shall develop specific project recommendations and prioritize those recommendations based on—

(1) the extent of damage and land loss resulting from riverbank erosion;

(2) the rate of erosion;

(3) the significant threat of future flood risk to public property, public infrastructure, or public safety;

(4) the destruction of natural resources or habitats; and

(5) the potential cost savings for maintenance of the channel.

(c) DISPOSITION.—The Secretary may carry out any project identified in the study conducted pursuant to subsection (a) in accordance with the criteria for projects carried out under one of the following authorities:

(1) Section 14 of the Flood Control Act of 1946 (33 U.S.C. 701r).

(2) Section 205 of the Flood Control Act of 1948 (33 U.S.C. 701s).

(3) Section 111 of the River and Harbor Act of 1968 (33 U.S.C. 426i).

(4) Section 1135 of the Water Resources Development Act of 1986 (33 U.S.C. 2309a).

(d) ANNUAL REPORT.—For a project recommended pursuant to the study that cannot be carried out under any of the authorities specified in subsection (c), upon a determination by the Secretary of the feasibility of the project, the Secretary may include a recommendation concerning the project in the annual report submitted to Congress under section 7001.

SEC. 2010. UPPER MISSISSIPPI RIVER PROTECTION.

(a) DEFINITION OF UPPER ST. ANTHONY FALLS LOCK AND DAM.—In this section, the term "Upper St. Anthony Falls Lock and Dam" means the lock and dam located on Mississippi River Mile 853.9 in Minneapolis, Minnesota.

(b) MANDATORY CLOSURE.—Not later than 1 year after the date of enactment of this Act, the Secretary shall close the Upper St. Anthony Falls Lock and Dam.

(c) EMERGENCY OPERATIONS.—Nothing in this section prevents the Secretary from carrying out emergency lock operations necessary to mitigate flood damage.

SEC. 2011. CORPS OF ENGINEERS LOCK AND DAM ENERGY DEVELOPMENT.

Section 1117 of the Water Resources Development Act of 1986 (100 Stat. 4236) is amended to read as follows:

"SEC. 1117. W.D. MAYO LOCK AND DAM.

"(a) IN GENERAL.—The Cherokee Nation of Oklahoma may—

"(1) design and construct one or more hydroelectric generating facilities at the W.D. Mayo Lock and Dam on the Arkansas River, Oklahoma; and

"(2) market the electricity generated from any such facility.

"(b) PRECONSTRUCTION REQUIREMENTS.—

"(1) PERMITS.—Before the date on which construction of a hydroelectric generating facility begins under subsection (a), the Cherokee Nation shall obtain any permit required under Federal or State law, except that the Cherokee Nation shall be exempt from licensing requirements that may otherwise apply to construction, operation, or maintenance of the facility under the Federal Power Act (16 U.S.C. 791a et seq.).

"(2) REVIEW OF PLANS AND SPECIFICATIONS.—The Cherokee Nation may initiate the design or construction of a hydroelectric generating facility under subsection (a) only after the Secretary reviews and approves the plans and specifications for the design and construction.

"(c) PAYMENT OF DESIGN AND CONSTRUCTION COSTS.—

"(1) IN GENERAL.—The Secretary may accept funds offered by the Cherokee Nation and use such funds to carry out the design and construction of a hydroelectric generating facility under subsection (a).

"(2) ALLOCATION OF COSTS.—The Cherokee Nation shall—

"(A) bear all costs associated with the design and construction of a hydroelectric generating facility under subsection (a); and

"(B) provide any funds necessary for the design and construction to the Secretary prior to the Secretary initiating any activities related to the design and construction.

"(d) ASSUMPTION OF LIABILITY.—The Cherokee Nation shall—

"(1) hold all title to a hydroelectric generating facility constructed under subsection (a) and may, subject to the approval of the Secretary, assign such title to a third party;

"(2) be solely responsible for—

"(A) the operation, maintenance, repair, replacement, and rehabilitation of the facility; and

"(B) the marketing of the electricity generated by the facility; and

"(3) release and indemnify the United States from any claims, causes of action, or liabilities that may arise out of any activity undertaken to carry out this section.

"(e) ASSISTANCE AVAILABLE.—The Secretary may provide technical and construction management assistance requested by the Cherokee Nation relating to the design and construction of a hydroelectric generating facility under subsection (a).

"(f) THIRD PARTY AGREEMENTS.—The Cherokee Nation may enter into agreements with the Secretary or a third party that the Cherokee Nation or the Secretary determines are necessary to carry out this section.".

SEC. 2012. RESTRICTED AREAS AT CORPS OF ENGINEERS DAMS.

Section 2 of the Freedom to Fish Act (127 Stat. 449) is amended—

(1) in subsection (b)(1) by striking "2 years after the date of enactment of this Act" and inserting "4 years after the date of enactment of the Water Resources Reform and Development Act of 2014";

(2) in the heading of subsection (c) by inserting "OR MODIFIED" after "NEW"; and

(3) in subsection (c)—

(A) in matter preceding paragraph (1) by inserting "new or modified" after "establishes any"; and

(B) in paragraph (3) by striking "2 years after the date of enactment of this Act" and inserting "4 years after the date of enactment of the Water Resources Reform and Development Act of 2014".

SEC. 2013. OPERATION AND MAINTENANCE OF FUEL TAXED INLAND WATERWAYS.

Section 102 of the Water Resources Development Act of 1986 (33 U.S.C. 2212) is amended—

(1) by redesignating subsection (c) as subsection (d); and

(2) by inserting after subsection (b) the following:

"(c) FLOODGATES ON THE INLAND WATERWAYS.—

"(1) OPERATION AND MAINTENANCE CARRIED OUT BY THE SECRETARY.—Notwithstanding any other provision of law, the Secretary shall be responsible for the operation and maintenance, including repair, of any flood gate, as well as any pumping station constructed within the channel as a single unit with that flood gate, that—

"(A) was constructed as of the date of enactment of the Water Resources Reform and Development Act of 2014 as a feature of an authorized hurricane and storm damage reduction project; and

"(B) crosses an inland or intracoastal waterway described in section 206 of the Inland Waterways Revenue Act of 1978 (33 U.S.C. 1804).

"(2) NON-FEDERAL COST SHARE.—The non-Federal share of the cost of operation, maintenance, repair, rehabilitation, and replacement of any structure under this subsection shall be 35 percent.".

Subtitle B—Port and Harbor Maintenance

SEC. 2101. FUNDING FOR HARBOR MAINTENANCE PROGRAMS.

(a) DEFINITIONS.—In this section:

(1) TOTAL AMOUNT OF HARBOR MAINTENANCE TAXES RECEIVED.—The term "total amount of harbor maintenance taxes received" means, with respect to a fiscal year, the aggregate of amounts appropriated, transferred, or credited to the Harbor Maintenance Trust Fund under section 9505(a) of the Internal Revenue Code of 1986 for that fiscal year as set forth in the current year estimate provided in the President's budget request for the subsequent fiscal year, submitted pursuant to section 1105 of title 31, United States Code.

(2) TOTAL BUDGET RESOURCES.—The term "total budget resources" means the total amount made available by appropriations Acts from the Harbor Maintenance Trust Fund for a fiscal year for making expenditures under section 9505(c) of the Internal Revenue Code of 1986.

(b) TARGET APPROPRIATIONS.—

(1) IN GENERAL.—The target total budget resources made available to the Secretary from the Harbor Maintenance Trust Fund for a fiscal year shall be not less than the following:

(A) For fiscal year 2015, 67 percent of the total amount of harbor maintenance taxes received in fiscal year 2014.

(B) For fiscal year 2016, 69 percent of the total amount of harbor maintenance taxes received in fiscal year 2015.

(C) For fiscal year 2017, 71 percent of the total amount of harbor maintenance taxes received in fiscal year 2016.

(D) For fiscal year 2018, 74 percent of the total amount of harbor maintenance taxes received in fiscal year 2017.

(E) For fiscal year 2019, 77 percent of the total amount of harbor maintenance taxes received in fiscal year 2018.

(F) For fiscal year 2020, 80 percent of the total amount of harbor maintenance taxes received in fiscal year 2019.

(G) For fiscal year 2021, 83 percent of the total amount of harbor maintenance taxes received in fiscal year 2020.

(H) For fiscal year 2022, 87 percent of the total amount of harbor maintenance taxes received in fiscal year 2021.

(I) For fiscal year 2023, 91 percent of the total amount of harbor maintenance taxes received in fiscal year 2022.

(J) For fiscal year 2024, 95 percent of the total amount of harbor maintenance taxes received in fiscal year 2023.

(K) For fiscal year 2025, and each fiscal year thereafter, 100 percent of the total amount of harbor maintenance taxes received in the previous fiscal year.

(2) USE OF AMOUNTS.—The total budget resources described in paragraph (1) may be used only for making expenditures under section 9505(c) of the Internal Revenue Code of 1986.

(c) IMPACT ON OTHER FUNDS.—

(1) SENSE OF CONGRESS.—It is the sense of Congress that any increase in funding for harbor maintenance programs under this section shall result from an overall increase in appropriations for the civil works program of the Corps of Engineers and not from reductions in the appropriations for other programs, projects, and activities carried out by the Corps of Engineers for other authorized purposes.

(2) APPLICATION.—The target total budget resources for a fiscal year specified in subsection (b)(1) shall only apply in a fiscal year for which the level of appropriations provided for the

civil works program of the Corps of Engineers in that fiscal year is increased, as compared to the previous fiscal year, by a dollar amount that is at least equivalent to the dollar amount necessary to address such target total budget resources in that fiscal year.

SEC. 2102. OPERATION AND MAINTENANCE OF HARBOR PROJECTS.

(a) IN GENERAL.—Section 210 of the Water Resources Development Act of 1986 (33 U.S.C. 2238) is amended by adding at the end the following:

"(c) OPERATION AND MAINTENANCE OF HARBOR PROJECTS.—

"(1) IN GENERAL.—To the maximum extent practicable, the Secretary shall make expenditures to pay for operation and maintenance costs of the harbors and inland harbors referred to in subsection (a)(2), including expenditures of funds appropriated from the Harbor Maintenance Trust Fund, based on an equitable allocation of funds among all such harbors and inland harbors.

"(2) CRITERIA.—

"(A) IN GENERAL.—In determining an equitable allocation of funds under paragraph (1), the Secretary shall—

"(i) consider the information obtained in the assessment conducted under subsection (e);

"(ii) consider the national and regional significance of harbor operations and maintenance; and

"(iii) as appropriate, consider national security and military readiness needs.

"(B) LIMITATION.—The Secretary shall not allocate funds under paragraph (1) based solely on the tonnage transiting through a harbor.

"(3) EMERGING HARBOR PROJECTS.—Notwithstanding any other provision of this subsection, in making expenditures under paragraph (1) for each of fiscal years 2015 through 2022, the Secretary shall allocate for operation and maintenance costs of emerging harbor projects an amount that is not less than 10 percent of the funds made available under this section for fiscal year 2012 to pay the costs described in subsection (a)(2).

"(4) MANAGEMENT OF GREAT LAKES NAVIGATION SYSTEM.—To sustain effective and efficient operation and maintenance of the Great Lakes Navigation System, including any navigation feature in the Great Lakes that is a Federal responsibility with respect to operation and maintenance, the Secretary shall manage all of the individually authorized projects in the Great Lakes Navigation System as components of a single, comprehensive system, recognizing the interdependence of the projects.

"(d) PRIORITIZATION.—

"(1) PRIORITY.—

"(A) IN GENERAL.—For each of fiscal years 2015 through 2024, if priority funds are available, the Secretary shall use the priority funds as follows:

"(i) 90 percent of the priority funds shall be used for high- and moderate-use harbor projects.

"(ii) 10 percent of the priority funds shall be used for emerging harbor projects.

"(B) ADDITIONAL CONSIDERATIONS.—For each of fiscal years 2015 through 2024, of the priority funds available, the Secretary shall use—

"(i) not less than 5 percent of such funds for underserved harbor projects; and

"(ii) not less than 10 percent of such funds for projects that are located within the Great Lakes Navigation System.

"(C) UNDERSERVED HARBORS.—In determining which underserved harbor projects shall receive funds under this paragraph, the Secretary shall consider—

"(i) the total quantity of commerce supported by the water body on which the project is located; and

"(ii) the minimum width and depth that—

"(I) would be necessary at the underserved harbor project to provide sufficient clearance for fully loaded commercial vessels using the underserved harbor project to maneuver safely; and

"(II) does not exceed the constructed width and depth of the authorized navigation project.

"(2) EXPANDED USES.—

"(A) DEFINITION OF ELIGIBLE HARBOR OR INLAND HARBOR DEFINED.—In this paragraph, the term 'eligible harbor or inland harbor' means a harbor or inland harbor at which the total amount of harbor maintenance taxes collected in the immediately preceding 3 fiscal years exceeds the value of the work carried out for the harbor or inland harbor using amounts from the Harbor Maintenance Trust Fund during those 3 fiscal years.

"(B) USE OF EXPANDED USES FUNDS.—

"(i) FISCAL YEARS 2015 THROUGH 2024.—For each of fiscal years 2015 through 2024, of the priority funds available, the Secretary shall use not less than 10 percent of such funds for expanded uses carried out at an eligible harbor or inland harbor.

"(ii) SUBSEQUENT FISCAL YEARS.—For fiscal year 2025 and each fiscal year thereafter, the Secretary shall use not less than 10 percent of the priority funds available for expanded uses carried out at an eligible harbor or inland harbor.

"(C) PRIORITIZATION.—In allocating funds under this paragraph, the Secretary shall give priority to projects at eligible harbors or inland harbors for which the difference, calculated in dollars, is greatest between—

"(i) the total amount of funding made available for projects at that eligible harbor or inland harbor from the Harbor Maintenance Trust Fund in the immediately preceding 3 fiscal years; and

"(ii) the total amount of harbor maintenance taxes collected at that harbor or inland harbor in the immediately preceding 3 fiscal years.

"(3) REMAINING FUNDS.—

"(A) IN GENERAL.—For each of fiscal years 2015 through 2024, if after fully funding all projects eligible for funding under paragraphs (1)(B) and (2)(B)(i), priority

funds made available under those paragraphs remain unobligated, the Secretary shall use those remaining funds to pay for operation and maintenance costs of any harbor or inland harbor referred to in subsection (a)(2) based on an equitable allocation of those funds among the harbors and inland harbors.

"(B) CRITERIA.—In determining an equitable allocation of funds under subparagraph (A), the Secretary shall—

"(i) use the criteria specified in subsection (c)(2)(A); and

"(ii) make amounts available in accordance with the requirements of paragraph (1)(A).

"(4) EMERGENCY EXPENDITURES.—Nothing in this subsection prohibits the Secretary from making an expenditure to pay for the operation and maintenance costs of a specific harbor or inland harbor, including the transfer of funding from the operation and maintenance of a separate project, if—

"(A) the Secretary determines that the action is necessary to address the navigation needs of a harbor or inland harbor where safe navigation has been severely restricted due to an unforeseen event; and

"(B) the Secretary provides within 90 days of the action notice and information on the need for the action to the Committee on Environment and Public Works and the Committee on Appropriations of the Senate and the Committee on Transportation and Infrastructure and the Committee on Appropriations of the House of Representatives.

"(e) ASSESSMENT OF HARBORS AND INLAND HARBORS.—

"(1) IN GENERAL.—Not later than 270 days after the date of enactment of this subsection, and biennially thereafter, the Secretary shall assess the operation and maintenance needs and uses of the harbors and inland harbors referred to in subsection (a)(2).

"(2) ASSESSMENT OF HARBOR NEEDS AND ACTIVITIES.—

"(A) TOTAL OPERATION AND MAINTENANCE NEEDS OF HARBORS.—In carrying out paragraph (1), the Secretary shall identify—

"(i) the total future costs required to achieve and maintain the constructed width and depth for the harbors and inland harbors referred to in subsection (a)(2); and

"(ii) the total expected costs for expanded uses at eligible harbors or inland harbors referred to in subsection (d)(2).

"(B) USES OF HARBORS AND INLAND HARBORS.—In carrying out paragraph (1), the Secretary shall identify current uses (and, to the extent practicable, assess the national, regional, and local benefits of such uses) of harbors and inland harbors referred to in subsection (a)(2), including the use of those harbors for—

"(i) commercial navigation, including the movement of goods;

"(ii) domestic trade;

"(iii) international trade;

"(iv) commercial fishing;

"(v) subsistence, including use by Indian tribes (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b)) for subsistence and ceremonial purposes;

"(vi) use as a harbor of refuge;

"(vii) transportation of persons;

"(viii) purposes relating to domestic energy production, including the fabrication, servicing, or supply of domestic offshore energy production facilities;

"(ix) activities of the Secretary of the department in which the Coast Guard is operating;

"(x) activities of the Secretary of the Navy;

"(xi) public health and safety related equipment for responding to coastal and inland emergencies;

"(xii) recreation purposes; and

"(xiii) other authorized purposes.

"(3) REPORT TO CONGRESS.—

"(A) IN GENERAL.—For fiscal year 2016, and biennially thereafter, in conjunction with the President's annual budget submission to Congress under section 1105(a) of title 31, United States Code, the Secretary shall submit to the Committee on Environment and Public Works and the Committee on Appropriations of the Senate and the Committee on Transportation and Infrastructure and the Committee on Appropriations of the House of Representatives a report that, with respect to harbors and inland harbors referred to in subsection (a)(2)—

"(i) identifies the operation and maintenance costs associated with the harbors and inland harbors, including those costs required to achieve and maintain the constructed width and depth for the harbors and inland harbors and the costs for expanded uses at eligible harbors and inland harbors, on a project-by-project basis;

"(ii) identifies the amount of funding requested in the President's budget for the operation and maintenance costs associated with the harbors and inland harbors, on a project-by-project basis;

"(iii) identifies the unmet operation and maintenance needs associated with the harbors and inland harbors, on a project-by-project basis; and

"(iv) identifies the harbors and inland harbors for which the President will allocate funding over the subsequent 5 fiscal years for operation and maintenance activities, on a project-by-project basis, including the amounts to be allocated for such purposes.

"(B) PUBLIC AVAILABILITY.—The Secretary shall make the report submitted under subparagraph (A) available to the public, including on the Internet.

"(f) DEFINITIONS.—In this section:

"(1) CONSTRUCTED WIDTH AND DEPTH.—The term 'constructed width and depth' means the width and depth to which a project has been constructed, which may not exceed the authorized width and depth of the project.

"(2) EMERGING HARBOR PROJECT.—The term 'emerging harbor project' means a project that is assigned to a harbor or inland harbor referred to in subsection (a)(2) that transits less than 1,000,000 tons of cargo annually.

"(3) EXPANDED USES.—The term 'expanded uses' means the following activities:

"(A) The maintenance dredging of a berth in a harbor that is accessible to a Federal navigation project and that benefits commercial navigation at the harbor.

"(B) The maintenance dredging and disposal of legacy-contaminated sediment, and sediment unsuitable for open water disposal, if—

"(i) such dredging and disposal benefits commercial navigation at the harbor; and

"(ii) such sediment is located in and affects the maintenance of a Federal navigation project or is located in a berth that is accessible to a Federal navigation project.

"(4) GREAT LAKES NAVIGATION SYSTEM.—The term 'Great Lakes Navigation System' includes—

"(A)(i) Lake Superior;

"(ii) Lake Huron;

"(iii) Lake Michigan;

"(iv) Lake Erie; and

"(v) Lake Ontario;

"(B) all connecting waters between the lakes referred to in subparagraph (A) used for commercial navigation;

"(C) any navigation features in the lakes referred to in subparagraph (A) or waters described in subparagraph (B) that are a Federal operation or maintenance responsibility; and

"(D) areas of the Saint Lawrence River that are operated or maintained by the Federal Government for commercial navigation.

"(5) HARBOR MAINTENANCE TAX.—The term 'harbor maintenance tax' means the amounts collected under section 4461 of the Internal Revenue Code of 1986.

"(6) HIGH-USE HARBOR PROJECT.—The term 'high-use harbor project' means a project that is assigned to a harbor or inland harbor referred to in subsection (a)(2) that transits not less than 10,000,000 tons of cargo annually.

"(7) MODERATE-USE HARBOR PROJECT.—The term 'moderate-use harbor project' means a project that is assigned to a harbor or inland harbor referred to in subsection (a)(2) that transits annually—

"(A) more than 1,000,000 tons of cargo; but

"(B) less than 10,000,000 tons of cargo.

"(8) PRIORITY FUNDS.—The term 'priority funds' means the difference between—

"(A) the total funds that are made available under this section to pay the costs described in subsection (a)(2) for a fiscal year; and

"(B) the total funds made available under this section to pay the costs described in subsection (a)(2) in fiscal year 2012.

"(9) UNDERSERVED HARBOR PROJECT.—

"(A) IN GENERAL.—The term 'underserved harbor project' means a project that is assigned to a harbor or inland harbor referred to in subsection (a)(2)—

"(i) that is a moderate-use harbor project or an emerging harbor project;

"(ii) that has been maintained at less than the constructed width and depth of the project during each of the preceding 6 fiscal years; and

"(iii) for which State and local investments in infrastructure have been made at those projects during the preceding 6 fiscal years.

"(B) ADMINISTRATION.—For purposes of this paragraph, State and local investments in infrastructure shall include infrastructure investments made using amounts made available for activities under section 105(a)(9) of the Housing and Community Development Act of 1974 (42 U.S.C. 5305(a)(9)).".

(b) OPERATION AND MAINTENANCE.—Section 101(b)(1) of the Water Resources Development Act of 1986 (33 U.S.C. 2211(b)(1)) is amended by striking "45 feet" and inserting "50 feet".

(c) CONFORMING AMENDMENT.—Section 9505(c)(1) of the Internal Revenue Code of 1986 is amended by striking "(as in effect on the date of the enactment of the Water Resources Development Act of 1996)".

SEC. 2103. CONSOLIDATION OF DEEP DRAFT NAVIGATION EXPERTISE.

Section 2033(e) of the Water Resources Development Act of 2007 (33 U.S.C. 2282a(e)) is amended by adding at the end the following:

"(3) DEEP DRAFT NAVIGATION PLANNING CENTER OF EXPERTISE.—

"(A) IN GENERAL.—The Secretary shall consolidate deep draft navigation expertise within the Corps of Engineers into a deep draft navigation planning center of expertise.

"(B) LIST.—Not later than 60 days after the date of the consolidation required under subparagraph (A), the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a list of the grade levels and expertise of each of the personnel assigned to the center described in subparagraph (A).".

SEC. 2104. REMOTE AND SUBSISTENCE HARBORS.

Section 2006 of the Water Resources Development Act of 2007 (33 U.S.C. 2242) is amended—

(1) in subsection (a)—

(A) in paragraph (1)(B) by inserting "or Alaska" after "Hawaii"; and

(B) in paragraph (2)—

(i) by striking "community" and inserting "region"; and

(ii) by inserting ", as determined by the Secretary, including consideration of information provided by the non-Federal interest" after "improvement"; and

(2) by adding at the end the following:

"(c) PRIORITIZATION.—Projects recommended by the Secretary under subsection (a) shall be given equivalent budget consideration and priority as projects recommended solely by national economic development benefits.

"(d) DISPOSITION.—

"(1) IN GENERAL.—The Secretary may carry out any project identified in the study carried out pursuant to subsection (a) in accordance with the criteria for projects carried out under the authority of the Secretary under section 107 of the River and Harbor Act of 1960 (33 U.S.C. 577).

"(2) NON-FEDERAL INTERESTS.—In evaluating and implementing a project under this section, the Secretary shall allow a non-Federal interest to participate in the financing of a project in accordance with the criteria established for flood control projects under section 903(c) of the Water Resources Development Act of 1986 (Public Law 99–662; 100 Stat. 4184).

"(e) ANNUAL REPORT.—For a project that cannot be carried out under the authority specified in subsection (d), on a determination by the Secretary of the feasibility of the project under subsection (a), the Secretary may include a recommendation concerning the project in the annual report submitted to Congress under section 7001.".

SEC. 2105. ARCTIC DEEP DRAFT PORT DEVELOPMENT PARTNERSHIPS.

(a) IN GENERAL.—The Secretary may provide technical assistance to non-Federal public entities, including Indian tribes (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b)), for the development, construction, operation, and maintenance of channels, harbors, and related infrastructure associated with deep draft ports for purposes of dealing with Arctic development and security needs.

(b) ACCEPTANCE OF FUNDS.—The Secretary is authorized to accept and expend funds provided by non-Federal public entities, including Indian tribes (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b)), to carry out the technical assistance activities described in subsection (a).

(c) LIMITATION.—No assistance may be provided under this section until after the date on which the entity to which that assistance is to be provided enters into a written agreement with the Secretary that includes such terms and conditions as the Secretary determines to be appropriate and in the public interest.

(d) PRIORITIZATION.—The Secretary shall prioritize technical assistance provided under this section for Arctic deep draft ports identified by the Secretary, the Secretary of Homeland Security, and the Secretary of Defense as important for Arctic development and security.

SEC. 2106. ADDITIONAL MEASURES AT DONOR PORTS AND ENERGY TRANSFER PORTS.

(a) DEFINITIONS.—In this section:

(1) CARGO CONTAINER.—The term "cargo container" means a cargo container that is 1 Twenty-foot Equivalent Unit.

(2) DONOR PORT.—The term "donor port" means a port—

(A) that is subject to the harbor maintenance fee under section 24.24 of title 19, Code of Federal Regulations (or a successor regulation);

(B) at which the total amount of harbor maintenance taxes collected comprise not less than $15,000,000 annually of the total funding of the Harbor Maintenance Trust Fund established under section 9505 of the Internal Revenue Code of 1986;

(C) that received less than 25 percent of the total amount of harbor maintenance taxes collected at that port in the previous 5 fiscal years; and

(D) that is located in a State in which more than 2,000,000 cargo containers were unloaded from or loaded on to vessels in fiscal year 2012.

(3) ENERGY COMMODITY.—The term "energy commodity" includes—

(A) petroleum products;

(B) natural gas;

(C) coal;

(D) wind and solar energy components; and

(E) biofuels.

(4) ENERGY TRANSFER PORT.—The term "energy transfer port" means a port—

(A) that is subject to the harbor maintenance fee under section 24.24 of title 19, Code of Federal Regulation (or any successor regulation); and

(B)(i) at which energy commodities comprised greater than 25 percent of all commercial activity by tonnage in fiscal year 2012; and

(ii) through which more than 40,000,000 tons of cargo were transported in fiscal year 2012.

(5) EXPANDED USES.—The term "expanded uses" has the meaning given the term in section 210(f) of the Water Resources Development Act of 1986 (33 U.S.C. 2238(f)).

(6) HARBOR MAINTENANCE TAX.—The term "harbor maintenance tax" has the meaning given the term in section 210(f) of the Water Resources Development Act of 1986 (33 U.S.C. 2238(f)).

(b) AUTHORITY.—

(1) IN GENERAL.—Subject to the availability of appropriations, the Secretary may provide to donor ports and energy transfer ports amounts in accordance with this section.

(2) LIMITATIONS.—Amounts provided under this section—

(A) for energy transfer ports shall be divided equally among all States with an energy transfer port; and

(B) shall be made available to a port as either a donor port or an energy transfer port and no port may receive amounts as both a donor port and an energy transfer port.

(c) USE OF FUNDS.—Amounts provided under this section may be used by a donor port or an energy transfer port—

(1) to provide payments to importers entering cargo or shippers transporting cargo through that port, as calculated by U.S. Customs and Border Protection according to the amount of harbor maintenance taxes collected;

(2) for expanded uses; or

(3) for environmental remediation related to dredging berths and Federal navigation channels.

(d) ADMINISTRATION OF PAYMENTS.—If a donor port or an energy transfer port elects to provide payments to importers or shippers under subsection (c), the Secretary shall transfer the amount that would otherwise be provided to the port under this section that is equal to those payments to the Commissioner of U.S. Customs and Border Protection to provide the payments to the importers or shippers.

(e) REPORT TO CONGRESS.—

(1) IN GENERAL.—Not later than 18 months after the date of enactment of this section, the Secretary shall assess the impact of the authority provided by this section and submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report on the results of that assessment, including any recommendations for amending or reauthorizing the authority.

(2) FACTORS.—In carrying out the assessment under paragraph (1), the Secretary shall assess—

(A) the impact of the amounts provided and used under this section on those ports that received funds under this section; and

(B) any impact on domestic harbors and ports that did not receive funds under this section.

(f) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There is authorized to be appropriated to carry out this section $50,000,000 for each of fiscal years 2015 through 2018.

(2) DIVISION BETWEEN DONOR PORTS AND ENERGY TRANSFER PORTS.—For each fiscal year, amounts made available to carry out this section shall be provided in equal amounts to donor ports and energy transfer ports.

(3) ADDITIONAL APPROPRIATIONS.—If the target total budget resources under subparagraphs (A) through (D) of section 2101(b)(1) are met for each of fiscal years 2015 through 2018, there is authorized to be appropriated to carry out this section $50,000,000 for each of fiscal years 2019 through 2022.

SEC. 2107. PRESERVING UNITED STATES HARBORS.

(a) IN GENERAL.—Upon a request from a non-Federal interest, the Secretary shall review a report developed by the non-Federal interest that provides an economic justification for Federal investment in the operation and maintenance of a federally authorized harbor or inland harbor (referred to in this section as a "federally authorized harbor").

(b) JUSTIFICATION OF INVESTMENT.—A report submitted under subsection (a) may provide for an economic justification of Federal investment in the operation and maintenance of a federally authorized harbor based on—

(1) the projected economic benefits, including transportation savings and job creation; and

(2) other factors, including navigation safety, national security, and sustainability of subsistence harbors.

(c) WRITTEN RESPONSE.—Not later than 180 days after the date on which the Secretary receives a report under subsection (a), the Secretary shall provide to the non-Federal interest a written re-

sponse to the report, including an assessment of the information provided by the non-Federal interest.

(d) PRIORITIZATION.—As the Secretary determines to be appropriate, the Secretary may use the information provided in the report under subsection (a) to justify additional operation and maintenance funding for a federally authorized harbor in accordance with section 101(b) of the Water Resources Development Act of 1986 (33 U.S.C. 2211(b)).

(e) LIMITATION ON STATUTORY CONSTRUCTION.—Nothing in this section may be construed to preclude the operation and maintenance of a federally authorized harbor under section 101(b) of the Water Resources Development Act of 1986 (33 U.S.C. 2211(b)).

TITLE III—SAFETY IMPROVEMENTS AND ADDRESSING EXTREME WEATHER EVENTS

Subtitle A—Dam Safety

SEC. 3001. DAM SAFETY.

(a) ADMINISTRATOR.—

(1) IN GENERAL.—The National Dam Safety Program Act (33 U.S.C. 467 et seq.) is amended by striking "Director" each place it appears and inserting "Administrator".

(2) CONFORMING AMENDMENT.—Section 2 of the National Dam Safety Program Act (33 U.S.C. 467) is amended—

(A) by striking paragraph (3);

(B) by redesignating paragraphs (1) and (2) as paragraphs (2) and (3), respectively; and

(C) by inserting before paragraph (2) (as redesignated by subparagraph (B)) the following:

"(1) ADMINISTRATOR.—The term 'Administrator' means the Administrator of the Federal Emergency Management Agency.".

(b) INSPECTION OF DAMS.—Section 3(b)(1) of the National Dam Safety Program Act (33 U.S.C. 467a(b)(1)) is amended by striking "or maintenance" and inserting "maintenance, condition, or provisions for emergency operations".

(c) NATIONAL DAM SAFETY PROGRAM.—

(1) OBJECTIVES.—Section 8(c) of the National Dam Safety Program Act (33 U.S.C. 467f(c)) is amended by striking paragraph (4) and inserting the following:

"(4) develop and implement a comprehensive dam safety hazard education and public awareness initiative to assist the public in preparing for, mitigating, responding to, and recovering from dam incidents;".

(2) BOARD.—Section 8(f)(4) of the National Dam Safety Program Act (33 U.S.C. 467f(f)(4)) is amended by inserting ", representatives from nongovernmental organizations," after "State agencies".

(d) PUBLIC AWARENESS AND OUTREACH FOR DAM SAFETY.—The National Dam Safety Program Act (33 U.S.C. 467 et seq.) is amended—

(1) by redesignating sections 11, 12, and 13 as sections 12, 13, and 14, respectively; and

(2) by inserting after section 10 (33 U.S.C. 467g–1) the following:

"SEC. 11. PUBLIC AWARENESS AND OUTREACH FOR DAM SAFETY.

"The Administrator, in consultation with other Federal agencies, State and local governments, dam owners, the emergency management community, the private sector, nongovernmental organizations and associations, institutions of higher education, and any other appropriate entities shall, subject to the availability of appropriations, carry out a nationwide public awareness and outreach initiative to assist the public in preparing for, mitigating, responding to, and recovering from dam incidents.".

(e) AUTHORIZATION OF APPROPRIATIONS.—

(1) NATIONAL DAM SAFETY PROGRAM.—

(A) ANNUAL AMOUNTS.—Section 14(a)(1) of the National Dam Safety Program Act (33 U.S.C. 467j(a)(1)) (as so redesignated) is amended by striking "$6,500,000" and all that follows through "2011" and inserting "$9,200,000 for each of fiscal years 2015 through 2019".

(B) MAXIMUM AMOUNT OF ALLOCATION.—Section 14(a)(2)(B) of the National Dam Safety Program Act (33 U.S.C. 467j(a)(2)(B)) (as so redesignated) is amended—

(i) by striking "The amount" and inserting the following:

"(i) IN GENERAL.—The amount"; and

(ii) by adding at the end the following:

"(ii) FISCAL YEAR 2015 AND SUBSEQUENT FISCAL YEARS.—For fiscal year 2015 and each subsequent fiscal year, the amount of funds allocated to a State under this paragraph may not exceed the amount of funds committed by the State to implement dam safety activities.".

(2) NATIONAL DAM INVENTORY.—Section 14(b) of the National Dam Safety Program Act (33 U.S.C. 467j(b)) (as so redesignated) is amended by striking "$650,000" and all that follows through "2011" and inserting "$500,000 for each of fiscal years 2015 through 2019".

(3) PUBLIC AWARENESS.—Section 14 of the National Dam Safety Program Act (33 U.S.C. 467j) (as so redesignated) is amended—

(A) by redesignating subsections (c) through (f) as subsections (d) through (g), respectively; and

(B) by inserting after subsection (b) the following:

"(c) PUBLIC AWARENESS.—There is authorized to be appropriated to carry out section 11 $1,000,000 for each of fiscal years 2015 through 2019.".

(4) RESEARCH.—Section 14(d) of the National Dam Safety Program Act (as so redesignated) is amended by striking "$1,600,000" and all that follows through "2011" and inserting "$1,450,000 for each of fiscal years 2015 through 2019".

(5) DAM SAFETY TRAINING.—Section 14(e) of the National Dam Safety Program Act (as so redesignated) is amended by striking "$550,000" and all that follows through "2011" and inserting "$750,000 for each of fiscal years 2015 through 2019".

(6) STAFF.—Section 14(f) of the National Dam Safety Program Act (as so redesignated) is amended by striking "$700,000" and all that follows through "2011" and inserting "$1,000,000 for each of fiscal years 2015 through 2019".

(f) TECHNICAL AMENDMENT.—Section 14 (a)(1) of the National Dam Safety Program Act (33 U.S.C. 467j(a)(1)) (as so redesignated) is amended by striking "sections 7, 8, and 11" and inserting "sections 7, 8, and 12".

Subtitle B—Levee Safety

SEC. 3011. SYSTEMWIDE IMPROVEMENT FRAMEWORK.

A levee system shall remain eligible for rehabilitation assistance under the authority provided by section 5 of the Act of August 18, 1941 (33 U.S.C. 701n) as long as the levee system sponsor continues to make satisfactory progress, as determined by the Secretary, on an approved systemwide improvement framework or letter of intent.

SEC. 3012. MANAGEMENT OF FLOOD RISK REDUCTION PROJECTS.

(a) IN GENERAL.—If 2 or more flood control projects are located within the same geographic area, the Secretary shall, at the request of the non-Federal interests for the affected projects, consider those projects as a single program for budgetary or project management purposes, if the Secretary determines that doing so would not be incompatible with the authorized project purposes.

(b) COST SHARE.—

(1) IN GENERAL.—If any work on a project to which subsection (a) applies is required solely because of impacts to that project from a navigation project, the cost of carrying out that work shall be shared in accordance with the cost-sharing requirements for the navigation project.

(2) USE OF AMOUNTS.—Work described in paragraph (1) may be carried out using amounts made available under subsection (a).

SEC. 3013. VEGETATION MANAGEMENT POLICY.

(a) DEFINITION OF GUIDELINES.—In this section, the term "guidelines" means the Corps of Engineers policy guidelines for management of vegetation on levees, including—

(1) Engineering Technical Letter 1110–2–571 entitled "Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures" and adopted April 10, 2009; and

(2) the draft policy guidance letter entitled "Process for Requesting a Variance from Vegetation Standards for Levees and Floodwalls" (77 Fed. Reg. 9637 (Feb. 17, 2012)).

(b) REVIEW.—The Secretary shall carry out a comprehensive review of the guidelines in order to determine whether current Federal policy relating to levee vegetation is appropriate for all regions of the United States.

(c) FACTORS.—

(1) IN GENERAL.—In carrying out the review, the Secretary shall consider—

(A) the varied interests and responsibilities in managing flood risks, including the need—

(i) to provide the greatest benefits for public safety with limited resources; and

(ii) to ensure that levee safety investments minimize environmental impacts and provide corresponding public safety benefits;

(B) the levee safety benefits that can be provided by woody vegetation;

(C) the preservation, protection, and enhancement of natural resources, including—

(i) the benefit of vegetation on levees in providing habitat for species of concern, including endangered, threatened, and candidate species; and

(ii) the impact of removing levee vegetation on compliance with other regulatory requirements;

(D) protecting the rights of Indian tribes pursuant to treaties and statutes;

(E) determining how vegetation impacts the performance of a levee or levee system during a storm or flood event;

(F) the available science and the historical record regarding the link between vegetation on levees and flood risk;

(G) the avoidance of actions requiring significant economic costs and environmental impacts; and

(H) other factors relating to the factors described in subparagraphs (A) through (F) identified in public comments that the Secretary determines to be appropriate.

(2) VARIANCE CONSIDERATIONS.—

(A) IN GENERAL.—In carrying out the review, the Secretary shall specifically consider factors that promote and allow for consideration of variances from guidelines on a Statewide, tribal, regional, or watershed basis, including variances based on—

(i) regional or watershed soil conditions;

(ii) hydrologic factors;

(iii) vegetation patterns and characteristics;

(iv) environmental resources, including endangered, threatened, or candidate species and related regulatory requirements;

(v) levee performance history, including historical information on original construction and subsequent operation and maintenance activities;

(vi) any effects on water supply;

(vii) any scientific evidence on the link between levee vegetation and levee safety;

(viii) institutional considerations, including implementation challenges and conflicts with or violations of Federal or State environmental laws;

(ix) the availability of limited funds for levee construction and rehabilitation;

(x) the economic and environmental costs of removing woody vegetation on levees; and

(xi) other relevant factors identified in public comments that the Secretary determines to be appropriate.

(B) SCOPE.—The scope of a variance approved by the Secretary may include a complete exemption to guidelines, if appropriate.

(d) COOPERATION AND CONSULTATION; RECOMMENDATIONS.—

(1) IN GENERAL.—The Secretary shall carry out the review under this section in consultation with other applicable Federal agencies, representatives of State, regional, local, and tribal governments, appropriate nongovernmental organizations, and the public.

(2) RECOMMENDATIONS.—

(A) REGIONAL INTEGRATION TEAMS.—Corps of Engineers Regional Integration Teams, representing districts, divisions, and headquarters, in consultation with State and Federal resource agencies, and with participation by local agencies, shall submit to the Secretary any recommendations for vegetation management policies for levees that conform with Federal and State laws and other applicable requirements, including recommendations relating to the review of guidelines under subsection (b) and the consideration of variances under subsection (c)(2).

(B) STATE, TRIBAL, REGIONAL, AND LOCAL ENTITIES.—The Secretary shall consider and accept recommendations from any State, tribal, regional, or local entity for vegetation management policies for levees that conform with Federal and State laws and other applicable requirements, including recommendations relating to the review of guidelines under subsection (b) and the consideration of variances under subsection (c)(2).

(e) INDEPENDENT CONSULTATION.—

(1) IN GENERAL.—As part of the review, the Secretary shall solicit and consider the views of independent experts on the engineering, environmental, and institutional considerations underlying the guidelines, including the factors described in subsection (c) and any information obtained by the Secretary under subsection (d).

(2) AVAILABILITY OF VIEWS.—The views of the independent experts obtained under paragraph (1) shall be—

(A) made available to the public; and

(B) included in supporting materials issued in connection with the revised guidelines required under subsection (f).

(f) REVISION OF GUIDELINES.—

(1) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the Secretary shall—

(A) revise the guidelines based on the results of the review, including—

(i) recommendations received as part of the consultation described in subsection (d)(1); and

(ii) the views received under subsection (e);

(B) provide the public not less than 30 days to review and comment on draft guidelines before issuing final guidelines; and

(C) submit to Congress and make publicly available a report that contains a summary of the activities of the Sec-

retary and a description of the findings of the Secretary under this section.

(2) CONTENT; INCORPORATION INTO MANUAL.—The revised guidelines shall—

(A) provide a practical, flexible process for approving Statewide, tribal, regional, or watershed variances from the guidelines that—

(i) reflect due consideration of the factors described in subsection (c); and

(ii) incorporate State, tribal, and regional vegetation management guidelines for specific areas that—

(I) are consistent with the guidelines; and

(II) have been adopted through a formal public process; and

(B) be incorporated into the manual proposed under section 5(c) of the Act of August 18, 1941 (33 U.S.C. 701n(c)).

(3) FAILURE TO MEET DEADLINES.—If the Secretary fails to submit a report by the required deadline under this subsection, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a detailed explanation of—

(A) why the deadline was missed;

(B) solutions needed to meet the deadline; and

(C) a projected date for submission of the report.

(g) INTERIM ACTIONS.—

(1) IN GENERAL.—Until the date on which revisions to the guidelines are adopted in accordance with subsection (f), the Secretary shall not require the removal of existing vegetation as a condition or requirement for any approval or funding of a project, or any other action, unless the specific vegetation has been demonstrated to present an unacceptable safety risk.

(2) REVISIONS.—Beginning on the date on which the revisions to the guidelines are adopted in accordance with subsection (f), the Secretary shall reconsider, on request of an affected entity, any previous action of the Corps of Engineers in which the outcome was affected by the former guidelines.

SEC. 3014. LEVEE CERTIFICATIONS.

(a) IMPLEMENTATION OF FLOOD PROTECTION STRUCTURE ACCREDITATION TASK FORCE.—In carrying out section 100226 of Public Law 112–141 (42 U.S.C. 4101 note; 126 Stat. 942), the Secretary shall—

(1) ensure that at least 1 program activity carried out under the inspection of completed works program of the Corps of Engineers provides adequate information to the Secretary to reach a levee accreditation decision under section 65.10 of title 44, Code of Federal Regulations (or successor regulation); and

(2) to the maximum extent practicable, carry out activities under the inspection of completed works program of the Corps of Engineers in alignment with the schedule established for the national flood insurance program established under chapter 1 of the National Flood Insurance Act of 1968 (42 U.S.C. 4011 et seq.).

(b) ACCELERATED LEVEE SYSTEM EVALUATIONS.—

(1) IN GENERAL.—On receipt of a request from a non-Federal interest, the Secretary may carry out a levee system evaluation of a federally authorized levee for purposes of the national flood insurance program established under chapter 1 of the National Flood Insurance Act of 1968 (42 U.S.C. 4011 et seq.) if the evaluation will be carried out earlier than such an evaluation would be carried out under subsection (a).

(2) REQUIREMENTS.—A levee system evaluation under paragraph (1) shall—

(A) at a minimum, comply with section 65.10 of title 44, Code of Federal Regulations (as in effect on the date of enactment of this Act); and

(B) be carried out in accordance with such procedures as the Secretary, in consultation with the Administrator of the Federal Emergency Management Agency, may establish.

(3) FUNDING.—

(A) IN GENERAL.—The Secretary may use amounts made available under section 22 of the Water Resources Development Act of 1974 (42 U.S.C. 1962d–16) to carry out this subsection.

(B) COST SHARE.—The Secretary shall apply the cost share under section 22(b) of the Water Resources Development Act of 1974 (42 U.S.C. 1962d–16(b)) to any activities carried out under this subsection.

SEC. 3015. PLANNING ASSISTANCE TO STATES.

Section 22 of the Water Resources Development Act of 1974 (42 U.S.C. 1962d–16) is amended—

(1) in subsection (a)—

(A) in paragraph (1)—

(i) by inserting "or other non-Federal interest working with a State" after "cooperate with any State"; and

(ii) by inserting ", including plans to comprehensively address water resources challenges," after "of such State"; and

(B) in paragraph (2)(A), by striking ", at Federal expense,";

(2) in subsection (b)—

(A) in paragraph (1), by striking "subsection (a)(1)" each place it appears and inserting "subsection (a)";

(B) by redesignating paragraphs (2) and (3) as paragraphs (3) and (4), respectively; and

(C) by inserting after paragraph (1) the following:

"(2) CONTRIBUTED FUNDS.—The Secretary may accept and expend funds in excess of the fees established under paragraph (1) that are provided by a State or other non-Federal interest for assistance under this section."; and

(3) in subsection (c)—

(A) in paragraph (1)—

(i) by striking "$10,000,000" and inserting "$30,000,000"; and

(ii) by striking "$2,000,000" and inserting "$5,000,000 in Federal funds"; and

(B) in paragraph (2), by striking "$5,000,000" and inserting "$15,000,000".

SEC. 3016. LEVEE SAFETY.

(a) PURPOSES.—Section 9001 of the Water Resources Development Act of 2007 (33 U.S.C. 3301 note) is amended—

*(1) in the section heading, by inserting "**; PURPOSES**" after "**TITLE**";*

(2) by striking "This title" and inserting the following:

"(a) SHORT TITLE.—This title"; and

(3) by adding at the end the following:

"(b) PURPOSES.—The purposes of this title are—

"(1) to ensure that human lives and property that are protected by new and existing levees are safe;

"(2) to encourage the use of appropriate engineering policies, procedures, and technical practices for levee site investigation, design, construction, operation and maintenance, inspection, assessment, and emergency preparedness;

"(3) to develop and support public education and awareness projects to increase public acceptance and support of levee safety programs and provide information;

"(4) to build public awareness of the residual risks associated with living in levee protected areas;

"(5) to develop technical assistance materials, seminars, and guidelines to improve the security of levees of the United States; and

"(6) to encourage the establishment of effective State and tribal levee safety programs.".

(b) DEFINITIONS.—Section 9002 of the Water Resources Development Act of 2007 (33 U.S.C. 3301) is amended—

(1) by redesignating paragraphs (1), (2), (3), (4), (5), and (6), as paragraphs (3), (6), (7), (14), (15), and (16), respectively;

(2) by inserting before paragraph (3) (as redesignated by paragraph (1)) the following:

"(1) ADMINISTRATOR.—The term 'Administrator' means the Administrator of the Federal Emergency Management Agency.

"(2) CANAL STRUCTURE.—

"(A) IN GENERAL.—The term 'canal structure' means an embankment, wall, or structure along a canal or manmade watercourse that—

"(i) constrains water flows;

"(ii) is subject to frequent water loading; and

"(iii) is an integral part of a flood risk reduction system that protects the leveed area from flood waters associated with hurricanes, precipitation events, seasonal high water, and other weather-related events.

"(B) EXCLUSION.—The term 'canal structure' does not include a barrier across a watercourse.";

(3) by inserting after paragraph (3) (as redesignated by paragraph (1)) the following:

"(4) FLOODPLAIN MANAGEMENT.—The term 'floodplain management' means the operation of a community program of corrective and preventative measures for reducing flood damage.

"(5) INDIAN TRIBE.—The term 'Indian tribe' has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b)."; and

(4) by striking paragraph (7) (as redesignated by paragraph (1)) and inserting the following:

"(7) LEVEE.—

"(A) IN GENERAL.—The term 'levee' means a manmade barrier (such as an embankment, floodwall, or other structure)—

"(i) the primary purpose of which is to provide hurricane, storm, or flood protection relating to seasonal high water, storm surges, precipitation, or other weather events; and

"(ii) that is normally subject to water loading for only a few days or weeks during a calendar year.

"(B) INCLUSIONS.—The term 'levee' includes a levee system, including—

"(i) levees and canal structures that—

"(I) constrain water flows;

"(II) are subject to more frequent water loading; and

"(III) do not constitute a barrier across a watercourse; and

"(ii) roadway and railroad embankments, but only to the extent that the embankments are integral to the performance of a flood damage reduction system.

"(C) EXCLUSIONS.—The term 'levee' does not include—

"(i) a roadway or railroad embankment that is not integral to the performance of a flood damage reduction system;

"(ii) a canal constructed completely within natural ground without any manmade structure (such as an embankment or retaining wall to retain water or a case in which water is retained only by natural ground);

"(iii) a canal regulated by a Federal or State agency in a manner that ensures that applicable Federal safety criteria are met;

"(iv) a levee or canal structure—

"(I) that is not a part of a Federal flood damage reduction system;

"(II) that is not recognized under the National Flood Insurance Program as providing protection from the 1-percent-annual-chance or greater flood;

"(III) that is not greater than 3 feet high;

"(IV) the population in the leveed area of which is less than 50 individuals; and

"(V) the leveed area of which is less than 1,000 acres; or

"(v) any shoreline protection or river bank protection system (such as revetments or barrier islands).

"(8) LEVEE FEATURE.—The term 'levee feature' means a structure that is critical to the functioning of a levee, including—

"(A) an embankment section;

"(B) a floodwall section;

"(C) a closure structure;

"(D) a pumping station;

"(E) an interior drainage work; and

"(F) a flood damage reduction channel.

"(9) LEVEE SYSTEM.—The term 'levee system' means 1 or more levee segments, including all levee features that are interconnected and necessary to ensure protection of the associated leveed areas—

"(A) that collectively provide flood damage reduction to a defined area; and

"(B) the failure of 1 of which may result in the failure of the entire system.

"(10) NATIONAL LEVEE DATABASE.—The term 'national levee database' means the levee database established under section 9004.

"(11) PARTICIPATING PROGRAM.—The term 'participating program' means a levee safety program developed by a State or Indian tribe that includes the minimum components necessary for recognition by the Secretary.

"(12) REHABILITATION.—The term 'rehabilitation' means the repair, replacement, reconstruction, removal of a levee, or reconfiguration of a levee system, including a setback levee, that is carried out to reduce flood risk or meet national levee safety guidelines.

"(13) RISK.—The term 'risk' means a measure of the probability and severity of undesirable consequences.".

(c) COMMITTEE ON LEVEE SAFETY.—Section 9003 of the Water Resources Development Act of 2007 (33 U.S.C. 3302) is amended—

(1) in subsection (b)—

(A) by striking paragraphs (1) and (2) and inserting the following:

"(1) NONVOTING MEMBERS.—The following 2 nonvoting members:

"(A) The Secretary (or a designee of the Secretary).

"(B) The Administrator (or a designee of the Administrator).";

(B) by redesignating paragraph (3) as paragraph (2); and

(C) in paragraph (2) (as redesignated by subparagraph (B)) by inserting "voting" after "14";

(2) by redesignating subsection (g) as subsection (h); and

(3) by striking subsections (c) through (f) and inserting the following:

"(c) ADMINISTRATION.—

"(1) TERMS OF VOTING MEMBERS.—

"(A) IN GENERAL.—A voting member of the committee shall be appointed for a term of 3 years, except that, of the members first appointed—

"(i) 5 shall be appointed for a term of 1 year;

"(ii) 5 shall be appointed for a term of 2 years; and

"(iii) 4 shall be appointed for a term of 3 years.

"(B) REAPPOINTMENT.—A voting member of the committee may be reappointed to the committee, as the Secretary determines to be appropriate.

"(C) VACANCIES.—A vacancy on the committee shall be filled in the same manner as the original appointment was made.

"(2) CHAIRPERSON.—

"(A) IN GENERAL.—The voting members of the committee shall appoint a chairperson from among the voting members of the committee.

"(B) TERM.—The chairperson shall serve a term of not more than 2 years.

"(d) STANDING COMMITTEES.—

"(1) IN GENERAL.—The committee may establish standing committees comprised of volunteers from all levels of government and the private sector, to advise the committee regarding specific levee safety issues, including participating programs, technical issues, public education and awareness, and safety and the environment.

"(2) MEMBERSHIP.—The committee shall recommend to the Secretary for approval individuals for membership on the standing committees.

"(e) DUTIES AND POWERS.—The committee—

"(1) shall submit to the Secretary and Congress an annual report regarding the effectiveness of the levee safety initiative in accordance with section 9006; and

"(2) may secure from other Federal agencies such services, and enter into such contracts, as the committee determines to be necessary to carry out this subsection.

"(f) TASK FORCE COORDINATION.—The committee shall, to the maximum extent practicable, coordinate the activities of the committee with the Federal Interagency Floodplain Management Task Force.

"(g) COMPENSATION.—

"(1) FEDERAL EMPLOYEES.—Each member of the committee who is an officer or employee of the United States—

"(A) shall serve without compensation in addition to compensation received for the services of the member as an officer or employee of the United States; but

"(B) shall be allowed a per diem allowance for travel expenses, at rates authorized for an employee of an agency under subchapter I of chapter 57 of title 5, United States Code, while away from the home or regular place of business of the member in the performance of the duties of the committee.

"(2) NON-FEDERAL EMPLOYEES.—To the extent amounts are made available to carry out this section in appropriations Acts, the Secretary shall provide to each member of the committee who is not an officer or employee of the United States a stipend and a per diem allowance for travel expenses, at rates authorized for an employee of an agency under subchapter I of chapter 57 of title 5, United States Code, while away from the home or regular place of business of the member in performance of services for the committee.

"(3) STANDING COMMITTEE MEMBERS.—Each member of a standing committee shall serve in a voluntary capacity.".

(d) INVENTORY OF LEVEES.—Section 9004 of the Water Resources Development Act of 2007 (33 U.S.C. 3303) is amended—

(1) in subsection (a)(2)(A) by striking "and, for non-Federal levees, such information on levee location as is provided to the Secretary by State and local governmental agencies" and insert-

ing "and updated levee information provided by States, Indian tribes, Federal agencies, and other entities"; and

(2) by adding at the end the following:

"(c) LEVEE REVIEW.—

"(1) IN GENERAL.—The Secretary shall carry out a one-time inventory and review of all levees identified in the national levee database.

"(2) NO FEDERAL INTEREST.—The inventory and inspection under paragraph (1) does not create a Federal interest in the construction, operation, or maintenance of any levee that is included in the inventory or inspected under this subsection.

"(3) REVIEW CRITERIA.—In carrying out the inventory and review, the Secretary shall use the levee safety action classification criteria to determine whether a levee should be classified in the inventory as requiring a more comprehensive inspection.

"(4) STATE AND TRIBAL PARTICIPATION.—At the request of a State or Indian tribe with respect to any levee subject to review under this subsection, the Secretary shall—

"(A) allow an official of the State or Indian tribe to participate in the review of the levee; and

"(B) provide information to the State or Indian tribe relating to the location, construction, operation, or maintenance of the levee.

"(5) EXCEPTIONS.—In carrying out the inventory and review under this subsection, the Secretary shall not be required to review any levee that has been inspected by a State or Indian tribe using the same methodology described in paragraph (3) during the 1-year period immediately preceding the date of enactment of this subsection if the Governor of the State or chief executive of the tribal government, as applicable, requests an exemption from the review.".

(e) LEVEE SAFETY INITIATIVE .—

(1) IN GENERAL.—Sections 9005 and 9006 of the Water Resources Development Act of 2007 (33 U.S.C. 3304, 3305) are redesignated as sections 9007 and 9008, respectively.

(2) LEVEE SAFETY INITIATIVE.—Title IX of the Water Resources Development Act of 2007 (33 U.S.C. 3301 et seq.) is amended by inserting after section 9004 the following:

"SEC. 9005. LEVEE SAFETY INITIATIVE.

"(a) ESTABLISHMENT.—The Secretary, in consultation with the Administrator, shall carry out a levee safety initiative.

"(b) MANAGEMENT.—The Secretary shall appoint—

"(1) an administrator of the levee safety initiative; and

"(2) such staff as are necessary to implement the initiative.

"(c) LEVEE SAFETY GUIDELINES.—

"(1) ESTABLISHMENT.—Not later than 1 year after the date of enactment of this subsection, the Secretary, in consultation with the Administrator and in coordination with State, local, and tribal governments and organizations with expertise in levee safety, shall establish a set of voluntary, comprehensive, national levee safety guidelines that—

"(A) are available for common, uniform use by all Federal, State, tribal, and local agencies;

"(B) incorporate policies, procedures, standards, and criteria for a range of levee types, canal structures, and related facilities and features; and

"(C) provide for adaptation to local, regional, or watershed conditions.

"(2) REQUIREMENT.—The policies, procedures, standards, and criteria under paragraph (1)(B) shall be developed taking into consideration the levee hazard potential classification system established under subsection (d).

"(3) INCORPORATION.—The guidelines shall address, to the maximum extent practicable—

"(A) the activities and practices carried out by State, local, and tribal governments, and the private sector to safely build, regulate, operate, and maintain levees; and

"(B) Federal activities that facilitate State efforts to develop and implement effective State programs for the safety of levees, including levee inspection, levee rehabilitation, locally developed floodplain management, and public education and training programs.

"(4) CONSIDERATION BY FEDERAL AGENCIES.—To the maximum extent practicable, all Federal agencies shall consider the levee safety guidelines in carrying out activities relating to the management of levees.

"(5) PUBLIC COMMENT.—Prior to finalizing the guidelines under this subsection, the Secretary shall—

"(A) issue draft guidelines for public comment, including comment by States, non-Federal interests, and other appropriate stakeholders; and

"(B) consider any comments received in the development of final guidelines.

"(d) HAZARD POTENTIAL CLASSIFICATION SYSTEM.—

"(1) ESTABLISHMENT.—The Secretary shall establish a hazard potential classification system for use under the levee safety initiative and participating programs.

"(2) REVISION.—The Secretary shall review and, as necessary, revise the hazard potential classification system not less frequently than once every 5 years.

"(3) CONSISTENCY.—The hazard potential classification system established pursuant to this subsection shall be consistent with and incorporated into the levee safety action classification tool developed by the Corps of Engineers.

"(e) TECHNICAL ASSISTANCE AND MATERIALS.—

"(1) ESTABLISHMENT.—The Secretary, in consultation with the Administrator, shall provide technical assistance and training to promote levee safety and assist States, communities, and levee owners in—

"(A) developing levee safety programs;

"(B) identifying and reducing flood risks associated with levees;

"(C) identifying local actions that may be carried out to reduce flood risks in leveed areas; and

"(D) rehabilitating, improving, replacing, reconfiguring, modifying, and removing levees and levee systems.

"(2) ELIGIBILITY.—To be eligible to receive technical assistance under this subsection, a State shall—

"(A) be in the process of establishing or have in effect a State levee safety program under which a State levee safety agency, in accordance with State law, carries out the guidelines established under subsection (c)(1); and

"(B) allocate sufficient funds in the budget of that State to carry out that State levee safety program.

"(3) WORK PLANS.—The Secretary shall enter into an agreement with each State receiving technical assistance under this subsection to develop a work plan necessary for the State levee safety program of that State to reach a level of program performance that meets the guidelines established under subsection (c)(1).

"(f) PUBLIC EDUCATION AND AWARENESS.—

"(1) IN GENERAL.—The Secretary, in coordination with the Administrator, shall carry out public education and awareness efforts relating to the levee safety initiative.

"(2) CONTENTS.—In carrying out the efforts under paragraph (1), the Secretary and the Administrator shall—

"(A) educate individuals living in leveed areas regarding the risks of living in those areas; and

"(B) promote consistency in the transmission of information regarding levees among Federal agencies and regarding risk communication at the State and local levels.

"(g) STATE AND TRIBAL LEVEE SAFETY PROGRAM.—

"(1) GUIDELINES.—

"(A) IN GENERAL.—Not later than 1 year after the date of enactment of this subsection, in consultation with the Administrator, the Secretary shall issue guidelines that establish the minimum components necessary for recognition of a State or tribal levee safety program as a participating program.

"(B) GUIDELINE CONTENTS.—The guidelines under subparagraph (A) shall include provisions and procedures requiring each participating State and Indian tribe to certify to the Secretary that the State or Indian tribe, as applicable—

"(i) has the authority to participate in the levee safety initiative;

"(ii) can receive funds under this title;

"(iii) has adopted any levee safety guidelines developed under this title;

"(iv) will carry out levee inspections;

"(v) will carry out, consistent with applicable requirements, flood risk management and any emergency action planning procedures the Secretary determines to be necessary relating to levees;

"(vi) will carry out public education and awareness activities consistent with the efforts carried out under subsection (f); and

"(vii) will collect and share information regarding the location and condition of levees, including for inclusion in the national levee database.

"(C) PUBLIC COMMENT.—Prior to finalizing the guidelines under this paragraph, the Secretary shall—

"(i) issue draft guidelines for public comment; and

"(ii) consider any comments received in the development of final guidelines.

"(2) ASSISTANCE TO STATES.—

"(A) ESTABLISHMENT.—The Administrator may provide assistance, subject to the availability of funding specified in appropriations Acts for Federal Emergency Management Agency activities pursuant to this title and subject to amounts available under subparagraph (E), to States and Indian tribes in establishing participating programs, conducting levee inventories, and improving levee safety programs in accordance with subparagraph (B).

"(B) REQUIREMENTS.—To be eligible to receive assistance under this section, a State or Indian tribe shall—

"(i) meet the requirements of a participating program established by the guidelines issued under paragraph (1);

"(ii) use not less than 25 percent of any amounts received to identify and assess non-Federal levees within the State or on land of the Indian tribe;

"(iii) submit to the Secretary and Administrator any information collected by the State or Indian tribe in carrying out this subsection for inclusion in the national levee safety database; and

"(iv) identify actions to address hazard mitigation activities associated with levees and leveed areas identified in the hazard mitigation plan of the State approved by the Administrator of the Federal Emergency Management Agency under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.).

"(C) MEASURES TO ASSESS EFFECTIVENESS.—

"(i) IN GENERAL.—Not later than 1 year after the date of enactment of this subsection, the Administrator shall implement quantifiable performance measures and metrics to assess the effectiveness of the assistance provided in accordance with subparagraph (A).

"(ii) CONSIDERATIONS.—In assessing the effectiveness of assistance under clause (i), the Administrator shall consider the degree to which the State or tribal program—

"(I) ensures that human lives and property that are protected by new and existing levees are safe;

"(II) encourages the use of appropriate engineering policies, procedures, and technical practices for levee site investigation, design, construction, operation and maintenance, inspection, assessment, and emergency preparedness;

"(III) develops and supports public education and awareness projects to increase public acceptance and support of levee safety programs and provide information;

"(IV) builds public awareness of the residual risks associated with living in levee protected areas; and

"(V) develops technical assistance materials, seminars, and guidelines to improve the security of levees of the United States.

"(D) MAINTENANCE OF EFFORT.—Technical assistance or grants may not be provided to a State under this subsection during a fiscal year unless the State enters into an agreement with the Administrator to ensure that the State will maintain during that fiscal year aggregate expenditures for programs to ensure levee safety that equal or exceed the average annual level of such expenditures for the State for the 2 fiscal years preceding that fiscal year.

"(E) AUTHORIZATION OF APPROPRIATIONS.—

"(i) IN GENERAL.—There is authorized to be appropriated to the Administrator to carry out this subsection $25,000,000 for each of fiscal years 2015 through 2019.

"(ii) ALLOCATION.—For each fiscal year, amounts made available under this subparagraph shall be allocated among the States and Indian tribes as follows:

"(I) 1/3 among States and Indian tribes that qualify for assistance under this subsection.

"(II) 2/3 among States and Indian tribes that qualify for assistance under this subsection, to each such State or Indian tribe in the proportion that—

"(aa) the miles of levees in the State or on the land of the Indian tribe that are listed on the inventory of levees; bears to

"(bb) the miles of levees in all States and on the land of all Indian tribes that are in the national levee database.

"(iii) MAXIMUM AMOUNT OF ALLOCATION.—The amounts allocated to a State or Indian tribe under this subparagraph shall not exceed 50 percent of the reasonable cost of implementing the State or tribal levee safety program.

"(F) PROHIBITION.—No amounts made available to the Administrator under this title shall be used for levee construction, rehabilitation, repair, operations, or maintenance.

"(h) LEVEE REHABILITATION ASSISTANCE PROGRAM.—

"(1) ESTABLISHMENT.—The Secretary shall provide assistance to States, Indian tribes, and local governments relating to addressing flood mitigation activities that result in an overall reduction in flood risk.

"(2) REQUIREMENTS.—To be eligible to receive assistance under this subsection, a State, Indian tribe, or local government shall—

"(A) participate in, and comply with, all applicable Federal floodplain management and flood insurance programs;

"(B) have in place a hazard mitigation plan that—

"(i) includes all levee risks; and

"(ii) complies with the Disaster Mitigation Act of 2000 (Public Law 106–390; 114 Stat. 1552);

"(C) submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require;

"(D) commit to provide normal operation and maintenance of the project for the 50 year-period following completion of rehabilitation; and

"(E) comply with such minimum eligibility requirements as the Secretary, in consultation with the committee, may establish to ensure that each owner and operator of a levee under a participating State or tribal levee safety program—

"(i) acts in accordance with the guidelines developed under subsection (c); and

"(ii) carries out activities relating to the public in the leveed area in accordance with the hazard mitigation plan described in subparagraph (B).

"(3) FLOODPLAIN MANAGEMENT PLANS.—

"(A) IN GENERAL.—Not later than 1 year after the date of execution of a project agreement for assistance under this subsection, a State, Indian tribe, or local government shall prepare a floodplain management plan in accordance with the guidelines under subparagraph (D) to reduce the impacts of future flood events in each applicable leveed area.

"(B) INCLUSIONS.—A plan under subparagraph (A) shall address—

"(i) potential measures, practices, and policies to reduce loss of life, injuries, damage to property and facilities, public expenditures, and other adverse impacts of flooding in each applicable leveed area;

"(ii) plans for flood fighting and evacuation; and

"(iii) public education and awareness of flood risks.

"(C) IMPLEMENTATION.—Not later than 1 year after the date of completion of construction of the applicable project, a floodplain management plan prepared under subparagraph (A) shall be implemented.

"(D) GUIDELINES.—Not later than 180 days after the date of enactment of this subsection, the Secretary, in consultation with the Administrator, shall develop such guidelines for the preparation of floodplain management plans prepared under this paragraph as the Secretary determines to be appropriate.

"(E) TECHNICAL SUPPORT.—The Secretary may provide technical support for the development and implementation of floodplain management plans prepared under this paragraph.

"(4) USE OF FUNDS.—

"(A) IN GENERAL.—Assistance provided under this subsection may be used—

"(i) for any rehabilitation activity to maximize overall risk reduction associated with a levee under a participating State or tribal levee safety program; and

"(ii) only for a levee that is not federally operated and maintained.

"(B) PROHIBITION.—Assistance provided under this subsection shall not be used—

"(i) to perform routine operation or maintenance for a levee; or

"(ii) to make any modification to a levee that does not result in an improvement to public safety.

"(5) NO PROPRIETARY INTEREST.—A contract for assistance provided under this subsection shall not be considered to confer any proprietary interest on the United States.

"(6) COST SHARE.—The maximum Federal share of the cost of any assistance provided under this subsection shall be 65 percent.

"(7) PROJECT LIMIT.—The maximum amount of Federal assistance for a project under this subsection shall be $10,000,000.

"(8) LIMITATION.—A project shall not receive Federal assistance under this subsection more than 1 time.

"(9) FEDERAL INTEREST.—For a project that is not a project eligible for rehabilitation assistance under section 5 of the Act of August 18, 1941 (33 U.S.C. 701n), the Secretary shall determine that the proposed rehabilitation is in the Federal interest prior to providing assistance for such rehabilitation.

"(10) OTHER LAWS.—Assistance provided under this subsection shall be subject to all applicable laws (including regulations) that apply to the construction of a civil works project of the Corps of Engineers.

"(i) EFFECT OF SECTION.—Nothing in this section—

"(1) affects the requirement under section 100226(b)(2) of Public Law 112–141 (42 U.S.C. 4101 note; 126 Stat. 942); or

"(2) confers any regulatory authority on—

"(A) the Secretary; or

"(B) the Administrator, including for the purpose of setting premium rates under the national flood insurance program established under chapter 1 of the National Flood Insurance Act of 1968 (42 U.S.C. 4011 et seq.).

"SEC. 9006. REPORTS.

"(a) STATE OF LEVEES.—

"(1) IN GENERAL.—Not later than 1 year after the date of enactment of this subsection, and biennially thereafter, the Secretary in coordination with the committee, shall submit to Congress and make publicly available a report describing the state of levees in the United States and the effectiveness of the levee safety initiative, including—

"(A) progress achieved in implementing the levee safety initiative;

"(B) State and tribal participation in the levee safety initiative;

"(C) recommendations to improve coordination of levee safety, floodplain management, and environmental protection concerns, including—

"(i) identifying and evaluating opportunities to coordinate public safety, floodplain management, and environmental protection activities relating to levees; and

"(ii) evaluating opportunities to coordinate environmental permitting processes for operation and

maintenance activities at existing levee projects in compliance with all applicable laws; and

"(D) any recommendations for legislation and other congressional actions necessary to ensure national levee safety.

"(2) INCLUSION.—Each report under paragraph (1) shall include a report of the committee that describes the independent recommendations of the committee for the implementation of the levee safety initiative.

"(b) NATIONAL DAM AND LEVEE SAFETY PROGRAM.—Not later than 3 years after the date of enactment of this subsection, to the maximum extent practicable, the Secretary and the Administrator, in coordination with the committee, shall submit to Congress and make publicly available a report that includes recommendations regarding the advisability and feasibility of, and potential approaches for, establishing a joint national dam and levee safety program.

"(c) ALIGNMENT OF FEDERAL PROGRAMS RELATING TO LEVEES.—Not later than 2 years after the date of enactment of this subsection, the Comptroller General of the United States shall submit to Congress a report on opportunities for alignment of Federal programs to provide incentives to State, tribal, and local governments and individuals and entities—

"(1) to promote shared responsibility for levee safety;

"(2) to encourage the development of strong State and tribal levee safety programs;

"(3) to better align the levee safety initiative with other Federal flood risk management programs; and

"(4) to promote increased levee safety through other Federal programs providing assistance to State and local governments.

"(d) LIABILITY FOR CERTAIN LEVEE ENGINEERING PROJECTS.—Not later than 1 year after the date of enactment of this subsection, the Secretary shall submit to Congress and make publicly available a report that includes recommendations that identify and address any legal liability associated with levee engineering projects that prevent—

"(1) levee owners from obtaining needed levee engineering services; or

"(2) development and implementation of a State or tribal levee safety program.".

(f) AUTHORIZATION OF APPROPRIATIONS.—Section 9008 of the Water Resources Development Act of 2007 (as redesignated by subsection (e)(1)) is amended—

(1) by striking "are" and inserting "is"; and

(2) by striking "Secretary" and all that follows through the period at the end and inserting the following:

"Secretary—

"(1) to carry out sections 9003, 9005(c), 9005(d), 9005(e), and 9005(f), $4,000,000 for each of fiscal years 2015 through 2019;

"(2) to carry out section 9004, $20,000,000 for each of fiscal years 2015 through 2019; and

"(3) to carry out section 9005(h), $30,000,000 for each of fiscal years 2015 through 2019.".

SEC. 3017. REHABILITATION OF EXISTING LEVEES.

(a) IN GENERAL.—The Secretary shall carry out measures that address consolidation, settlement, subsidence, sea level rise, and new datum to restore federally authorized hurricane and storm damage reduction projects that were constructed as of the date of enactment of this Act to the authorized levels of protection of the projects if the Secretary determines the necessary work is technically feasible, environmentally acceptable, and economically justified.

(b) LIMITATION.—This section shall only apply to those projects for which the executed project partnership agreement provides that the non-Federal interest is not required to perform future measures to restore the project to the authorized level of protection of the project to account for subsidence and sea-level rise as part of the operation, maintenance, repair, replacement, and rehabilitation responsibilities.

(c) COST SHARE.—

(1) IN GENERAL.—The non-Federal share of the cost of construction of a project carried out under this section shall be determined as provided in subsections (a) through (d) of section 103 of the Water Resources Development Act of 1986 (33 U.S.C. 2213).

(2) CERTAIN ACTIVITIES.—The non-Federal share of the cost of operations, maintenance, repair, replacement, and rehabilitation for a project carried out under this section shall be 100 percent.

(d) REPORT TO CONGRESS.—Not later than 5 years after the date of enactment of this Act, the Secretary shall include in the annual report developed under section 7001—

(1) any recommendations relating to the continued need for the authority provided under this section;

(2) a description of the measures carried out under this section;

(3) any lessons learned relating to the measures implemented under this section; and

(4) best practices for carrying out measures to restore hurricane and storm damage reduction projects.

(e) TERMINATION OF AUTHORITY.—The authority of the Secretary under this subsection terminates on the date that is 10 years after the date of enactment of this Act.

Subtitle C—Additional Safety Improvements and Risk Reduction Measures

SEC. 3021. USE OF INNOVATIVE MATERIALS.

Section 8(d) of the Water Resources Development Act of 1988 (33 U.S.C. 2314) is amended by striking "materials" and all that follows through the period at the end and inserting "methods, or materials, including roller compacted concrete, geosynthetic materials, and advanced composites, that the Secretary determines are appropriate to carry out this section.".

SEC. 3022. DURABILITY, SUSTAINABILITY, AND RESILIENCE.

In carrying out the activities of the Corps of Engineers, the Secretary, to the maximum extent practicable, shall encourage the use

of durable and sustainable materials and resilient construction techniques that—

(1) allow a water resources infrastructure project—

(A) to resist hazards due to a major disaster; and

(B) to continue to serve the primary function of the water resources infrastructure project following a major disaster;

(2) reduce the magnitude or duration of a disruptive event to a water resources infrastructure project; and

(3) have the absorptive capacity, adaptive capacity, and recoverability to withstand a potentially disruptive event.

SEC. 3023. STUDY ON RISK REDUCTION.

(a) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the Secretary, in coordination with the Secretary of the Interior and the Secretary of Commerce, shall enter into an arrangement with the National Academy of Sciences to carry out a study and make recommendations relating to infrastructure and coastal restoration options for reducing risk to human life and property from extreme weather events, such as hurricanes, coastal storms, and inland flooding.

(b) CONSIDERATIONS.—The study under subsection (a) shall include—

(1) an analysis of strategies and water resources projects, including authorized water resources projects that have not yet been constructed, and other projects implemented in the United States and worldwide to respond to risk associated with extreme weather events;

(2) an analysis of—

(A) historical extreme weather events;

(B) the ability of existing infrastructure to mitigate risks associated with extreme weather events; and

(C) the reduction in long-term costs and vulnerability to infrastructure through the use of resilient construction techniques;

(3) identification of proven, science-based approaches and mechanisms for ecosystem protection and identification of natural resources likely to have the greatest need for protection, restoration, and conservation so that the infrastructure and restoration projects can continue safeguarding the communities in, and sustaining the economy of, the United States;

(4) an estimation of the funding necessary to improve infrastructure in the United States to reduce risk associated with extreme weather events;

(5) an analysis of the adequacy of current funding sources and the identification of potential new funding sources to finance the necessary infrastructure improvements referred to in paragraph (3); and

(6) an analysis of the Federal, State, and local costs of natural disasters and the potential cost-savings associated with implementing mitigation measures.

(c) COORDINATION.—The National Academy of Sciences may cooperate with the National Academy of Public Administration to carry out 1 or more aspects of the study under subsection (a).

(d) PUBLICATION.—Not later than 30 days after completion of the study under subsection (a), the National Academy of Sciences shall—

(1) submit a copy of the study to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives; and

(2) make a copy of the study available on a publicly accessible Internet site.

SEC. 3024. MANAGEMENT OF FLOOD, DROUGHT, AND STORM DAMAGE.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Comptroller General shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a study of the strategies used by the Corps of Engineers for the comprehensive management of water resources in response to floods, storms, and droughts, including an historical review of the ability of the Corps of Engineers to manage and respond to historical drought, storm, and flood events.

(b) CONSIDERATIONS.—The study under subsection (a) shall address—

(1) the extent to which existing water management activities of the Corps of Engineers can better meet the goal of addressing future flooding, drought, and storm damage risks, which shall include analysis of all historical extreme weather events that have been recorded during the previous 5 centuries as well as in the geological record;

(2) whether existing water resources projects built or maintained by the Corps of Engineers, including dams, levees, floodwalls, flood gates, and other appurtenant infrastructure were designed to adequately address flood, storm, and drought impacts and the extent to which the water resources projects have been successful at addressing those impacts;

(3) any recommendations for approaches for repairing, rebuilding, or restoring infrastructure, land, and natural resources that consider the risks and vulnerabilities associated with past and future extreme weather events;

(4) whether a reevaluation of existing management approaches of the Corps of Engineers could result in greater efficiencies in water management and project delivery that would enable the Corps of Engineers to better prepare for, contain, and respond to flood, storm, and drought conditions;

(5) any recommendations for improving the planning processes of the Corps of Engineers to provide opportunities for comprehensive management of water resources that increases efficiency and improves response to flood, storm, and drought conditions;

(6) any recommendations on the use of resilient construction techniques to reduce future vulnerability from flood, storm, and drought conditions; and

(7) any recommendations for improving approaches to rebuilding or restoring infrastructure and natural resources that contribute to risk reduction, such as coastal wetlands, to prepare for flood and drought.

SEC. 3025. POST-DISASTER WATERSHED ASSESSMENTS.

(a) WATERSHED ASSESSMENTS.—

(1) IN GENERAL.—In an area that the President has declared a major disaster in accordance with section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5170), the Secretary may carry out a watershed assessment to identify, to the maximum extent practicable, specific flood risk reduction, hurricane and storm damage reduction, ecosystem restoration, or navigation project recommendations that will help to rehabilitate and improve the resiliency of damaged infrastructure and natural resources to reduce risks to human life and property from future natural disasters.

(2) EXISTING PROJECTS.—A watershed assessment carried out paragraph (1) may identify existing projects being carried out under 1 or more of the authorities referred to in subsection (b)(1).

(3) DUPLICATE WATERSHED ASSESSMENTS.—In carrying out a watershed assessment under paragraph (1), the Secretary shall use all existing watershed assessments and related information developed by the Secretary or other Federal, State, or local entities.

(b) PROJECTS.—

(1) IN GENERAL.—The Secretary may carry out projects identified under a watershed assessment under subsection (a) in accordance with the criteria for projects carried out under one of the following authorities:

(A) Section 205 of the Flood Control Act of 1948 (33 U.S.C. 701s).

(B) Section 111 of the River and Harbor Act of 1968 (33 U.S.C. 426i).

(C) Section 206 of the Water Resources Development Act of 1996 (33 U.S.C. 2330).

(D) Section 1135 of the Water Resources Development Act of 1986 (33 U.S.C. 2309a).

(E) Section 107 of the River and Harbor Act of 1960 (33 U.S.C. 577).

(F) Section 3 of the Act of August 13, 1946 (33 U.S.C. 426g).

(2) ANNUAL PLAN.—For each project that does not meet the criteria under paragraph (1), the Secretary shall include a recommendation relating to the project in the annual report submitted to Congress by the Secretary in accordance with section 7001.

(3) EXISTING PROJECTS.—In carrying out a project under paragraph (1), the Secretary shall—

(A) to the maximum extent practicable, use all existing information and studies available for the project; and

(B) not require any element of a study completed for the project prior to the disaster to be repeated.

(c) REQUIREMENTS.—All requirements applicable to a project under the Acts described in subsection (b) shall apply to the project.

(d) LIMITATIONS ON ASSESSMENTS.—A watershed assessment under subsection (a) shall be initiated not later than 2 years after the date on which the major disaster declaration is issued.

SEC. 3026. HURRICANE AND STORM DAMAGE REDUCTION STUDY.

(a) IN GENERAL.—As part of the study for flood and storm damage reduction related to natural disasters to be carried out by the Secretary under title II of division A of the Disaster Relief Appropriations Act, 2013, under the heading "Department of the Army—Corps of Engineers—Civil—Investigations" (127 Stat. 5), the Secretary shall make specific project recommendations.

(b) CONSULTATION.—In making recommendations pursuant to this section, the Secretary may consult with key stakeholders, including State, county, and city governments, and, as applicable, State and local water districts, and in the case of recommendations concerning projects that substantially affect communities served by historically Black colleges and universities, Tribal Colleges and Universities, and other minority-serving institutions, the Secretary shall consult with those colleges, universities, and institutions.

(c) REPORT.—The Secretary shall include any recommendations of the Secretary under this section in the annual report submitted to Congress by the Secretary in accordance with section 7001.

SEC. 3027. EMERGENCY COMMUNICATION OF RISK.

(a) DEFINITIONS.—In this section:

(1) AFFECTED GOVERNMENT.—The term "affected government" means a State, local, or tribal government with jurisdiction over an area that will be affected by a flood.

(2) ANNUAL OPERATING PLAN.—The term "annual operating plan" means a plan prepared by the Secretary that describes potential water condition scenarios for a river basin for a year.

(b) COMMUNICATION.—In any river basin where the Secretary carries out flood risk management activities subject to an annual operating plan, the Secretary shall establish procedures for providing the public and affected governments, including Indian tribes, in the river basin with—

(1) timely information regarding expected water levels;

(2) advice regarding appropriate preparedness actions;

(3) technical assistance; and

(4) any other information or assistance determined appropriate by the Secretary.

(c) PUBLIC AVAILABILITY OF INFORMATION.—To the maximum extent practicable, the Secretary, in coordination with the Administrator of the Federal Emergency Management Agency, shall make the information required under subsection (b) available to the public through widely used and readily available means, including on the Internet.

(d) PROCEDURES.—The Secretary shall use the procedures established under subsection (b) only when precipitation or runoff exceeds those calculations considered as the lowest risk to life and property contemplated by the annual operating plan.

SEC. 3028. SAFETY ASSURANCE REVIEW.

Section 2035 of the Water Resources Development Act of 2007 (33 U.S.C. 2344) is amended by adding at the end the following:

"(g) NONAPPLICABILITY OF FACA.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to a safety assurance review conducted under this section.".

SEC. 3029. EMERGENCY RESPONSE TO NATURAL DISASTERS.

(a) EMERGENCY RESPONSE TO NATURAL DISASTERS.—Section 5(a)(1) of the Act of August 18, 1941 (33 U.S.C. 701n(a)(1)), is amended in the first sentence—

(1) by inserting "and subject to the condition that the Chief of Engineers may include modifications to the structure or project" after "work for flood control"; and

(2) by striking "structure damaged or destroyed by wind, wave, or water action of other than an ordinary nature when in the discretion of the Chief of Engineers such repair and restoration is warranted for the adequate functioning of the structure for hurricane or shore protection" and inserting "structure or project damaged or destroyed by wind, wave, or water action of other than an ordinary nature to the design level of protection when, in the discretion of the Chief of Engineers, such repair and restoration is warranted for the adequate functioning of the structure or project for hurricane or shore protection, subject to the condition that the Chief of Engineers may include modifications to the structure or project to address major deficiencies or implement nonstructural alternatives to the repair or restoration of the structure if requested by the non-Federal sponsor".

(b) REVIEW OF EMERGENCY RESPONSE AUTHORITIES.—

(1) IN GENERAL.—The Secretary shall undertake a review of implementation of section 5 of the Act of August 18, 1941 (33 U.S.C. 701n), to evaluate the alternatives available to the Secretary to ensure—

(A) the safety of affected communities to future flooding and storm events;

(B) the resiliency of water resources development projects to future flooding and storm events;

(C) the long-term cost-effectiveness of water resources development projects that provide flood control and hurricane and storm damage reduction benefits; and

(D) the policy goals and objectives that have been outlined by the President as a response to recent extreme weather events, including Hurricane Sandy, that relate to preparing for future floods are met.

(2) SCOPE OF REVIEW.—In carrying out the review, the Secretary shall—

(A) review the historical precedents and implementation of section 5 of that Act, including those actions undertaken by the Secretary, over time, under that section—

(i) to repair or restore a project; and

(ii) to increase the level of protection for a damaged project to address future conditions;

(B) evaluate the difference between adopting, as an appropriate standard under section 5 of that Act, the repair or restoration of a project to pre-flood or pre-storm levels and the repair or restoration of a project to a design level of protection, including an assessment for each standard of—

(i) the implications on populations at risk of flooding or damage;

(ii) the implications on probability of loss of life;

(iii) the implications on property values at risk of flooding or damage;

(iv) the implications on probability of increased property damage and associated costs;

(v) the implications on local and regional economies; and

(vi) the estimated total cost and estimated cost savings;

(C) review and evaluate the historic and potential uses, and economic feasibility for the life of the project, of nonstructural alternatives, including natural features such as dunes, coastal wetlands, floodplains, marshes, and mangroves, to reduce the damage caused by floods, storm surges, winds, and other aspects of extreme weather events, and to increase the resiliency and long-term cost-effectiveness of water resources development projects;

(D) incorporate the science on expected rates of sea-level rise and extreme weather events;

(E) incorporate the work completed by the Hurricane Sandy Rebuilding Task Force, established by Executive Order No. 13632 (77 Fed. Reg. 74341); and

(F) review the information obtained from the report developed under subsection (c)(1).

(c) REPORTS.—

(1) BIENNIAL REPORT TO CONGRESS.—

(A) IN GENERAL.—Not later than 2 years after the date of enactment of this Act and every 2 years thereafter, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report detailing the amounts expended in the previous 5 fiscal years to carry out Corps of Engineers projects under section 5 of the Act of August 18, 1941 (33 U.S.C. 701n).

(B) INCLUSIONS.—A report under subparagraph (A) shall, at a minimum, include a description of—

(i) each structure, feature, or project for which amounts are expended, including the type of structure, feature, or project and cost of the work; and

(ii) how the Secretary has repaired, restored, replaced, or modified each structure, feature, or project or intends to restore the structure, feature, or project to the design level of protection for the structure, feature, or project.

(2) REPORT ON REVIEW OF EMERGENCY RESPONSE AUTHORITIES.—Not later than 18 months after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report on the results of the review under subsection (b).

TITLE IV—RIVER BASINS AND COASTAL AREAS

SEC. 4001. RIVER BASIN COMMISSIONS.

Section 5019 of the Water Resources Development Act of 2007 (121 Stat. 1201) is amended by striking subsection (b) and inserting the following:

"(b) AUTHORIZATION TO ALLOCATE.—

"(1) IN GENERAL.—The Secretary shall allocate funds to the Susquehanna River Basin Commission, the Delaware River Basin Commission, and the Interstate Commission on the Potomac River Basin to fulfill the equitable funding requirements of the respective interstate compacts.

"(2) AMOUNTS.—For each fiscal year, the Secretary shall allocate to each Commission described in paragraph (1) an amount equal to the amount determined by the Commission in accordance with the respective interstate compact approved by Congress.

"(3) NOTIFICATION.—If the Secretary does not allocate funds for a given fiscal year in accordance with paragraph (2), the Secretary, in conjunction with the subsequent submission by the President of the budget to Congress under section 1105(a) of title 31, United States Code, shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a notice that describes—

"(A) the reasons why the Secretary did not allocate funds in accordance with paragraph (2) for that fiscal year; and

"(B) the impact of that decision not to allocate funds on each area of jurisdiction of each Commission described in paragraph (1), including with respect to—

"(i) water supply allocation;
"(ii) water quality protection;
"(iii) regulatory review and permitting;
"(iv) water conservation;
"(v) watershed planning;
"(vi) drought management;
"(vii) flood loss reduction;
"(viii) recreation; and
"(ix) energy development.".

SEC. 4002. MISSISSIPPI RIVER.

(a) MISSISSIPPI RIVER FORECASTING IMPROVEMENTS.—

(1) IN GENERAL.—The Secretary, in consultation with the Secretary of the department in which the Coast Guard is operating, the Director of the United States Geological Survey, the Administrator of the National Oceanic and Atmospheric Administration, and the Director of the National Weather Service, as applicable, shall improve forecasting on the Mississippi River by—

(A) updating forecasting technology deployed on the Mississippi River and its tributaries through—

(i) the construction of additional automated river gages;

(ii) the rehabilitation of existing automated and manual river gages; and

(iii) the replacement of manual river gages with automated gages, as the Secretary determines to be necessary;

(B) constructing additional sedimentation ranges on the Mississippi River and its tributaries; and

(C) deploying additional automatic identification system base stations at river gage sites.

(2) PRIORITIZATION.—In carrying out this subsection, the Secretary shall prioritize the sections of the Mississippi River on which additional and more reliable information would have the greatest impact on maintaining navigation on the Mississippi River.

(3) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress and make publicly available a report on the activities carried out by the Secretary under this subsection.

(b) MIDDLE MISSISSIPPI RIVER PILOT PROGRAM.—

(1) IN GENERAL.—In accordance with the project for navigation, Mississippi River between the Ohio and Missouri Rivers (Regulating Works), Missouri and Illinois, authorized by the Act of June 25, 1910 (36 Stat. 631, chapter 382) (commonly known as the "River and Harbor Act of 1910"), the Act of January 1, 1927 (44 Stat. 1010, chapter 47) (commonly known as the "River and Harbor Act of 1927"), and the Act of July 3, 1930 (46 Stat. 918, chapter 847), the Secretary may study improvements to navigation and aquatic ecosystem restoration in the middle Mississippi River.

(2) DISPOSITION.—

(A) IN GENERAL.—The Secretary may carry out any project identified pursuant to paragraph (1) in accordance with the criteria for projects carried out under one of the following authorities:

(i) Section 206 of the Water Resources Development Act of 1996 (33 U.S.C. 2330).

(ii) Section 1135 of the Water Resources Development Act of 1986 (33 U.S.C. 2309a).

(iii) Section 107 of the River and Harbor Act of 1960 (33 U.S.C. 577).

(iv) Section 104(a) of the River and Harbor Act of 1958 (33 U.S.C. 610(a)).

(B) REPORT.—For each project that does not meet the criteria under subparagraph (A), the Secretary shall include a recommendation relating to the project in the annual report submitted to Congress by the Secretary in accordance with section 7001.

(c) GREATER MISSISSIPPI RIVER BASIN SEVERE FLOODING AND DROUGHT MANAGEMENT STUDY.—

(1) DEFINITION OF GREATER MISSISSIPPI RIVER BASIN.—In this subsection, the term "greater Mississippi River Basin" means the area covered by hydrologic units 5, 6, 7, 8, 10, and 11, as identified by the United States Geological Survey as of the date of enactment of this Act.

(2) IN GENERAL.—The Secretary shall carry out a study of the greater Mississippi River Basin—

(A) to improve the coordinated and comprehensive management of water resource projects in the greater Mississippi River Basin relating to severe flooding and drought conditions; and

(B) to identify and evaluate—

(i) modifications to those water resource projects, consistent with the authorized purposes of those projects; and

(ii) the development of new water resource projects to improve the reliability of navigation and more effectively reduce flood risk.

(3) REPORT.—Not later than 3 years after the date of enactment of this Act, the Secretary shall submit to Congress and make publicly available a report on the study carried out under this subsection.

(4) SAVINGS CLAUSE.—Nothing in this subsection impacts the operations and maintenance of the Missouri River Mainstem System, as authorized by the Act of December 22, 1944 (commonly known as the "Flood Control Act of 1944")(58 Stat. 897, chapter 665).

(d) FLEXIBILITY IN MAINTAINING NAVIGATION.—

(1) EXTREME LOW WATER EVENT DEFINED.—In this subsection, the term "extreme low water event" means an extended period of time during which low water threatens the safe commercial use of the Mississippi River for navigation, including the use and availability of fleeting areas.

(2) REPORT ON AREAS FOR ACTION.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary, in consultation with the Secretary of the department in which the Coast Guard is operating, shall complete and make publicly available a report identifying areas that are unsafe and unreliable for commercial navigation during extreme low water events along the authorized Federal navigation channel on the Mississippi River and measures to address those restrictions.

(B) INCLUSIONS.—The report under subparagraph (A) shall—

(i) consider data from the most recent extreme low water events that impacted navigation along the authorized Federal navigation channel on the Mississippi River;

(ii) identify locations for potential modifications, including improvements outside the authorized navigation channel, that will alleviate hazards at areas that constrain navigation during extreme low water events along the authorized Federal navigation channel on the Mississippi River; and

(iii) include recommendations for possible actions to address constrained navigation during extreme low water events.

(3) AUTHORIZED ACTIVITIES.—If the Secretary, in consultation with the Secretary of the department in which the Coast

Guard is operating, determines it to be critical to maintaining safe and reliable navigation within the authorized Federal navigation channel on the Mississippi River, the Secretary may carry out activities outside the authorized Federal navigation channel along the Mississippi River, including the construction and operation of maintenance of fleeting areas, that—

(A) are necessary for safe and reliable navigation in the Federal channel; and

(B) have been identified in the report under paragraph (2).

(4) RESTRICTION.—The Secretary shall only carry out activities authorized under paragraph (3) for such period of time as is necessary to maintain reliable navigation during the extreme low water event.

(5) NOTIFICATION.—Not later than 60 days after initiating an activity under this subsection, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a notice that includes—

(A) a description of the activities undertaken, including the costs associated with the activities; and

(B) a comprehensive description of how the activities are necessary for maintaining safe and reliable navigation of the Federal channel.

SEC. 4003. MISSOURI RIVER.

(a) UPPER MISSOURI BASIN FLOOD AND DROUGHT MONITORING.—

(1) IN GENERAL.—The Secretary, in coordination with the Administrator of the National Oceanic and Atmospheric Administration, the Chief of the Natural Resources Conservation Service, the Director of the United States Geological Survey, and the Commissioner of the Bureau of Reclamation, shall carry out activities to improve and support management of Corps of Engineers water resources development projects, including—

(A) soil moisture and snowpack monitoring in the Upper Missouri River Basin to reduce flood risk and improve river and water resource management in the Upper Missouri River Basin, as outlined in the February 2013 report entitled "Upper Missouri Basin Monitoring Committee—Snow Sampling and Instrumentation Recommendations";

(B) restoring and maintaining existing mid- and high-elevation snowpack monitoring sites operated under the SNOTEL program of the Natural Resources Conservation Service; and

(C) operating streamflow gages and related interpretive studies in the Upper Missouri River Basin under the cooperative water program and the national streamflow information program of the United States Geological Service.

(2) USE OF FUNDS.—Amounts made available to the Secretary to carry out activities under this subsection shall be used to supplement but not supplant other related activities of Federal agencies that are carried out within the Missouri River Basin.

(3) COOPERATIVE AGREEMENTS.—

(A) IN GENERAL.—The Secretary may enter into cooperative agreements with other Federal agencies to carry out this subsection.

(B) MAINTENANCE OF EFFORT.—The Secretary may only enter into a cooperative agreement with another Federal agency under this paragraph if such agreement specifies that the agency will maintain aggregate expenditures in the Missouri River Basin for existing programs that implement activities described in paragraph (1) at a level that is equal to or exceeds the aggregate expenditures for the fiscal year immediately preceding the fiscal year in which such agreement is signed.

(4) REPORT.—Not later than 1 year after the date of enactment of this Act, the Comptroller General of the United States, in consultation with the Secretary, shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report that—

(A) identifies progress made by the Secretary and other Federal agencies in implementing the recommendations contained in the report described in paragraph (1)(A) with respect to enhancing soil moisture and snowpack monitoring in the Upper Missouri Basin;

(B) includes recommendations—

(i) to enhance soil moisture and snowpack monitoring in the Upper Missouri Basin that would enhance water resources management, including managing flood risk, in that basin; and

(ii) on the most efficient manner of collecting and sharing data to assist Federal agencies with water resources management responsibilities;

(C) identifies the expected costs and timeline for implementing the recommendations described in subparagraph (B)(i); and

(D) identifies the role of States and other Federal agencies in gathering necessary soil moisture and snowpack monitoring data.

(b) MISSOURI RIVER BETWEEN FORT PECK DAM, MONTANA AND GAVINS POINT DAM, SOUTH DAKOTA AND NEBRASKA.—Section 9(f) of the Act of December 22, 1944 (commonly known as the "Flood Control Act of 1944") (58 Stat. 891, chapter 665; 102 Stat. 4031) is amended in the second sentence by striking "$3,000,000" and inserting "$5,000,000".

(c) MISSOURI RIVER RECOVERY IMPLEMENTATION COMMITTEE EXPENSES REIMBURSEMENT.—Section 5018(b)(5) of the Water Resources Development Act of 2007 (121 Stat. 1200) is amended by striking subparagraph (B) and inserting the following:

"(B) TRAVEL EXPENSES.—Subject to the availability of funds, the Secretary may reimburse a member of the Committee for travel expenses, including per diem in lieu of subsistence, at rates authorized for an employee of a Federal agency under subchapter I of chapter 57 of title 5, United States Code, while away from the home or regular

place of business of the member in performance of services for the Committee.".

(d) UPPER MISSOURI SHORELINE STABILIZATION.—

(1) IN GENERAL.—The Secretary shall conduct a study to determine the feasibility of carrying out projects to address shoreline erosion in the Upper Missouri River Basin (including the States of South Dakota, North Dakota, and Montana) resulting from the operation of a reservoir constructed under the Pick-Sloan Missouri River Basin Program (authorized by section 9 of the Act of December 22, 1944 (commonly known as the "Flood Control Act of 1944") (58 Stat. 891, chapter 665)).

(2) CONTENTS.—The study carried out under paragraph (1) shall, to the maximum extent practicable—

(A) use previous assessments completed by the Corps of Engineers or other Federal agencies; and

(B) assess the infrastructure needed to—

(i) reduce shoreline erosion;

(ii) mitigate additional loss of land;

(iii) contribute to environmental and ecosystem improvement; and

(iv) protect existing community infrastructure, including roads and water and waste-water related infrastructure.

(3) DISPOSITION.—The Secretary may carry out projects identified in the study under paragraph (1) in accordance with the criteria for projects carried out under section 14 of the Flood Control Act of 1946 (33 U.S.C. 701r).

(4) ANNUAL REPORT.—For each project identified in the study under paragraph (1) that cannot be carried out under any of the authorities specified in paragraph (3), upon determination by the Secretary of the feasibility of the project, the Secretary may include a recommendation relating to the project in the annual report submitted to Congress under section 7001.

(5) COORDINATION.—In carrying out this subsection, the Secretary shall consult and coordinate with the appropriate State or tribal agency for the area in which the project is located.

(6) PAYMENT OPTIONS.—The Secretary shall allow the full non-Federal contribution for a project under this subsection to be paid in accordance with section 103(k) of the Water Resources Development Act of 1986 (33 U.S.C. 2213(k)).

(e) MISSOURI RIVER FISH AND WILDLIFE MITIGATION.—The Secretary shall include in the first budget of the United States Government submitted by the President under section 1105 of title 31, United States Code, after the date of enactment of this Act, and biennially thereafter, a report that describes activities carried out by the Secretary relating to the project for mitigation of fish and wildlife losses, Missouri River Bank Stabilization and Navigation Project, Missouri, Kansas, Iowa, and Nebraska, authorized by section 601(a) of the Water Resources Development Act of 1986 (100 Stat. 4143), including—

(1) an inventory of all actions taken by the Secretary in furtherance of the project, including an inventory of land owned or acquired by the Secretary;

(2) a description, including a prioritization, of the specific actions proposed to be undertaken by the Secretary for the subsequent fiscal year in furtherance of the project;

(3) an assessment of the progress made in furtherance of the project, including—

(A) a description of how each of the actions identified under paragraph (1) have impacted the progress; and

(B) the status of implementation of any applicable requirements of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), including any applicable biological opinions; and

(4) an assessment of additional actions or authority necessary to achieve the results of the project.

(f) LOWER YELLOWSTONE.—Section 3109 of the Water Resources Development Act of 2007 (121 Stat. 1135) is amended—

(1) by striking "The Secretary may" and inserting the following:

"(a) IN GENERAL.—The Secretary may"; and

(2) by adding at the end the following:

"(b) LOCAL PARTICIPATION.—In carrying out subsection (a), the Secretary shall consult with, and consider the activities being carried out by—

"(1) other Federal agencies;

"(2) conservation districts;

"(3) the Yellowstone River Conservation District Council; and

"(4) the State of Montana.".

SEC. 4004. ARKANSAS RIVER.

(a) PROJECT GOAL.—The goal for operation of the McClellan-Kerr Arkansas River navigation system, Arkansas and Oklahoma, shall be to maximize the use of the system in a balanced approach that incorporates advice from representatives from all project purposes to ensure that the full value of the system is realized by the United States.

(b) MCCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM ADVISORY COMMITTEE.—

(1) IN GENERAL.—In accordance with the Federal Advisory Committee Act (5 U.S.C. App.), the Secretary shall establish an advisory committee for the McClellan-Kerr Arkansas River navigation system, Arkansas and Oklahoma project authorized by the first section of the Act of July 24, 1946 (60 Stat. 635, chapter 595).

(2) DUTIES.—The advisory committee shall—

(A) serve in an advisory capacity only; and

(B) provide information and recommendations to the Corps of Engineers relating to the efficiency, reliability, and availability of the operations of the McClellan-Kerr Arkansas River navigation system.

(3) SELECTION AND COMPOSITION.—The advisory committee shall be—

(A) selected jointly by the Little Rock district engineer and the Tulsa district engineer; and

(B) composed of members that equally represent the McClellan-Kerr Arkansas River navigation system project purposes.

(4) AGENCY RESOURCES.—The Little Rock district and the Tulsa district of the Corps of Engineers, under the supervision of the southwestern division, shall jointly provide the advisory committee with adequate staff assistance, facilities, and resources.

(5) TERMINATION.—

(A) IN GENERAL.—Subject to subparagraph (B), the advisory committee shall terminate on the date on which the Secretary submits a report to Congress demonstrating increases in the efficiency, reliability, and availability of the McClellan-Kerr Arkansas River navigation system.

(B) RESTRICTION.—The advisory committee shall terminate not less than 2 calendar years after the date on which the advisory committee is established.

SEC. 4005. COLUMBIA BASIN.

Section 536(g) of the Water Resources Development Act of 2000 (114 Stat. 2661) is amended by striking "$30,000,000" and inserting "$50,000,000".

SEC. 4006. RIO GRANDE.

Section 5056 of the Water Resources Development Act of 2007 (121 Stat. 1213) is amended—

(1) in subsection (b)(2)—

(A) in the matter preceding subparagraph (A), by striking "2008" and inserting "2014"; and

(B) in subparagraph (C), by inserting "and an assessment of needs for other related purposes in the Rio Grande Basin, including flood damage reduction" after "assessment";

(2) in subsection (c)(2)—

(A) by striking "an interagency agreement with" and inserting "1 or more interagency agreements with the Secretary of State and"; and

(B) by inserting "or the U.S. Section of the International Boundary and Water Commission" after "the Department of the Interior"; and

(3) in subsection (f), by striking "2011" and inserting "2019".

SEC. 4007. NORTHERN ROCKIES HEADWATERS.

(a) IN GENERAL.—The Secretary shall conduct a study to determine the feasibility of carrying out projects for aquatic ecosystem restoration and flood risk reduction that will mitigate the impacts of extreme weather events, including floods and droughts, on communities, water users, and fish and wildlife located in and along the headwaters of the Columbia, Missouri, and Yellowstone Rivers (including the tributaries of those rivers) in the States of Idaho and Montana.

(b) INCLUSIONS.—The study under subsection (a) shall, to the maximum extent practicable—

(1) emphasize the protection and enhancement of natural riverine processes; and

(2) assess the individual and cumulative needs associated with—

(A) floodplain restoration and reconnection;

(B) floodplain and riparian area protection through the use of conservation easements;

(C) instream flow restoration projects;

(D) fish passage improvements;

(E) channel migration zone mapping; and

(F) invasive weed management.

(c) DISPOSITION.—

(1) IN GENERAL.—The Secretary may carry out any project identified in the study pursuant to subsection (a) in accordance with the criteria for projects carried out under one of the following authorities:

(A) Section 206 of the Water Resources Development Act of 1996 (33 U.S.C. 2330).

(B) Section 1135 of the Water Resources Development Act of 1986 (33 U.S.C. 2309a).

(C) Section 104(a) of the River and Harbor Act of 1958 (33 U.S.C. 610(a)).

(D) Section 205 of the Flood Control Act of 1948 (33 U.S.C. 701s).

(2) REPORT.—For each project that does not meet the criteria under paragraph (1), the Secretary shall include a recommendation relating to the project in the annual report submitted to Congress by the Secretary in accordance with section 7001.

(d) COORDINATION.—In carrying out this section, the Secretary—

(1) shall consult and coordinate with the appropriate agency for each State and Indian tribe; and

(2) may enter into cooperative agreements with those State or tribal agencies described in paragraph (1).

(e) LIMITATIONS.—Nothing in this section invalidates, preempts, or creates any exception to State water law, State water rights, or Federal or State permitted activities or agreements in the States of Idaho and Montana or any State containing tributaries to rivers in those States.

SEC. 4008. RURAL WESTERN WATER.

Section 595 of the Water Resources Development Act of 1999 (113 Stat. 383) is amended—

(1) by striking subsection (c) and inserting the following:

"(c) FORM OF ASSISTANCE.—Assistance under this section may be in the form of—

"(1) design and construction assistance for water-related environmental infrastructure and resource protection and development in Idaho, Montana, rural Nevada, New Mexico, rural Utah, and Wyoming, including projects for—

"(A) wastewater treatment and related facilities;

"(B) water supply and related facilities;

"(C) environmental restoration; and

"(D) surface water resource protection and development; and

"(2) technical assistance to small and rural communities for water planning and issues relating to access to water resources."; and

(2) by striking subsection (h) and inserting the following:

"(h) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section for the period beginning with fiscal year 2001, $435,000,000, which shall—

"(1) be made available to the States and locales described in subsection (b) consistent with program priorities determined by the Secretary in accordance with criteria developed by the Secretary to establish the program priorities; and

"(2) remain available until expended.".

SEC. 4009. NORTH ATLANTIC COASTAL REGION.

(a) IN GENERAL.—The Secretary shall conduct a study to determine the feasibility of carrying out projects to restore aquatic ecosystems within the coastal waters of the Northeastern United States from the State of Virginia to the State of Maine, including associated bays, estuaries, and critical riverine areas.

(b) STUDY.—In carrying out the study under subsection (a), the Secretary shall—

(1) as appropriate, coordinate with the heads of other appropriate Federal agencies, the Governors of the coastal States from Virginia to Maine, nonprofit organizations, and other interested parties;

(2) identify projects for aquatic ecosystem restoration based on an assessment of the need and opportunities for aquatic ecosystem restoration within the coastal waters of the Northeastern States described in subsection (a); and

(3) use, to the maximum extent practicable, any existing plans and data.

(c) DISPOSITION.—

(1) IN GENERAL.—The Secretary may carry out any project identified in the study pursuant to subsection (a) in accordance with the criteria for projects carried out under one of the following authorities:

(A) Section 206 of the Water Resources Development Act of 1996 (33 U.S.C. 2330).

(B) Section 1135 of the Water Resources Development Act of 1986 (33 U.S.C. 2309a).

(C) Section 3 of the Act of August 13, 1946 (33 U.S.C. 426g).

(D) Section 204 of the Water Resources Development Act of 1992 (33 U.S.C. 2326).

(2) REPORT.—For each project that does not meet the criteria under paragraph (1), the Secretary shall include a recommendation relating to the project in the annual report submitted to Congress by the Secretary in accordance with section 7001.

SEC. 4010. CHESAPEAKE BAY.

(a) IN GENERAL.—Section 510 of the Water Resources Development Act of 1996 (Public Law 104–303; 110 Stat. 3759; 121 Stat. 1202) is amended—

(1) in subsection (a)—

(A) in paragraph (1)—

(i) by striking "pilot program" and inserting "program"; and

(ii) by inserting "in the basin States described in subsection (f) and the District of Columbia" after "interests"; and

(B) by striking paragraph (2) and inserting the following:

"(2) FORM.—The assistance under paragraph (1) shall be in the form of design and construction assistance for water-related resource protection and restoration projects affecting the Chesapeake Bay estuary, based on the comprehensive plan under subsection (b), including projects for—

"(A) sediment and erosion control;

"(B) protection of eroding shorelines;

"(C) ecosystem restoration, including restoration of submerged aquatic vegetation;

"(D) protection of essential public works;

"(E) beneficial uses of dredged material; and

"(F) other related projects that may enhance the living resources of the estuary.";

(2) by striking subsection (b) and inserting the following:

"(b) COMPREHENSIVE PLAN.—

"(1) IN GENERAL.—Not later than 2 years after the date of enactment of the Water Resources Reform and Development Act of 2014, the Secretary, in cooperation with State and local governmental officials and affected stakeholders, shall develop a comprehensive Chesapeake Bay restoration plan to guide the implementation of projects under subsection (a)(2).

"(2) COORDINATION.—The restoration plan described in paragraph (1) shall, to the maximum extent practicable, consider and avoid duplication of any ongoing or planned actions of other Federal, State, and local agencies and nongovernmental organizations.

"(3) PRIORITIZATION.—The restoration plan described in paragraph (1) shall give priority to projects eligible under subsection (a)(2) that will also improve water quality or quantity or use natural hydrological features and systems.";

(3) in subsection (c)—

(A) in paragraph (1), by striking "to provide" and all that follows through the period at the end and inserting "for the design and construction of a project carried out pursuant to the comprehensive Chesapeake Bay restoration plan described in subsection (b).";

(B) in paragraph (2)(A), by striking "facilities or resource protection and development plan" and inserting "resource protection and restoration plan"; and

(C) by adding at the end the following:

"(3) PROJECTS ON FEDERAL LAND.—A project carried out pursuant to the comprehensive Chesapeake Bay restoration plan described in subsection (b) that is located on Federal land shall be carried out at the expense of the Federal agency that owns the land on which the project will be a carried out.

"(4) NON-FEDERAL CONTRIBUTIONS.—A Federal agency carrying out a project described in paragraph (3) may accept contributions of funds from non-Federal entities to carry out that project.";

(4) by striking subsection (e) and inserting the following:

"(e) COOPERATION.—In carrying out this section, the Secretary shall cooperate with—

"(1) the heads of appropriate Federal agencies, including—

"(A) the Administrator of the Environmental Protection Agency;

"(B) the Secretary of Commerce, acting through the Administrator of the National Oceanographic and Atmospheric Administration;

"(C) the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service; and

"(D) the heads of such other Federal agencies as the Secretary determines to be appropriate; and

"(2) agencies of a State or political subdivision of a State, including the Chesapeake Bay Commission.";

(5) by striking subsection (f) and inserting the following:

"(f) PROJECTS.—The Secretary shall establish, to the maximum extent practicable, at least 1 project under this section in—

"(1) regions within the Chesapeake Bay watershed of each of the basin States of Delaware, Maryland, New York, Pennsylvania, Virginia, and West Virginia; and

"(2) the District of Columbia.";

(6) by striking subsection (h); and

(7) by redesignating subsection (i) as subsection (h).

(b) CHESAPEAKE BAY OYSTER RESTORATION.—Section 704(b) of Water Resources Development Act of 1986 (33 U.S.C. 2263(b)) is amended—

(1) in paragraph (1), by striking "$50,000,000" and inserting "$60,000,000"; and

(2) in paragraph (4), by striking subparagraph (B) and inserting the following:

"(B) FORM.—The non-Federal share may be provided through in-kind services, including—

"(i) the provision by the non-Federal interest of shell stock material that is determined by the Secretary to be suitable for use in carrying out the project; and

"(ii) in the case of a project carried out under paragraph (2)(D) after the date of enactment of this clause, land conservation or restoration efforts undertaken by the non-Federal interest that the Secretary determines provide water quality benefits that—

"(I) enhance the viability of oyster restoration efforts;

"(II) are integral to the project; and

"(III) are cost effective.".

SEC. 4011. LOUISIANA COASTAL AREA.

(a) REVIEW OF COASTAL MASTER PLAN.—Section 7002(c) of the Water Resources Development Act of 2007 (121 Stat. 1271) is amended by inserting ", or the plan entitled 'Louisiana Comprehensive Master Plan for a Sustainable Coast' prepared by the State of Louisiana and accepted by the Louisiana Coastal Protection and Restoration Authority (including any subsequent amendments or revisions)" before the period at the end.

(b) INTERIM USE OF PLAN.—

(1) DEFINITIONS.—In this subsection:

(A) ANNUAL REPORT.—The term "annual report" has the meaning given the term in section 7001(f).

(B) FEASIBILITY REPORT; FEASIBILITY STUDY.—The terms "feasibility report" and "feasibility study" have the meanings given those terms in section 7001(f).

(2) REVIEW.—The Secretary shall—

(A) review the plan entitled 'Louisiana's Comprehensive Master Plan for a Sustainable Coast' prepared by the State of Louisiana and accepted by the Louisiana Coastal Protection and Restoration Authority Board (including any subsequent amendments or revisions); and

(B) in consultation with the State of Louisiana, identify and conduct feasibility studies for up to 10 projects included in the plan described in subparagraph (A).

(3) RECOMMENDATIONS.—The Secretary shall include in the subsequent annual report, in accordance with section 7001—

(A) any proposed feasibility study initiated under paragraph (2)(B); and

(B) any feasibility report for a project identified under paragraph (2)(B).

(4) ADMINISTRATION.—Section 7008 of the Water Resources Development Act of 2007 (121 Stat. 1278) shall not apply to any feasibility study carried out under this subsection.

(c) SCIENCE AND TECHNOLOGY.—Section 7006(a)(2) of the Water Resources Development Act of 2007 (121 Stat. 1274) is amended—

(1) by redesignating subparagraphs (C) and (D) as subparagraphs (D) and (E), respectively; and

(2) by inserting after subparagraph (B) the following:

"(C) to examine a systemwide approach to coastal sustainability;".

SEC. 4012. RED RIVER BASIN.

(a) IN GENERAL.—In the case of a reservoir located within the Red River Basin for which the Department of the Army is authorized to provide for municipal and industrial water supply storage and irrigation storage, the Secretary may reassign unused irrigation storage to storage for municipal and industrial water supply for use by a State or local interest that has entered into an agreement with the Secretary for water supply storage at that reservoir prior to the date of enactment of this Act.

(b) ADMINISTRATION.—Any assignment under subsection (a) shall be subject to such terms and conditions as the Secretary determines to be appropriate and necessary in the public interest.

SEC. 4013. TECHNICAL CORRECTIONS.

(a) RARITAN RIVER.—Section 102 of the Energy and Water Development Appropriations Act, 1998 (Public Law 105–62; 111 Stat. 1327), is repealed.

(b) DES MOINES, BOONE, AND RACCOON RIVERS.—The boundaries for the project referred to as the Des Moines Recreational River and Greenbelt, Iowa, under the heading "CORPS OF ENGINEERS—CIVIL" under the heading "DEPARTMENT OF THE ARMY" under the heading "DEPARTMENT OF DEFENSE—CIVIL" in chapter IV of title I of the Supplemental Appropriations Act, 1985 (99 Stat. 313), are revised to include the entirety of sections 19 and 29, situated in T. 89 N., R. 28 W.

(c) SOUTH FLORIDA COASTAL AREA.—Section 109 of title I of division B of the Miscellaneous Appropriations Act, 2001 (114 Stat. 2763A–221; 121 Stat. 1217) is amended—

(1) in subsection (a), by inserting "and unincorporated communities" after "municipalities";

(2) by redesignating subsection (f) as subsection (g); and

(3) by inserting after subsection (e) the following:

"(f) PRIORITY.—In providing assistance under this section, the Secretary shall give priority to projects sponsored by current non-Federal interests, incorporated communities in Monroe County, Monroe County, and the State of Florida.".

(d) TRINITY RIVER AND TRIBUTARIES.—Section 5141(a)(2) of the Water Resources Development Act of 2007 (121 Stat. 1253) is amended by inserting "and the Interior Levee Drainage Study Phase–II report, Dallas, Texas, dated January 2009," after "September 2006,".

(e) CENTRAL AND SOUTHERN FLORIDA CANAL.—

(1) IN GENERAL.—The Secretary shall consider any amounts and associated program income provided prior to the date of enactment of this Act by the Secretary of the Interior to the non-Federal interest for the acquisition of areas identified in section 316(b)(2) of the Water Resources Development Act of 1996 (110 Stat. 3715)—

(A) as satisfying the requirements of that paragraph; and

(B) as part of the Federal share of the cost of implementing the plan under that subsection.

(2) NON-FEDERAL COST SHARE.—The non-Federal interest shall receive credit for land, easements, rights-of-way, and relocations provided for the project as part of the non-Federal share of the cost of implementing the plan under section 316(b)(2) of the Water Resources Development Act of 1996 (110 Stat. 3715).

(3) CONFORMING AMENDMENT.—Section 316(b)(2) of the Water Resources Development Act of 1996 (110 Stat. 3715) is amended in the first sentence by striking "shall pay" and inserting "may pay up to".

(f) SOUTH PLATTE RIVER WATERSHED.—Section 116 of the Energy and Water Development and Related Agencies Appropriations Act, 2009 (123 Stat. 608) is amended in the matter preceding the proviso by inserting "(or a designee of the Department)" after "Colorado Department of Natural Resources".

(g) POTOMAC RIVER.—Section 84(a) of the Water Resources Development Act of 1974 (88 Stat. 35) is amended by striking paragraph (1) and inserting the following:

"(1) A channel capacity sufficient to pass the 100-year flood event, as identified in the document entitled 'Four Mile Run Watershed Feasibility Report' and dated January 2014.".

SEC. 4014. OCEAN AND COASTAL RESILIENCY.

(a) IN GENERAL.—The Secretary shall conduct studies to determine the feasibility of carrying out Corps of Engineers projects in coastal zones to enhance ocean and coastal ecosystem resiliency.

(b) STUDY.—In carrying out the study under subsection (a), the Secretary shall—

(1) as appropriate, coordinate with the heads of other appropriate Federal agencies, the Governors and other chief execu-

tive officers of the coastal states, nonprofit organizations, and other interested parties;

(2) identify Corps of Engineers projects in coastal zones for enhancing ocean and coastal ecosystem resiliency based on an assessment of the need and opportunities for, and feasibility of, the projects;

(3) to the maximum extent practicable, use any existing Corps of Engineers plans and data; and

(4) not later than 365 days after initial appropriations for this section, and every five years thereafter subject to the availability of appropriations, complete a study authorized under subsection (a).

(c) DISPOSITION.—

(1) IN GENERAL.—The Secretary may carry out a project identified in the study pursuant to subsection (a) in accordance with the criteria for projects carried out under one of the following authorities:

(A) Section 206(a)-(d) of the Water Resources Development Act of 1996 (33 U.S.C. 2330(a)-(d)).

(B) Section 1135(a)-(g) and (i) of the Water Resources Development Act of 1986 (33 U.S.C. 2309a(a)-(g) and (i)).

(C) Section 3(a)-(b), and (c)(1) of the Act of August, 13 1946 (33 U.S.C. 426g(a)-(b), and (c)(1)).

(D) Section 204(a)-(f) of the Water Resources Development Act of 1992 (33 U.S.C. 2326(a)-(f)).

(2) REPORT.—For each project that does not meet the criteria under paragraph (1), the Secretary shall include a recommendation relating to the project in the annual report submitted to Congress by the Secretary in accordance with section 7001.

(d) REQUESTS FOR PROJECTS.—The Secretary may carry out a project for a coastal state under this section only at the request of the Governor or chief executive officer of the coastal state, as appropriate.

(e) DEFINITION.—In this section, the terms "coastal zone" and "coastal state" have the meanings given such terms in section 304 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1453), as in effect on the date of enactment of this Act

TITLE V—WATER INFRASTRUCTURE FINANCING

Subtitle A—State Water Pollution Control Revolving Funds

SEC. 5001. GENERAL AUTHORITY FOR CAPITALIZATION GRANTS.

Section 601(a) of the Federal Water Pollution Control Act (33 U.S.C. 1381(a)) is amended by striking "for providing assistance" and all that follows through the period at the end and inserting the following: "to accomplish the objectives, goals, and policies of this Act by providing assistance for projects and activities identified in section 603(c).".

SEC. 5002. CAPITALIZATION GRANT AGREEMENTS.

Section 602(b) of the Federal Water Pollution Control Act (33 U.S.C. 1382(b)) is amended—

(1) in paragraph (6)—

(A) by striking "section 603(c)(1) of";

(B) by striking "before fiscal" and all that follows through "grants under this title and" and inserting "with assistance made available by a State water pollution control revolving fund authorized under this title, or";

(C) by inserting ", or both," after "205(m) of this Act"; and

(D) by striking "201(b)" and all that follows through "511(c)(1)," and inserting "511(c)(1)";

(2) in paragraph (9), by striking "standards; and" and inserting "standards, including standards relating to the reporting of infrastructure assets;";

(3) in paragraph (10), by striking the period at the end and inserting a semicolon; and

(4) by adding at the end the following:

"(11) the State will establish, maintain, invest, and credit the fund with repayments, such that the fund balance will be available in perpetuity for activities under this Act;

"(12) any fees charged by the State to recipients of assistance that are considered program income will be used for the purpose of financing the cost of administering the fund or financing projects or activities eligible for assistance from the fund;

"(13) beginning in fiscal year 2016, the State will require as a condition of providing assistance to a municipality or intermunicipal, interstate, or State agency that the recipient of such assistance certify, in a manner determined by the Governor of the State, that the recipient—

"(A) has studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is sought under this title; and

"(B) has selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account—

"(i) the cost of constructing the project or activity;

"(ii) the cost of operating and maintaining the project or activity over the life of the project or activity; and

"(iii) the cost of replacing the project or activity; and

"(14) a contract to be carried out using funds directly made available by a capitalization grant under this title for program management, construction management, feasibility studies, preliminary engineering, design, engineering, surveying, mapping, or architectural related services shall be negotiated in the same manner as a contract for architectural and engineering services is negotiated under chapter 11 of title 40, United States Code, or an equivalent State qualifications-based requirement (as determined by the Governor of the State).".

SEC. 5003. WATER POLLUTION CONTROL REVOLVING LOAN FUNDS.

Section 603 of the Federal Water Pollution Control Act (33 U.S.C. 1383) is amended—

(1) by striking subsection (c) and inserting the following:

"(c) PROJECTS AND ACTIVITIES ELIGIBLE FOR ASSISTANCE.—The amounts of funds available to each State water pollution control revolving fund shall be used only for providing financial assistance—

"(1) to any municipality or intermunicipal, interstate, or State agency for construction of publicly owned treatment works (as defined in section 212);

"(2) for the implementation of a management program established under section 319;

"(3) for development and implementation of a conservation and management plan under section 320;

"(4) for the construction, repair, or replacement of decentralized wastewater treatment systems that treat municipal wastewater or domestic sewage;

"(5) for measures to manage, reduce, treat, or recapture stormwater or subsurface drainage water;

"(6) to any municipality or intermunicipal, interstate, or State agency for measures to reduce the demand for publicly owned treatment works capacity through water conservation, efficiency, or reuse;

"(7) for the development and implementation of watershed projects meeting the criteria set forth in section 122;

"(8) to any municipality or intermunicipal, interstate, or State agency for measures to reduce the energy consumption needs for publicly owned treatment works;

"(9) for reusing or recycling wastewater, stormwater, or subsurface drainage water;

"(10) for measures to increase the security of publicly owned treatment works; and

"(11) to any qualified nonprofit entity, as determined by the Administrator, to provide assistance to owners and operators of small and medium publicly owned treatment works—

"(A) to plan, develop, and obtain financing for eligible projects under this subsection, including planning, design, and associated preconstruction activities; and

"(B) to assist such treatment works in achieving compliance with this Act.";

(2) in subsection (d)—

(A) in paragraph (1)—

(i) in subparagraph (A), by striking "20 years" and inserting "the lesser of 30 years and the projected useful life (as determined by the State) of the project to be financed with the proceeds of the loan";

(ii) in subparagraph (B), by striking "not later than 20 years after project completion" and inserting "upon the expiration of the term of the loan";

(iii) in subparagraph (C), by striking "and" at the end;

(iv) in subparagraph (D), by inserting "and" after the semicolon at the end; and

(v) by adding at the end the following:

"(E) for a treatment works proposed for repair, replacement, or expansion, and eligible for assistance under subsection (c)(1), the recipient of a loan shall—

"(i) develop and implement a fiscal sustainability plan that includes—

"(I) an inventory of critical assets that are a part of the treatment works;

"(II) an evaluation of the condition and performance of inventoried assets or asset groupings;

"(III) a certification that the recipient has evaluated and will be implementing water and energy conservation efforts as part of the plan; and

"(IV) a plan for maintaining, repairing, and, as necessary, replacing the treatment works and a plan for funding such activities; or

"(ii) certify that the recipient has developed and implemented a plan that meets the requirements under clause (i);"; and

(B) in paragraph (7), by inserting ", $400,000 per year, or 1/5 percent per year of the current valuation of the fund, whichever amount is greatest, plus the amount of any fees collected by the State for such purpose regardless of the source" before the period at the end; and

(3) by adding at the end the following:

"(i) ADDITIONAL SUBSIDIZATION.—

"(1) IN GENERAL.—In any case in which a State provides assistance to a municipality or intermunicipal, interstate, or State agency under subsection (d), the State may provide additional subsidization, including forgiveness of principal and negative interest loans—

"(A) to benefit a municipality that—

"(i) meets the affordability criteria of the State established under paragraph (2); or

"(ii) does not meet the affordability criteria of the State if the recipient—

"(I) seeks additional subsidization to benefit individual ratepayers in the residential user rate class;

"(II) demonstrates to the State that such ratepayers will experience a significant hardship from the increase in rates necessary to finance the project or activity for which assistance is sought; and

"(III) ensures, as part of an assistance agreement between the State and the recipient, that the additional subsidization provided under this paragraph is directed through a user charge rate system (or other appropriate method) to such ratepayers; or

"(B) to implement a process, material, technique, or technology—

"(i) to address water-efficiency goals;

"(ii) to address energy-efficiency goals;

"(iii) to mitigate stormwater runoff; or

"(iv) to encourage sustainable project planning, design, and construction.

"(2) AFFORDABILITY CRITERIA.—

"(A) ESTABLISHMENT.—

"(i) IN GENERAL.—Not later than September 30, 2015, and after providing notice and an opportunity for public comment, a State shall establish affordability criteria to assist in identifying municipalities that would experience a significant hardship raising the revenue necessary to finance a project or activity eligible for assistance under subsection (c)(1) if additional subsidization is not provided.

"(ii) CONTENTS.—The criteria under clause (i) shall be based on income and unemployment data, population trends, and other data determined relevant by the State, including whether the project or activity is to be carried out in an economically distressed area, as described in section 301 of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3161).

"(B) EXISTING CRITERIA.—If a State has previously established, after providing notice and an opportunity for public comment, affordability criteria that meet the requirements of subparagraph (A)—

"(i) the State may use the criteria for the purposes of this subsection; and

"(ii) those criteria shall be treated as affordability criteria established under this paragraph.

"(C) INFORMATION TO ASSIST STATES.—The Administrator may publish information to assist States in establishing affordability criteria under subparagraph (A).

"(3) LIMITATIONS.—

"(A) IN GENERAL.—A State may provide additional subsidization in a fiscal year under this subsection only if the total amount appropriated for making capitalization grants to all States under this title for the fiscal year exceeds $1,000,000,000.

"(B) ADDITIONAL LIMITATION.—

"(i) GENERAL RULE.—Subject to clause (ii), a State may use not more than 30 percent of the total amount received by the State in capitalization grants under this title for a fiscal year for providing additional subsidization under this subsection.

"(ii) EXCEPTION.—If, in a fiscal year, the amount appropriated for making capitalization grants to all States under this title exceeds $1,000,000,000 by a percentage that is less than 30 percent, clause (i) shall be applied by substituting that percentage for 30 percent.

"(C) APPLICABILITY.—The authority of a State to provide additional subsidization under this subsection shall apply to amounts received by the State in capitalization grants under this title for fiscal years beginning after September 30, 2014.

"(D) CONSIDERATION.—If the State provides additional subsidization to a municipality or intermunicipal, interstate, or State agency under this subsection that meets the

criteria under paragraph (1)(A), the State shall take the criteria set forth in section 602(b)(5) into consideration.".

SEC. 5004. REQUIREMENTS.

Title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) is amended by adding at the end the following:

"SEC. 608. REQUIREMENTS.

"(a) IN GENERAL.—Funds made available from a State water pollution control revolving fund established under this title may not be used for a project for the construction, alteration, maintenance, or repair of treatment works unless all of the iron and steel products used in the project are produced in the United States.

"(b) DEFINITION OF IRON AND STEEL PRODUCTS.—In this section, the term 'iron and steel products' means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, construction materials.

"(c) APPLICATION.—Subsection (a) shall not apply in any case or category of cases in which the Administrator finds that—

"(1) applying subsection (a) would be inconsistent with the public interest;

"(2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

"(3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

"(d) WAIVER.—If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public, on an informal basis, a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet site of the Environmental Protection Agency.

"(e) INTERNATIONAL AGREEMENTS.—This section shall be applied in a manner consistent with United States obligations under international agreements.

"(f) MANAGEMENT AND OVERSIGHT.—The Administrator may retain up to 0.25 percent of the funds appropriated for this title for management and oversight of the requirements of this section.

"(g) EFFECTIVE DATE.—This section does not apply with respect to a project if a State agency approves the engineering plans and specifications for the project, in that agency's capacity to approve such plans and specifications prior to a project requesting bids, prior to the date of enactment of the Water Resources Reform and Development Act of 2014.".

SEC. 5005. REPORT ON THE ALLOTMENT OF FUNDS.

(a) REVIEW.—The Administrator of the Environmental Protection Agency shall conduct a review of the allotment formula in effect on the date of enactment of this Act for allocation of funds authorized under title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) to determine whether that formula adequately

addresses the water quality needs of eligible States, territories, and Indian tribes, based on—

(1) the most recent survey of needs developed by the Administrator under section 516(b) of that Act (33 U.S.C. 1375(b)); and

(2) any other information the Administrator considers appropriate.

(b) REPORT.—Not later than 18 months after the date of enactment of this Act, the Administrator shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report on the results of the review under subsection (a), including any recommendations for changing the allotment formula.

SEC. 5006. EFFECTIVE DATE.

This subtitle, including any amendments made by the subtitle, shall take effect on October 1, 2014.

Subtitle B—General Provisions

SEC. 5011. WATERSHED PILOT PROJECTS.

Section 122 of the Federal Water Pollution Control Act (33 U.S.C. 1274) is amended—

*(1) in the section heading, by striking "**WET WEATHER**";*

(2) in subsection (a)—

(A) in the matter preceding paragraph (1)—

(i) by striking "for treatment works" and inserting "to a municipality or municipal entity"; and

(ii) by striking "of wet weather discharge control";

(B) in paragraph (2), by striking "in reducing such pollutants" and all that follows before the period at the end and inserting "to manage, reduce, treat, recapture, or reuse municipal stormwater, including techniques that utilize infiltration, evapotranspiration, and reuse of stormwater onsite"; and

(C) by adding at the end the following:

"(3) WATERSHED PARTNERSHIPS.—Efforts of municipalities and property owners to demonstrate cooperative ways to address nonpoint sources of pollution to reduce adverse impacts on water quality.

"(4) INTEGRATED WATER RESOURCE PLAN.—The development of an integrated water resource plan for the coordinated management and protection of surface water, ground water, and stormwater resources on a watershed or subwatershed basis to meet the objectives, goals, and policies of this Act.

"(5) MUNICIPALITY-WIDE STORMWATER MANAGEMENT PLANNING.—The development of a municipality-wide plan that identifies the most effective placement of stormwater technologies and management approaches, to reduce water quality impairments from stormwater on a municipality-wide basis.

"(6) INCREASED RESILIENCE OF TREATMENT WORKS.—Efforts to assess future risks and vulnerabilities of publicly owned treatment works to manmade or natural disasters, including extreme weather events and sea-level rise, and to carry out meas-

ures, on a systemwide or area-wide basis, to increase the resiliency of publicly owned treatment works.";

(3) by striking subsection (c);

(4) by redesignating subsection (d) as subsection (c); and

(5) in subsection (c) (as so redesignated) by striking "5 years after the date of enactment of this section," and inserting "October 1, 2015,".

SEC. 5012. DEFINITION OF TREATMENT WORKS.

(a) GRANTS FOR CONSTRUCTION OF TREATMENT WORKS.—Section 212(2)(A) of the Federal Water Pollution Control Act (33 U.S.C. 1292(2)(A)) is amended—

(1) by striking "any works, including site";

(2) by striking "is used for ultimate" and inserting "will be used for ultimate"; and

(3) by inserting before the period at the end the following: "and acquisition of other land, and interests in land, that are necessary for construction".

(b) DEFINITIONS.—Section 502 of the Federal Water Pollution Control Act (33 U.S.C. 1362) is amended by adding at the end the following:

"(26) TREATMENT WORKS.—The term 'treatment works' has the meaning given the term in section 212.".

(c) EFFECTIVE DATE.—The amendments made by this section shall take effect on October 1, 2014.

SEC. 5013. FUNDING FOR INDIAN PROGRAMS.

Section 518(c) of the Federal Water Pollution Control Act (33 U.S.C. 1377(c)) is amended—

(1) by striking "The Administrator" and inserting the following:

"(1) FISCAL YEARS 1987–2014.—The Administrator";

(2) in paragraph (1) (as so designated)—

(A) by striking "each fiscal year beginning after September 30, 1986," and inserting "each of fiscal years 1987 through 2014,"; and

(B) by striking the second sentence; and

(3) by adding at the end the following:

"(2) FISCAL YEAR 2015 AND THEREAFTER.—For fiscal year 2015 and each fiscal year thereafter, the Administrator shall reserve, before allotments to the States under section 604(a), not less than 0.5 percent and not more than 2.0 percent of the funds made available to carry out title VI.

"(3) USE OF FUNDS.—Funds reserved under this subsection shall be available only for grants for projects and activities eligible for assistance under section 603(c) to serve—

"(A) Indian tribes (as defined in subsection (h));

"(B) former Indian reservations in Oklahoma (as determined by the Secretary of the Interior); and

"(C) Native villages (as defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602)).".

SEC. 5014. WATER INFRASTRUCTURE PUBLIC-PRIVATE PARTNERSHIP PILOT PROGRAM.

(a) IN GENERAL.—The Secretary shall establish a pilot program to evaluate the cost effectiveness and project delivery efficiency of allowing non-Federal pilot applicants to carry out authorized water

resources development projects for coastal harbor improvement, channel improvement, inland navigation, flood damage reduction, aquatic ecosystem restoration, and hurricane and storm damage reduction.

(b) PURPOSES.—The purposes of the pilot program established under subsection (a) are—

(1) to identify cost-saving project delivery alternatives that reduce the backlog of authorized Corps of Engineers projects; and

(2) to evaluate the technical, financial, and organizational benefits of allowing a non-Federal pilot applicant to carry out and manage the design or construction (or both) of 1 or more of such projects.

(c) SUBSEQUENT APPROPRIATIONS.—Any activity undertaken under this section is authorized only to the extent specifically provided for in subsequent appropriations Acts.

(d) ADMINISTRATION.—In carrying out the pilot program established under subsection (a), the Secretary shall—

(1) identify for inclusion in the program at least 15 projects that are authorized for construction for coastal harbor improvement, channel improvement, inland navigation, flood damage reduction, or hurricane and storm damage reduction;

(2) notify in writing the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives of each project identified under paragraph (1);

(3) in consultation with the non-Federal pilot applicant associated with each project identified under paragraph (1), develop a detailed project management plan for the project that outlines the scope, financing, budget, design, and construction resource requirements necessary for the non-Federal pilot applicant to execute the project, or a separable element of the project;

(4) at the request of the non-Federal pilot applicant associated with each project identified under paragraph (1), enter into a project partnership agreement with the non-Federal pilot applicant under which the non-Federal pilot applicant is provided full project management control for the financing, design, or construction (or any combination thereof) of the project, or a separable element of the project, in accordance with plans approved by the Secretary;

(5) following execution of a project partnership agreement under paragraph (4) and completion of all work under the agreement, issue payment, in accordance with subsection (g), to the relevant non-Federal pilot applicant for that work; and

(6) regularly monitor and audit each project carried out under the program to ensure that all activities related to the project are carried out in compliance with plans approved by the Secretary and that construction costs are reasonable.

(e) SELECTION CRITERIA.—In identifying projects under subsection (d)(1), the Secretary shall consider the extent to which the project—

(1) is significant to the economy of the United States;

(2) leverages Federal investment by encouraging non-Federal contributions to the project;

(3) employs innovative project delivery and cost-saving methods;

(4) received Federal funds in the past and experienced delays or missed scheduled deadlines;

(5) has unobligated Corps of Engineers funding balances; and

(6) has not received Federal funding for recapitalization and modernization since the project was authorized.

(f) DETAILED PROJECT SCHEDULE.—Not later than 180 days after entering into a project partnership agreement under subsection (d)(4), a non-Federal pilot applicant, to the maximum extent practicable, shall submit to the Secretary a detailed project schedule for the relevant project, based on estimated funding levels, that specifies deadlines for each milestone with respect to the project.

(g) PAYMENT.—Payment to the non-Federal pilot applicant for work completed pursuant to a project partnership agreement under subsection (d)(4) may be made from—

(1) if applicable, the balance of the unobligated amounts appropriated for the project; and

(2) other amounts appropriated to the Corps of Engineers, subject to the condition that the total amount transferred to the non-Federal pilot applicant may not exceed the estimate of the Federal share of the cost of construction, including any required design.

(h) TECHNICAL ASSISTANCE.—At the request of a non-Federal pilot applicant participating in the pilot program established under subsection (a), the Secretary may provide to the non-Federal pilot applicant, if the non-Federal pilot applicant contracts with and compensates the Secretary, technical assistance with respect to—

(1) a study, engineering activity, or design activity related to a project carried out by the non-Federal pilot applicant under the program; and

(2) obtaining permits necessary for such a project.

(i) IDENTIFICATION OF IMPEDIMENTS.—

(1) IN GENERAL.—The Secretary shall—

(A) except as provided in paragraph (2), identify any procedural requirements under the authority of the Secretary that impede greater use of public-private partnerships and private investment in water resources development projects;

(B) develop and implement, on a project-by-project basis, procedures and approaches that—

(i) address such impediments; and

(ii) protect the public interest and any public investment in water resources development projects that involve public-private partnerships or private investment in water resources development projects; and

(C) not later than 1 year after the date of enactment of this section, issue rules to carry out the procedures and approaches developed under subparagraph (B).

(2) RULE OF CONSTRUCTION.—Nothing in this section allows the Secretary to waive any requirement under—

(A) sections 3141 through 3148 and sections 3701 through 3708 of title 40, United States Code;

(B) the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.); or

(C) any other provision of Federal law.

(j) PUBLIC BENEFIT STUDIES.—

(1) IN GENERAL.—Before entering into a project partnership agreement under subsection (d)(4), the Secretary shall conduct an assessment of whether, and provide justification in writing to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representative that, the proposed agreement provides better public and financial benefits than a similar transaction using public funding or financing.

(2) REQUIREMENTS.—An assessment under paragraph (1) shall—

(A) be completed in a period of not more than 90 days;

(B) take into consideration any supporting materials and data submitted by the relevant non-Federal pilot applicant and other stakeholders; and

(C) determine whether the proposed project partnership agreement is in the public interest by determining whether the agreement will provide public and financial benefits, including expedited project delivery and savings for taxpayers.

(k) NON-FEDERAL FUNDING.—The non-Federal pilot applicant may finance the non-Federal share of a project carried out under the pilot program established under subsection (a).

(l) APPLICABILITY OF FEDERAL LAW.—Any provision of Federal law that would apply to the Secretary if the Secretary were carrying out a project shall apply to a non-Federal pilot applicant carrying out a project under this section.

(m) COST SHARE.—Nothing in this section affects a cost-sharing requirement under Federal law that is applicable to a project carried out under the pilot program established under subsection (a).

(n) REPORT.—Not later than 3 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report describing the results of the pilot program established under subsection (a), including any recommendations of the Secretary concerning whether the program or any component of the program should be implemented on a national basis.

(o) NON-FEDERAL PILOT APPLICANT DEFINED.—In this section, the term "non-Federal pilot applicant" means—

(1) the non-Federal sponsor of the water resources development project;

(2) a non-Federal interest, as defined in section 221 of the Flood Control Act of 1970 (42 U.S.C. 1982d–5b); or

(3) a private entity with the consent of the local government in which the project is located or that is otherwise affected by the project.

Subtitle C—Innovative Financing Pilot Projects

SEC. 5021. SHORT TITLE.

This subtitle may be cited as the "Water Infrastructure Finance and Innovation Act of 2014".

SEC. 5022. DEFINITIONS.

In this subtitle:

(1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency.

(2) COMMUNITY WATER SYSTEM.—The term "community water system" has the meaning given the term in section 1401 of the Safe Drinking Water Act (42 U.S.C. 300f).

(3) FEDERAL CREDIT INSTRUMENT.—The term "Federal credit instrument" means a secured loan or loan guarantee authorized to be made available under this subtitle with respect to a project.

(4) INVESTMENT-GRADE RATING.—The term "investment-grade rating" means a rating of BBB minus, Baa3, bbb minus, BBB (low), or higher assigned by a rating agency to project obligations.

(5) LENDER.—

(A) IN GENERAL.—The term "lender" means any non-Federal qualified institutional buyer (as defined in section 230.144A(a) of title 17, Code of Federal Regulations (or a successor regulation), known as Rule 144A(a) of the Securities and Exchange Commission and issued under the Securities Act of 1933 (15 U.S.C. 77a et seq.)).

(B) INCLUSIONS.—The term "lender" includes—

(i) a qualified retirement plan (as defined in section 4974(c) of the Internal Revenue Code of 1986) that is a qualified institutional buyer; and

(ii) a governmental plan (as defined in section 414(d) of the Internal Revenue Code of 1986) that is a qualified institutional buyer.

(6) LOAN GUARANTEE.—The term "loan guarantee" means any guarantee or other pledge by the Secretary or the Administrator to pay all or part of the principal of, and interest on, a loan or other debt obligation issued by an obligor and funded by a lender.

(7) OBLIGOR.—The term "obligor" means an eligible entity that is primarily liable for payment of the principal of, or interest on, a Federal credit instrument.

(8) PROJECT OBLIGATION.—

(A) IN GENERAL.—The term "project obligation" means any note, bond, debenture, or other debt obligation issued by an obligor in connection with the financing of a project.

(B) EXCLUSION.—The term "project obligation" does not include a Federal credit instrument.

(9) RATING AGENCY.—The term "rating agency" means a credit rating agency registered with the Securities and Exchange Commission as a nationally recognized statistical rating organization (as defined in section 3(a) of the Securities Exchange Act of 1934 (15 U.S.C. 78c(a))).

(10) SECURED LOAN.—The term "secured loan" means a direct loan or other debt obligation issued by an obligor and funded by the Secretary or Administrator, as applicable, in connection with the financing of a project under section 5029.

(11) STATE.—The term "State" means—

(A) a State;

(B) the District of Columbia;

(C) the Commonwealth of Puerto Rico; and

(D) any other territory or possession of the United States.

(12) STATE INFRASTRUCTURE FINANCING AUTHORITY.—The term "State infrastructure financing authority" means the State entity established or designated by the Governor of a State to receive a capitalization grant provided by, or otherwise carry out the requirements of, title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et. seq.) or section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j–12).

(13) SUBSIDY AMOUNT.—The term "subsidy amount" means the amount of budget authority sufficient to cover the estimated long-term cost to the Federal Government of a Federal credit instrument, as calculated on a net present value basis, excluding administrative costs and any incidental effects on governmental receipts or outlays in accordance with the Federal Credit Reform Act of 1990 (2 U.S.C. 661 et seq.).

(14) SUBSTANTIAL COMPLETION.—The term "substantial completion", with respect to a project, means the earliest date on which a project is considered to perform the functions for which the project is designed.

(15) TREATMENT WORKS.—The term "treatment works" has the meaning given the term in section 212 of the Federal Water Pollution Control Act (33 U.S.C. 1292).

SEC. 5023. AUTHORITY TO PROVIDE ASSISTANCE.

(a) IN GENERAL.—The Secretary and the Administrator may provide financial assistance under this subtitle to carry out pilot projects, which shall be selected to ensure a diversity of project types and geographical locations.

(b) RESPONSIBILITY.—

(1) SECRETARY.—The Secretary shall carry out all pilot projects under this subtitle that are eligible projects under section 5026(1).

(2) ADMINISTRATOR.—The Administrator shall carry out all pilot projects under this subtitle that are eligible projects under paragraphs (2), (3), (4), (5), (6), and (8) of section 5026.

(3) OTHER PROJECTS.—The Secretary or the Administrator, as applicable, may carry out eligible projects under paragraph (7) or (9) of section 5026.

SEC. 5024. APPLICATIONS.

(a) IN GENERAL.—To receive assistance under this subtitle, an eligible entity shall submit to the Secretary or the Administrator, as applicable, an application at such time, in such manner, and containing such information as the Secretary or the Administrator may require.

(b) COMBINED PROJECTS.—In the case of an eligible project described in paragraph (8) or (9) of section 5026, the Secretary or the

Administrator, as applicable, shall require the eligible entity to submit a single application for the combined group of projects.

SEC. 5025. ELIGIBLE ENTITIES.

The following entities are eligible to receive assistance under this subtitle:

(1) A corporation.

(2) A partnership.

(3) A joint venture.

(4) A trust.

(5) A Federal, State, or local governmental entity, agency, or instrumentality.

(6) A tribal government or consortium of tribal governments.

(7) A State infrastructure financing authority.

SEC. 5026. PROJECTS ELIGIBLE FOR ASSISTANCE.

The following projects may be carried out with amounts made available under this subtitle:

(1) Any project for flood damage reduction, hurricane and storm damage reduction, environmental restoration, coastal or inland harbor navigation improvement, or inland and intracoastal waterways navigation improvement that the Secretary determines is technically sound, economically justified, and environmentally acceptable, including—

(A) a project to reduce flood damage;

(B) a project to restore aquatic ecosystems;

(C) a project to improve the inland and intracoastal waterways navigation system of the United States; and

(D) a project to improve navigation of a coastal or inland harbor of the United States, including channel deepening and construction of associated general navigation features.

(2) 1 or more activities that are eligible for assistance under section 603(c) of the Federal Water Pollution Control Act (33 U.S.C. 1383(c)), notwithstanding the public ownership requirement under paragraph (1) of that subsection.

(3) 1 or more activities described in section 1452(a)(2) of the Safe Drinking Water Act (42 U.S.C. 300j–12(a)(2)).

(4) A project for enhanced energy efficiency in the operation of a public water system or a publicly owned treatment works.

(5) A project for repair, rehabilitation, or replacement of a treatment works, community water system, or aging water distribution or waste collection facility (including a facility that serves a population or community of an Indian reservation).

(6) A brackish or sea water desalination project, a managed aquifer recharge project, or a water recycling project.

(7) Acquisition of real property or an interest in real property—

(A) if the acquisition is integral to a project described in paragraphs (1) through (6); or

(B) pursuant to an existing plan that, in the judgment of the Administrator or the Secretary, as applicable, would mitigate the environmental impacts of water resources infrastructure projects otherwise eligible for assistance under this section.

(8) A combination of projects, each of which is eligible under paragraph (2) or (3), for which a State infrastructure financing authority submits to the Administrator a single application.

(9) A combination of projects secured by a common security pledge, each of which is eligible under paragraph (1), (2), (3), (4), (5), (6), or (7), for which an eligible entity, or a combination of eligible entities, submits a single application.

SEC. 5027. ACTIVITIES ELIGIBLE FOR ASSISTANCE.

For purposes of this subtitle, an eligible activity with respect to an eligible project includes the cost of—

(1) development-phase activities, including planning, feasibility analysis (including any related analysis necessary to carry out an eligible project), revenue forecasting, environmental review, permitting, preliminary engineering and design work, and other preconstruction activities;

(2) construction, reconstruction, rehabilitation, and replacement activities;

(3) the acquisition of real property or an interest in real property (including water rights, land relating to the project, and improvements to land), environmental mitigation (including acquisitions pursuant to section 5026(7)), construction contingencies, and acquisition of equipment; and

(4) capitalized interest necessary to meet market requirements, reasonably required reserve funds, capital issuance expenses, and other carrying costs during construction.

SEC. 5028. DETERMINATION OF ELIGIBILITY AND PROJECT SELECTION.

(a) ELIGIBILITY REQUIREMENTS.—To be eligible to receive financial assistance under this subtitle, a project shall meet the following criteria, as determined by the Secretary or Administrator, as applicable:

(1) CREDITWORTHINESS.—

(A) IN GENERAL.—The project and obligor shall be creditworthy, which shall be determined by the Secretary or the Administrator, as applicable.

(B) CONSIDERATIONS.—In determining the creditworthiness of a project and obligor, the Secretary or the Administrator, as applicable, shall take into consideration relevant factors, including—

(i) the terms, conditions, financial structure, and security features of the proposed financing;

(ii) the dedicated revenue sources that will secure or fund the project obligations;

(iii) the financial assumptions upon which the project is based; and

(iv) the financial soundness and credit history of the obligor.

(C) SECURITY FEATURES.—The Secretary or the Administrator, as applicable, shall ensure that any financing for the project has appropriate security features, such as a rate covenant, supporting the project obligations to ensure repayment.

(D) RATING OPINION LETTERS.—

(i) PRELIMINARY RATING OPINION LETTER.—The Secretary or the Administrator, as applicable, shall require each project applicant to provide, at the time of application, a preliminary rating opinion letter from at least 1 rating agency indicating that the senior obligations of the project (which may be the Federal credit instrument) have the potential to achieve an investment-grade rating.

(ii) FINAL RATING OPINION LETTERS.—The Secretary or the Administrator, as applicable, shall require each project applicant to provide, prior to final acceptance and financing of the project, final rating opinion letters from at least 2 rating agencies indicating that the senior obligations of the project have an investment-grade rating.

(E) SPECIAL RULE FOR CERTAIN COMBINED PROJECTS.—The Administrator shall develop a credit evaluation process for a Federal credit instrument provided to a State infrastructure financing authority for a project under section 5026(8) or an entity for a project under section 5026(9), which may include requiring the provision of a final rating opinion letter from at least 2 rating agencies.

(2) ELIGIBLE PROJECT COSTS.—

(A) IN GENERAL.—Subject to subparagraph (B), the eligible project costs of a project shall be reasonably anticipated to be not less than $20,000,000.

(B) SMALL COMMUNITY WATER INFRASTRUCTURE PROJECTS.—For a project described in paragraph (2) or (3) of section 5026 that serves a community of not more than 25,000 individuals, the eligible project costs of a project shall be reasonably anticipated to be not less than $5,000,000.

(3) DEDICATED REVENUE SOURCES.—The Federal credit instrument for the project shall be repayable, in whole or in part, from dedicated revenue sources that also secure the project obligations.

(4) PUBLIC SPONSORSHIP OF PRIVATE ENTITIES.—

(A) IN GENERAL.—If an eligible project is carried out by an entity that is not a State or local government or an agency or instrumentality of a State or local government or a tribal government or consortium of tribal governments, the project shall be publicly sponsored.

(B) PUBLIC SPONSORSHIP.—For purposes of this subtitle, a project shall be considered to be publicly sponsored if the obligor can demonstrate, to the satisfaction of the Secretary or the Administrator, as appropriate, that the project applicant has consulted with the affected State, local, or tribal government in which the project is located, or is otherwise affected by the project, and that such government supports the proposed project.

(5) LIMITATION.—No project receiving Federal credit assistance under this subtitle may be financed (directly or indirectly), in whole or in part, with proceeds of any obligation—

(A) the interest on which is exempt from the tax imposed under chapter 1 of the Internal Revenue Code of 1986; or

(B) with respect to which credit is allowable under subpart I or J of part IV of subchapter A of chapter 1 of such Code.

(6) USE OF EXISTING FINANCING MECHANISMS.—

(A) NOTIFICATION.—For each eligible project for which the Administrator has authority under paragraph (2) or (3) of section 5023(b) and for which the Administrator has received an application for financial assistance under this subtitle, the Administrator shall notify, not later than 30 days after the date on which the Administrator receives a complete application, the applicable State infrastructure financing authority of the State in which the project is located that such application has been submitted.

(B) DETERMINATION.—If, not later than 60 days after the date of receipt of a notification under subparagraph (A), a State infrastructure financing authority notifies the Administrator that the State infrastructure financing authority intends to commit funds to the project in an amount that is equal to or greater than the amount requested under the application, the Administrator may not provide any financial assistance for that project under this subtitle unless—

(i) by the date that is 180 days after the date of receipt of a notification under subparagraph (A), the State infrastructure financing authority fails to enter into an assistance agreement to provide funds for the project; or

(ii) the financial assistance to be provided by the State infrastructure financing authority will be at rates and terms that are less favorable than the rates and terms for financial assistance provided under this subtitle.

(7) OPERATION AND MAINTENANCE PLAN.—

(A) IN GENERAL.—The Secretary or the Administrator, as applicable, shall determine whether an applicant for assistance under this subtitle has developed, and identified adequate revenues to implement, a plan for operating, maintaining, and repairing the project over the useful life of the project.

(B) SPECIAL RULE.—An eligible project described in section 5026(1) that has not been specifically authorized by Congress shall not be eligible for Federal assistance for operations and maintenance.

(b) SELECTION CRITERIA.—

(1) ESTABLISHMENT.—The Secretary or the Administrator, as applicable, shall establish criteria for the selection of projects that meet the eligibility requirements of subsection (a), in accordance with paragraph (2).

(2) CRITERIA.—The selection criteria shall include the following:

(A) The extent to which the project is nationally or regionally significant, with respect to the generation of economic and public benefits, such as—

(i) the reduction of flood risk;

(ii) the improvement of water quality and quantity, including aquifer recharge;

(iii) the protection of drinking water, including source water protection; and

(iv) the support of international commerce.

(B) The extent to which the project financing plan includes public or private financing in addition to assistance under this subtitle.

(C) The likelihood that assistance under this subtitle would enable the project to proceed at an earlier date than the project would otherwise be able to proceed.

(D) The extent to which the project uses new or innovative approaches.

(E) The amount of budget authority required to fund the Federal credit instrument made available under this subtitle.

(F) The extent to which the project—

(i) protects against extreme weather events, such as floods or hurricanes; or

(ii) helps maintain or protect the environment.

(G) The extent to which a project serves regions with significant energy exploration, development, or production areas.

(H) The extent to which a project serves regions with significant water resource challenges, including the need to address—

(i) water quality concerns in areas of regional, national, or international significance;

(ii) water quantity concerns related to groundwater, surface water, or other water sources;

(iii) significant flood risk;

(iv) water resource challenges identified in existing regional, State, or multistate agreements; or

(v) water resources with exceptional recreational value or ecological importance.

(I) The extent to which the project addresses identified municipal, State, or regional priorities.

(J) The readiness of the project to proceed toward development, including a demonstration by the obligor that there is a reasonable expectation that the contracting process for construction of the project can commence by not later than 90 days after the date on which a Federal credit instrument is obligated for the project under this subtitle.

(K) The extent to which assistance under this subtitle reduces the contribution of Federal assistance to the project.

(3) SPECIAL RULE FOR CERTAIN COMBINED PROJECTS.—For a project described in section 5026(8), the Administrator shall only consider the criteria described in subparagraphs (B) through (K) of paragraph (2).

(c) FEDERAL REQUIREMENTS.—Nothing in this section supersedes the applicability of other requirements of Federal law (including regulations).

SEC. 5029. SECURED LOANS.

(a) AGREEMENTS.—

(1) IN GENERAL.—Subject to paragraphs (2) and (3), the Secretary or the Administrator, as applicable, may enter into agreements with 1 or more obligors to make secured loans, the proceeds of which shall be used to finance eligible project costs of any project selected under section 5028.

(2) FINANCIAL RISK ASSESSMENT.—Before entering into an agreement under this subsection for a secured loan, the Secretary or the Administrator, as applicable, in consultation with the Director of the Office of Management and Budget and each rating agency providing a rating opinion letter under section 5028(a)(1)(D), shall determine an appropriate capital reserve subsidy amount for the secured loan, taking into account each such rating opinion letter.

(3) INVESTMENT-GRADE RATING REQUIREMENT.—The execution of a secured loan under this section shall be contingent on receipt by the senior obligations of the project of an investment-grade rating.

(b) TERMS AND LIMITATIONS.—

(1) IN GENERAL.—A secured loan provided for a project under this section shall be subject to such terms and conditions, and contain such covenants, representations, warranties, and requirements (including requirements for audits), as the Secretary or the Administrator, as applicable, determines to be appropriate.

(2) MAXIMUM AMOUNT.—The amount of a secured loan under this section shall not exceed the lesser of—

(A) an amount equal to 49 percent of the reasonably anticipated eligible project costs; and

(B) if the secured loan does not receive an investment-grade rating, the amount of the senior project obligations of the project.

(3) PAYMENT.—A secured loan under this section—

(A) shall be payable, in whole or in part, from State or local taxes, user fees, or other dedicated revenue sources that also secure the senior project obligations of the relevant project;

(B) shall include a rate covenant, coverage requirement, or similar security feature supporting the project obligations; and

(C) may have a lien on revenues described in subparagraph (A), subject to any lien securing project obligations.

(4) INTEREST RATE.—The interest rate on a secured loan under this section shall be not less than the yield on United States Treasury securities of a similar maturity to the maturity of the secured loan on the date of execution of the loan agreement.

(5) MATURITY DATE.—

(A) IN GENERAL.—The final maturity date of a secured loan under this section shall be the earlier of—

(i) the date that is 35 years after the date of substantial completion of the relevant project (as determined by the Secretary or the Administrator, as applicable); and

(ii) if the useful life of the project (as determined by the Secretary or Administrator, as applicable) is less than 35 years, the useful life the project.

(B) SPECIAL RULE FOR STATE INFRASTRUCTURE FINANCING AUTHORITIES.—The final maturity date of a secured loan to a State infrastructure financing authority under this section shall be not later than 35 years after the date on which amounts are first disbursed.

(6) NONSUBORDINATION.—A secured loan under this section shall not be subordinated to the claims of any holder of project obligations in the event of bankruptcy, insolvency, or liquidation of the obligor of the project.

(7) FEES.—The Secretary or the Administrator, as applicable, may establish fees at a level sufficient to cover all or a portion of the costs to the Federal Government of making a secured loan under this section.

(8) NON-FEDERAL SHARE.—The proceeds of a secured loan under this section may be used to pay any non-Federal share of project costs required if the loan is repayable from non-Federal funds.

(9) MAXIMUM FEDERAL INVOLVEMENT.—

(A) IN GENERAL.—Except as provided in subparagraph (B), for each project for which assistance is provided under this subtitle, the total amount of Federal assistance shall not exceed 80 percent of the total project cost.

(B) EXCEPTIONS.—Subparagraph (A) shall not apply to any rural water project—

(i) that is authorized to be carried out by the Secretary of the Interior;

(ii) that includes among its beneficiaries a federally recognized Indian tribe; and

(iii) for which the authorized Federal share of the total project costs is greater than the amount described in subparagraph (A).

(c) REPAYMENT.—

(1) SCHEDULE.—The Secretary or the Administrator, as applicable, shall establish a repayment schedule for each secured loan provided under this section, based on the projected cash flow from project revenues and other repayment sources.

(2) COMMENCEMENT.—

(A) IN GENERAL.—Scheduled loan repayments of principal or interest on a secured loan under this section shall commence not later than 5 years after the date of substantial completion of the project (as determined by the Secretary or Administrator, as applicable).

(B) SPECIAL RULE FOR STATE INFRASTRUCTURE FINANCING AUTHORITIES.—Scheduled loan repayments of principal or interest on a secured loan to a State infrastructure financing authority under this subtitle shall commence not later than 5 years after the date on which amounts are first disbursed.

(3) DEFERRED PAYMENTS.—

(A) AUTHORIZATION.—If, at any time after the date of substantial completion of a project for which a secured loan is provided under this section, the project is unable to generate sufficient revenues to pay the scheduled loan repayments of principal and interest on the secured loan, the Secretary or the Administrator, as applicable, subject to subparagraph (C), may allow the obligor to add unpaid principal and interest to the outstanding balance of the secured loan.

(B) INTEREST.—Any payment deferred under subparagraph (A) shall—

(i) continue to accrue interest in accordance with subsection (b)(4) until fully repaid; and

(ii) be scheduled to be amortized over the remaining term of the secured loan.

(C) CRITERIA.—

(i) IN GENERAL.—Any payment deferral under subparagraph (A) shall be contingent on the project meeting such criteria as the Secretary or the Administrator, as applicable, may establish.

(ii) REPAYMENT STANDARDS.—The criteria established under clause (i) shall include standards for reasonable assurance of repayment.

(4) PREPAYMENT.—

(A) USE OF EXCESS REVENUES.—Any excess revenues that remain after satisfying scheduled debt service requirements on the project obligations and secured loan and all deposit requirements under the terms of any trust agreement, bond resolution, or similar agreement securing project obligations may be applied annually to prepay a secured loan under this section without penalty.

(B) USE OF PROCEEDS OF REFINANCING.—A secured loan under this section may be prepaid at any time without penalty from the proceeds of refinancing from non-Federal funding sources.

(d) SALE OF SECURED LOANS.—

(1) IN GENERAL.—Subject to paragraph (2), as soon as practicable after the date of substantial completion of a project and after providing a notice to the obligor, the Secretary or the Administrator, as applicable, may sell to another entity or reoffer into the capital markets a secured loan for a project under this section, if the Secretary or the Administrator, as applicable, determines that the sale or reoffering can be made on favorable terms.

(2) CONSENT OF OBLIGOR.—In making a sale or reoffering under paragraph (1), the Secretary or the Administrator, as applicable, may not change the original terms and conditions of the secured loan without the written consent of the obligor.

(e) LOAN GUARANTEES.—

(1) IN GENERAL.—The Secretary or the Administrator, as applicable, may provide a loan guarantee to a lender in lieu of making a secured loan under this section, if the Secretary or the Administrator, as applicable, determines that the budgetary

cost of the loan guarantee is substantially the same as that of a secured loan.

(2) TERMS.—The terms of a loan guarantee provided under this subsection shall be consistent with the terms established in this section for a secured loan, except that the rate on the guaranteed loan and any prepayment features shall be negotiated between the obligor and the lender, with the consent of the Secretary or the Administrator, as applicable.

SEC. 5030. PROGRAM ADMINISTRATION.

(a) REQUIREMENT.—The Secretary or the Administrator, as applicable, shall establish a uniform system to service the Federal credit instruments made available under this subtitle.

(b) FEES.—

(1) IN GENERAL.—The Secretary or the Administrator, as applicable, may collect and spend fees, contingent on authority being provided in appropriations Acts, at a level that is sufficient to cover—

(A) the costs of services of expert firms retained pursuant to subsection (d); and

(B) all or a portion of the costs to the Federal Government of servicing the Federal credit instruments provided under this subtitle.

(c) SERVICER.—

(1) IN GENERAL.—The Secretary or the Administrator, as applicable, may appoint a financial entity to assist the Secretary or the Administrator in servicing the Federal credit instruments provided under this subtitle.

(2) DUTIES.—A servicer appointed under paragraph (1) shall act as the agent for the Secretary or the Administrator, as applicable.

(3) FEE.—A servicer appointed under paragraph (1) shall receive a servicing fee, subject to approval by the Secretary or the Administrator, as applicable.

(d) ASSISTANCE FROM EXPERTS.—The Secretary or the Administrator, as applicable, may retain the services, including counsel, of organizations and entities with expertise in the field of municipal and project finance to assist in the underwriting and servicing of Federal credit instruments provided under this subtitle.

(e) APPLICABILITY OF OTHER LAWS.—Section 513 of the Federal Water Pollution Control Act (33 U.S.C. 1372) applies to the construction of a project carried out, in whole or in part, with assistance made available through a Federal credit instrument under this subtitle in the same manner that section applies to a treatment works for which a grant is made available under that Act.

SEC. 5031. STATE, TRIBAL, AND LOCAL PERMITS.

The provision of financial assistance for a project under this subtitle shall not—

(1) relieve any recipient of the assistance of any obligation to obtain any required State, local, or tribal permit or approval with respect to the project;

(2) limit the right of any unit of State, local, or tribal government to approve or regulate any rate of return on private equity invested in the project; or

(3) otherwise supersede any State, local, or tribal law (including any regulation) applicable to the construction or operation of the project.

SEC. 5032. REGULATIONS.

The Secretary or the Administrator, as applicable, may promulgate such regulations as the Secretary or Administrator determines to be appropriate to carry out this subtitle.

SEC. 5033. FUNDING.

(a) IN GENERAL.—There is authorized to be appropriated to each of the Secretary and the Administrator to carry out this subtitle, to remain available until expended—

(1) $20,000,000 for fiscal year 2015;

(2) $25,000,000 for fiscal year 2016;

(3) $35,000,000 for fiscal year 2017;

(4) $45,000,000 for fiscal year 2018; and

(5) $50,000,000 for fiscal year 2019.

(b) ADMINISTRATIVE COSTS.—Of the funds made available to carry out this subtitle, the Secretary or the Administrator, as applicable, may use for the administration of this subtitle, including for the provision of technical assistance to aid project sponsors in obtaining the necessary approvals for the project, not more than $2,200,000 for each of fiscal years 2015 through 2019.

(c) SMALL COMMUNITY WATER INFRASTRUCTURE PROJECTS.—

(1) IN GENERAL.—For each fiscal year, the Secretary or the Administrator, as applicable, shall set aside not less than 15 percent of the amounts made available for that fiscal year under this section for small community water infrastructure projects described in section 5028(a)(2)(B).

(2) ADMINISTRATION.—Any amounts set aside under paragraph (1) that remain unobligated on June 1 of the fiscal year for which the amounts are set aside shall be available for obligation by the Secretary or the Administrator, as applicable, for projects other than small community water infrastructure projects.

(d) ADDITIONAL FUNDING.—Notwithstanding section 5029(b)(2), the Secretary or the Administrator, as applicable, may make available up to 25 percent of the amounts made available for each fiscal year under this section for loans in excess of 49 percent of the total project costs.

SEC. 5034. REPORTS ON PILOT PROGRAM IMPLEMENTATION.

(a) AGENCY REPORTING.—As soon as practicable after each fiscal year for which amounts are made available to carry out this subtitle, the Secretary and the Administrator shall publish on a dedicated, publicly accessible Internet site—

(1) each application received for assistance under this subtitle; and

(2) a list of the projects selected for assistance under this subtitle, including—

(A) a description of each project;

(B) the amount of financial assistance provided for each project; and

(C) the basis for the selection of each project with respect to the requirements of this subtitle.

(b) REPORTS TO CONGRESS.—

(1) IN GENERAL.—Not later than 4 years after the date of enactment of this Act, the Comptroller General of the United States shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report summarizing for the projects that are receiving, or have received, assistance under this subtitle—

(A) the applications received for assistance under this subtitle;

(B) the projects selected for assistance under this subtitle, including a description of the projects and the basis for the selection of those projects with respect to the requirements of this subtitle;

(C) the type and amount of financial assistance provided for each project selected for assistance under this subtitle;

(D) the financial performance of each project selected for assistance under this subtitle, including an evaluation of whether the objectives of this subtitle are being met;

(E) the benefits and impacts of implementation of this subtitle, including the public benefit provided by the projects selected for assistance under this subtitle, including, as applicable, water quality and water quantity improvement, the protection of drinking water, and the reduction of flood risk; and

(F) an evaluation of the feasibility of attracting non-Federal public or private financing for water infrastructure projects as a result of the implementation of this subtitle.

(2) RECOMMENDATIONS.—The report under paragraph (1) shall include—

(A) an evaluation of the impacts (if any) of the limitation under section 5028 (a)(5) on the ability of eligible entities to finance water infrastructure projects under this subtitle;

(B) a recommendation as to whether the objectives of this subtitle would be best served—

(i) by continuing the authority of the Secretary or the Administrator, as applicable, to provide assistance under this subtitle;

(ii) by establishing a Government corporation or Government-sponsored enterprise to provide assistance in accordance with this subtitle; or

(iii) by terminating the authority of the Secretary and the Administrator under this subtitle and relying on the capital markets to fund the types of infrastructure investments assisted by this subtitle without Federal participation; and

(C) any proposed changes to improve the efficiency and effectiveness of this subtitle in providing financing for water infrastructure projects, taking into consideration the recommendations made under subparagraphs (A) and (B).

SEC. 5035. REQUIREMENTS.

(a) IN GENERAL.—Except as provided in subsection (c), none of the amounts made available under this subtitle may be used for the construction, alteration, maintenance, or repair of a project eligible

for assistance under this subtitle unless all of the iron and steel products used in the project are produced in the United States.

(b) DEFINITION OF IRON AND STEEL PRODUCTS.—In this section, the term "iron and steel products" means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

(c) APPLICATION.—Subsection (a) shall not apply in any case or category of cases in which the Administrator finds that—

(1) applying subsection (a) would be inconsistent with the public interest;

(2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

(3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(d) WAIVER.—If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public, on an informal basis, a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

(e) INTERNATIONAL AGREEMENTS.—This section shall be applied in a manner consistent with United States obligations under international agreements.

TITLE VI—DEAUTHORIZATION AND BACKLOG PREVENTION

SEC. 6001. DEAUTHORIZATION OF INACTIVE PROJECTS.

(a) PURPOSES.—The purposes of this section are—

(1) to identify $18,000,000,000 in water resources development projects authorized by Congress that are no longer viable for construction due to—

(A) a lack of local support;

(B) a lack of available Federal or non-Federal resources; or

(C) an authorizing purpose that is no longer relevant or feasible;

(2) to create an expedited and definitive process to deauthorize water resources development projects that are no longer viable for construction; and

(3) to allow the continued authorization of water resources development projects that are viable for construction.

(b) COMPREHENSIVE STATUS REPORTS.—Section 1001(b) of the Water Resources Development Act of 1986 (33 U.S.C. 579a(b)) is amended by adding at the end the following:

"(3) MINIMUM FUNDING LIST.—At the end of each fiscal year, the Secretary shall submit to the Committee on Environ-

ment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives, and make available on a publicly accessible Internet site in a manner that is downloadable, searchable, and sortable, a list of—

"(A) projects or separable elements of projects authorized for construction for which funding has been obligated during the current fiscal year or any of the 6 preceding fiscal years;

"(B) the amount of funding obligated for each such project or separable element per fiscal year;

"(C) the current phase of each such project or separable element of a project; and

"(D) the amount required to complete the current phase of each such project or separable element.

"(4) COMPREHENSIVE BACKLOG REPORT.—

"(A) IN GENERAL.—The Secretary shall compile and publish a complete list of all projects and separable elements of projects of the Corps of Engineers that are authorized for construction but have not been completed.

"(B) REQUIRED INFORMATION.—The Secretary shall include on the list developed under subparagraph (A) for each project and separable element on that list—

"(i) the date of authorization of the project or separable element, including any subsequent modifications to the original authorization;

"(ii) the original budget authority for the project or separable element;

"(iii) a brief description of the project or separable element;

"(iv) the estimated date of completion of the project or separable element;

"(v) the estimated cost of completion of the project or separable element; and

"(vi) any amounts appropriated for the project or separable element that remain unobligated.

"(C) PUBLICATION.—

"(i) IN GENERAL.—Not later than 1 year after the date of enactment of this paragraph, the Secretary shall submit a copy of the list developed under subparagraph (A) to—

"(I) the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives; and

"(II) the Director of the Office of Management and Budget.

"(ii) PUBLIC AVAILABILITY.—Beginning on the date the Secretary submits the report to Congress under clause (i), the Secretary shall make a copy of the list available on a publicly accessible Internet site in a manner that is downloadable, searchable, and sortable.".

(c) INTERIM DEAUTHORIZATION LIST.—

(1) IN GENERAL.—The Secretary shall develop an interim deauthorization list that identifies each water resources development project, or separable element of a project, authorized for construction before November 8, 2007, for which—

(A) construction was not initiated before the date of enactment of this Act; or

(B) construction was initiated before the date of enactment of this Act, but for which no funds, Federal or non-Federal, were obligated for construction of the project or separable element of the project during the current fiscal year or any of the 6 preceding fiscal years.

(2) SPECIAL RULE FOR PROJECTS RECEIVING FUNDS FOR POST-AUTHORIZATION STUDY.—A project or separable element of a project may not be identified on the interim deauthorization list, or the final deauthorization list developed under subsection (d), if the project or separable element received funding for a post-authorization study during the current fiscal year or any of the 6 preceding fiscal years.

(3) PUBLIC COMMENT AND CONSULTATION.—

(A) IN GENERAL.—The Secretary shall solicit comments from the public and the Governors of each applicable State on the interim deauthorization list developed under paragraph (1).

(B) COMMENT PERIOD.—The public comment period shall be 90 days.

(4) SUBMISSION TO CONGRESS; PUBLICATION.—Not later than 90 days after the date of submission of the list required by section 1001(b)(4)(A) of the Water Resources Development Act of 1986 (as added by subsection (b)), the Secretary shall—

(A) submit the interim deauthorization list to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives; and

(B) publish the interim deauthorization list in the Federal Register.

(d) FINAL DEAUTHORIZATION LIST.—

(1) IN GENERAL.—The Secretary shall develop a final deauthorization list of each water resources development project, or separable element of a project, described in subsection (c)(1) that is identified pursuant to this subsection.

(2) DEAUTHORIZATION AMOUNT.—

(A) IN GENERAL.—The Secretary shall include on the final deauthorization list projects and separable elements of projects that have, in the aggregate, an estimated Federal cost to complete that is at least $18,000,000,000.

(B) DETERMINATION OF FEDERAL COST TO COMPLETE.—For purposes of subparagraph (A), the Federal cost to complete shall take into account any allowances authorized by section 902 of the Water Resources Development Act of 1986 (33 U.S.C. 2280), as applied to the most recent project schedule and cost estimate.

(3) IDENTIFICATION OF PROJECTS.—

(A) SEQUENCING OF PROJECTS.—

(i) IN GENERAL.—The Secretary shall identify projects and separable elements of projects for inclu-

sion on the final deauthorization list according to the order in which the projects and separable elements of the projects were authorized, beginning with the earliest authorized projects and separable elements of projects and ending once the last project or separable element of a project necessary to meet the aggregate amount under paragraph (2) is identified.

(ii) FACTORS TO CONSIDER.—The Secretary may identify projects and separable elements of projects in an order other than that established by clause (i) if the Secretary determines, on a case-by-case basis, that a project or separable element of a project is critical for interests of the United States, based on the possible impact of the project or separable element of the project on public health and safety, the national economy, or the environment.

(iii) CONSIDERATION OF PUBLIC COMMENTS.—In making determinations under clause (ii), the Secretary shall consider any comments received under subsection (c)(3).

(B) APPENDIX.—The Secretary shall include as part of the final deauthorization list an appendix that—

(i) identifies each project or separable element of a project on the interim deauthorization list developed under subsection (c) that is not included on the final deauthorization list; and

(ii) describes the reasons why the project or separable element is not included.

(4) SUBMISSION TO CONGRESS; PUBLICATION.—Not later than 120 days after the date on which the public comment period under subsection (c)(3) expires, the Secretary shall—

(A) submit the final deauthorization list and the appendix to the final deauthorization list to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives; and

(B) publish the final deauthorization list and the appendix to the final deauthorization list in the Federal Register.

(e) DEAUTHORIZATION; CONGRESSIONAL REVIEW.—

(1) IN GENERAL.—After the expiration of the 180-day period beginning on the date of submission of the final deauthorization report under subsection (d), a project or separable element of a project identified in the report is hereby deauthorized, unless Congress passes a joint resolution disapproving the final deauthorization report prior to the end of such period.

(2) NON-FEDERAL CONTRIBUTIONS.—

(A) IN GENERAL.—A project or separable element of a project identified in the final deauthorization report under subsection (d) shall not be deauthorized under this subsection if, before the expiration of the 180-day period referred to in paragraph (1), the non-Federal interest for the project or separable element of the project provides sufficient funds to complete the project or separable element of the project.

(B) TREATMENT OF PROJECTS.—Notwithstanding subparagraph (A), each project and separable element of a project identified in the final deauthorization report shall be treated as deauthorized for purposes of the aggregate deauthorization amount specified in subsection (d)(2).

(f) GENERAL PROVISIONS.—

(1) DEFINITIONS.—In this section:

(A) POST-AUTHORIZATION STUDY.—The term "post-authorization study" means—

(i) a feasibility report developed under section 905 of the Water Resources Development Act of 1986 (33 U.S.C. 2282);

(ii) a feasibility study, as defined in section 105(d) of the Water Resources Development Act of 1986 (33 U.S.C. 2215(d)); or

(iii) a review conducted under section 216 of the Flood Control Act of 1970 (33 U.S.C. 549a), including an initial appraisal that—

(I) demonstrates a Federal interest; and

(II) requires additional analysis for the project or separable element.

(B) WATER RESOURCES DEVELOPMENT PROJECT.—The term "water resources development project" includes an environmental infrastructure assistance project or program of the Corps of Engineers.

(2) TREATMENT OF PROJECT MODIFICATIONS.—For purposes of this section, if an authorized water resources development project or separable element of the project has been modified by an Act of Congress, the date of the authorization of the project or separable element shall be deemed to be the date of the most recent such modification.

SEC. 6002. REVIEW OF CORPS OF ENGINEERS ASSETS.

(a) ASSESSMENT AND INVENTORY.—Not later than 1 year after the date of enactment of this Act, the Secretary shall conduct an assessment of all properties under the control of the Corps of Engineers and develop an inventory of the properties that are not needed for the missions of the Corps of Engineers.

(b) CRITERIA.—In conducting the assessment and developing the inventory under subsection (a), the Secretary shall use the following criteria:

(1) The extent to which the property aligns with the current missions of the Corps of Engineers.

(2) The economic impact of the property on existing communities in the vicinity of the property.

(3) The extent to which the utilization rate for the property is being maximized and is consistent with nongovernmental industry standards for the given function or operation.

(4) The extent to which the reduction or elimination of the property could reduce operation and maintenance costs of the Corps of Engineers.

(5) The extent to which the reduction or elimination of the property could reduce energy consumption by the Corps of Engineers.

(c) NOTIFICATION.—As soon as practicable following completion of the inventory of properties under subsection (a), the Secretary shall provide the inventory to the Administrator of General Services.

(d) REPORT TO CONGRESS.—Not later than 30 days after the date of the notification under subsection (c), the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report containing the findings of the Secretary with respect to the assessment and inventory required under subsection (a).

SEC. 6003. BACKLOG PREVENTION.

(a) PROJECT DEAUTHORIZATION.—

(1) IN GENERAL.—A water resources development project, or separable element of such a project, authorized for construction by this Act shall not be authorized after the last day of the 7-year period beginning on the date of enactment of this Act unless funds have been obligated for construction of such project during that period.

(2) IDENTIFICATION OF PROJECTS.—Not later than 60 days after the expiration of the 7-year period referred to in paragraph (1), the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report that identifies the projects deauthorized under paragraph (1).

(b) REPORT TO CONGRESS.—Not later than 60 days after the expiration of the 12-year period beginning on the date of enactment of this Act, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives, and make available to the public, a report that contains—

(1) a list of any water resources development projects authorized by this Act for which construction has not been completed during that period;

(2) a description of the reasons the projects were not completed;

(3) a schedule for the completion of the projects based on expected levels of appropriations; and

(4) a 5-year and 10-year projection of construction backlog and any recommendations to Congress regarding how to mitigate current problems and the backlog.

SEC. 6004. DEAUTHORIZATIONS.

(a) IN GENERAL.—

(1) WALNUT CREEK (PACHECO CREEK), CALIFORNIA.—The portions of the project for flood protection on Walnut Creek, California, constructed under section 203 of the Flood Control Act of 1960 (Public Law 86–645; 74 Stat. 488), consisting of the Walnut Creek project from Sta 0+00 to Sta 142+00 and the upstream extent of the Walnut Creek project along Pacheco Creek from Sta 0+00 to Sta 73+50 are no longer authorized beginning on the date of enactment of this Act.

(2) WALNUT CREEK (SAN RAMON CREEK), CALIFORNIA.—The portion of the project for flood protection on Walnut Creek, California, constructed under section 203 of the Flood Control Act

of 1960 (Public Law 86–645; 74 Stat. 488), consisting of the culvert constructed by the Department of the Army on San Ramon Creek from Sta 4+27 to Sta 14+27 is no longer authorized beginning on the date of enactment of this Act.

(3) EIGHTMILE RIVER, CONNECTICUT.—

(A) The portion of the project for navigation, Eightmile River, Connecticut, authorized by the first section of the Act of June 25, 1910 (36 Stat. 633, chapter 382) (commonly known as the "River and Harbor Act of 1910"), that begins at a point of the existing 8-foot channel limit with coordinates N701002.39, E1109247.73, thence running north 2 degrees 19 minutes 57.1 seconds east 265.09 feet to a point N701267.26, E1109258.52, thence running north 7 degrees 47 minutes 19.3 seconds east 322.32 feet to a point N701586.60, E1109302.20, thence running north 90 degrees 0 minutes 0 seconds east 65.61 to a point N701586.60, E1109367.80, thence running south 7 degrees 47 minutes 19.3 seconds west 328.11 feet to a point N701261.52, E1109323.34, thence running south 2 degrees 19 minutes 57.1 seconds west 305.49 feet to an end at a point N700956.28, E1109310.91 on the existing 8-foot channel limit, shall be reduced to a width of 65 feet and the channel realigned to follow the deepest available water.

(B) The project referred to in subparagraph (A) beginning at a point N701296.72, E1109262.55 and running north 45 degrees 4 minutes 2.8 seconds west 78.09 feet to a point N701341.18, E1109217.98, thence running north 5 degrees 8 minutes 34.6 seconds east 180.14 feet to a point N701520.59, E1109234.13, thence running north 54 degrees 5 minutes 50.1 seconds east 112.57 feet to a point N701568.04, E1109299.66, thence running south 7 degrees 47 minutes 18.4 seconds west 292.58 feet to the point of origin; and the remaining area north of the channel realignment beginning at a point N700956.28, E1109310.91 thence running north 2 degrees 19 minutes 57.1 seconds east 305.49 feet west to a point N701261.52, E1109323.34 north 7 degrees 47 minutes 18.4 seconds east 328.11 feet to a point N701586.60, E1109367.81 thence running north 90 degrees 0 minutes 0 seconds east 7.81 feet to a point N701586.60, E1109375.62 thence running south 5 degrees 8 minutes 34.6 seconds west 626.29 feet to a point N700962.83, E1109319.47 thence south 52 degrees 35 minutes 36.5 seconds 10.79 feet to the point of origin is no longer authorized beginning on the date of enactment of this Act.

(4) HILLSBOROUGH (HILLSBORO) BAY AND RIVER, FLORIDA.—The portions of the project for navigation, Hillsborough (Hillsboro) Bay and River, Florida, authorized by the Act of March 3, 1899 (30 Stat. 1126; chapter 425), that extend on either side of the Hillsborough River from the Kennedy Boulevard bridge to the mouth of the river that cause the existing channel to exceed 100 feet in width are no longer authorized beginning on the date of enactment of this Act.

(5) KAHULUI WASTEWATER RECLAMATION FACILITY, MAUI, HAWAII.—The project authorized pursuant to section 14 of the

Flood Control Act of 1946 (33 U.S.C. 701r) to provide shoreline protection for the Kahului Wastewater Reclamation Facility, located on the Island of Maui in the State of Hawaii is no longer authorized beginning on the date of enactment of this Act.

(6) LUCAS-BERG PIT, ILLINOIS WATERWAY AND GRANT CALUMET RIVER, ILLINOIS.—The portion of the project for navigation, Illinois Waterway and Grand Calumet River, Illinois, authorized by the first section of the Act of July 24, 1946 (60 Stat. 636; chapter 595), that consists of the Lucas-Berg Pit confined disposal facility, Illinois is no longer authorized beginning on the date of enactment of this Act.

(7) PORT OF IBERIA, LOUISIANA.—Section 1001(25) of the Water Resources Development Act of 2007 (121 Stat. 1053) is amended by striking "; except that" and all that follows before the period at the end.

(8) ROCKLAND HARBOR, MAINE.—The project for navigation, Rockland Harbor, Maine, authorized by the Act of June 3, 1896 (29 Stat. 202; chapter 314), and described as follows is no longer authorized beginning on the date of enactment of this Act:

(A) Beginning at the point in the 14-foot turning basin limit with coordinates N162,927.61, E826,210.16.

(B) Thence running north 45 degrees 45 minutes 15.6 seconds east 287.45 feet to a point N163,128.18, E826,416.08.

(C) Thence running south 13 degrees 17 minutes 53.3 seconds east 129.11 feet to a point N163,002.53, E826,445.77.

(D) Thence running south 45 degrees 45 minutes 18.4 seconds west 221.05 feet to a point N162,848.30, E826,287.42.

(E) Thence running north 44 degrees 14 minutes 59.5 seconds west 110.73 feet to the point of origin.

(9) THOMASTON HARBOR, GEORGES RIVER, MAINE.—The portion of the project for navigation, Georges River, Maine (Thomaston Harbor), authorized by the first section of the Act of June 3, 1896 (29 Stat. 215, chapter 314), and modified by section 317 of the Water Resources Development Act of 2000 (Public Law 106–541; 114 Stat. 2604), that lies northwesterly of a line commencing at point N87,220.51, E321,065.80 thence running northeasterly about 125 feet to a point N87,338.71, E321,106.46 is no longer authorized beginning on the date of enactment of this Act.

(10) CORSICA RIVER, QUEEN ANNE'S COUNTY, MARYLAND.—The portion of the project for improving the Corsica River, Maryland, authorized by the first section of the Act of July 25, 1912 (37 Stat. 205; chapter 253), and described as follows is no longer authorized beginning on the date of enactment of this Act: Approximately 2,000 feet of the eastern section of the project channel extending from—

(A) centerline station 0+000 (coordinates N506350.60, E1575013.60); to

(B) station 2+000 (coordinates N508012.39, E1574720.18).

(11) GOOSE CREEK, SOMERSET COUNTY, MARYLAND.—The project for navigation, Goose Creek, Somerset County, Maryland, carried out pursuant to section 107 of the Rivers and Harbor Act of 1960 (33 U.S.C. 577), is realigned as follows: Beginning at Goose Creek Channel Geometry Centerline of the 60-foot-wide main navigational ship channel, Centerline Station No. 0+00, coordinates North 157851.80, East 1636954.70, as stated and depicted on the Condition Survey Goose Creek, Sheet 1 of 1, prepared by the United States Army Corps of Engineers, Baltimore District, July 2003; thence departing the aforementioned centerline traveling the following courses and distances: S. 64 degrees 49 minutes 06 seconds E., 1583.82 feet to a point, on the outline of said 60-foot-wide channel thence binding on said out-line the following four courses and distances: S. 63 degrees 26 minutes 06 seconds E., 1460.05 feet to a point, thence; N. 50 degrees 38 minutes 26 seconds E., 973.28 feet to a point, thence; N. 26 degrees 13 minutes 09 seconds W., 240.39 feet to a point on the Left Toe of the 60-foot-wide main navigational channel at computed Centerline Station No. 42+57.54, coordinates North 157357.84, East 1640340.23. Geometry Left Toe of the 60-foot-wide main navigational ship channel, Left Toe Station No. 0+00, coordinates North 157879.00, East 1636967.40, as stated and depicted on the Condition Survey Goose Creek, Sheet 1 of 1, prepared by the United States Army Corps of Engineers, Baltimore District, August 2010; thence departing the aforementioned centerline traveling the following courses and distances: S. 64 degrees 49 minutes 12 seconds E., 1583.91 feet to a point, on the outline of said 60-foot-wide channel thence binding on said out-line the following eight courses and distances: S. 63 degrees 25 minutes 38 seconds E., 1366.25 feet to a point, thence; N. 83 degrees 36 minutes 24 seconds E., 125.85 feet to a point, thence; N. 50 degrees 38 minutes 26 seconds E., 805.19 feet to a point, thence; N. 12 degrees 12 minutes 29 seconds E., 78.33 feet to a point thence; N. 26 degrees 13 minutes 28 seconds W., 46.66 feet to a point thence; S. 63 degrees 45 minutes 41 seconds W., 54.96 feet to a point thence; N. 26 degrees 13 minutes 24 seconds W., 119.94 feet to a point on the Left Toe of the 60-foot-wide main navigational channel at computed Centerline Station No. 41+81.10, coordinates North 157320.30, East 1640264.00. Geometry Right Toe of the 60-foot-wide main navigational ship channel, Right Toe Station No. 0+00, coordinates North 157824.70, East 1636941.90, as stated and depicted on the Condition Survey Goose Creek, Sheet 1 of 1, prepared by the United States Army Corps of Engineers, Baltimore District, August 2010; thence departing the aforementioned centerline traveling the following courses and distances: S. 64 degrees 49 minutes 06 seconds E., 1583.82 feet to a point, on the outline of said 60-foot-wide channel thence binding on said out-line the following six courses and distances: S. 63 degrees 25 minutes 47 seconds E., 1478.79 feet to a point, thence; N. 50 degrees 38 minutes 26 seconds E., 1016.69 feet to a point, thence; N. 26 degrees 14 minutes 49 seconds W., 144.26 feet to a point, thence; N. 63 degrees 54 minutes 03 seconds E., 55.01 feet to a point thence; N. 26 degrees 12 minutes 08 seconds W., 120.03 feet to a point a point on the Right Toe of the 60-foot-

wide main navigational channel at computed Centerline Station No. 43+98.61, coordinates North 157395.40, East 1640416.50.

(12) LOWER THOROUGHFARE, DEAL ISLAND, MARYLAND.—The portion of the project for navigation, Lower Thoroughfare, Maryland, authorized by the Act of June 25, 1910 (36 Stat. 639, chapter 382) (commonly known as the "River and Harbor Act of 1910"), that begins at Lower Thoroughfare Channel Geometry Centerline of the 60-foot-wide main navigational ship channel, Centerline Station No. 44+88, coordinates North 170435.62, East 1614588.93, as stated and depicted on the Condition Survey Lower Thoroughfare, Deal Island, Sheet 1 of 3, prepared by the United States Army Corps of Engineers, Baltimore District, August 2010; thence departing the aforementioned centerline traveling the following courses and distances: S. 42 degrees 20 minutes 44 seconds W., 30.00 feet to a point, on the outline of said 60-foot-wide channel thence binding on said out-line the following four courses and distances: N. 64 degrees 08 minutes 55 seconds W., 53.85 feet to a point, thence; N. 42 degrees 20 minutes 43 seconds W., 250.08 feet to a point, thence; N. 47 degrees 39 minutes 03 seconds E., 20.00 feet to a point, thence; S. 42 degrees 20 minutes 44 seconds E., 300.07 feet to a point binding on the Left Toe of the 60-foot-wide main navigational channel at computed Centerline Station No. 43+92.67, coordinates North 170415.41, 1614566.76; thence; continuing with the aforementioned centerline the following courses and distances: S. 42 degrees 20 minutes 42 seconds W., 30.00 feet to a point, on the outline of said 60-foot-wide channel thence binding on said out-line the following four courses and distances: N. 20 degrees 32 minutes 06 seconds W., 53.85 feet to a point, thence; N. 42 degrees 20 minutes 49 seconds W., 250.08 feet to a point, thence; S. 47 degrees 39 minutes 03 seconds W., 20.00 feet to a point, thence; S. 42 degrees 20 minutes 46 seconds E., 300.08 feet to a point binding on the Left Toe of the 60-foot-wide main navigational channel at computed Centerline Station No. 43+92.67, coordinates North 170415.41, 1614566.76 is no longer authorized beginning on the date of enactment of this Act.

(13) GLOUCESTER HARBOR AND ANNISQUAM RIVER, MASSACHUSETTS.—The portions of the project for navigation, Gloucester Harbor and Annisquam River, Massachusetts, authorized by section 2 of the Act of March 2, 1945 (59 Stat. 12; chapter 19), consisting of an 8-foot anchorage area in Lobster Cove, and described as follows are no longer authorized beginning on the date of enactment of this Act:

(A) Beginning at a bend along the easterly limit of the existing project, N3063230.31, E878283.77, thence running northwesterly about 339 feet to a point, N3063478.86, E878053.83, thence running northwesterly about 281 feet to a bend on the easterly limit of the existing project, N3063731.88, E877932.54, thence running southeasterly about 612 feet along the easterly limit of the existing project to the point of origin.

(B) Beginning at a bend along the easterly limit of the existing project, N3064065.80, E878031.45, thence running

northwesterly about 621 feet to a point, N3064687.05, E878031.13, thence running southwesterly about 122 feet to a point, N3064686.98, E877908.85, thence running southeasterly about 624 feet to a point, N3064063.31, E877909.17, thence running southwesterly about 512 feet to a point, N3063684.73, E877564.56, thence running about 741 feet to a point along the westerly limit of the existing project, N3063273.98, E876947.77, thence running northeasterly about 533 feet to a bend along the westerly limit of the existing project, N3063585.62, E877380.63, thence running about 147 feet northeasterly to a bend along the westerly limit of the project, N3063671.29, E877499.63, thence running northeasterly about 233 feet to a bend along the westerly limit of the existing project, N3063840.60, E877660.29, thence running about 339 feet northeasterly to a bend along the westerly limit of the existing project, N3064120.34, E877852.55, thence running about 573 feet to a bend along the westerly limit of the existing project, N3064692.98, E877865.04, thence running about 113 feet to a bend along the northerly limit of the existing project, N3064739.51, E877968.31, thence running 145 feet southeasterly to a bend along the northerly limit of the existing project, N3064711.19, E878110.69, thence running about 650 feet along the easterly limit of the existing project to the point of origin.

(14) CLATSOP COUNTY DIKING DISTRICT NO. 10, KARLSON ISLAND, OREGON.—The Diking District No. 10, Karlson Island portion of the project for raising and improving existing levees in Clatsop County, Oregon, authorized by section 5 of the Act of June 22, 1936 (49 Stat. 1590) is no longer authorized beginning on the date of enactment of this Act.

(15) NUMBERG DIKE NO. 34 LEVEED AREA, CLATSOP COUNTY DIKING DISTRICT NO. 13, CLATSOP COUNTY, OREGON (WALLUSKI-YOUNGS).—The Numberg Dike No. 34 leveed area, Clatsop County Diking District, No. 13, Walluski River and Youngs River dikes, portion of the project for raising and improving existing levees in Clatsop County, Oregon, authorized by section 5 of the Act of June 22, 1936 (49 Stat. 1590) is no longer authorized beginning on the date of enactment of this Act.

(16) EAST FORK OF TRINITY RIVER, TEXAS.—The portion of the project for flood protection on the East Fork of the Trinity River, Texas, authorized by section 203 of the Flood Control Act of 1962 (76 Stat. 1185), that consists of the 2 levees identified as Kaufman County Levees K5E and K5W is no longer authorized beginning on the date of enactment of this Act.

(17) BURNHAM CANAL, WISCONSIN.—The portion of the project for navigation, Milwaukee Harbor Project, Milwaukee, Wisconsin, known as the Burnham Canal, authorized by the first section of the Act of March 3, 1843 (5 Stat. 619; chapter 85), and described as follows is no longer authorized beginning on the date of enactment of this Act:

(A) Beginning at channel point #415a N381768.648, E2524554.836, a distance of about 170.58 feet.

(B) Thence running south 53 degrees 43 minutes 41 seconds west to channel point #417 N381667.728, E2524417.311, a distance of about 35.01 feet.

(C) Thence running south 34 degrees 10 minutes 40 seconds west to channel point #501 N381638.761, E2524397.639, a distance of about 139.25 feet.

(D) Thence running south 34 degrees 10 minutes 48 seconds west to channel point #503 N381523.557, E2524319.406, a distance of about 235.98 feet.

(E) Thence running south 32 degrees 59 minutes 13 seconds west to channel point #505 N381325.615, E2524190.925, a distance of about 431.29 feet.

(F) Thence running south 32 degrees 36 minutes 05 seconds west to channel point #509 N380962.276, E2523958.547, a distance of about 614.52 feet.

(G) Thence running south 89 degrees 05 minutes 00 seconds west to channel point #511 N380952.445, E2523344.107, a distance of about 74.68 feet.

(H) Thence running north 89 degrees 04 minutes 59 seconds west to channel point #512 N381027.13, E2523342.91, a distance of about 533.84 feet.

(I) Thence running north 89 degrees 05 minutes 00 seconds east to channel point #510 N381035.67, E2523876.69, a distance of about 47.86 feet.

(J) Thence running north 61 degrees 02 minutes 07 seconds east to channel point #508 N381058.84, E2523918.56, a distance of about 308.55 feet.

(K) Thence running north 36 degrees 15 minutes 29 seconds east to channel point #506 N381307.65, E2524101.05, a distance of about 199.98 feet.

(L) Thence running north 32 degrees 59 minutes 12 seconds east to channel point #504 N381475.40, E2524209.93, a distance of about 195.14 feet.

(M) Thence running north 26 degrees 17 minutes 22 seconds east to channel point #502 N381650.36, E2524296.36, a distance of about 81.82 feet.

(N) Thence running north 88 degrees 51 minutes 05 seconds west to channel point #419 N381732.17, E2524294.72, a distance of about 262.65 feet.

(O) Thence running north 82 degrees 01 minutes 02 seconds east to channel point #415a, the point of origin.

(18) MANITOWOC HARBOR, WISCONSIN.—The portion of the project for navigation, Manitowoc River, Manitowoc, Wisconsin, authorized by the Act of August 30, 1852 (10 Stat. 58; chapter 104), and described as follows is no longer authorized beginning on the date of enactment of this Act: The triangular area bound by—

(A) 44.09893383N and 087.66854912W;

(B) 44.09900535N and 087.66864372W; and

(C) 44.09857884N and 087.66913123W.

(b) SEWARD WATERFRONT, SEWARD, ALASKA.—

(1) IN GENERAL.—Subject to paragraph (2), the portion of the project for navigation, Seward Harbor, Alaska, identified as Tract H, Seward Original Townsite, Waterfront Park Replat, Plat No 2012–4, Seward Recording District, shall not be subject

to navigation servitude beginning on the date of enactment of this Act.

(2) ENTRY BY FEDERAL GOVERNMENT.—The Federal Government may enter upon the property referred to in paragraph (1) to carry out any required operation and maintenance of the general navigation features of the project referred to in paragraph (1).

(c) PORT OF HOOD RIVER, OREGON.—

(1) EXTINGUISHMENT OF PORTIONS OF EXISTING FLOWAGE EASEMENT.—With respect to the properties described in paragraph (2), beginning on the date of enactment of this Act, the flowage easement identified as Tract 1200E–6 on the Easement Deed recorded as Instrument No. 740320 is extinguished above elevation 79.39 feet (NGVD 29) the Ordinary High Water Line.

(2) AFFECTED PROPERTIES.—The properties referred to in paragraph (1), as recorded in Hood River County, Oregon, are as follows:

(A) Instrument Number 2010–1235.

(B) Instrument Number 2010–02366.

(C) Instrument Number 2010–02367.

(D) Parcel 2 of Partition Plat #2011–12P.

(E) Parcel 1 of Partition Plat 2005–26P.

(3) FEDERAL LIABILITIES; CULTURAL, ENVIRONMENTAL, AND OTHER REGULATORY REVIEWS.—

(A) FEDERAL LIABILITY.—The United States shall not be liable for any injury caused by the extinguishment of the easement under this subsection.

(B) CULTURAL AND ENVIRONMENTAL REGULATORY ACTIONS.—Nothing in this subsection establishes any cultural or environmental regulation relating to the properties described in paragraph (2).

(4) EFFECT ON OTHER RIGHTS.—Nothing in this subsection affects any remaining right or interest of the Corps of Engineers in the properties described in paragraph (2).

SEC. 6005. LAND CONVEYANCES.

(a) OAKLAND INNER HARBOR TIDAL CANAL, CALIFORNIA.—Section 3182(b)(1) of the Water Resources Development Act of 2007 (Public Law 110–114; 121 Stat. 1165) is amended—

(1) in subparagraph (A) by inserting ", or to a multicounty public entity that is eligible to hold title to real property" after "To the city of Oakland"; and

(2) in subparagraphs (B) and (C) by inserting "multicounty public entity or other" before "public entity".

(b) ST. CHARLES COUNTY, MISSOURI, LAND EXCHANGE.—

(1) DEFINITIONS.—In this subsection:

(A) FEDERAL LAND.—The term "Federal land" means approximately 84 acres of land, as identified by the Secretary, that is a portion of the approximately 227 acres of land leased from the Corps of Engineers by Ameren Corporation for the Portage Des Sioux Power Plant in St. Charles County, Missouri (Lease No. DA-23-065–CIVENG–64–651, Pool 26).

(B) NON-FEDERAL LAND.—The term "non-Federal land" means the approximately 68 acres of land owned by Ameren Corporation in Jersey County, Illinois, contained

within the north half of section 23, township 6 north, range 11 west of the third principal meridian.

(2) LAND EXCHANGE.—On conveyance by Ameren Corporation to the United States of all right, title, and interest in and to the non-Federal land, the Secretary shall convey to Ameren Corporation all right, title, and interest of the United States in and to the Federal land.

(3) SPECIFIC CONDITIONS.—

(A) DEEDS.—

(i) DEED TO NON-FEDERAL LAND.—The Secretary may only accept conveyance of the non-Federal land by warranty deed, as determined acceptable by the Secretary.

(ii) DEED TO FEDERAL LAND.—The Secretary shall convey the Federal land to Ameren Corporation by quitclaim deed.

(B) CASH PAYMENT.—If the appraised fair market value of the Federal land, as determined by the Secretary, exceeds the appraised fair market value of the non-Federal land, as determined by the Secretary, Ameren Corporation shall make a cash payment to the United States reflecting the difference in the appraised fair market values.

(c) TULSA PORT OF CATOOSA, ROGERS COUNTY, OKLAHOMA, LAND EXCHANGE.—

(1) DEFINITIONS.—In this subsection:

(A) FEDERAL LAND.—The term "Federal land" means the approximately 87 acres of land situated in Rogers County, Oklahoma, contained within United States Tracts 413 and 427 and acquired for the McClellan-Kerr Arkansas Navigation System.

(B) NON-FEDERAL LAND.—The term "non-Federal land" means the approximately 34 acres of land situated in Rogers County, Oklahoma, and owned by the Tulsa Port of Catoosa that lie immediately south and east of the Federal land.

(2) LAND EXCHANGE.—On conveyance by the Tulsa Port of Catoosa to the United States of all right, title, and interest in and to the non-Federal land, the Secretary shall convey to the Tulsa Port of Catoosa all right, title, and interest of the United States in and to the Federal land.

(3) SPECIFIC CONDITIONS.—

(A) DEEDS.—

(i) DEED TO NON-FEDERAL LAND.—The Secretary may only accept conveyance of the non-Federal land by warranty deed, as determined acceptable by the Secretary.

(ii) DEED TO FEDERAL LAND.—The Secretary shall convey the Federal land to the Tulsa Port of Catoosa by quitclaim deed and subject to any reservations, terms, and conditions the Secretary determines necessary to allow the United States to operate and maintain the McClellan-Kerr Arkansas River Navigation System.

(iii) CASH PAYMENT.—If the appraised fair market value of the Federal land, as determined by the Sec-

retary, exceeds the appraised fair market value of the non-Federal land, as determined by the Secretary, the Tulsa Port of Catoosa shall make a cash payment to the United States reflecting the difference in the appraised fair market values.

(d) HAMMOND BOAT BASIN, WARRENTON, OREGON.—

(1) DEFINITIONS.—In this subsection:

(A) CITY.—The term "City" means the city of Warrenton, located in Clatsop County, Oregon.

(B) MAP.—The term "map" means the map contained in Exhibit A of Department of the Army Lease No. DACW57–1–88–0033 (or a successor instrument).

(2) CONVEYANCE AUTHORITY.—Subject to the provisions of this subsection, the Secretary shall convey to the City by quitclaim deed, and without consideration, all right, title, and interest of the United States in and to the parcel of land described in paragraph (3).

(3) DESCRIPTION OF LAND.—

(A) IN GENERAL.—Except as provided in subparagraph (B), the land referred to in paragraph (2) is the parcel totaling approximately 59 acres located in the City, together with any improvements thereon, including the Hammond Marina (as described in the map).

(B) EXCLUSION.—The land referred to in paragraph (2) shall not include the site provided for the fisheries research support facility of the National Marine Fisheries Service.

(C) AVAILABILITY OF MAP.—The map shall be on file in the Portland District Office of the Corps of Engineers.

(4) TERMS AND CONDITIONS.—As a condition of the conveyance under this subsection, the Secretary may impose a requirement that the City assume full responsibility for operating and maintaining the channel and the breakwater.

(5) REVERSION.—If the Secretary determines that the land conveyed under this subsection ceases to be owned by the public, all right, title, and interest in and to the land shall revert, at the discretion of the Secretary, to the United States.

(6) DEAUTHORIZATION.—After the land is conveyed under this subsection, the land shall no longer be a portion of the project for navigation, Hammond Small Boat Basin, Oregon, authorized by section 107 of the Rivers and Harbor Act of 1960 (33 U.S.C. 577).

(e) CRANEY ISLAND DREDGED MATERIAL MANAGEMENT AREA, PORTSMOUTH, VIRGINIA.—

(1) IN GENERAL.—Subject to the conditions described in this subsection, the Secretary may convey to the Commonwealth of Virginia, by quitclaim deed and without consideration, all right, title, and interest of the United States in and to 2 parcels of land situated within the project for navigation, Craney Island Eastward Expansion, Norfolk Harbor and Channels, Hampton Roads, Virginia, authorized by section 1001(45) of the Water Resources Development Act of 2007 (Public Law 110–114; 121 Stat. 1057), together with any improvements thereon.

(2) LANDS TO BE CONVEYED.—

(A) IN GENERAL.—The 2 parcels of land to be conveyed under this subsection include a parcel consisting of ap-

proximately 307.82 acres of land and a parcel consisting of approximately 13.33 acres of land, both located along the eastern side of the Craney Island Dredged Material Management Area in Portsmouth, Virginia.

(B) USE.—The 2 parcels of land described in subparagraph (A) may be used by the Commonwealth of Virginia exclusively for the purpose of port expansion, including the provision of road and rail access and the construction of a shipping container terminal.

(3) REVERSION.—If the Secretary determines that the land conveyed under this subsection ceases to be owned by the public or is used for any purpose that is inconsistent with paragraph (2), all right, title, and interest in and to the land shall revert, at the discretion of the Secretary, to the United States.

(f) CITY OF ASOTIN, WASHINGTON.—

(1) IN GENERAL.—The Secretary shall convey to the city of Asotin, Asotin County, Washington, without monetary consideration, all right, title, and interest of the United States in and to the land described in paragraph (3).

(2) REVERSION.—If the land transferred under this subsection ceases at any time to be used for a public purpose, the land shall revert to the United States.

(3) DESCRIPTION.—The land to be conveyed to the city of Asotin, Washington, under this subsection are—

(A) the public ball fields designated as Tracts 1503, 1605, 1607, 1609, 1611, 1613, 1615, 1620, 1623, 1624, 1625, 1626, and 1631; and

(B) other leased areas designated as Tracts 1506, 1522, 1523, 1524, 1525, 1526, 1527, 1529, 1530, 1531, and 1563.

(g) GENERALLY APPLICABLE PROVISIONS.—

(1) SURVEY TO OBTAIN LEGAL DESCRIPTION.—The exact acreage and the legal description of any real property to be conveyed under this section shall be determined by a survey that is satisfactory to the Secretary.

(2) APPLICABILITY OF PROPERTY SCREENING PROVISIONS.—Section 2696 of title 10, United States Code, shall not apply to any conveyance under this section.

(3) ADDITIONAL TERMS AND CONDITIONS.—The Secretary may require that any conveyance under this section be subject to such additional terms and conditions as the Secretary considers necessary and appropriate to protect the interests of the United States.

(4) COSTS OF CONVEYANCE.—An entity to which a conveyance is made under this section shall be responsible for all reasonable and necessary costs, including real estate transaction and environmental documentation costs, associated with the conveyance.

(5) LIABILITY.—An entity to which a conveyance is made under this section shall hold the United States harmless from any liability with respect to activities carried out, on or after the date of the conveyance, on the real property conveyed. The United States shall remain responsible for any liability with respect to activities carried out, before such date, on the real property conveyed.

(h) RELEASE OF USE RESTRICTIONS.—Notwithstanding any other provision of law, the Tennessee Valley Authority shall, without monetary consideration, grant releases from real estate restrictions established pursuant to section 4(k)(b) of the Tennessee Valley Authority Act of 1933 (16 U.S.C. 831c(k)(b)) with respect to tracts of land identified in section 4(k)(b) of that Act, subject to the condition that such releases shall be granted in a manner consistent with applicable Tennessee Valley Authority policies.

TITLE VII—WATER RESOURCES INFRASTRUCTURE

SEC. 7001. ANNUAL REPORT TO CONGRESS.

(a) IN GENERAL.—Not later than February 1 of each year, the Secretary shall develop and submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives an annual report, to be entitled "Report to Congress on Future Water Resources Development", that identifies the following:

(1) FEASIBILITY REPORTS.—Each feasibility report that meets the criteria established in subsection (c)(1)(A).

(2) PROPOSED FEASIBILITY STUDIES.—Any proposed feasibility study submitted to the Secretary by a non-Federal interest pursuant to subsection (b) that meets the criteria established in subsection (c)(1)(A).

(3) PROPOSED MODIFICATIONS.—Any proposed modification to an authorized water resources development project or feasibility study that meets the criteria established in subsection (c)(1)(A) that—

(A) is submitted to the Secretary by a non-Federal interest pursuant to subsection (b); or

(B) is identified by the Secretary for authorization.

(b) REQUESTS FOR PROPOSALS.—

(1) PUBLICATION.—Not later than May 1 of each year, the Secretary shall publish in the Federal Register a notice requesting proposals from non-Federal interests for proposed feasibility studies and proposed modifications to authorized water resources development projects and feasibility studies to be included in the annual report.

(2) DEADLINE FOR REQUESTS.—The Secretary shall include in each notice required by this subsection a requirement that non-Federal interests submit to the Secretary any proposals described in paragraph (1) by not later than 120 days after the date of publication of the notice in the Federal Register in order for the proposals to be considered for inclusion in the annual report.

(3) NOTIFICATION.—On the date of publication of each notice required by this subsection, the Secretary shall—

(A) make the notice publicly available, including on the Internet; and

(B) provide written notification of the publication to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives.

(c) CONTENTS.—

(1) FEASIBILITY REPORTS, PROPOSED FEASIBILITY STUDIES, AND PROPOSED MODIFICATIONS.—

(A) CRITERIA FOR INCLUSION IN REPORT.—The Secretary shall include in the annual report only those feasibility reports, proposed feasibility studies, and proposed modifications to authorized water resources development projects and feasibility studies that—

(i) are related to the missions and authorities of the Corps of Engineers;

(ii) require specific congressional authorization, including by an Act of Congress;

(iii) have not been congressionally authorized;

(iv) have not been included in any previous annual report; and

(v) if authorized, could be carried out by the Corps of Engineers.

(B) DESCRIPTION OF BENEFITS.—

(i) DESCRIPTION.—The Secretary shall describe in the annual report, to the extent applicable and practicable, for each proposed feasibility study and proposed modification to an authorized water resources development project or feasibility study included in the annual report, the benefits, as described in clause (ii), of each such study or proposed modification (including the water resources development project that is the subject of the proposed feasibility study or the proposed modification to an authorized feasibility study).

(ii) BENEFITS.—The benefits (or expected benefits, in the case of a proposed feasibility study) described in this clause are benefits to—

(I) the protection of human life and property;

(II) improvement to transportation;

(III) the national economy;

(IV) the environment; or

(V) the national security interests of the United States.

(C) IDENTIFICATION OF OTHER FACTORS.—The Secretary shall identify in the annual report, to the extent practicable—

(i) for each proposed feasibility study included in the annual report, the non-Federal interest that submitted the proposed feasibility study pursuant to subsection (b); and

(ii) for each proposed feasibility study and proposed modification to an authorized water resources development project or feasibility study included in the annual report, whether the non-Federal interest has demonstrated—

(I) that local support exists for the proposed feasibility study or proposed modification to an authorized water resources development project or feasibility study (including the water resources development project that is the subject of the pro-

posed feasibility study or the proposed modification to an authorized feasibility study); and

(II) the financial ability to provide the required non-Federal cost share.

(2) TRANSPARENCY.—The Secretary shall include in the annual report, for each feasibility report, proposed feasibility study, and proposed modification to an authorized water resources development project or feasibility study included under paragraph (1)(A)—

(A) the name of the associated non-Federal interest, including the name of any non-Federal interest that has contributed, or is expected to contribute, a non-Federal share of the cost of—

(i) the feasibility report;

(ii) the proposed feasibility study;

(iii) the authorized feasibility study for which the modification is proposed; or

(iv) construction of—

(I) the water resources development project that is the subject of—

(aa) the feasibility report;

(bb) the proposed feasibility study; or

(cc) the authorized feasibility study for which a modification is proposed; or

(II) the proposed modification to an authorized water resources development project;

(B) a letter or statement of support for the feasibility report, proposed feasibility study, or proposed modification to an authorized water resources development project or feasibility study from each associated non-Federal interest;

(C) the purpose of the feasibility report, proposed feasibility study, or proposed modification to an authorized water resources development project or feasibility study;

(D) an estimate, to the extent practicable, of the Federal, non-Federal, and total costs of—

(i) the proposed modification to an authorized feasibility study; and

(ii) construction of—

(I) the water resources development project that is the subject of—

(aa) the feasibility report; or

(bb) the authorized feasibility study for which a modification is proposed, with respect to the change in costs resulting from such modification; or

(II) the proposed modification to an authorized water resources development project; and

(E) an estimate, to the extent practicable, of the monetary and nonmonetary benefits of—

(i) the water resources development project that is the subject of—

(I) the feasibility report; or

(II) the authorized feasibility study for which a modification is proposed, with respect to the benefits of such modification; or

(ii) the proposed modification to an authorized water resources development project.

(3) CERTIFICATION.—The Secretary shall include in the annual report a certification stating that each feasibility report, proposed feasibility study, and proposed modification to an authorized water resources development project or feasibility study included in the annual report meets the criteria established in paragraph (1)(A).

(4) APPENDIX.—The Secretary shall include in the annual report an appendix listing the proposals submitted under subsection (b) that were not included in the annual report under paragraph (1)(A) and a description of why the Secretary determined that those proposals did not meet the criteria for inclusion under such paragraph.

(d) SPECIAL RULE FOR INITIAL ANNUAL REPORT.—Notwithstanding any other deadlines required by this section, the Secretary shall—

(1) not later than 60 days after the date of enactment of this Act, publish in the Federal Register a notice required by subsection (b)(1); and

(2) include in such notice a requirement that non-Federal interests submit to the Secretary any proposals described in subsection (b)(1) by not later than 120 days after the date of publication of such notice in the Federal Register in order for such proposals to be considered for inclusion in the first annual report developed by the Secretary under this section.

(e) PUBLICATION.—Upon submission of an annual report to Congress, the Secretary shall make the annual report publicly available, including through publication on the Internet.

(f) DEFINITIONS.—In this section:

(1) ANNUAL REPORT.—The term "annual report" means a report required by subsection (a).

(2) FEASIBILITY REPORT.—

(A) IN GENERAL.—The term "feasibility report" means a final feasibility report developed under section 905 of the Water Resources Development Act of 1986 (33 U.S.C. 2282).

(B) INCLUSIONS.—The term "feasibility report" includes—

(i) a report described in section 105(d)(2) of the Water Resources Development Act of 1986 (33 U.S.C. 2215(d)(2)); and

(ii) where applicable, any associated report of the Chief of Engineers.

(3) FEASIBILITY STUDY.—The term "feasibility study" has the meaning given that term in section 105 of the Water Resources Development Act of 1986 (33 U.S.C. 2215).

(4) NON-FEDERAL INTEREST.—The term "non-Federal interest" has the meaning given that term in section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b).

SEC. 7002. AUTHORIZATION OF FINAL FEASIBILITY STUDIES.

The following final feasibility studies for water resources development and conservation and other purposes are authorized to be carried out by the Secretary substantially in accordance with the plan, and subject to the conditions, described in the respective reports designated in this section:

(1) NAVIGATION.—

A. State	***B. Name***	***C. Date of Report of Chief of Engineers***	***D. Estimated Costs***
1. TX, LA	*Sabine Neches Waterway, Southeast Texas and Southwest Louisiana*	*July 22, 2011*	*Federal: $748,070,000 Non-Federal: $365,970,000 Total: $1,114,040,000*
2. FL	*Jacksonville Harbor-Milepoint*	*Apr. 30, 2012*	*Federal: $27,870,000 Non-Federal: $9,290,000 Total: $37,160,000*
3. GA	*Savannah Harbor Expansion Project*	*Aug. 17, 2012*	*Federal: $492,000,000 Non-Federal: $214,000,000 Total: $706,000,000*
4. TX	*Freeport Harbor*	*Jan. 7, 2013*	*Federal: $121,000,000 Non-Federal: $118,300,000 Total: $239,300,000*
5. FL	*Canaveral Harbor (Sect 203 Sponsor Report)*	*Feb. 25, 2013*	*Federal: $29,240,000 Non-Federal: $11,830,000 Total: $41,070,000*
6. MA	*Boston Harbor*	*Sept. 30, 2013*	*Federal: $216,470,000 Non-Federal: $94,510,000 Total: $310,980,000*
7. FL	*Lake Worth Inlet*	*Apr. 16, 2014*	*Federal: $57,556,000 Non-Federal: $30,975,000 Total: $88,531,000*

A. State	B. Name	C. Date of Report of Chief of Engineers	D. Estimated Costs
8. FL	Jacksonville Harbor	Apr. 16, 2014	Federal: $362,000,000 Non-Federal: $238,900,000 Total: $600,900,000

(2) FLOOD RISK MANAGEMENT.—

A. State	B. Name	C. Date of Report of Chief of Engineers	D. Estimated Costs
1. KS	Topeka	Aug. 24, 2009	Federal: $17,360,000 Non-Federal: $9,350,000 Total: $26,710,000
2. CA	American River Watershed, Common Features Project, Natomas Basin	Dec. 30, 2010	Federal: $760,630,000 Non-Federal: $386,650,000 Total: $1,147,280,000
3. IA	Cedar River, Cedar Rapids	Jan. 27, 2011	Federal: $73,130,000 Non-Federal: $39,380,000 Total: $112,510,000
4. MN, ND	Fargo-Moorhead Metro	Dec. 19, 2011	Federal: $846,700,000 Non-Federal: $1,077,600,000 Total: $1,924,300,000
5. KY	Ohio River Shoreline, Paducah	May 16, 2012	Federal: $13,170,000 Non-Federal: $7,090,000 Total: $20,260,000

A. State	*B. Name*	*C. Date of Report of Chief of Engineers*	*D. Estimated Costs*
6. MO	*Jordan Creek, Springfield*	*Aug. 26, 2013*	*Federal: $13,560,000* *Non-Federal: $7,300,000* *Total: $20,860,000*
7. CA	*Orestimba Creek, San Joaquin River Basin*	*Sept. 25, 2013*	*Federal: $23,680,000* *Non-Federal: $21,650,000* *Total: $45,330,000*
8. CA	*Sutter Basin*	*Mar. 12, 2014*	*Federal: $255,270,000* *Non-Federal: $433,660,000* *Total: $688,930,000*
9. NV	*Truckee Meadows*	*Apr. 11, 2014*	*Federal: $181,652,000* *Non-Federal: $99,168,000* *Total: $280,820,000*

(3) HURRICANE AND STORM DAMAGE RISK REDUCTION.—

A. State	*B. Name*	*C. Date of Report of Chief of Engineers*	*D. Estimated Initial Costs and Estimated Renourishment Costs*
1. NC	*West Onslow Beach and New River Inlet (Topsail Beach)*	*Sept. 28, 2009*	*Initial Federal: $29,900,000* *Initial Non-Federal: $16,450,000* *Initial Total: $46,350,000* *Renourishment Federal: $69,410,000* *Renourishment Non-Federal: $69,410,000* *Renourishment Total: $138,820,000*
2. NC	*Surf City and North Topsail Beach*	*Dec. 30, 2010*	*Initial Federal: $84,770,000* *Initial Non-Federal: $45,650,000* *Initial Total: $130,420,000* *Renourishment Federal: $122,220,000* *Renourishment Non-Federal: $122,220,000* *Renourishment Total: $244,440,000*
3. CA	*San Clemente Shoreline*	*Apr. 15, 2012*	*Initial Federal: $7,420,000* *Initial Non-Federal: $3,990,000* *Initial Total: $11,410,000* *Renourishment Federal: $43,835,000* *Renourishment Non-Federal: $43,835,000* *Renourishment Total: $87,670,000*

A. State	B. Name	C. Date of Report of Chief of Engineers	D. Estimated Initial Costs and Estimated Renourishment Costs
4. FL	Walton County	July 16, 2013	Initial Federal: $17,945,000 Initial Non-Federal: $46,145,000 Initial Total: $64,090,000 Renourishment Federal: $24,740,000 Renourishment Non-Federal: $82,820,000 Renourishment Total: $107,560,000
5. LA	Morganza to the Gulf	July 8, 2013	Federal: $6,695,400,000 Non-Federal: $3,604,600,000 Total: $10,300,000,000

(4) HURRICANE AND STORM DAMAGE RISK REDUCTION AND ENVIRONMENTAL RESTORATION.—

A. State	B. Name	C. Date of Report of Chief of Engineers	D. Estimated Costs
1. MS	Mississippi Coastal Improvement Program (MSCIP) Hancock, Harrison, and Jackson Counties	Sept. 15, 2009	Federal: $693,300,000 Non-Federal: $373,320,000 Total: $1,066,620,000

(5) ENVIRONMENTAL RESTORATION.—

A. State	*B. Name*	*C. Date of Report of Chief of Engineers*	*D. Estimated Costs*
1. MD	*Mid-Chesapeake Bay Island*	*Aug. 24, 2009*	*Federal: $1,240,750,000* *Non-Federal: $668,100,000* *Total: $1,908,850,000*
2. FL	*Central and Southern Florida Project, Comprehensive Everglades Restoration Plan, Caloosahatchee River (C–43) West Basin Storage Project, Hendry County*	*Mar. 11, 2010 and Jan. 6, 2011*	*Federal: $313,300,000* *Non-Federal: $313,300,000* *Total: $626,600,000*
3. LA	*Louisiana Coastal Area*	*Dec. 30, 2010*	*Federal: $1,026,000,000* *Non-Federal: $601,000,000* *Total: $1,627,000,000*
4. MN	*Marsh Lake*	*Dec. 30, 2011*	*Federal: $6,760,000* *Non-Federal: $3,640,000* *Total: $10,400,000*

A. State	*B. Name*	*C. Date of Report of Chief of Engineers*	*D. Estimated Costs*
5. FL	*Central and Southern Florida Project, Comprehensive Everglades Restoration Plan, C–111 Spreader Canal Western Project*	*Jan. 30, 2012*	*Federal: $87,280,000* *Non-Federal: $87,280,000* *Total: $174,560,000*
6. FL	*CERP Biscayne Bay Coastal Wetland, Florida*	*May 2, 2012*	*Federal: $98,510,000* *Non-Federal: $98,510,000* *Total: $197,020,000*
7. FL	*Central and Southern Florida Project, Broward County Water Preserve Area*	*May 21, 2012*	*Federal: $448,070,000* *Non-Federal: $448,070,000* *Total: $896,140,000*
8. LA	*Louisiana Coastal Area-Barataria Basin Barrier*	*June 22, 2012*	*Federal: $321,750,000* *Non-Federal: $173,250,000* *Total: $495,000,000*
9. NC	*Neuse River Basin*	*Apr. 23, 2013*	*Federal: $23,830,000* *Non-Federal: $12,830,000* *Total: $36,660,000*

A. State	B. Name	C. Date of Report of Chief of Engineers	D. Estimated Costs
10. VA	Lynnhaven River	Mar. 27, 2014	Federal: $22,821,500 Non-Federal: $12,288,500 Total: $35,110,000
11. OR	Willamette River Floodplain Restoration	Jan. 6, 2014	Federal: $27,401,000 Non-Federal: $14,754,000 Total: $42,155,000

SEC. 7003. AUTHORIZATION OF PROJECT MODIFICATIONS RECOMMENDED BY THE SECRETARY.

The following project modifications for water resources development and conservation and other purposes are authorized to be carried out by the Secretary substantially in accordance with the recommendations of the Secretary, as specified in the letters referred to in this section:

A. State	B. Name	C. Date of Secretary's Recommendation Letter	D. Updated Authorization Project Costs
1. MN	Roseau River	Jan. 24, 2013	Estimated Federal: $25,455,000 Estimated non-Federal: $18,362,000 Total: $43,817,000
2. IL	Wood River Levee System Reconstruction	May 7, 2013	Estimated Federal: $16,678,000 Estimated non-Federal: $8,980,000 Total: $25,658,000

A. State	*B. Name*	*C. Date of Secretary's Recommendation Letter*	*D. Updated Authorization Project Costs*
3. TX	*Corpus Christi Ship Channel*	*Aug. 8, 2013*	*Estimated Federal: $182,582,000* *Estimated non-Federal: $170,649,000* *Total: $353,231,000*
4. IA	*Des Moines River and Raccoon River Project*	*Feb. 12, 2014*	*Estimated Federal: $14,990,300* *Estimated non-Federal: $8,254,700* *Total: $23,245,000*
5. MD	*Poplar Island*	*Feb. 26, 2014*	*Estimated Federal: $868,272,000* *Estimated non-Federal: $365,639,000* *Total: $1,233,911,000*
6. IL	*Lake Michigan (Chicago Shoreline)*	*Mar. 18, 2014*	*Estimated Federal: $185,441,000* *Estimated non-Federal: $355,105,000* *Total: $540,546,000*
7. NE	*Western Sarpy and Clear Creek*	*Mar. 20, 2014*	*Estimated Federal: $28,128,800* *Estimated non-Federal: $15,146,300* *Total: $43,275,100*
8. MO	*Cape Girardeau*	*Apr. 14, 2014*	*Estimated Federal: $17,687,000* *Estimated non-Federal: $746,000* *Total: $18,433,000*

SEC. 7004. EXPEDITED CONSIDERATION IN THE HOUSE AND SENATE.

(a) CONSIDERATION IN THE HOUSE OF REPRESENTATIVES.—

(1) DEFINITION OF INTERIM AUTHORIZATION BILL.—In this subsection, the term "interim authorization bill" means a bill of the 113th Congress introduced after the date of enactment of this Act in the House of Representatives by the chair of the Committee on Transportation and Infrastructure which—

(A) has the following title: "A bill to provide for the authorization of certain water resources development or conservation projects outside the regular authorization cycle."; and

(B) only contains—

(i) authorization for 1 or more water resources development or conservation projects for which a final report of the Chief of Engineers has been completed; or

(ii) deauthorization for 1 or more water resources development or conservation projects.

(2) EXPEDITED CONSIDERATION.—If an interim authorization bill is not reported by a committee to which it is referred within 30 calendar days, the committee shall be discharged from its further consideration and the bill shall be referred to the appropriate calendar.

(b) CONSIDERATION IN THE SENATE.—

(1) POLICY.—The benefits of water resource projects designed and carried out in an economically justifiable, environmentally acceptable, and technically sound manner are important to the economy and environment of the United States and recommendations to Congress regarding those projects should be expedited for approval in a timely manner.

(2) APPLICABILITY.—The procedures under this subsection apply to projects for water resources development, conservation, and other purposes, subject to the conditions that—

(A) each project is carried out—

(i) substantially in accordance with the plan identified in the report of the Chief of Engineers for the project; and

(ii) subject to any conditions described in the report for the project; and

(B)(i) a report of the Chief of Engineers has been completed; and

(ii) after the date of enactment of this Act, the Assistant Secretary of the Army for Civil Works has submitted to Congress a recommendation to authorize construction of the project.

(3) EXPEDITED CONSIDERATION.—

(A) IN GENERAL.—A bill shall be eligible for expedited consideration in accordance with this subsection if the bill—

(i) authorizes a project that meets the requirements described in paragraph (2); and

(ii) is referred to the Committee on Environment and Public Works of the Senate.

(B) COMMITTEE CONSIDERATION.—

(i) IN GENERAL.—Not later than January 31st of the second session of each Congress, the Committee on Environment and Public Works of the Senate shall—

(I) report all bills that meet the requirements of subparagraph (A); or

(II) introduce and report a measure to authorize any project that meets the requirements described in paragraph (2).

(ii) FAILURE TO ACT.—Subject to clause (iii), if the committee fails to act on a bill that meets the requirements of subparagraph (A) by the date specified in clause (i), the bill shall be discharged from the committee and placed on the calendar of the Senate.

(iii) EXCEPTIONS.—Clause (ii) shall not apply if—

(I) in the 180-day period immediately preceding the date specified in clause (i), the full committee holds a legislative hearing on a bill to authorize all projects that meet the requirements described in paragraph (2);

(II)(aa) the committee favorably reports a bill to authorize all projects that meet the requirements described in paragraph (2); and

(bb) the bill described in item (aa) is placed on the calendar of the Senate; or

(III) a bill that meets the requirements of subparagraph (A) is referred to the committee not earlier than 30 days before the date specified in clause (i).

(4) TERMINATION.—The procedures for expedited consideration under this subsection terminate on December 31, 2018.

(c) RULES OF THE SENATE AND HOUSE OF REPRESENTATIVES.—This section is enacted by Congress—

(1) as an exercise of the rulemaking power of the Senate and House of Representatives, respectively, and as such it is deemed a part of the rules of each House, respectively, but applicable only with respect to the procedure to be followed in that House in the case of a bill addressed by this section, and it supersedes other rules only to the extent that it is inconsistent with such rules; and

(2) with full recognition of the constitutional right of either House to change the rules (so far as relating to the procedure of that House) at any time, in the same manner, and to the same extent as in the case of any other rule of that House.

And the Senate agree to the same.

H.R. 3080

Managers on the part of the **HOUSE**	*Managers on the part of the* **SENATE**
From the Committee on Transportation and Infrastructure, for consideration of the House bill and the Senate amendment, and modifications committed to conference:	
Mr. SHUSTER	
Mr. DUNCAN OF TENNESSEE	
Mr. LOBIONDO	
Mr. GRAVES OF MISSOURI	
Mrs. CAPITO	
Mrs. MILLER OF MICHIGAN	
Mr. HUNTER	

H.R. 3080—Continued

Managers on the part of the **HOUSE**	*Managers on the part of the* **SENATE**
Mr. BUCSHON	
Mr. GIBBS	
Mr. HANNA	
Mr. WEBSTER OF FLORIDA	
Mr. RICE OF SOUTH CAROLINA	
Mr. MULLIN	
Mr. DAVIS, RODNEY, OF ILLINOIS	
Mr. RAHALL	

H.R. 3080—Continued

Managers on the part of the **HOUSE**	*Managers on the part of the* **SENATE**
Mr. DEFAZIO	
Ms. BROWN OF FLORIDA	
Ms. JOHNSON, EDDIE BERNICE, OF TEXAS	
Mr. BISHOP OF NEW YORK	
Ms. EDWARDS	
Mr. CARAMENDI	
Ms. HAHN	
~~Mr. NOLAN~~	

H.R. 3080—Continued

Managers on the part of the **HOUSE**	*Managers on the part of the* **SENATE**
Ms. FRANKEL OF FLORIDA	
Mrs. BUSTOS	

H.R. 3080—Continued

Managers on the part of the **HOUSE**	*Managers on the part of the* **SENATE**
From the Committee on Natural Resources, for consideration of secs. 103, 115, 144, 146, and 220 of the House bill, and secs. 2017, 2027, 2028, 2033, 2051, 3005, 5002, 5003, 5005, 5007, 5012, 5018, 5020, title XII, and sec. 13002 of the Senate amendment, and modifications committed to conference:	
Mr. HASTINGS OF WASHINGTON	
Mr. BISHOP OF UTAH	
Mrs. NAPOLITANO	

H.R. 3080—Continued

Managers on the part of the **HOUSE**	*Managers on the part of the* **SENATE**
	Mrs. BOXER
	Mr. CARPER
	Mr. CARDIN
	Mr. WHITEHOUSE
	Mr. SANDERS
	Mr. VITTER
	Mr. INHOFE
	Mr. BARRASSO

JOINT EXPLANATORY STATEMENT OF THE COMMITTEE OF CONFERENCE

The managers on the part of the House and the Senate at the conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 3080), to provide for the conservation and development of water and related resources, and for other purposes, submit the following joint statement to the House and the Senate in explanation of the effect of the action agreed upon by the managers and recommended in the accompanying conference report:

The Senate amendment struck all of the House bill after the enacting clause and inserted a substitute text.

The House recedes from its disagreement to the amendment of the Senate with an amendment that is a substitute for the House bill and the Senate amendment. The differences between the House bill, the Senate amendment, and the substitute agreed to in conference are noted below, except for clerical corrections, conforming changes made necessary by agreements reached by the conferees, and minor drafting and clarifying changes.

Definition of Feasible

When the term "feasible" is used in this Act, the conferees intend this to mean a determination that a water resources project is technically feasible, economically justified, and environmentally acceptable.

Sec. 1. Short title; table of contents.
Sec. 2. Definition of Secretary.

TITLE I—PROGRAM REFORMS AND STREAMLINING

SEC. 1001. VERTICAL INTEGRATION AND ACCELERATION OF STUDIES.

House § 101, Senate § 2032.—Senate recedes, with an amendment.

This section generally limits a new Corps of Engineers feasibility study initiated after the date of enactment of this Act to 3 years and $3 million in federal costs. It also requires District, Division, and Headquarters personnel to concurrently conduct reviews of a feasibility study. For any feasibility study not complete after 3 years, upon notification of the non-federal project sponsor and Congress, the Secretary of the Army may take up to one additional year to complete the feasibility study. If the feasibility study is still not complete, authorization for the feasibility study is terminated. The Secretary is given authority to extend the timeline further for complex studies, provided that a notice is provided to the Committees of jurisdiction explaining the rationale for the determination.

The Managers are concerned about the length of time it often takes for the Corps of Engineers to complete its feasibility studies. While there are several reasons studies can sometimes take 15 years or more, the Managers believe that the time can be shortened by setting the deadlines established in this legislation. The schedule set by this section closely follows the one which the Corps is working to implement administratively. The Managers believe that setting an aggressive schedule in statute will increase the likelihood that necessary federal and non-federal efforts will be undertaken in a timely manner and financial resources will be provided so that feasibility studies will be completed in 3 years after the date of a feasibility cost sharing agreement with a non-federal sponsor. The objective in establishing these defined procedures is to achieve consistency and efficiency in the feasibility study process.

SEC. 1002. CONSOLIDATION OF STUDIES.

House § 104, Senate § 2034.—Senate recedes, with an amendment.

This section repeals requirements that the Corps of Engineers conduct a reconnaissance study prior to initiating a feasibility study. In its place the section articulates an accelerated process which allows non-federal project sponsors and the Corps of Engineers to proceed directly to the feasibility study.

While repealing the requirement that the Corps of Engineers carry out reconnaissance studies and produce a reconnaissance report, some of the activities prescribed by Section 905(b) of the Water Resources Development of 1986 as amended may be carried out at the beginning of the feasibility study process as required under Section 1001 of this Act. At any point during a feasibility study, the Secretary may terminate the study when it is clear there is no demonstrable federal interest for a project or that construction of the project is not possible for technical, legal, or financial reasons.

SEC. 1003. EXPEDITED COMPLETION OF REPORTS.

House § 105. No comparable Senate section.—Senate recedes.

SEC. 1004. REMOVAL OF DUPLICATIVE ANALYSES.

House § 106. No comparable Senate section.—Senate recedes.

This section repeals a requirement that the Corps of Engineers reevaluate cost-estimates immediately after initial cost-estimates have been completed.

While the Managers applaud the Corps of Engineers for centuries of planning, constructing, operating, and maintaining projects that are integral to the Nation's economic security, implementation of Section 911 of the Water Resources Development Act of 1986 has led to unnecessary and duplicative reviews. Value engineering is a useful concept and tool in carrying out water resources development projects, however, requiring the analysis of cost-estimates immediately after costs have been initially estimated is counter-productive. By repealing Section 911, the Managers intend the Corps of Engineers to continue to apply value engineering intent and techniques to projects, but to apply them in consultation with contractors immediately prior to or after the project has initiated construction. Value engineering should be an ongoing and integral aspect of any Corps of Engineers project.

SEC. 1005. PROJECT ACCELERATION.

House § 103, Senate § 2033.—House and Senate agree to an amendment.

The Managers intend this section to be narrowly designed to streamline the process for complying with the requirements of the National Environmental Policy Act (NEPA). This subsection clarifies that the requirements of all other laws continue to apply to a water resources project. The requirements of laws and regulations that do not relate to complying with the NEPA process are not affected and remain in full affect. Nothing in this section preempts or interferes with any regulatory requirements in effect at the time of enactment of this Act or may be created after enactment of this Act. Nothing in this section affects any obligation to comply with the regulations issued by the Council on Environmental Quality or any other federal agency to carry out that Act unless they specifically impact the ability to comply with the process requirements of this section.

The Managers have included in this section a requirement that the Secretary establish and maintain an electronic database for the purpose of reporting requirements and to make publicly available the status and progress with respect to compliance with applicable laws. The language also includes a requirement that the Secretary publish the status and progress of each project study. The Managers support making more transparent the process of meeting milestones of compliance with laws so that interested parties can follow the progress of individual studies. At the same time, the Managers do not want the process to become a huge exercise that requires a large amount of time as well as human and monetary resources. The Secretary should manage this requirement so that the public receives relevant information but excessive resources are not spent maintaining the database.

SEC. 1006. EXPEDITING THE EVALUATION AND PROCESSING OF PERMITS.

House § 102, Senate § 2042.—House and Senate agree to an amendment.

This section provides permanent authority for the Corps of Engineers to accept funds from non-federal public interests to expedite the processing of permits within the regulatory program of the Corps of Engineers. Additionally, this section allows public utility companies and natural gas companies to participate in the program. Finally, this section directs the Secretary to ensure that the use of the authority does not slow down the permit processing time of applicants that do not participate in the section 214 program.

According to testimony presented to the House of Representatives Committee on Transportation and Infrastructure, more than $220 billion in annual economic investment is directly related to activities associated with the Corps of Engineers regulatory program, specifically, decisions reached under section 404 of the Clean Water Act. Currently, not every Corps of Engineers District utilizes the Section 214 program. By authorizing a permanent program, the Managers provide direction and encourage each District to participate in the Section 214 program and ensure regulatory decisions are reached in a timely manner. The Managers expect that when funds are offered by an entity under this section, the Secretary will accept and utilize those funds in an expeditious manner.

The Managers have included additional transparency provisions, including an annual report to Congress, as well as provisions to ensure that a consistent approach is taken in implementing the program across the Nation. In the past, the Government Accountability Office (GAO) has critiqued the Corps' implementation of this program. In response, the Corps has taken steps to ensure greater consistency in implementation of the authority across the 38 Corps Districts and to ensure full compliance with the all regulatory requirements. These steps include updated guidance, development of a template of necessary decision documents, and ongoing training of District staff. The Managers expect the Corps to continue implementation of these initiatives as it carries out the expanded authority provided in the Conference agreement. Finally, the Conference agreement requires additional GAO oversight of the implementation of this expanded authority to ensure compliance with all regulatory requirements.

SEC. 1007. EXPEDITING APPROVAL OF MODIFICATIONS AND ALTERATIONS OF PROJECTS BY NON-FEDERAL INTERESTS.

House § 107. No comparable Senate section.—Senate recedes.

SEC. 1008. EXPEDITING HYDROPOWER AT CORPS OF ENGINEERS FACILITIES.

Senate § 2009. No comparable House section.—House recedes.

SEC. 1009. ENHANCED USE OF ELECTRONIC COMMERCE IN FEDERAL PROCUREMENT.

House § 130. No comparable Senate section.—Senate recedes.

SEC. 1010. DETERMINATION OF PROJECT COMPLETION.

Senate § 2036. No comparable House section.—House recedes.

SEC. 1011. PRIORITIZATION.

Senate § 2044, § 2045. No comparable House section.—House recedes, with an amendment.

This section establishes criteria for prioritization of hurricane and storm damage reduction and ecosystem restoration projects.

The Managers are also concerned with the application of certain cost share requirements to ecosystem restoration projects. When identifying the costs of construction for navigation projects, the Corps of Engineers, pursuant to the Act of June 21, 1940 (more commonly known as the Truman-Hobbs Act) considers the cost of highway and railroad bridge alterations or removals as construction costs, eligible for cost share. However, for flood control projects and ecosystem restoration projects, local sponsors are currently required to pay the entire cost of a bridge alteration or removal as a non-federal responsibility to provide all lands, easements, rights-of-way, disposal areas, and relocations, pursuant to section 103(a) of the Water Resources Development Act of 1986, as amended. While that specific section is notably applicable to only flood control projects, the Corps has applied this responsibility broadly to other project purposes, such as ecosystem restoration purposes, as well.

Bridge alterations and removals can be essential components of ecosystem restoration projects, such as related to large-scale ecosystem restoration projects. As such, the Managers encourage the Secretary to explore whether such alterations and removals should, like navigation projects, be considered as part of the costs of construction of an ecosystem restoration project, and to report to the Committees of jurisdiction on its findings. If the Secretary determines that such alterations and removals are integral to meeting the goals of ecosystem restoration projects, the Secretary shall develop new guidance for ecosystem restoration projects that fits their unique needs.

SEC. 1012. TRANSPARENCY IN ACCOUNTING AND ADMINISTRATIVE EXPENSES.

Senate § 2035. No comparable House section.—House recedes.

SEC. 1013. EVALUATION OF PROJECT PARTNERSHIP AGREEMENTS.

Senate § 2037. No comparable House section.—House recedes, with an amendment.

SEC. 1014. STUDY AND CONSTRUCTION OF WATER RESOURCES DEVELOPMENT PROJECTS BY NON-FEDERAL INTERESTS.

House § 108, § 112. No comparable Senate section.—Senate recedes, with an amendment.

For purposes of this section, the terms "before construction" and "before initiation of construction" are intended to mean after the issuance of a notice to proceed.

SEC. 1015. CONTRIBUTIONS BY NON-FEDERAL INTERESTS.

House § 109. No comparable Senate section.—Senate recedes, with an amendment.

This section clarifies the non-federal interests that may contribute funds toward construction of authorized water resources projects. Additionally, this section clarifies that inland navigation facilities and the repair of water resources facilities after an emergency declaration are eligible for contributed funds from non-federal interests.

For example, this section clarifies non-federal interests, as defined by Section 221 of the Flood Control Act of 1970, as amended, may participate in the funding of the construction of projects on the inland navigation system. Currently, capital improvement projects are financed 50 percent from the General Fund of the Treasury, and 50 percent from the Inland Waterway Trust Fund. While this section does not alter that arrangement, it does authorize non-federal interests to fund capital improvement projects on the inland navigation system. For instance, under current law, a State cannot fund the construction of a new lock and dam. This section is intended to authorize that type of funding activity.

SEC. 1016. OPERATION AND MAINTENANCE OF CERTAIN PROJECTS.

Senate § 2023. No comparable House section.—House recedes, with an amendment.

SEC. 1017. ACCEPTANCE OF CONTRIBUTED FUNDS TO INCREASE LOCK OPERATIONS.

House § 110, § 217, Senate § 2039.—House recedes.

This section authorizes the Secretary of the Army to accept non-federal contributions from non-federal entities to operate and maintain the Nation's inland waterways transportation system.

The Corps of Engineers is undergoing a review of those 239 lock projects at 193 sites on the inland navigation system to prioritize operation and maintenance funding needs. Up until several years ago, almost all of the locks in the system were operated 24 hours a day, 7 days a week, 365 days a year. However, due to the age of the system, limited use for some of the projects, and limited operation and maintenance funds, the Corps of Engineers is proposing to limit the operations of certain locks on a District-by-District basis. While the Managers applaud the Corps in their efforts to prioritize projects, the Managers are wary of a lack of coordination amongst Districts when implementing these changes in hours of service, and in a few cases have proposed to limit the hours of service based on inaccurate or limited data.

While changes in hours of service are imminent and in some cases have already been implemented, non-federal interests have expressed a willingness to finance the operations and maintenance of projects where the hours of service have been proposed to be reduced. This section is intended to allow the Corps to accept such funds to ensure commercial and recreational traffic is not unduly impacted on the inland navigation system.

SEC. 1018. CREDIT FOR IN-KIND CONTRIBUTIONS.

House § 116, Senate § 2012.—House recedes, with an amendment.

This section corrects two provisions in WRDA 2007 that have not been properly executed due to unintended interpretations. In previous Water Resources Development Acts, credit was authorized for individual projects. While the intent was the same, many of these provisions had been written differently over time. In an effort to harmonize those activities for which credit could be authorized, Congress requested technical assistance from the Corps of Engineers in drafting a credit provision that could be applied to all Corps projects. While the language provided by the Corps was included in WRDA 2007, the Corps subsequently determined that specific sections of the law could not be executed consistent with Congressional intent.

This section allows the Secretary to provide in-kind credit for work done by the non-federal sponsor prior to execution of a project partnership agreement.

This section explicitly authorizes the Secretary to enter into a written agreement with the non-federal interest to credit certain in-kind contributions against the non-federal share of cost of the project.

This section directs the Secretary to reimburse the non-Federal interest for costs that exceed the non-Federal cost-share requirements if the excess costs are incurred for work carried out pursuant to a written agreement and are a result of the requirement that the non-Federal sponsor provide all lands, easements, rights-of-way, dredged material disposal areas, and relocations (LERRD) for the authorized project under this section. The Secretary is directed to enter into an agreement, subject to availability of funds, to provide the reimbursement. This provision is intended to address a disincentive created by Corps policy that discourages non-Federal interests from carrying out in-kind work on projects that that have significant LERRD costs. At a time of limited Federal budgets, the Managers urge the Secretary to work with non-Federal interests willing to invest local funding in civil works projects. The Managers intend for the Secretary to enter into a reimbursement agreement if funds are available for the project and utilize those funds to provide reimbursement prior to transfer of the project to the non-Federal sponsor for operation and maintenance.

This section requires the Secretary to update any guidance or regulations related to the approval of in-kind credit to establish a milestone for executing an in-kind memorandum of understanding, criteria and procedures for granting exceptions to this milestone, and criteria and procedures for determining that work is integral to a project. The Managers are concerned with the lack of flexibility afforded by the Secretary in determining at what point during a feasibility study a non-federal sponsor may carry out work for in-kind credit. In carrying out the update required by this section, the Managers expect that the Secretary will use an inclusive process that considers input from non-federal interests. Further, the Managers encourage the Secretary to ensure that the final guidelines provide a process for carrying out work for in-kind credit that is predictable and takes into account the unique issues that may arise regarding individual water resources projects.

Both the House and Senate Committees typically receive numerous requests for project-specific credit during the development of this Act. While requests for credit have received favorable consideration in prior water resources legislation, the Managers concluded that a general provision allowing credit under specified conditions would minimize the need for future project-specific provisions and, at the same time, assure consistency in considering future proposals for credit.

The Managers are becoming increasingly wary of non-federal interests advocating for credit for work not captured by a project partnership agreement or an in-kind Memorandum of Understanding. The Managers would strongly encourage non-federal interests to sign such agreements prior to carrying out any work related to a proposed project; otherwise such work will not be eligible for credit.

SEC. 1019. CLARIFICATION OF IN-KIND CREDIT AUTHORITY.

Senate § 2010. No comparable House section.—House recedes, with an amendment.

SEC. 1020. TRANSFER OF EXCESS CREDIT.

Senate § 2011. No comparable House section.—House recedes, with an amendment.

SEC. 1021. CREDITING AUTHORITY FOR FEDERALLY AUTHORIZED NAVIGATION PROJECTS.

Senate § 2062. No comparable House section.—House recedes, with an amendment.

SEC. 1022. CREDIT IN LIEU OF REIMBURSEMENT.

Senate § 2013. No comparable House section.—House recedes, with an amendment.

SEC. 1023. ADDITIONAL CONTRIBUTIONS BY NON-FEDERAL INTERESTS.

House § 111, Senate § 2059.—Senate recedes.

SEC. 1024. AUTHORITY TO ACCEPT AND USE MATERIALS AND SERVICES.

Senate § 11005. No comparable House section.—House recedes, with an amendment.

The Managers are concerned that limited operations and maintenance funding is having a negative impact on the Secretary's ability to maintain the long-term reliability of our Nation's water resources infrastructure. In many cases, there is insufficient funding available to quickly restore project operations following a natural disaster, failure of equipment, or other emergency. Restoration of project operations are dependent on enactment by the Congress of emergency supplemental funding, which could result in months before projects are fully restored to safe and reliable operations. The cost to our Nation's economy for these delayed actions is millions of dollars per day. For our Nation to remain competitive in the world's economy, the Managers believe there is a need to leverage other resources to enable the Secretary to quickly restore safe and reliable project operations after an emergency. To that end, the Secretary, working with States, local governments, industry, and other stakeholders, is authorized to accept materials and services to repair water resources projects that have been damaged or destroyed as a result of a major disaster, emergency, or other event. To enable the fastest opportunity to restore safe and reliable project operations, the Secretary is strongly encouraged to delegate to the lowest level in the Corps of Engineers the authority to make the determination of an emergency; to make the determination on whether acceptance of these contributions are in the public interest; and to accept the contributions from non-federal public, private, or non-profit entities.

SEC. 1025. WATER RESOURCES PROJECTS ON FEDERAL LAND.

Senate § 2018. No comparable House section.—House recedes, with an amendment.

This section is intended to clarify the authority of the Secretary and the application of cost-sharing for certain projects carried out on federal land under the administrative jurisdiction of another federal agency.

If federal land necessary to construct a water resources development project was originally paid for by the non-federal interest for such project and the non-federal interest signs a memorandum of understanding with the Secretary to cost-share work on such federal land, the Managers intend for the Secretary to cost-

share any construction with the non-federal interest as if the non-federal interest currently owns the land. In such a case, the Secretary should not require the construction on the federal land to be fully funded by the federal agency that currently has jurisdiction over the land. Any recommendations in a feasibility study should be consistent with the policy in this section.

SEC. 1026. CLARIFICATION OF IMPACTS TO OTHER FEDERAL FACILITIES.

House § 113. No comparable Senate section.—Senate recedes.

This section clarifies that when a Corps of Engineers project adversely impacts other federal facilities, the Secretary may accept funds from other federal agencies to address the impacts, including removal, relocation, and reconstruction of such facilities.

SEC. 1027. CLARIFICATION OF MUNITION DISPOSAL AUTHORITIES.

Senate § 2029. No comparable House section.—House recedes.

SEC. 1028. CLARIFICATION OF MITIGATION AUTHORITY.

House § 114, Senate § 2017.—House recedes, with an amendment.

SEC. 1029. CLARIFICATION OF INTERAGENCY SUPPORT AUTHORITIES.

Senate § 2038. No comparable House section.—House recedes, with an amendment.

SEC. 1030. CONTINUING AUTHORITY.

Senate § 2003, § 2004. No comparable House section.—House recedes, with an amendment.

This section increases the authorization for small continuing authority projects associated with navigation, flood damage reduction, ecosystem restoration, emergency streambank protection, control of invasive species, and other activities carried out by the Corps of Engineers.

In some cases, Corps of Engineers projects have caused damages to other nearby infrastructure projects or other properties of local importance. For instance, coastal navigation projects may inadvertently redirect flows or waves and damage nearby shorelines. The Corps of Engineers is encouraged to use relevant continuing authorities programs to correct these deficiencies.

SEC. 1031. TRIBAL PARTNERSHIP PROGRAM.

House § 115, Senate § 2027.—Senate recedes.

SEC. 1032. TERRITORIES OF THE UNITED STATES.

House § 139. No comparable Senate section.—Senate recedes.

SEC. 1033. CORROSION PREVENTION.

House § 131, Senate § 2048.—Senate recedes.

SEC. 1034. ADVANCED MODELING TECHNOLOGIES.

House § 129. No comparable Senate section.—Senate recedes, with an amendment.

SEC. 1035. RECREATIONAL ACCESS.

House § 138. No comparable Senate section.—Senate recedes, with an amendment.

SEC. 1036. NON-FEDERAL PLANS TO PROVIDE ADDITIONAL FLOOD RISK REDUCTION.

House § 121, Senate § 2055.—House recedes, with an amendment.

This section authorizes the Secretary of the Army to carry out a locally preferred plan if that project increment provides a higher level of flood protection and is economically justified, technically achievable, and environmentally acceptable. The federal cost of carrying out such a plan may not exceed the federal share as authorized by law for the national economic development plan.

In certain cases, non-federal project sponsors request the Corps of Engineers carry out a locally-preferred plan that is more robust than that recommended in a Chief's Report. This provision is consistent with current practice where the Corps will recommend to Congress a more robust locally preferred plan at the request of the non-federal interest, provided the non-federal interest contributes any additional costs that may be incurred in carrying out the locally preferred plan. This provision gives the Corps authority to implement a locally preferred plan for a flood damage reduction project authorized in this Act. It is not intended to affect current law with respect to establishing cost-share for an authorized project.

SEC. 1037. HURRICANE AND STORM DAMAGE REDUCTION.

Senate § 2030. No comparable House section.—House recedes, with an amendment.

This section authorizes a non-federal interest to request that the Corps of Engineers study a project to determine if there is a federal interest in carrying out an additional 15 years of work. If the study results in a determination that there continues to be a federal interest in the project, the Corps may request authorization through the Annual Report process as prescribed in section 7001 of this Act.

For those projects that are approaching the 50-year expiration over the next 5 years, the Corps of Engineers is authorized to continue work for a one time only, additional 3 years. This will give those expiring projects sufficient opportunity to get into the study pipeline and the Annual Report process while ensuring shoreline communities and infrastructure have continuing protection from storm events.

The activities prescribed in this section are not to be determined to be a "new start" for budgetary purposes, rather they are to be considered a continuation of an existing project.

SEC. 1038. REDUCTION OF FEDERAL COSTS FOR HURRICANE AND STORM DAMAGE REDUCTION PROJECTS.

House § 128, Senate § 2031.—House and Senate agree to an amendment.

SEC. 1039. INVASIVE SPECIES.

House § 137, § 144, § 145, Senate § 2052, § 5007, §5011, § 5018.—House and Senate agree to an amendment.

It is the intent in section (a), Aquatic Species Review, that the assessment provides a national perspective of the existing federal authorities related to invasive species, including invasive vegetation in reservoir basins associated with Corps of Engineers water projects in the western United States. It would be appropriate to identify any specific tribal authorities that may exist for rivers and reservoirs that may be associated with Corps of Engineers projects that intersect with reservation lands.

This section does not authorize any activities proposed under the "Great Lakes and Mississippi River Interbasin Study" (GLMRIS) authorized by Section 3061(d) of the Water Resources Development Act of 2007, Public Law 110-114.

SEC. 1040. FISH AND WILDLIFE MITIGATION.

Senate § 2005. No comparable House section.—House recedes, with an amendment.

SEC. 1041. MITIGATION STATUS REPORT.

Senate § 2006. No comparable House section.—House recedes.

SEC. 1042. REPORTS TO CONGRESS.

Senate § 2050. No comparable House section.—House recedes, with an amendment.

SEC. 1043. NON-FEDERAL IMPLEMENTATION PILOT PROGRAM.

Senate § 2025, § 2026. No comparable House section.—House recedes.

SEC. 1044. INDEPENDENT PEER REVIEW.

Senate § 2007. No comparable House section.—House recedes, with an amendment.

SEC. 1045. REPORT ON SURFACE ELEVATIONS AT DROUGHT AFFECTED LAKES.

House § 141. No comparable Senate section.—Senate recedes.

SEC. 1046. RESERVOIR OPERATIONS AND WATER SUPPLY.

House § 133, § 142, § 143, Senate § 2014, § 2061, § 2064.—House and Senate agree to an amendment.

Section 1046 (a) Dam Optimization

The Managers are concerned with the impacts of drought on water supply in arid regions. The purpose of the assessment in Section 1046(a)(2)(A) is to determine if the Corps of Engineers reservoirs located in arid regions (primarily the 17 Western states) can be managed more flexibly during drought periods, to provide additional water supply, including capturing water during rain events that otherwise would have been routed

directly to the ocean. If there are restrictions to managing water during drought periods, it is the intent to identify those practices and authorities that limit the management of water during droughts and determine whether and how they could be changed to allow for more effective water capture and recovery during defined drought periods. In addition, it is the intent of this section to identify if it is determined that the original capacity of the reservoir basin has been reduced due to sedimentation, that the location and extent of that reduction of storage capacity be defined.

The Managers are also concerned that in the past few years there have been significant flood and drought events affecting all areas of the country from the arid West, the Missouri River basin, the Mississippi River basin, and the Southeast. The Corps operates more than 600 dams and other water control structures around the country. The operation of many of these structures is subject to plans that may not efficiently balance all needs of these reservoirs (e.g., flood control, water supply, environmental restoration, and recreation). This section requires the Corps to do a review of all facilities and report to the House Committee on Transportation and Infrastructure and the Senate Committee on Environment and Public Works when the last reviews and updates of operations plans were conducted, as well as what changes were implemented as a result of the operation reviews and a prioritized schedule of when the next operations review is expected for all projects.

Future updates of the operation plans for these dams and reservoirs could have significant benefits for all of the authorized project purposes. In carrying out reviews under this section, the Secretary is directed to coordinate with appropriate federal, state, and local agencies and public and private entities that could be impacted as well as affected non-federal interests.

Sec. 1046 (c)

The Managers remain concerned about the collection of fees in the Upper Missouri River basin. The Senate-passed bill included a permanent ban on such fees, and the House bill was silent with respect to such fees. The conference agreement includes a 10-year moratorium, which will allow Congress to revisit this matter in the future, including consideration of the extension of the moratorium included in this section.

The Managers recognize that an offset was required due to the direct spending impacts of this provision. Since the benefits of this provision are regional in nature, benefiting the Upper Missouri River basin, the Managers recommend that the Corps of Engineers look first to unobligated balances found in the appropriate accounts of the Upper Missouri River basin to meet the offset identified to cover the direct spending impacts of this provision. Further, the Managers direct the Secretary to ensure that the offset shall not negatively impact the Missouri River Bank Stabilization and Navigation Project.

SEC. 1047. SPECIAL USE PERMITS.

Senate § 2046. No comparable House section.—House recedes, with an amendment.

SEC. 1048. AMERICA THE BEAUTIFUL NATIONAL PARKS AND FEDERAL RECREATIONAL LANDS PASS PROGRAM.

Senate § 13002. No comparable House section.—House recedes.

SEC. 1049. APPLICABILITY OF SPILL PREVENTION, CONTROL, AND COUNTERMEASURE RULE.

Senate § 13001. No comparable House section.—House recedes, with an amendment.

SEC. 1050. NAMINGS.

House § 136, Senate § 2060, § 3017.—House and Senate agree to an amendment.

SEC. 1051. INTERSTATE WATER AGREEMENTS AND COMPACTS.

House § 140, Senate § 2015.—House and Senate agree.

SEC. 1052. SENSE OF CONGRESS REGARDING WATER RESOURCES DEVELOPMENT BILLS.

House § 135. No comparable Senate section.—Senate recedes.

TITLE II—NAVIGATION

Subtitle A—Inland Waterways

SEC. 2001. DEFINITIONS.

House §211, Senate § 7002.—Senate recedes.

SEC. 2002. PROJECT DELIVERY PROCESS REFORMS.

House §212, Senate §7003.—Senate recedes, with an amendment.

SEC. 2003. EFFICIENCY OF REVENUE COLLECTION.

House § 213, Senate § 7006.—Same

SEC. 2004. INLAND WATERWAYS REVENUE STUDIES.

House § 214, Senate § 7005.—Senate recedes, with an amendment.

In carrying out subsection 2004(a), the Secretary shall review, and to the extent practicable, utilize the assessments completed in the report entitled " New Approaches for U.S. Lock and Dam Maintenance and Funding" completed in January 2013 by the Center for Ports and Waterways, Texas Transportation Institute.

In carrying out the study under subsection 2004(b), the Secretary shall evaluate the potential benefits and implications of revenue sources identified in and documented by known authorities of the Inland System, and review appropriate reports and associated literature related to revenue sources. The Managers are aware of several reports and legislative proposals submitted to Congress over the years that should be included in this evaluation, including the 1992 Report of the Congressional Budget Office, entitled "Paying for Highways, Airways, and Waterways: How Can Users Be Charged;" the Final Report of the Inland Marine Transportation System (IMTS) Capital Projects Business Model, published on April 12, 2010, and the draft legislative proposals submitted by the Executive Branch in 2008 and 2011.

SEC. 2005. INLAND WATERWAYS STAKEHOLDER ROUNDTABLE.

House § 215. No comparable Senate section.—Senate recedes, with an amendment.

It is the intent of this section to provide an opportunity for all stakeholders to participate in a facilitated discussion and to provide a comprehensive set of non-binding recommendations to the Secretary in respect to the future financial management of the inland and intracoastal waterways. The roundtable is to include representatives of the navigation and non-navigation users who derive benefits from the existence of the inland waterway system.

SEC. 2006. PRESERVING THE INLAND WATERWAY TRUST FUND.

House § 216, Senate § 7004, § 7008.—House and Senate agree to an amendment.

SEC. 2007. INLAND WATERWAYS OVERSIGHT.

House § 216, Senate § 7007.—House recedes, with an amendment.

SEC. 2008. ASSESSMENT OF OPERATION AND MAINTENANCE NEEDS OF THE ATLANTIC INTRACOASTAL WATERWAY AND THE GULF INTRACOASTAL WATERWAY.

House § 218. No comparable Senate section.—Senate recedes, with an amendment.

SEC. 2009. INLAND WATERWAYS RIVERBANK STABILIZATION.

Senate § 2043. No comparable House section.—House recedes, with an amendment.

It is the intent of section 2009 that attention and assessment is given to identifying specific inland and intracoastal waterways where extensive riverbank damage has been caused by vessel-generated wave-wash, plant and soil degradation caused by saltwater intrusion, and recent major flooding events. The Managers recognize the complexity of carrying out large, system-wide stabilization projects and recommend the Secretary utilize the authorities in this section to carry out smaller projects with the greatest threat to human safety and infrastructure that ensure safe navigation and protect infrastructure.

SEC. 2010. UPPER MISSISSIPPI RIVER PROTECTION.

House § 219, Senate § 5021.—House and Senate agree to an amendment.

This section directs the Secretary of the Army to close the Upper St. Anthony's Fall Lock and Dam within one year of the date of enactment of this Act.

The concerns at the Upper St. Anthony Falls Lock and Dam are unique, not representative of other projects on the Nation's inland navigation system, and should not be used as precedent for agency determinations on other projects. The Managers support efforts at the state and local level to mitigate potential economic impacts of this action.

SEC. 2011. CORPS OF ENGINEERS LOCK AND DAM ENERGY DEVELOPMENT.

House § 220, Senate § 5020.—Senate recedes.

SEC. 2012. RESTRICTED AREAS AT CORPS OF ENGINEERS DAMS.

House § 125, Senate § 2058.—Senate recedes, with an amendment.

SEC. 2013. OPERATION AND MAINTENANCE OF FUEL TAXED INLAND WATERWAYS.

Senate § 2047. No comparable House section.—House recedes, with an amendment.

Subtitle B—Port and Harbor Maintenance

SEC. 2101. FUNDING FOR HARBOR MAINTENANCE PROGRAMS.

House § 201, Senate § 8003.—House and Senate agree to an amendment.

The Managers support robust federal investment in the operation and maintenance of the Nation's authorized ports and harbors, including through increased expenditures from the Harbor Maintenance Trust Fund (HMTF). While both the H.R. 3080 and S. 601 included provisions aimed at utilizing a greater portion of annual collections from shippers (which recently have averaged around $1.6 billion) for maintaining safe and efficient navigation corridors, the Managers have agreed to an amended harbor maintenance subtitle that aims to accomplish this goal, while at the same time addresses the needs of the Nation's authorized harbors in a manner that benefits both the largest commercial harbors, as well as the smaller and emerging harbors.

In section 2101, the Managers express strong support for increasing the annual expenditures from the HMTF for authorized operation and maintenance expenditures at harbor projects to a point where annual expenditures for operation and maintenance activities equal annual collections from shippers to the HMTF. At the same time, the Managers recognize that any increase in operation and maintenance expenditures should not come at the expense of other activities of the Corps of Engineers, including its navigation construction-related activities, or at the expense of other mission areas of the Corps of Engineers, including flood damage reduction or environmental restoration. Accordingly, the Managers have included language directing that any increase in annual operation and maintenance expenditures come from an equivalent increase in the total appropriations amount for the Corps of Engineers, Civil Works program. Explained a different way, the Corps would need to see its total appropriation for the entire Civil Works authority increase by a dollar amount at least equal to the value of the annual percentage increase in appropriated HMTF funds described in subsection 2101 (b) so as to not negatively impact any other budgetary account of the Corps, or any other mission area of the Corps within the operation and maintenance account.

SEC. 2102. OPERATION AND MAINTENANCE OF HARBOR PROJECTS.

House §201, § 202, § 206, Senate § 8004, § 8005—House and Senate agree to an amendment.

Section 2102 amends section 210 of the Water Resources Development Act of 1986 to establish a new framework for annual allocation of operation and maintenance expenditures. The framework directs the Secretary, to the extent practicable, to base future allocations of operation and maintenance funds on an equitable basis, considering a variety of enumerated factors. For the past several years, the Secretary has made funding allocations for operation and maintenance of the Nation's harbors primarily on the basis of tonnage moved through the harbors. The Water Resources Development Act of 2007 included language that "the operations and maintenance budget of the Corps of Engineers should reflect the use of all available economic data, rather than a single performance metric" to urge the Secretary to consider the broader benefits of harbors in making funding decisions; however, since that time, the Corps has continued to use tonnage as the primary metric for such decisions. Accordingly, section 2102 specifically states that the "Secretary shall not allocate funds ... based solely on the tonnage transiting through a harbor."

While the Managers recognize that tonnage throughput is an important metric for evaluating harbors and will continue to be a consideration in the allocation of funds, federal harbors provide critical national, regional, and local economic benefits, as well as national security or human health and safety benefits that should also be considered. Going forward, the Secretary is to evaluate all of the potential benefits of authorized harbors, including commercial uses, in making an equitable allocation of funds.

The amendments made by section 2102 also established a new prioritization of future annual expenditures for operation and maintenance of eligible harbors.

First, for each of fiscal years 2015 through 2022, the Secretary is required to allocate not less than 10 percent of the value of operation and maintenance funds appropriated in fiscal year 2012 ($898 million) (hereinafter referred to as the 2012 baseline) to address the maintenance dredging needs of emerging harbors. For the remaining 90 percent of funds within the 2012 baseline, the Secretary is authorized to make funding decisions as necessary to address harbor needs based on an equitable allocation of funds, as defined in the statute.

Second, for any funds appropriated to address the operation and maintenance needs of harbors that are above the 2012 baseline (hereinafter referred to as priority funds), for fiscal years 2015 through 2024, the Secretary is directed to allocate 90 percent of such funds to meet the needs of high-use and moderate-use harbor projects, and to allocate 10 percent of priority funds to meet the use of emerging harbors. This 10 percent allocation of priority funds for emerging harbors is in addition to the 10 percent allocation (for fiscal years 2015 through 2022) within the 2012 baseline. It is the intent that the 2012 baseline be considered as the funds made available to address the operation and maintenance needs of harbors in appropriations, not including supplemental appropriations for that year.

Third, in addition to the 90 percent-10 percent division of priority funds described in the previous paragraph, the Secretary is directed, for fiscal years 2015 through 2024, to allocate not less than 5 percent of total priority funds available in a fiscal year to meet the needs of underserved harbor projects (as defined); and not less than 10 percent of such funds for projects located within the Great Lakes Navigation System. Finally, of the total priority funds available for each of fiscal years 2015 through 2024, the Secretary is directed to use not less than 10 percent of those funds for expanded uses (as defined) carried out at eligible harbors or inland harbors (as defined).

In establishing this prioritization system the Managers are identifying certain priority areas to receive priority funds. The Managers intend that funding operation and maintenance of one project can satisfy more than one identified prioritization category. For example, if the Secretary provides funding for an emerging harbor in the Great Lakes, that funding can count both for meeting the 10 percent allocation for emerging harbors from priority funds, as well as the 10 percent allocation for projects in the Great Lakes Navigation System. Similarly, if the Secretary were to allocate funding to an underserved harbor that also meets the definition of a moderate-use harbor, that allocation could help satisfy both statutory allocations. Finally, if the Secretary were to allocate funding to an eligible high-use or medium-use harbor or inland harbor for expanded uses, that allocation could satisfy the expanded uses allocation and the allocation for meeting the needs of high-use or moderate-use harbors.

In making funding decisions under this section, the Managers expect that the Secretary can use the flexibility within the 90 percent of funds appropriated within the 2012 baseline to meet other funding priorities of the Secretary, while still meeting the priority allocations included in this section for priority funds above the 2012 baseline.

Section 2102 also directs the Secretary to undertake a biennial assessment of the total operation and maintenance needs of the Nation's harbors. The intent of this provision is to provide a more comprehensive understanding of the operation and maintenance needs of authorized harbors, both to meet their authorized widths and depths, as well as to address potential expanded uses at eligible harbors and inland harbors. The Managers expect that this information will provide a useful tool for future funding allocations, as well as provide individual harbors with some expectation of when their individual operation and maintenance needs may be addressed through future funding allocations. In addition, this assessment will provide greater detail on the current uses of high use harbors that transit 90 percent of the Nation's commerce as well as emerging harbors, including harbors used for commercial fishing purposes, and harbors that are used in emergencies to provide water access for Coast Guard, fire control and emergency relief, to nuclear power stations, other energy-related industries, or coastal developments that could be impacted by hurricanes, earthquakes, tsunamis, or other shoreline catastrophes.

It is the intent of Section 2102 (a) (2) Assessment of Harbor Needs and Activities, (B) Uses of Harbors and Inland Harbors, (xi) *public health and safety related equipment for responding to coastal and inland emergencies*, that attention and assessment be given to identifying specific harbors that would be used in emergencies to provide water access for coast guard, fire control and emergency relief, to nuclear power stations, other energy-related industries, or coastal developments that could be impacted by hurricanes, earthquakes, tsunamis, or other shoreline catastrophes.

Section 4022(b) of the Internal Revenue Service Restructuring and Reform Act of 1998 (the "IRS Reform Act") requires the Joint Committee on Taxation (in consultation with the Internal Revenue Service and the Department of the Treasury) to provide a tax complexity analysis. The complexity analysis is required for all legislation reported by the Senate Committee on Finance, the House Committee on Ways and Means, or any committee of conference if the legislation includes a provision that directly or indirectly amends the Internal Revenue Code (the "Code") and has widespread applicability to individuals or small businesses. The staff of the Joint Committee on Taxation has determined that a complexity analysis is not required under section 4022(b) of the IRS Reform Act because the bill contains no provisions that have "widespread applicability" to individuals or small businesses.

SEC. 2103. CONSOLIDATION OF DEEP DRAFT NAVIGATION EXPERTISE.

House § 204. No comparable Senate section.—Senate recedes.

SEC. 2104. REMOTE AND SUBSISTENCE HARBORS.

Senate § 5017. No comparable House section.—House recedes, with an amendment.

SEC. 2105. ARCTIC DEEP DRAFT PORT DEVELOPMENT PARTNERSHIPS.

Senate § 5022. No comparable House section.—House recedes, with an amendment.

SEC. 2106. ADDITIONAL MEASURES AT DONOR PORTS AND ENERGY TRANSFER PORTS.

Senate § 8004. No comparable House section.—House recedes, with an amendment.

SEC. 2107. PRESERVING UNITED STATES HARBORS.

House § 203. No comparable Senate section.—Senate recedes, with an amendment.

TITLE III—SAFETY IMPROVEMENTS AND ADDRESSING EXTREME WEATHER EVENTS

Subtitle A—Dam Safety

SEC. 3001. DAM SAFETY.

House §124, Senate § 9001, § 9002, § 9003, § 9004, § 9005, § 9006, § 9007.—House recedes, with an amendment.

Subtitle B—Levee Safety

SEC. 3011. SYSTEMWIDE IMPROVEMENT FRAMEWORK.

House § 127, Senate § 2041.—House recedes.

SEC. 3012. MANAGEMENT OF FLOOD RISK REDUCTION PROJECTS.

Senate § 3011. No comparable House section.—House recedes, with an amendment.

SEC. 3013. VEGETATION MANAGEMENT POLICY.

House § 127, Senate § 2020.—House recedes, with an amendment.

SEC. 3014. LEVEE CERTIFICATIONS.

Senate § 2021. No comparable House section.—House recedes, with an amendment.

SEC. 3015. PLANNING ASSISTANCE TO STATES.

House § 126, Senate § 2019.—House recedes, with an amendment.

SEC. 3016. LEVEE SAFETY.

House § 126, Senate § 6001-6009.—House and Senate agree to an amendment.

SEC. 3017. REHABILITATION OF EXISTING LEVEES.

Senate § 2022. No comparable House section.—House recedes, with an amendment.

Subtitle C—Additional Safety Improvements and Risk Reduction Measures

SEC. 3021. USE OF INNOVATIVE MATERIALS.

House § 132. No comparable Senate section.—Senate recedes, with an amendment.

SEC. 3022. DURABILITY, SUSTAINABILITY, AND RESILIENCE.

House § 132, Senate § 11001.—House and Senate agree to an amendment.

SEC. 3023. STUDY ON RISK REDUCTION.

Senate § 11002. No comparable House section.—House recedes.

SEC. 3024. MANAGEMENT OF FLOOD, DROUGHT, AND STORM DAMAGE.

Senate § 11003. No comparable House section.—House recedes, with an amendment.

SEC. 3025. POST-DISASTER WATERSHED ASSESSMENTS.

Senate §11004. No comparable House section.—House recedes, with an amendment.

SEC. 3026. HURRICANE AND STORM DAMAGE REDUCTION STUDY.

House § 120, Senate § 3004.—Senate recedes.

Section 3026 clarifies that Congress intends that the study for flood and storm damage reduction related to natural disasters carried out by the Secretary under Title II of Division A of the Disaster Relief Appropriations Act, 2013, shall include in the recommendations specific reference to regional and watershed level actions that could be taken, including the development of coastal wetlands to serve as protective surge reduction areas, to reduce shoreline impacts from storm surges. It is the intent of this section to provide direction on the development of a recommended step down approach that local and regional governments could collaborate on to improve coastal storm damage reduction.

SEC. 3027. EMERGENCY COMMUNICATION OF RISK.

House § 123. No comparable Senate section.—Senate recedes, with an amendment.

SEC. 3028. SAFETY ASSURANCE REVIEW.

Senate § 2002. No comparable House section.—House recedes.

SEC. 3029. EMERGENCY RESPONSE TO NATURAL DISASTERS.

House § 122, Senate § 2040.—House and Senate agree to an amendment.

TITLE IV—RIVER BASINS AND COASTAL AREAS

SEC. 4001. RIVER BASIN COMMISSIONS.

House § 134, Senate §2063.—House recedes, with an amendment.

It is the intent of Section 4001 that the Secretary follow through on the direction provided by Congress to find and implement the means necessary to financially support the Susquehanna, Delaware, and Potomac River Basin Commissions. Congress has made clear its intent that the three River Basin Commissions be supported and expects the Corps of Engineers to act appropriately.

SEC. 4002. MISSISSIPPI RIVER.

Senate § 2056, § 2057, § 5012, § 5023. No comparable House section.—House recedes, with an amendment.

This section authorizes the Secretary to update forecasting technology in the interest of maintaining navigation. This section authorizes the Secretary to study the feasibility of carrying out projects to improve navigation and aquatic ecosystem restoration. This section authorizes the Secretary to carry out a study to improve the coordinated and comprehensive management of water resource projects related to severe flooding and drought conditions. This section authorizes the Secretary to carry out navigation projects outside of the authorized federal navigation channel to ensure safe and reliable fleeting areas.

The Upper Mississippi River System (UMRS) is the only river designated by the United States Congress as a "nationally significant ecosystem and a nationally significant commercial navigation system." Congress declared its commitment to modernize the infrastructure and improve its ecosystem with authorization of the Navigation and Ecosystem Sustainability Program (NESP) in WRDA 2007. This commitment is reinforced with the prioritization list contained in the Inland Marine Transportation System Capital Projects Business Model, parts of which are authorized in this bill.

The Managers recognize the interconnected nature of the many systems that make up the greater Mississippi River Basin and the need to better manage the Basin during times of severe flooding and drought that threaten personal safety, property, and navigation within the Basin. The study authorized in subsection (c) should identify any federal actions that are likely to prevent and mitigate the impacts of severe flooding and drought, including changes to authorized channel dimensions, operational procedures of locks and dams, and reservoir management within the greater Mississippi River Basin, consistent with the authorized purposes of the water resource projects; identify and make recommendations to remedy challenges to the Corps of Engineers presented by severe flooding and drought, including river access, in carrying out its mission to maintain safe, reliable navigation, consistent with the authorized purposes of the water resource projects in the greater Mississippi River Basin; and identify and locate natural or other physical impediments along the middle and lower Mississippi River to maintaining navigation on the middle and lower Mississippi River during periods of low water. In carrying out the study, Managers encourage the Secretary to consult with appropriate committees of Congress, federal, State, tribal, and local agencies, environmental interests, agricultural interests, recreational interests, river navigation industry representatives, other shipping and business interests, organized labor, and nongovernmental organizations; use existing data to the maximum extent practicable; and incorporate lessons learned and best practices developed as a result of past severe flooding and drought events, including major floods and the successful effort to maintain navigation during the near historic low water levels on the Mississippi River during the winter of 2012-2013.

Subsection (d) provides the Secretary with authority to carry out activities identified in the report required under paragraph (2) to maintain safe and reliable navigation within the authorized federal navigation channel on the Mississippi River. The Managers intend for any project carried out under this authority to be subject to applicable cost-sharing and mitigation requirements.

SEC. 4003. MISSOURI RIVER.

House § 119, Senate § 3003, § 3005, § 5008, §5009, §5015.—House recedes, with an amendment.

It is the intent of the Managers that the Secretary of the Army coordinate with the appropriate agencies to carry out activities to improve and support management of the federal water resources

development projects in the Missouri River basin. In carrying out this coordination the Secretary shall consult with the appropriate federal, State, and tribal agencies located in the area in which the water resources project is located. It is the intent that the shoreline erosion study be limited to those Upper Missouri River mainstem reservoirs operated by the Corps of Engineers.

SEC. 4004. ARKANSAS RIVER.

Senate § 5006. No comparable House section.—House recedes.

SEC. 4005. COLUMBIA BASIN.

Senate §5005. No comparable House section.—House recedes, with an amendment.

SEC. 4006. RIO GRANDE.

Senate § 5004. No comparable House section.—House recedes, with an amendment.

SEC. 4007. NORTHERN ROCKIES HEADWATERS.

Senate § 5010. No comparable House section.—House recedes, with an amendment.

SEC. 4008. RURAL WESTERN WATER.

Senate § 5013. No comparable House section.—House recedes, with an amendment.

SEC. 4009. NORTH ATLANTIC COASTAL REGION.

Senate § 5002. No comparable House section.—House recedes, with an amendment.

In carrying out the study authorized under this section, the Managers urge the Secretary to look at a broad array of aquatic ecosystem restoration opportunities and needs, and identify those geographic areas and associated activities that will have the greatest impact on restoration and sustainability of the northeast coastal ecosystem. Issues that the study may evaluate include:

- an inventory and evaluation of coastal habitats
- identification of aquatic resources in need of improvement
- identification and prioritization of potential aquatic habitat restoration projects, and
- identification of geographical and ecological areas of concern, including finfish habitats, diadromous fisheries migratory corridors, shellfish habitats, submerged aquatic vegetation, wetland, and beach dune complexes and other similar habitats.

SEC. 4010. CHESAPEAKE BAY.

Senate §5003, §5014. No comparable House section.—House recedes, with an amendment.

For the purposes of the comprehensive plan authorized under this section, the Managers direct the Corps to use the Chesapeake Bay Comprehensive Water Resource and Restoration Plan ,which was initiated in Fiscal 2014.

SEC. 4011. LOUISIANA COASTAL AREA.

Senate § 3018. No comparable House section.—House recedes, with an amendment.

The Managers recognize the importance of ensuring that water resources projects do not cause incidental storm surge damage to neighboring states and local municipalities. Where incidental storm surge could occur, the Secretary is encouraged to consult with any affected states and local municipalities when developing a feasibility report under this section.

SEC. 4012. RED RIVER BASIN.

Senate § 3008. No comparable House section.—House recedes, with an amendment.

SEC. 4013. TECHNICAL CORRECTIONS.

Senate § 3002, § 3007, § 3012, § 3013, § 3019. No comparable House section.—House and Senate agree to an amendment.

SEC. 4014. OCEAN AND COASTAL RESILLIENCY.

No comparable House or Senate section.

TITLE V—WATER INFRASTRUCTURE FINANCING

The Managers support robust investment in the construction, repair, and replacement of the Nation's network of wastewater infrastructure, as well as other measures to address ongoing sources of pollution under the Clean Water Act. In the conference report to accompany H.R. 3080, the Managers have agreed both to the creation of a new Water Infrastructure Finance and Innovation Act (WIFIA) as well improvements to the existing Clean Water State Revolving Fund (Clean Water SRF), authorized by Title VI of the Clean Water Act.

Subtitle A and B:

During the consideration of H.R. 3080 and S. 601, the Mangers received statements of support for both the creation of a new WIFIA, as well as for reauthorization of the Clean Water SRF. The Managers agreed to include several targeted amendments to Title VI of the Clean Water Act (included in sections 5001, 5002, 5003, 5004, 5005, 5011, 5012, and 5013 of the conference report) to address several recommendations made by States and municipalities, and other stakeholders that used the Clean Water SRF for financing water quality improvements over the years. Many of these amendments have been subject to numerous hearings and have passed either the House of Representatives or the United States Senate in various bills over the last decade. These amendments are intended to increase the affordability of SRF financing to local communities, to increase flexibility in the uses of the Clean Water SRF to address local water quality concerns, and to promote more cost-effective management of infrastructure financed by SRF resources. The Managers also have agreed to codify, within Title VI of the Clean Water Act, several legislative provisions that have been carried forward through annual appropriations bills, including provisions related to the appropriate Clean Water SRF allocation for Indian tribes, nationwide.

By including these target amendments to the Clean Water SRF in the conference report to accompany H.R. 3080, the Managers intend to ensure that the Clean Water SRF remains a viable option for local communities and States to address ongoing local water quality concerns. After completion of the reports called for under this Title, the Managers expect to revisit the issue of financing wastewater infrastructure to

address any recommendations or challenges raised by these reports or through implementation of the provisions authorized by this Title.

Subtitle A—State Water Pollution Control Revolving Funds

SEC. 5001. GENERAL AUTHORITY FOR CAPITALIZATION GRANTS.

Senate § 10002, § 10007, §10011. No comparable House section.—House and Senate agree to an amendment.

SEC. 5002. CAPITALIZATION GRANT AGREEMENTS.

Senate § 10002, § 10007, §10011. No comparable House section.—House and Senate agree to an amendment.

SEC. 5003. WATER POLLUTION CONTROL REVOLVING LOAN FUNDS.

Senate § 10002, § 10007, §10011. No comparable House section.—House and Senate agree to an amendment.

SEC. 5004. REQUIREMENTS.

Senate §10016. No comparable House section.—House and Senate agree to an amendment.

SEC. 5005. REPORT ON THE ALLOTMENT OF FUNDS.

Senate § 10002, § 10007, §10011. No comparable House section.—House and Senate agree to an amendment.

SEC. 5006. EFFECTIVE DATE.

Senate § 10002, § 10007, §10011. No comparable House section.—House and Senate agree to an amendment.

Subtitle B—General Provisions

SEC. 5011. WATERSHED PILOT PROJECTS.

Senate § 10002, § 10007, §10011. No comparable House section.—House and Senate agree to an amendment.

SEC. 5012. DEFINITION OF TREATMENT WORKS.

Senate § 10002, § 10007, §10011. No comparable House section.—House and Senate agree to an amendment.

SEC. 5013. FUNDING FOR INDIAN PROGRAMS.

Senate § 10002, § 10007, §10011. No comparable House section.—House and Senate agree to an amendment.

SEC. 5014. WATER INFRASTRUCTURE PUBLIC-PRIVATE PARTNERSHIP PILOT PROGRAM.

House § 117. No comparable Senate section.—Senate recedes, with an amendment.

Subtitle C – Innovative Financing Pilot Projects

The Conference agreement maintains the Water Infrastructure Finance and Innovation Act (WIFIA) included in S. 601. The conference agreement includes targeted modifications to the Senate-passed bill to ensure WIFIA does not duplicate efforts undertaken by existing State Revolving Funds, to provide dedicated funding for rural infrastructure projects, and to provide additional flexibility to provide loans that are in excess of 49 percent of a project's total cost.

SEC. 5021. SHORT TITLE.

Senate § 10001. No comparable House section.—House recedes, with an amendment.

SEC. 5022. DEFINITIONS.

Senate § 10003. No comparable House section.—House recedes, with an amendment.

SEC. 5023. AUTHORITY TO PROVIDE ASSISTANCE.

Senate § 10004. No comparable House section.—House recedes, with an amendment.

SEC. 5024. APPLICATIONS.

Senate §10005. No comparable House section.—House recedes, with an amendment.

SEC. 5025. ELIGIBLE ENTITIES.

Senate § 10006. No comparable House section.—House recedes, with an amendment.

SEC. 5026. PROJECTS ELIGIBLE FOR ASSISTANCE.

Senate § 10007. No comparable House section.—House recedes, with an amendment.

SEC. 5027. ACTIVITIES ELIGIBLE FOR ASSISTANCE.

Senate § 10008. No comparable House section.—House recedes, with an amendment.

SEC. 5028. DETERMINATION OF ELIGIBILITY AND PROJECT SELECTION.

Senate § 10009. No comparable House section.—House recedes, with an amendment.

SEC. 5029. SECURED LOANS.

Senate §10010. No comparable House section.—House recedes, with an amendment.

SEC. 5030. PROGRAM ADMINISTRATION.

Senate §10011. No comparable House section.—House recedes, with an amendment.

SEC. 5031. STATE, TRIBAL, AND LOCAL PERMITS.

Senate § 10012. No comparable House section.—House recedes, with an amendment.

SEC. 5032. REGULATIONS.

Senate §10013. No comparable House section.—House recedes, with an amendment.

SEC. 5033. FUNDING.

Senate § 10014. No comparable House section.—House recedes, with an amendment.

SEC. 5034. REPORTS ON PILOT PROGRAM IMPLEMENTATION.

Senate § 10015. No comparable House section.—House recedes, with an amendment.

SEC. 5035. REQUIREMENTS.

Senate § 10016. No comparable House section.—House recedes, with an amendment.

TITLE VI—DEAUTHORIZATION AND BACKLOG PREVENTION

SEC. 6001. DEAUTHORIZATION OF INACTIVE PROJECTS.

House § 301, Senate § 2049.—Senate recedes, with an amendment.

This section establishes a process that will lead to the deauthorization of old, inactive projects the value of which shall exceed the value of projects authorized in this Act by $6 billion. This section requires the Secretary of the Army submit a list of inactive projects to the Congress that were authorized prior to the Water Resources Development Act of 2007, have not begun construction, or if they have begun construction, have not received any funds, federal or non-federal, in the past 6 years. The Secretary shall identify projects from the oldest authorization to the newest until the total federal cost of the projects on the list totals not less than $6 billion more than the value of the projects authorized by this Act. After a 180 day period of congressional review, the projects on the list are deauthorized.

This section is not intended to apply to project studies, or any activities authorized in the Water Resources Development Act of 2007 or those projects that have or are undergoing a post-authorization study (as defined) in the past 6 years.

Traditionally, Water Resources Development Acts contained lists of projects to be deauthorized. However, the Corps of Engineers has seemingly lost track of inactive projects. While the Managers applaud

devoting scarce funds and human resources to active projects, the Managers expect the Corps of Engineers to be able to readily identify those projects subject to this section.

In addition, to avoid a similar situation in the future, the Managers direct the Secretary to utilize existing authorities, including the authorities authorized by section 2041 of the Water Resources Development Act of 2007 (121 Stat. 1100), to regularly maintain and update the status of each water resources development project, study, or modification that is authorized by the Congress, including those projects, studies, and modifications that were authorized prior to the date of enactment of this Act, but that are not included in the final deauthorization list that is submitted to Congress under 6001(d)(4). The Managers expect that, upon completion of the deauthorization process established under this section, the Secretary will have identified each project, study, or modification that is currently authorized to be carried out by the Corps of Engineers. A single data base will be established that will consolidate all of the required information. This information will be accessible through Headquarters and will be updated quarterly to ensure consistency and accuracy.

SEC. 6002. REVIEW OF CORPS OF ENGINEERS ASSETS.

House § 302. No comparable Senate section.—Senate recedes, with an amendment.

It is the intent of section 6002 that the Army Corps of Engineers work directly with the General Services Administration (GSA) to identify and coordinate the identification and action on any physical asset that could be potentially transferred or removed from government ownership.

SEC. 6003. BACKLOG PREVENTION.

House § 303, Senate § 2049.—Senate recedes, with an amendment.

SEC. 6004. DEAUTHORIZATIONS.

House § 304, Senate § 3006, § 3020, § 3021.—House and Senate agree to an amendment.

SEC. 6005. LAND CONVEYANCES.

House § 305, Senate § 3010, § 3014, § 3016, § 5019, § 12008.—House and Senate agree to an amendment.

TITLE VII—WATER RESOURCES INFRASTRUCTURE

SEC. 7001. ANNUAL REPORT TO CONGRESS.

House § 118, Senate § 4001, § 4002, § 4003.—Senate recedes, with an amendment.

This section requires the Secretary of the Army to annually publish a notice in the federal Register requesting proposals from non-federal interests for project authorizations, studies, and modifications to existing Corps of Engineers projects. Further, it requires the Secretary to submit to Congress and make publicly available an annual report of those activities that are related to the missions of the Corps of Engineers and require specific authorization by law. Additionally, this section requires the Secretary to certify the proposals included in the annual report meet the criteria established by Congress in this section.

The section requires that information be provided about each proposal that is in the Annual Report submitted to the Congress. This information is meant to help the Congress set priorities regarding which potential studies, projects, and modifications will receive authorizations. The Secretary is expected to make use of information that is readily available and is not expected to begin a detailed and time-consuming analysis for additional information.

This section contains a provision to require the Corps of Engineers submit to Congress an appendix containing descriptions of those projects requested by non-federal interests that were not included in the Annual Report. The activities to be included in the appendix provide an additional layer of transparency that will allow Congress to review all non-federal interest submittals to the Corps of Engineers. This will allow Congress to receive a more complete spectrum of potential project studies, authorizations, and modifications. Activities described in the appendix are not subject to authorization from Congress.

SEC. 7002. AUTHORIZATION OF FINAL FEASIBILITY STUDIES.

House § 401, Senate § 1002.—Senate recedes, with an amendment.

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
441 G STREET, NW
WASHINGTON, DC 20314-1000

REPLY TO
ATTENTION OF

JUL 22 2011

CEMP-SWD (1105-2-10-a)

SUBJECT: Sabine-Neches Waterway Channel Improvement Project, Southeast Texas and Southwest Louisiana

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on navigation improvements for the Sabine-Neches Waterway (SNWW) in Southeast Texas and Southwest Louisiana. It is accompanied by the report of the Galveston District Engineer and the Southwestern Division Engineer. These reports are in response to a Congressional resolution adopted on 5 June 1997 by the Senate Committee on Environment and Public Works. The committee requested a review of the reports on the SNWW and other pertinent reports to determine the feasibility of modifying the channels serving the ports of Beaumont, Port Arthur, and Orange, Texas in the interest of commercial navigation. Pre-construction engineering and design activities for this proposed project, if funded, would be continued under this authority. The existing SNWW 40-Foot Navigation Project was authorized by the River and Harbor Act of 1962 and construction of the 40-foot project was completed in 1968.

2. The report recommends a project that will contribute to the economic efficiency of commercial navigation. The SNWW is a system of navigation channels that have been superimposed upon the Sabine-Neches estuary in Texas and Louisiana. The study evaluated navigation and environmental problems and opportunities for the entire estuarine system, which is defined as the study area. The study area encompasses a 2,000-square-mile area, which contains the smaller project area that includes those areas that would be directly affected by construction of the project (i.e. the dredging footprint, existing and proposed placement areas, and mitigation areas). The study area includes the following water bodies and adjacent coastal wetlands: Sabine Lake and adjacent marshes in Texas and Louisiana, the Neches River channel up to the new Neches River Saltwater Barrier, the Sabine River channel to the Sabine Island Wildlife Management Area, the GIWW west to Star Bayou, the GIWW east to Gum Cove Ridge, the Gulf shoreline extending to 10 miles either side of Sabine Pass, and 35 miles offshore into the Gulf of Mexico.

3. The reporting officers recommend the Locally Preferred Plan (LPP) to modify the existing SNWW. The LPP consists of the following improvements:

a. Deepen the SNWW from 40 to 48 feet and the offshore channel from 42 to 50 feet in depth from offshore to the Port of Beaumont Turning Basin;

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b. Extend the 50-foot deep offshore channel by 13.2 miles to deep water in the Gulf, increasing the total length of channel from 64 to 77 miles;

c. Taper and mark the Sabine Bank Channel from 800 feet wide to 700 feet wide;

d. Deepen and widen Taylor Bayou channels and turning basins;

e. Ease selected bends on the Sabine-Neches Canal and Neches River Channel;

f. Construct new and enlarge/deepen existing turning and anchorage basins on the Neches River Channel.

Dredged material placement for this project would be provided in accordance with the Dredged Material Management Plan (DMMP) developed during the study. Deepening of the SNWW would generate approximately 98 million cubic yards of new work material and 650 million cubic yards of maintenance material over the 50-year period of economic evaluation. Material from the extension channel, Sabine Bank Channel, Sabine Pass Outer Bar Channel, and Sabine Pass Jetty Channel would be placed offshore, either in existing placement areas or newly designated sites. Material from the inland reaches would be placed in existing confined, upland placement sites adjacent to each reach. Expansion of some existing upland sites would also be required. Some dredged material from the inland reaches would be used beneficially to restore large degraded marsh areas on the Neches River and nourish the Gulf shoreline at Texas and Louisiana Points.

4. As discussed further in the report of the Galveston District Engineer and the Southwestern Division Engineer, the recommended plan includes preliminary conclusions that 41 pipelines located within the SNWW Channel must be relocated and are classified as utility relocations for which the non-Federal sponsor must perform or assure performance. In accordance with Section 101(a)(4) of the Water Resources Development Act (WRDA) of 1986, as amended, one-half of the cost of each such relocation will be borne by the owner of the facility being relocated and one-half of the cost of each such relocation will be borne by the non-Federal sponsor. All relocations, including utility relocations, are to be accomplished at no cost to the Federal Government. The recommended plan also includes preliminary conclusions that there are an additional 5 pipelines that must be removed but not replaced. The Government, in coordination with the non-Federal sponsor, will conduct further analysis and finalize its conclusions during the period of pre-construction engineering and design.

5. Environmental benefits of the Neches River beneficial use (BU) features would offset all environmental impacts in the state of Texas and on all Federal lands, by restoring 2,853 acres of emergent marsh, improving 871 acres of shallow water habitat, and nourishing 1,234 acres of existing marsh in Texas. After consideration of project impacts in Texas and on Federal lands in the project area, the Neches River BU features will provide a net increase of 316 Average

Annual Habitat Units (AAHUs). The Gulf Shore BU features would offset minor erosion impacts to Gulf shorelines in Texas and Louisiana by periodically nourishing three miles of shoreline in each state. Unavoidable environmental impacts on non-Federal lands in Louisiana would be fully compensated by restoring 2,783 acres of emergent marsh, improving 957 acres of shallow water habitat, and stabilizing and nourishing 4,355 acres of existing marsh. These actions will provide 1,181 AAHUs to compensate for a loss of 1,159 AAHUs in Louisiana. Post-construction monitoring and adaptive management plans for the BU features and mitigation areas will be required until such time that the following performance criteria are met, as determined by the Division Commander: (1) each mitigation site and the Neches River BU features have an aerial coverage of 60 to 80 percent native, typical, emergent marsh vegetation; and invasive noxious and/or exotic plant species comprise less than 4 percent of mitigation site marsh coverage; (2) Texas Point BU feature shows a decreased erosion rate averaging less than 44 ft/yr after two disposal events; and (3) Louisiana Point BU feature shows an accretion rate averaging more than 1.2 ft/yr after two disposal events.

6. The recommended navigation project is not the National Economic Development (NED) plan. The recommended SNWW improvement is shallower and will be less costly than the NED plan and is the LPP supported by the non-Federal sponsor. The Sabine-Neches Navigation District is the non-Federal cost sharing sponsor.

7. Project Cost Breakdown Based on October 2010 Prices.

a. Total First Cost of Constructing Project. The estimated total first cost of constructing the project is $1,053,000,000 which includes the cost of constructing the general navigation features and the value of lands, easements, rights-of-way and relocations estimated as follows: $894,500,000 for channel modification and dredged material placement; $79,000,000 for environmental mitigation; $52,800,000 for bridge fender modifications; $1,270,000 Federal cost for cultural resources; $774,000 for additional Corps administrative costs; $3,690,000 for the value of lands, easements, rights-of-way, and relocations (except utility relocations) provided by the non-Federal sponsor; and $21,300,000 for the one-half of the cost of utility relocations borne by the non-Federal sponsor pursuant to Section 101(a)(4) of WRDA 1986, as amended.

b. Estimated Federal and non-Federal Shares. The estimated Federal and non-Federal shares of the total first cost of constructing the project are $707,000,000 and $345,990,000, respectively, as apportioned in accordance with the cost sharing provisions of Section 101 of WRDA 1986, as amended, as follows:

(1) The costs for the deepening of the channel from 40 to 45 feet will be shared at the rate of 75 percent by the Government and 25 percent by the non-Federal sponsor. Accordingly, the Federal and non-Federal shares of the estimated $772,000,000 cost in this zone will be approximately $579,000,000 and $193,000,000, respectively, with the difference of $1,270,000 being the Federal cost for cultural resources.

(2) The costs for the deepening of the channel from 45 to 48 feet will be shared at the rate of 50 percent by the Government and 50 percent by the non-Federal sponsor. Accordingly, the Federal and non-Federal shares of the estimated $256,000,000 cost in this zone will be approximately $128,000,000 each.

(3) In addition to payment by the non-Federal sponsor of its share of costs as estimated and addressed in sub-paragraphs (1) and (2) above, the estimated non-Federal share of $345,990,000 includes $3,690,000 for the estimated value of lands, easements, rights-of-way, and relocations (except utility relocations) that it must provide pursuant to Section 101(a)(3) of WRDA 1986, as amended, and $21,300,000 for one-half of the estimated costs of utility relocations borne by the non-Federal sponsor pursuant to Section 101(a)(4) of WRDA 1986, as amended.

c. Additional 10 Percent Payment. In addition to the non-Federal sponsor's estimated share of the total first cost of constructing the project in the amount of $345,990,000, pursuant to Section 101(a)(2) of WRDA 1986, as amended, the non-Federal sponsor must pay an additional 10 percent of the cost of the general navigation features of the project in cash over a period not to exceed 30 years, with interest. The value of lands, easements, rights-of-way, and relocations provided by the non-Federal sponsor under Section 101(a)(3) of WRDA 1986, as amended, and the costs of utility relocations borne by the non-Federal sponsor under Section 101(a)(4) of WRDA 1986, as amended, will be credited toward this payment.

d. Operations and Maintenance Costs. The additional annual cost of operation and maintenance for this recommended plan is estimated at $32,800,000. In accordance with Section 101(b) of WRDA 1986, the non-Federal sponsor will be responsible for an amount equal to 50 percent of the excess of the cost of the operation and maintenance of the project over the cost which would be incurred for operation and maintenance of the project if the project had a depth of 45 feet. The excess annual cost attributable to operation and maintenance for the depth in excess of 45 feet is $12,300,000 with the non-Federal sponsor responsible for $6,150,000.

e. Associated Costs. Estimated total project associated costs of $43,500,000 include $20,700,000 in non-Federal costs associated with dredging of berthing areas and development of other local service facilities; $1,500,000 for navigation aids (a U.S. Coast Guard expense); and $21,300,000 for the one-half of the cost of utility relocations to be borne by the facility owners in accordance with Section 101(a) (4) of WRDA of 1986, as amended.

f. Authorized Project Cost and Section 902 Calculation. The total estimated first cost of the project for the purposes of authorization and calculating the maximum cost of the project pursuant to Section 902 of WRDA 1986, as amended, should include the estimates for general navigation features (GNF) construction costs, the value of lands, easements, and rights-of-way,

the value of relocations provided under Section 101(a)(3) of WRDA 1986, as amended, and the one-half of the costs of utility relocations borne by the non-Federal sponsor for utility relocations under Section 101(a)(4) of WRDA 1986, as amended. Accordingly, as set forth in paragraph 7.a. above, based on October 2010 prices, the estimated total first cost of the project for these purposes is $1,053,000,000 with a Federal share of $707,000,000 and a non-Federal share of $345,990,000.

8. Based on October 2010 price levels, a discount rate of 4 1/8 percent, and a 50-year period of economic analysis, the project average annual benefits and costs for the SNWW improvements are estimated at $115,400,000 and $90,600,000, respectively, with a resulting net benefit of $24,800,000 and a benefit-to-cost ratio of 1.3 to 1.

9. In accordance with the Corps Engineering Circular on review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and vigorous review process to ensure technical quality. This included an Agency Technical Review (ATR), an Independent External Peer Review (IEPR), and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. The IEPR was completed by Battelle Memorial Institute. A total of 18 comments were documented. The comments were related to plan formulation, vessel fleet analysis, benefits, dredging and sedimentation, risk and uncertainty, and impact of salinity changes. In response, sections in the main report and EIS were expanded to include additional information. The final IEPR Report was completed in June 2010 with all comments addressed sufficiently.

10. Washington level review indicates that the plan recommended by the reporting officers is technically sound, environmentally and socially acceptable, and on the basis of congressional directives, economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies, except for the measurement of the National Economic Benefits which was modified by Section 6009 of the ESAA of 2005. Further, the recommended plan complies with other administration and legislative policies and guidelines. The views of interested parties, including Federal, State and local agencies, have been considered.

11. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that navigation improvements for the Sabine-Neches Waterway be authorized in accordance with the reporting officer's recommended plan at an estimated cost of $1,053,000,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 101 of WRDA 1986, as amended. This recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and policies including that the non-Federal sponsor must agree with the following requirements prior to project implementation.

a. Provide 10 percent of the total cost of construction of the GNFs attributable to dredging to a depth not in excess of 20 feet; plus 25 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 20 feet but not in excess of 45 feet; plus 50 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 45 feet as further specified below:

(1) Provide 25 percent of design costs allocated by the Government to commercial navigation in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

(2) Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs allocated by the Government to commercial navigation;

(3) Provide, during construction, any additional funds necessary to make its total contribution for commercial navigation equal to 10 percent of the total cost of construction of the GNFs attributable to dredging to a depth not in excess of 20 feet; plus 25 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 20 feet but not in excess of 45 feet; plus 50 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 45 feet;

b. Provide all lands, easements, and rights-of way (LER), including those necessary for the borrowing of material and the disposal of dredged or excavated material, and perform or assure the performance of all relocations, including utility relocations, all as determined by the Federal Government to be necessary for the construction or operation and maintenance of the GNFs;

c. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the GNFs, an additional amount equal to 10 percent of the total cost of construction of the GNFs less the amount of credit afforded by the Government for the value of the LER and relocations, including utility relocations, provided by the Sponsor for the GNFs. If the amount of credit afforded by the Government for the value of LER, and relocations, including utility relocations, provided by the Sponsor equals or exceeds 10 percent of the total cost of construction of the GNFs, the Sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of LER and relocations, including utility relocations, in excess of 10 percent of the total cost of construction of the GNFs;

d. Provide, operate, and maintain, at no cost to the Government, the local service facilities in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

e. Provide 50 percent of the excess cost of operation and maintenance of the project over that cost which the Federal Government determines would be incurred for operation and maintenance if the project had a depth of 45 feet;

f. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the Sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating and maintaining the GNFs;

g. Hold and save the United States free from all damages arising from the construction or operation and maintenance of the project, any betterments, and the local service facilities, except for damages due to the fault or negligence of the United States or its contractors;

h. Keep, and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, and other evidence are required, to the extent and in such detail as will properly reflect total cost of the project, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and local governments at 32 CFR, Section 33.20;

i. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601–9675, that may exist in, on, or under LER that the Federal Government determines to be necessary for the construction or operation and maintenance of the GNFs. However, for lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude, only the Government shall perform such investigations unless the Federal Government provides the Sponsor with prior specific written direction, in which case the Sponsor shall perform such investigations in accordance with such written direction;

j. Assume complete financial responsibility, as between the Federal Government and the Sponsor, for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under LER that the Federal Government determines to be necessary for the construction or operation and maintenance of the project;

k. To the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA;

l. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended, (42 U.S.C. 1962d-5b) and Section 101(e) of the WRDA 86, Public Law 99-662, as amended,

(33 U.S.C. 2211(e)) which provide that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the Sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element;

m. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended, (42 U.S.C. 4601-4655) and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way necessary for construction, operation, and maintenance of the project including those necessary for relocations, the borrowing of material, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said act;

n. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c);

o. Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project; and

p. Not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefor, to meet any of the Sponsor's obligations for the project unless the Federal agency providing the Federal portion of such funds verifies in writing that such funds are authorized to be used to carry out the project.

12. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to the

Congress, the States of Louisiana and Texas, the Sabine Neches Navigation District (the non-Federal sponsor), interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

MERDITH W.B. TEMPLE
Major General, USA
Acting Commander

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

CECW-PC (1105-2-10a) APR 30 2012

SUBJECT: Jacksonville Harbor Mile Point Navigation Study, Duval County, Florida

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress, the final feasibility report and environmental assessment on navigation improvements for Jacksonville Harbor Mile Point, Duval County, Florida. It is accompanied by the report of the district and division engineers. This report was prepared in response to a congressional resolution adopted on March 24, 1998 by the House Committee on Transportation and Infrastructure. Congress added funding in the appropriations for Fiscal Year 2000 to begin the reconnaissance phase of the feasibility study. This report constitutes the final report in response to this resolution. Preconstruction engineering and design activities for the Jacksonville Harbor Mile Point, Duval County, Florida Navigation Project will continue under the authority provided by the resolution cited above.

2. The report recommends authorizing a project that will contribute to the economic efficiency of commercial navigation. The recommended plan reduces the ebb tide crosscurrents at the confluence of the St. Johns River with the Intracoastal Waterway (IWW) by construction of a relocated Mile Point training wall. Relocation of the Mile Point training wall involves removal of the western 3,110 feet (ft) of existing Mile Point training wall, including land removal and dredging to open the confluence of the IWW and St. Johns River, construction of a new training wall western leg (~4,250 ft) and relocated eastern leg (~2,050 ft), restoration of Great Marsh Island as the least-cost disposal alternative and mitigation site providing beneficial use of dredged material, and construction of a flow improvement channel to offset project induced adverse impacts.

3. The reporting officers recommend the National Economic Development (NED) Plan to relocate/reconfigure the existing Mile Point Training Wall. The NED plan consists of the following improvements:

a. The training wall reconfiguration includes removal of the western 3,110 ft of the existing Mile Point training wall, construction of a relocated Eastern Leg training wall, approximately 2,050 ft, and a new West Leg training wall, approximately 4,250 ft. Total estimated quantity of material to be excavated is approximately 889,000 cubic yards (cy). All usable stone material recovered from the existing training wall will be stockpiled for use in either the West or East Leg of the relocated training wall and all other material excavated will be placed as beneficial use in the Salt Marsh Mitigation Area at Great Marsh Island and as foundation for the relocated training

wall. It is estimated that approximately 14,600 cy of armor stone can be recovered for reuse purposes; however, additional geophysical exploration will more precisely ascertain the exact quantities of stone available for reuse during the preconstruction, engineering and design phase.

b. The East Leg training wall incorporates a larger scour apron (25') than the West Leg (10') due to the predicted permanent shift of stronger currents in Pablo Creek towards the east, especially during the ebb tide. Channel migration of the IWW is anticipated and realignment of the channel to deep water may become necessary. The relocated East Leg consists of building approximately 2,050 ft of training wall tying into the existing structure on Helen Cooper Floyd Park and the West Leg consists of building approximately 4,250 ft of training wall across the breakthrough at Great Marsh Island. Estimated quantities associated with the East Leg are 26,900 cy of armor stone and 11,900 cy of bedding stone, and for the West Leg are 5,670 cy of concrete (567 units at 10cy/unit) and 32,000 square yards (sy) of geotextile fabric for bags and tubes to be filled with 40,500 cy of excavated material. Both legs will incorporate the use of a total of approximately 34,900 sy of filter fabric.

c. The least-cost disposal method is to restore the breakthrough at Great Marsh Island by constructing an approximate 4,250-foot Western Leg training wall and placing dredged material to restore the island. Restoration of this area provides an opportunity for beneficial use of dredged material and an opportunity to address impacts caused by the physical decay of the ecosystem through erosion of natural habitat caused by the crosscurrents. Without the project, Great Marsh Island will continue to erode. Restoring Great Marsh Island is both the least-cost alternative for dredged material and also provides up to 53 acres of salt marsh restoration. This alternative provides incidental environmental benefits, in addition to providing mitigation for approximately 8.15 acres of impacted salt marsh by the training wall removal.

d. The Flow Improvement Channel (FIC) would be constructed to offset any adverse effects that would be caused by closing off the breakthrough of Great Marsh Island. If Great Marsh Island is restored and the FIC is not built, then water quality is expected to be degraded within Chicopit Bay due to non-point source pollution loadings from the upstream watershed not being flushed out of the hydrological system. This would occur because the restoration would close off the recently formed channel through the eroded portion of Great Marsh Island, which now flushes the bay. The FIC would allow for improved water quality and environmental stability of the project area by potentially improving the flushing of sediment and other waterborne constituents into the adjacent IWW. The construction of the FIC would also restore the historic channel through Chicopit Bay, which has silted in with eroded material from Great Marsh Island. The FIC consists of dredging a channel 80 ft wide and 6 ft deep for a length of approximately 3,620 ft through Western Chicopit Bay. Dredged material from the FIC would be placed back into the Great Marsh Island restoration area.

e. Approximately 51.2 acres of land are under the control of the U.S. Navy. The U.S. Army Corps of Engineers (USACE) will coordinate with the U.S. Navy for a license that will allow

removal of the real property (uplands). Additionally, the federal government has navigational servitude over submerged lands impacted by the proposed project. The non-federal sponsor (Jacksonville Port Authority) owns lands in the vicinity of the proposed project, but those lands will not be impacted by the proposed project. The Nature Conservancy, Incorporated (Inc.) owns lands in the vicinity of the proposed project that may be required for construction of the western leg training wall through perpetual easement. The Nature Conservancy, Inc. is familiar with the proposed project and has indicated their support for the project.

4. Project Cost Breakdown Based on October 2011 Prices.

a. Project First Cost. The estimated project first cost is $35,999,000, which includes the cost of constructing the general navigation features (GNF) and the value of lands, easements, rights-of-way and relocations (LERR) estimated as follows: $32,812,000 for channel modification, turbidity and endangered species monitoring, and dredged material placement; $3,088,000 for environmental mitigation; and $99,000 administrative costs for the value of LERR. The Jacksonville Port Authority is the non-federal cost-sharing sponsor for all features.

b. Estimated Federal and Non-Federal Shares. The estimated federal and non-federal shares of the project first cost are $26,998,000 and $9,001,000, respectively, as apportioned in accordance with the cost sharing provisions of Section 101 of the Water Resources Development Act (WRDA) 1986, as amended (33 U.S.C. 2211), as follows:

(1) The cost for the general navigation features from greater than 20 ft to 45 ft will be shared at a rate of 75 percent by the Government and 25 percent by the non-federal sponsor. Accordingly, the federal and non-federal shares of the costs in this zone are estimated to be $26,924,000 and $8,976,000, respectively.

(2) In addition to the costs outlined in sub-paragraph (1) above, the project first cost includes administrative costs for LERR estimated at $99,000. The federal administrative costs include project real estate planning, review, and incidental costs between the U.S. Navy and the USACE. Accordingly, the federal and non-federal shares of the administrative costs are estimated to be $74,000 and $25,000, respectively. Credit is given for the incidental costs borne by the non-federal sponsor for LERR per Section 101 of WRDA 1986. Of the non-federal share, approximately $12,500, is eligible for LERR credit.

c. Additional 10 Percent Payment. In addition to the non-federal sponsor's estimated share of the total first cost of constructing the project in the amount of $9,001,000, pursuant to Section 101(a)(2) of WRDA 1986, as amended, the non-federal sponsor must pay an additional 10% of the costs of general navigation features of the project, $3,590,000, in cash over a period not to exceed 30 years, with interest. The value of the LERR provided by the non-federal sponsor under Section 101(a)(3) of WRDA 1986 as amended will be credited toward this payment.

d. Operations and Maintenance Costs. There are no additional costs of operation and maintenance for this recommended plan.

e. Associated Costs. Estimated associated costs of $431,000 include navigation aids, which is a U.S. Coast Guard expense.

f. Authorized Project Cost and Section 902 Calculation. The project first cost, for the purposes of authorization and calculating the maximum cost of the project pursuant to Section 902 of WRDA 1986, as amended, should include estimates for GNF construction costs, the value of LERR provided under Section 101(a)(3) of WRDA 1986, as amended. Accordingly, as set forth in paragraph 4.a. above, based on October 2011 prices, the estimated project first cost for these purposes is $35,999,000 with a federal share of $26,998,000 and a non-federal share of $9,001,000.

5. Based on October 2011 price levels, a 4-percent discount rate, and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $1,737,000. The average annual equivalent benefits are estimated to be $2,440,000. The average annual net benefits are estimated to be $703,000. The benefit-to-cost ratio for the recommended plan is 1.4.

6. Examination of the maximum flood and ebb tide current vectors indicate that flow velocities within the federal navigation channel are very similar between the existing and with-project condition and in isolated areas of the Mile Point turn are about 1 foot/second less under the with-project condition. This comparison suggests that little or no significant net increase in shoaling rates will occur in the Jacksonville Harbor federal channel over existing project conditions. A natural shift of the IWW at the entrance to Pablo Creek will be expected as a result of the realignment of the training wall. Lower water velocities will increase the opportunities for sedimentation on the western side of the entrance; while higher velocities along the eastern side have the potential to scour and undermine the location of the new training wall if unprotected against erosion. However, little or no significant net increase in shoaling of the IWW navigational channel is predicted as a result of the reconfiguration of the Mile Point training wall.

a. Historically, the training walls along the St. Johns River have performed well and required very little maintenance. With proper design and construction, it is anticipated that no maintenance of the relocated training wall legs will be required over the 50 year period of analysis. All dredged material for the recommended plan will be placed at Great Marsh Island; therefore, the selected plan will have no effect on future channel dredging maintenance activities for Jacksonville Harbor or the IWW.

b. Based on model investigations and current measurements, the resulting bottom current velocities from the relocated training wall legs and excavation and removal of a portion of the existing training wall and entire surrounding area to -13 ft Mean Low Water (MLW) are of such

magnitude to expect little deposition to occur in either of the channels. The Chicopit Bay FIC is also not expected to require maintenance dredging. Prior to the breakthrough of Great Marsh Island, a natural channel existed in the same location as the proposed FIC. Historical maps show water depths up to 10 ft due to tidal flushing of Chicopit Bay, as well as freshwater runoff from the neighboring creeks. Once Great Marsh Island is restored, the water from Greenfield and Mount Pleasant Creeks, as well as the large volume of water within Chicopit Bay's tidal prism, will flush in and out through the FIC. The water velocities in the channel are expected to be sufficient to prevent shoaling within the channel.

7. In accordance with the Corps Engineering Circular (EC) 1165-2-211 on sea level change, the study performed an analysis of three Sea Level Rise rates, a baseline estimate representing the minimum expected sea level change, an intermediate estimate, and a high estimate representing the maximum expected sea level change. Projecting the three rates of change provides a predicted low level rise of 0.12 meters (m) or approximately 0.39 ft, an intermediate level rise of 0.25 m or approximately 0.81 ft, and a high level rise of 0.66 m or approximately 2.17 ft. The impact of the low and intermediate level increases of 0.39 ft and 0.81 ft, respectively, would be inconsequential to the performance of the structure and the high level increase of 2.17 ft would only affect the performance of the structure during low probability events that exceeded the Mean Higher High Water (MHHW) level by more than 0.33 ft. Even during such low probability events, the structure will perform its intended purpose to train the river currents with the exception of that very small portion of the water column above the structure's crest. In addition, if over time the actual measured changes in relative sea level are closer to the Scenario III amounts or greater, then the structure's performance can easily be brought back to an optimal level by increasing the crest elevation by up to a foot without major expense. The salt marsh restoration design at Great Marsh Island is based on existing conditions, or current sea level, in order to achieve requisite elevations that would support low and high salt marsh as well as intertidal oyster beds. The restoration of these habitats cannot be performed using projected future sea level as the target species for these habitats would not be able to survive at current water levels. As an adaptive management measure to address future sea level rise, additional dredged material could be used when appropriate to increase the elevation of the Great Marsh Island restoration site and maintain salt marsh and other habitats.

8. In accordance with the Corps EC 1165-2-209 on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included District Quality Control, Agency Technical Review, Policy and Legal Compliance Review, Cost Engineering Directory of Expertise Review and Certification, and Model Review and Approval. Given the nature of the project, an exclusion from the requirement to conduct a Type I Independent External Peer Review was granted on 23 September 2011.

9. Washington level review indicates the plan recommended by the reporting officers is technically sound, environmentally and socially acceptable, and on the basis of congressional

directives, economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies. The recommended plan complies with other administration and legislative policies and guidelines. The views of interested parties, including federal, state and local agencies, have been considered. State and agency comments received during review of the final report/environmental assessment included concerns raised by the National Park Service related to channel realignment, unrecorded archaeological sites, cultural resources, and water quality within the Timucuan Ecological and Historical Preserve. These concerns were addressed through coordination and a multi-agency meeting and ultimately resolved in a Jacksonville District, USACE response dated February 27, 2012.

10. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that navigation improvements for Jacksonville Harbor Mile Point be authorized in accordance with the reporting officer's recommended plan at an estimated cost of $35,999,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal and State laws and policies, including Section 101 of WRDA 1986, as amended. This recommendation is subject to the non-federal sponsor agreeing to comply with all applicable federal laws and policies including that the non-federal sponsor must agree with the following requirements prior to project implementation.

a. Provide 10 percent of the total cost of construction of the GNFs attributable to dredging to a depth not in excess of 20 ft; plus 25 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 20 ft but not in excess of 45 ft; plus 50 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 45 ft as further specified below:

(1) Provide the non-federal share of design costs allocated by the Government to commercial navigation in accordance with the terms of a design agreement entered into prior to commencement of design work for the project.

(2) Provide, during construction, any additional funds necessary to make its total contribution for commercial navigation equal to 10 percent of the total cost of construction of the GNFs attributable to dredging to a depth not in excess of 20 ft; plus 25 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 20 ft but not in excess of 45 ft; plus 50 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 45 ft.

b. Provide all LERRs, including those necessary for the borrowing of material and the disposal of dredged or excavated material, and perform or assure the performance of all relocations, including utility relocations, all as determined by the federal government to be necessary for the construction or operation and maintenance of the GNFs.

c. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the GNFs, an additional amount equal to 10 percent of the total cost of construction of the GNFs less the amount of credit afforded by the Government for the value of the LERR is provided by the sponsor for the GNFs. If the amount of credit afforded by the Government for the value of LERR, and relocations, including utility relocations, provided by the sponsor equals or exceeds 10 percent of the total cost of construction of the GNFs, the sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of LERR and relocations, including utility relocations, in excess of 10 percent of the total cost of construction of the GNFs.

d. Provide, operate, and maintain, at no cost to the Government, the local service facilities in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the federal government;

e. Provide 50 percent of the excess cost of operation and maintenance of the project over that cost which the federal government determines would be incurred for operation and maintenance if the project had a depth of 45 ft.

f. Accomplish all removals determined necessary by the federal Government other than those removals specifically assigned to the federal Government;

g. Give the federal government a right to enter, at reasonable times and in a reasonable manner, upon property that the Sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating and maintaining the GNFs.

h. Hold and save the United States free from all damages arising from the construction or operation and maintenance of the project, any betterment, and the local service facilities, except for damages due to the fault or negligence of the United States or its contractors.

i. Keep, and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, and other evidence are required, to the extent and in such detail as will properly reflect total cost of the project, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and local governments at 32 Code of federal Regulation (CFR), Section 33.20.

j. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 United States Code 9601–9675, that may exist in, on, or under lands, easements,

right-of-ways, relocations and disposal areas (LERRD) that the federal government determines to be necessary for the construction or operation and maintenance of the GNFs. However, for lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude, only the Government shall perform such investigations unless the federal government provides the sponsor with prior specific written direction, in which case the sponsor shall perform such investigations in accordance with such written direction.

k. Assume complete financial responsibility, as between the federal government and the sponsor, for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under LERRD that the federal government determines to be necessary for the construction or operation and maintenance of the project;

l. Agree, as between the federal Government and the non-federal sponsor, that the non-federal sponsor shall be considered the operator of the local service facilities for the purpose of CERCLA liability.

m. To the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA.

n. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended, (42 U.S.C. 1962d-5b) and Section 101(e) of the WRDA 86, Public Law 99-662, as amended, (33 U.S.C. 2211(e)) which provide that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element.

o. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended, (42 U.S.C. 4601-4655) and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way necessary for construction, operation, and maintenance of the project including those necessary for relocations, the borrowing of material, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act.

p. Comply with all applicable federal and state laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable federal labor standards requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act

(formerly 40 U.S.C. 327 et seq.), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c));

q. Provide the non-federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project.

r. Not use funds from other federal programs, including any non-federal contribution required as a matching share therefore, to meet any of the sponsor's obligations for the project unless the federal agency providing the federal portion of such funds verifies in writing that such funds are authorized to be used to carry out the project.

11. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to the Congress, the State of Florida, the Jacksonville Port Authority (the non-federal sponsor), interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

MERDITH W.B. TEMPLE
Major General, USA
Acting Commander

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

CECW-PC (1105-2-10a) AUG 17 2012

SUBJECT: Savannah Harbor Expansion Project, Georgia and South Carolina

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on the Savannah Harbor Expansion Project, Georgia and South Carolina, which describes navigation improvements to the existing Savannah Harbor Navigation Project. It is accompanied by the report of the district and division engineers. The General Re-Evaluation Report and Final Environmental Impact Statement (GRR/FEIS) evaluate the advisability of increasing the channel depth, providing environmental mitigation to offset project impacts and making other improvements to Savannah Harbor in the interest of navigation and related purposes. Both the GRR and the FEIS are in response to Section 101(b)(9) of the Water Resources Development Act (WRDA) of 1999. This provision authorized construction substantially in accordance with a Chief's Report to be completed no later than December 31, 1999. The required Chief's Report was signed on October 21, 1999. Section 101(b)(9) also mandated that before the project could be carried out, the Secretary, in consultation with affected State and Federal agencies, formulate an analysis of the impacts of project depth alternatives ranging from -42 feet to -48 feet, along with a recommended plan for navigation and an associated mitigation plan, to be approved jointly with the Department of the Interior, the Department of Commerce and the Environmental Protection Agency (EPA). This report is submitted in fulfillment of these conditions, so that the project may be carried out in accordance with the WRDA 1999 authorization, subject to the requested statutory modification to increase the authorized total project cost, as described in paragraph 10 below.

2. The report recommends implementation of a project that will contribute to the economic efficiency of commercial navigation. Savannah Harbor is a deep draft navigation harbor located on the South Atlantic U.S. coast, 75 statute miles south of Charleston Harbor, South Carolina, and 120 miles north of Jacksonville Harbor, Florida. The Harbor comprises the lower 21.3 miles of the Savannah River (which, with certain of its tributaries, forms the boundary between Georgia and South Carolina along its entire length of 313 miles) and 11.4 miles of channel across the bar to the Atlantic Ocean. Improvements were considered from deep water in the ocean upstream to the area of the Garden City Terminal operated by the Georgia Ports Authority. The recommended plan will result in transportation cost savings by allowing the larger Post-Panamax vessels to operate more efficiently and experience fewer tidal and transit delays. The Georgia Department of Transportation is the non-Federal cost sharing sponsor.

3. The reporting officers recommend construction of a -47 foot Mean Lower Low Water (MLLW) depth alternative plan to modify the existing Savannah Harbor Navigation Project. The selected plan would require dredging and subsequent placement of 24 million cubic yards of new work sediments. Approximately 54% of this sediment would be deposited in existing upland

dredged material containment areas (DMCAs) and about 46% would be deposited in the US Environmental Protection Agency-approved Ocean Dredged Material Disposal Site (ODMDS) or an existing DMCA. The required Site Management and Monitoring Plan for the Savannah ODMDS must be completed and signed by the EPA and the Corps before the EPA can issue a concurrence for disposal of material from the SHEP into the Savannah ODMDS. Any portion of this material that does not meet the Ocean Dumping Criteria must be placed within an upland Confined Disposal Facility (CDF) that has sufficient capacity for the volume of proposed dredged material that does not meet the Ocean Dumping Criteria. The selected plan for navigation improvements consists primarily of the following:

a. Extending the existing entrance channel 7.1 miles from Stations -60+000B to -97+680B and deepening to -49 feet MLLW from the new ocean terminus to Station -14B+000B, then deepening to -47 feet MLLW from Station –14B+000B to Station 0+000 and, deepening the inner harbor to -47 feet MLLW from Station 0+000 to 103+000;

b. Widening bends on the entrance channel at one location (Stations -23+000B to -14+000B) and in the inner harbor channel at two locations; (Stations 27+700 to 31+500, and Stations 52+250 to 55+000);

c. Constructing two meeting areas (Stations 14+000 to 22+000 and Stations 55+000 to 59+000);

d. Deepening and enlarging the Kings Island Turning Basin to a width of 1,600-feet;

e. Restoring dredged material volumetric capacity in existing DMCAs; and

f. A mitigation plan which includes the features described below.

Other prior authorized features of the existing Savannah Harbor Navigation Project located beyond the limits described above in paragraph 3 would remain unchanged by the selected plan of improvement and would remain components of the Savannah Harbor Navigation Project.

4. The mitigation plan includes the following features:

a. Construction of a fish bypass around the New Savannah Bluff Lock and Dam in Augusta, Georgia. Construction of this feature would compensate for loss of shortnose and Atlantic sturgeon habitat in the estuary, by allowing the endangered shortnose sturgeon and the endangered Atlantic sturgeon access to historic spawning grounds at the Augusta Shoals that are currently inaccessible;

b. To minimize impacts to ecologically unique tidal freshwater wetlands in the estuary, construction of a series of flow re-routing features in the estuary to include a diversion structure, cut closures, removal of a tidegate structure, and construction of a rock sill and submerged sediment berm;

c. Acquisition and preservation of 2,245 acres of wetlands;

d. Restoration of approximately 28.75 acres of tidal brackish marsh;

e. Installation of an oxygen injection system, to compensate for adverse effects on dissolved oxygen levels in the Savannah River estuary;

f. Construction of a raw water storage impoundment for the City of Savannah's industrial and domestic water treatment facility, to offset increased chloride levels at the intake on Abercorn Creek during periods of low flow and high tide;

g. Construction of a boat ramp on Hutchinson Island to restore access to areas in Back River made inaccessible due to construction of the flow re-routing features;

h. One-time payment to Georgia Department of Natural Resources (GA DNR) for a Striped bass stocking program, to compensate for loss of Striped bass habitat;

i. Recover, document, and curate the items of historic significance of a Civil War ironclad (*CSS Georgia)*, listed on the National Register of Historic Places;

j. Monitoring to ensure that (1) the impacts described in the FEIS are not exceeded, and (2) the dissolved oxygen and wetland mitigation features function as intended. Monitoring will occur pre-construction, during construction, and up to 10 years post-construction; and

k. Adaptive management be implemented as outlined in the FEIS to (1) review the results of dissolved oxygen (DO) monitoring as well as the success of wetlands mitigation, and (2) modify features if necessary. In accordance with the FEIS, an Adaptive Management Team will be established, with the active participation of the cooperating agencies, for the purpose of effectively implementing the monitoring and adaptive management plan related to DO levels in the system and wetlands mitigation, and to ensure that the wetlands mitigation requirements and DO levels are met in the system.

5. The Project Cost Breakdown based on October 2011 Prices is estimated as follows:

a. Project First Cost. The estimated project first cost is $652,000,000, which includes the cost of constructing the General Navigation Features (GNFs) and the value of lands, easements, rights of-way and relocations estimated as follows: $257,000,000 for channel modification and dredged material placement; $311,000,000 for environmental and other mitigation; $84,000,000 for pre-engineering and design and construction management; and $163,000 for the value of lands, easements, rights-of-way, and relocations (except utility relocations) provided by the non-Federal sponsor. Included within the environmental mitigation costs is $35,600,000 for monitoring and $24,600,000 for adaptive management. To the extent appropriated by Congress, monitoring and adaptive management will be implemented as outlined in the FEIS, including the Corps commitments for the dissolved oxygen mitigation system and wetlands mitigation.

b. Estimated Federal and Non-Federal Shares. The estimated Federal and non-Federal shares of the project first cost are $454,000,000 and $198,000,000, respectively, as apportioned in accordance with the cost sharing provisions of Section 101(a)(1) of WRDA 1986, as amended (33 U.S.C. 2211(a)(1)), as follows:

(1) The costs for the deepening of the GNFs from -42 to -45 feet MLLW will be shared at the rate of 75 percent by the Government and 25 percent by the non-Federal sponsor. Accordingly, the Federal and non-Federal shares of the estimated $509,000,000 cost in this zone are estimated to be $383,000,000 and $126,000,000, respectively.

(2) The costs for the deepening of the GNFs from -45 to -47 feet MLLW will be shared at the rate of 50 percent by the Government and 50 percent by the non-Federal sponsor. Accordingly, the Federal and non-Federal shares of the estimated $143,000,000 cost in this zone are estimated to be $71,500,000 and $71,500,000, respectively.

(3) As a condition of issuance of the Section 401 Water Quality Certification by the South Carolina Department of Health and Environmental Control (DHEC), the potential non-Federal sponsor, the Georgia Ports Authority (GPA), agreed to provide financial assurance, in a manner acceptable to DHEC, that it will fund operation and maintenance of the Dissolved Oxygen system in any year that sufficient federal funds for the operation and maintenance of the system are not made available. This obligation extends for the life of the project. The GPA intends to place its full share of funds for adaptive management in an escrow account during project construction.

(4) The Savannah Harbor Expansion Project complies with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, dated February 11, 1994. By letter dated July 10, 2012, the GPA has indicated that it intends to establish, with the assistance of the EPA, a community advisory group that meets periodically to identify and address community concerns or recommendations that may arise associated with ongoing port activities. GPA will also facilitate sustainability by pursuing electrification of port infrastructure, reduced idling at distribution centers, and fleet upgrades under the SmartWay Port Drayage Truck program. In addition, in consultation with EPA Region 4 and the Georgia Environmental Protection Division, the GPA intends to conduct an air monitoring study not to exceed one year at no more than four monitoring sites, to evaluate any potential impacts on surrounding communities. This study would occur once the project is complete and GPA is serving Post-Panamax ships in normal operations. These efforts by the GPA are not included in the project costs. In cooperation with this effort, the Corps will provide technical assistance to the community to help explain scientific data or findings related to ongoing port activities and studies. The federal technical assistance is included in the estimated project costs.

c. In addition to payment by the non-Federal sponsor of its share of costs as estimated and addressed in sub-paragraphs b.(1) and (2), the estimated non-Federal share of $198,000,000 includes $163,000 for the estimated value of lands, easements, rights-of-way, and relocations

(except utility relocations) that it must provide pursuant to Section 101(a)(3) of WRDA 1986, as amended (33 U.S.C. 2211(a)(3)).

d. Additional 10 Percent Payment. In addition to the non-Federal sponsor's estimated share of the project first cost determined in b. above, pursuant to Section 101(a)(2) of WRDA 1986, as amended (33 U.S.C. 2211(a)(2)), the non-Federal sponsor must pay an additional 10 percent of the cost of the GNFs of the project in cash over a period not to exceed 30 years, with interest. The additional 10 percent payment is estimated to be $65,000,000 before interest is applied. The value of lands, easements, rights-of-way, and relocations, estimated at $163,000, provided by the non-Federal sponsor under Section 101(a)(3) of WRDA 1986, as amended (33 U.S.C. 2211(a)(3)), and the costs of utility relocations borne by the non-Federal sponsor under Section 101(a)(4) of WRDA 1986, as amended (33 U.S.C. 2211(a)(4)), will be credited toward payment of this amount.

e. Operation and Maintenance Costs. The additional annual cost of operation and maintenance for this recommended plan is estimated to be $5,100,000. In accordance with Section 101(b)(1) of WRDA 1986, as amended (33 U.S.C. 2211(b)(1)), the non-Federal sponsor will be responsible for an amount equal to 50 percent of the excess of the cost of the operation and maintenance of the project over the cost which would be incurred for operation and maintenance of the project if the project had a depth of -45 feet MLLW. The incremental increase in annual cost attributable to operation and maintenance for the depth in excess of -45 feet MLLW is $303,000 with the non-Federal sponsor responsible for $152,000. As specified in the 1999 Report of the Chief of Engineers, the costs of operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the modified City of Savannah water system will remain a City of Savannah responsibility and will not be operated and maintained as a project General Navigation Feature. Similarly, the boat ramp on Hutchinson Island will be transferred to a local entity upon completion of construction. The local entity will be responsible for the OMRR&R. Lands acquired for wetland preservation would be transferred to the Savannah National Wildlife Refuge and the OMRR&R costs would be borne by the US Fish and Wildlife Service. The project will also make a one-time payment to the existing GA DNR Striped bass Stocking Program. This action has no associated OMRR&R costs. Other project mitigation features to address the adverse impacts of the project will be operated and maintained in the same manner as other GNF are operated and maintained.

f. Associated Costs. Estimated associated costs of $7,700,000 include $2,600,000 in non-Federal costs associated with development of local service facilities (including dredging of berthing areas); and $5,100,000 for navigation aids (a U.S. Coast Guard expense).

g. Authorized Project Cost and Section 902 Calculation. The project first cost, for the purposes of calculating the maximum cost of the project pursuant to Section 902 of WRDA 1986, as amended, includes the cost of constructing the GNFs and the value of lands, easements, and rights-of-way. Accordingly, as set forth in paragraph a, above, based on October 2011 prices, the estimated project first cost for these purposes is $652,000,000 with an estimated Federal share of $454,000,000 and an estimated non-Federal share of $198,000,000.

6. Based on October 2011 price levels, a 4-percent discount rate, and a 50-year period of analysis, the total equivalent average annual costs of the -47 foot depth project are estimated to be $38,900,000. The average annual equivalent benefits are estimated to be $213,100,000. The average annual net benefits are $174,200,000. The benefit-to-cost ratio for the recommended plan is 5.5:1.

7. Section 119 of the Energy and Water Development Appropriations (EWDA), 2003, Division D of Public Law 108-7, authorizes the Secretary of the Army, acting through the Chief of Engineers, to credit toward the non-Federal share of the cost of the Savannah Harbor Expansion Project, authorized by Section 101(b)(9) of WRDA 1999, an amount equal to the Federal share of the costs incurred by the non-Federal interests subsequent to project authorization to the extent that the Secretary determines such costs were necessary to ensure compliance with the conditions of the project authorization. Of the project total costs, an estimated $23,000,000 is included for the creditable work. The non-Federal sponsor will receive credit in accordance with cost sharing for Navigation projects as provided for in WRDA 1986.

8. Risk and Uncertainty. Uncertainties were evaluated for economic benefits, costs, environmental impacts, mitigation effect, and sea-level change. The economic sensitivity analysis concluded that a Jasper County terminal would not have a significant effect on the recommendation. In addition, sensitivities to commodity forecasts, vessel availability and loadings confirmed that the improvements to Savannah Harbor are economically beneficial. Consideration was given to uncertainties that exist in the ability to predict the impacts from the proposed harbor deepening alternatives. In accordance with the Corps Engineering Circular EC 1165-2-212 on sea level change, the study performed an analysis of three Sea Level Rise (SLR) rates. The baseline estimate representing the minimum expected sea level change is 0.5-feet. The intermediate estimate is 0.9-feet and the high estimate representing the maximum expected sea level change is 2.3-feet. No impact from sea-level rise uncertainty is expected regarding the dredging, because dredging depths are relative to the Mean Lower Low Water datum, which changes with sea level. Structural features also carry minimal risk from sea-level rise as they are designed to function over a wide range of stages. Sea-level rise has a minor risk of the project over-mitigating from chloride impacts. Other uncertainties, examined in regards to environmental mitigations (dissolved oxygen, biological response), showed little risk.

9. In accordance with the Corps Engineering Circular EC 1165-2-209 on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included District Quality Control (DQC), Agency Technical Review (ATR), Policy and Legal Compliance Review, Cost Engineering Directory of Expertise (DX) Review and Certification, Model Review and Approval and Type I Independent External Peer Review (IEPR). Concerns expressed by the ATR team have been addressed and incorporated into the final report. The IEPR was completed by Battelle Memorial Institute. A total of 24 comments on the report and one comment on the responses to agency and public comments were documented. The IEPR panel considered eight of the comments of medium significance and the others as low significance. The comments were related to plan formulation, commodity forecasts, modeling, beneficial uses, impacts, risks and uncertainties, contingency, and sea-level rise. In response, sections in the main report and EIS

were expanded to include additional information. The final IEPR Report was completed in February 2011.

10. The project was authorized in Section 101(b)(9) of WRDA 1999 to be carried out at a total cost of $230,174,000. When escalated to October 2011 price levels in accordance with the procedure set out in ER 1105-2-100, Appendix G, implementing Section 902 of WRDA 1986, the authorized total project cost amounts to $469,000,000. The current estimated first cost of $652,000,000 exceeds that amount by more than 20 percent, necessitating a statutory modification to the project to increase its authorized total cost.

11. Washington level review indicates that the plan recommended by the reporting officers is technically sound, environmentally and socially acceptable, and on the basis of Congressional directives, economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies. The recommended plan complies with other administration and legislative policies and guidelines. The views of interested parties, including Federal, State and local agencies, have been considered. State and agency comments received during review of the final report/environmental assessment included concerns raised by the National Marine Fisheries Service, the United States Environmental Protection Agency and the Department of Interior which ranged from funding concerns, to the recent listing of the Atlantic sturgeon and the possible presence of hard bottoms in or near the project footprint to real estate transfer information. These concerns were addressed through coordination and USACE responses dated July 11, 2012. Comments were also received from state of Georgia which were generally in support of the project and recognized that earlier comments had been addressed in the final document. Two entities from the state of South Carolina provided comments expressing their preference for the -45 foot alternative and their concerns regarding the environmental effects. Reponses were provided re-iterating the considerations during the planning process and the extensive coordination that occurred regarding environmental effects and mitigation with the natural resource agencies. In compliance with Section 101(b)(9) of WRDA 1999, representatives of the Secretary of the Interior, the Secretary of Commerce, and the Administrator of the Environmental Protection Agency approve the selected plan and have determined that the associated mitigation plan adequately addresses the potential environmental impacts of the project.

12. I concur with the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to improve navigation in the Savannah Harbor be authorized in accordance with the reporting officers' selected plan at an estimated cost of $652,000,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including WRDA 1986, as amended (33 U.S.C. 2211). The non-Federal sponsor would provide the non-Federal cost share and all lands, easements, and rights-of-way, including those necessary for the borrowing of material and the disposal of dredged or excavated material, and would perform or assure the performance of all relocations, including utility relocations. This recommendation is subject to the non-Federal sponsor's agreeing in a Project Partnership Agreement, prior to project implementation, to

comply with all applicable Federal laws and policies, including but not limited to the following requirements:

a. Provide, during construction, funds necessary to make its total contribution for commercial navigation, when added to the non-Federal contribution that may be afforded credit pursuant to Section 119 of the EWDA, 2003, equal to:

(1) 25 percent of the cost of construction of the GNFs attributable to dredging to a depth in excess of -20 feet MLLW but not in excess of -45 feet MLLW, plus

(2) 50 percent of the costs attributable to dredging to a depth over -45 feet MLLW;

b. Place the estimated non-Federal sponsor's share of the monitoring and adaptive management costs (paragraph 4, j and k) in an escrow account at the time the Project Partnership Agreement is executed.

c. Provide all lands, easements, and rights-of-way (LER), including those necessary for the borrowing of material and the disposal of dredged or excavated material, and perform or assure the performance of all relocations, including utility relocations, all as determined by the Federal Government to be necessary for the construction or operation and maintenance of the GNFs;

d. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the project, an additional amount equal to 10 percent of the total cost of construction of the GNFs less the amount of credit afforded by the Government for the value of the LER and relocations, including utility relocations, provided by the non-Federal sponsor for the GNFs. If the amount of credit afforded by the Government for the value of the LER and relocations, including utility relocations, provided by the non-Federal sponsor equals or exceeds 10 percent of the total cost of construction of the GNFs, the non-Federal sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of the LER and relocations, including utility relocations, in excess of 10 percent of the total cost of construction of the GNFs;

e. Provide, operate, and maintain, at no cost to the Government, the local service facilities, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

f. In the case of project features greater than -45 feet MLLW in depth, provide 50 percent of the excess cost of operation and maintenance of the project over that cost which the Secretary determines would be incurred for operation and maintenance if the project had a depth of -45 feet MLLW;

g. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating and maintaining the GNFs;

h. Hold and save the United States free from all damages arising from the construction, operation and maintenance of the project, any betterments, and the local service facilities, except for damages due to the fault or negligence of the United States or its contractors;

i. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, and other evidence are required, to the extent and in such detail as will properly reflect total cost of the project, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 CFR Section 33.20;

j. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601-9675, that may exist in, on, or under the LER that the Federal Government determines to be necessary for the construction or operation and maintenance of the GNFs. However, for lands that the Government determines to be subject to the navigation servitude, only the Government shall perform such investigation unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

k. Assume complete financial responsibility, as between the Federal Government and the non-Federal sponsor, for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under the LER that the Federal Government determines to be necessary for the construction or operation and maintenance of the project;

l. To the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA;

m. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b) and Section 101(e) of WRDA 1986, Public Law 99-662, as amended (33 U.S.C. 2211(e)) which provide that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element;

n. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655) and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way necessary for construction, operation, and maintenance of the project including those necessary for relocations, the borrowing of material, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said act;

o. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964 (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c));

p. Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project; and

q. Not use funds from other Federal programs, including any non-Federal contribution required as a matching share, therefore, to meet any of the non-Federal sponsor's obligations for the project unless the Federal agency providing the Federal portion of such funds verifies in writing such funds are authorized to be used to carry out the project.

13. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to Congress as a proposal for implementation funding. However, prior to transmittal to Congress, the sponsor, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, U.S. Army
Commanding

DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
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WASHINGTON, DC 20310-2600

JAN 7 2013

DAEN

SUBJECT: Freeport Harbor Channel Improvement Project, Brazoria County, Texas

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on navigation improvements for the Freeport Harbor Channel Improvement Project (FHCIP). It is accompanied by the report of the Galveston District Engineer and the Southwestern Division Engineer. The feasibility study was conducted under the authority of Section 216 of the Flood Control Act of 1970, which authorizes review of completed Corps of Engineers navigation projects when significant changes in physical or economic conditions have occurred, and the submission of a report to Congress on the advisability of modifying the project in the overall public interest. Pre-construction engineering and design activities for this proposed project, if funded, would be continued under the authority provided by the section cited above. The existing Freeport Harbor Channel was authorized by the River and Harbor Acts of May 1950 and July 1958.

2. The report recommends a project that will contribute significantly to the economic efficiency of commercial navigation in the region. The FHCIP is an improvement of the existing Freeport Harbor Channel that provides for a deep-draft waterway from the Gulf of Mexico to the City of Freeport through the original mouth of the Brazos River. A diversion dam about 7.5 miles above the original river mouth, and a diversion channel rerouting the Brazos River from the dam to an outlet into the Gulf about 6.5 miles southwest of the original mouth, now separate the Freeport Harbor Channel from the river system and make the harbor and channels an entirely tidal system. The study evaluated navigation and environmental problems and opportunities for a 70-square mile study area. The study area includes the cities of Freeport, Surfside Beach and Quintana, the Freeport Harbor Channel, the Brazos River Diversion Channel, a portion of the Gulf Intracoastal Waterway, the Gulf of Mexico shoreline on both sides of the Freeport Harbor Channel, and the offshore channel and placement areas 10 miles into the Gulf of Mexico. The entire study area is located within Brazoria County, Texas and adjacent state waters in the Gulf of Mexico.

3. The reporting officers recommend the Locally Preferred Plan (LPP) to modify the existing Freeport Harbor Channel. The LPP consists of the following improvements:

a. Deepen the Outer Bar Channel into the Gulf of Mexico to -58 feet mean lower low water (MLLW);

b. Deepen from the end of the jetties in the Gulf of Mexico to the Lower Turning Basin to -56 feet MLLW;

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c. Deepen from the Lower Turning Basin to Station 132+66 near the Brazosport Turning Basin to -56 feet MLLW;

d. Deepen from Station 132+66, above the Brazosport Turning Basin, through the Upper Turning Basin to -51 feet MLLW;

e. Deepen and widen the lower 3,700 feet of the Stauffer Channel to -51 feet MLLW and 300 feet wide;

f. Dredge the remainder of the Stauffer Channel to -26 feet MLLW (its previously authorized depth was -30 feet).

Dredged material placement for this project will be provided in accordance with the Dredged Material Management Plan developed during the study. Deepening of the Freeport Harbor Channel would generate approximately 17.3 million cubic yards of new work material and approximately 176 million cubic yards of maintenance over the 50-year period of economic evaluation. Material from the Channel Extension, Outer Bar Channel, and Jetty Channel would be placed offshore in the existing New Work and Maintenance Material Ocean Dredged Material Disposal Sites (ODMDSs). Material from the inland Freeport Harbor channels and basins would be placed in one existing confined upland Placement Area (PA 1), and two new Placement Areas (PA 8 and PA 9).

Mitigation features will consist of the preservation of approximately 131 acres of riparian forest under a permanent conservation easement and the improvement of its habitat value by establishing 11 acres of riparian forest in place of 11 acres of invasive tree species; the creation of three acres of wetlands and an associated one acre of riparian forest; and required monitoring of mitigation performance and impacts to wetlands and riparian forest for corrective action, if needed.

4. The recommended navigation plan is not the National Economic Development (NED) plan. The recommended LPP is shallower and will be less costly than the NED plan in the main channel portion of the FHCIP. The LPP is supported by the non-Federal, cost sharing sponsor (Port Freeport).

5. Project Cost Breakdown based on October 2012 prices.

a. Project First Cost. The estimated project first cost of constructing the FHCIP is $237,474,000 which includes the cost of constructing General Navigation Featrures (GNF) and the value of lands, easements, rights-of-way and relocations estimated as follows: $208,079,000 for channel modification and dredged material placement; $165,000 for fish and wildlife mitigation; $1,691,000 for lands, easements, and rights-of-way provided by the

non-Federal sponsor; $18,135,000 for planning, engineering and design efforts; and $9,404,000 for construction management.

b. Estimated Federal and Non-Federal Shares: The estimated Federal and non-Federal shares of the project first cost are $121,132,000 and $116,342,000, respectively, as apportioned in accordance with the cost sharing provisions of Section 101(a) of the Water Resources Development Act (WRDA) of 1986, as amended (33 U.S.C. 2211(a)), as follows:

(1) The costs for deepening the Upper Stauffer Channel will be shared at the rate of 90 percent by the Government and 10 percent by the non-Federal sponsor for dredging depths between 18 and 20 feet and 75 percent by the Government and 25 percent by the non-Federal Sponsor for dredging between 20 and 26 feet. The total cost for this reach is $3,607,000 with $2,782,000 in Federal costs and $825,000 in non-Federal costs.

(2) The cost for deepening the Lower Stauffer Channel will be shared at the rate of 90 percent by the Government and 10 percent by the non-Federal sponsor for dredging depths between 18 and 20 feet and 75 percent by the Government and 25 percent by the non-Federal sponsor for dredging depths between 20 and 45 feet. Dredging depths deeper than 45 feet will be shared at the rate of 50 percent by the Government and 50 percent by the non-Federal sponsor. Costs for deepening this reach total $10,869,000 with $7,693,000 being paid by the Government and $3,176,000 being paid by the non-Federal sponsor.

(3) The costs for the deepening of the Freeport Harbor channels from the existing 46-foot depth to 56 feet (58 feet offshore) will be shared at the rate of 50 percent by the Government and 50 percent by the non-Federal sponsor. Accordingly, the Federal and non-Federal shares of the estimated $221,040,000 cost in this zone will be approximately $110,520,000 being paid by the Government and $110,520,000 being paid by the non-Federal sponsor.

(4) The costs for environmental mitigation will be shared at the prorated share rate of 51.4% by the Government and 48.6% by the non-Federal sponsor. Costs for mitigation total $267,000 with $137,000 being paid by the Government and $130,000 being paid by the non-Federal sponsor.

(5) In addition to payment by the non-Federal sponsor of its share of costs as estimated and described in sub-paragraphs b(1), b(2), b(3) and b(4) above, the estimated non-Federal share of $116,342,000 includes $1,691,000 for the estimated value of lands, easement, and rights-of-way that it must provide pursuant to Section 101(a)(3) of WRDA 1986, as amended (33 U.S.C.2211(a)(3)).

c. Additional 10 Percent Payment. In addition to payment by the non-Federal sponsor of its share of the project first costs determined in sub-paragraphs b(1), b(2) and b(3) above, pursuant to Section 101(a)(2) of WRDA 1986, as amended (33 U.S.C. 2211(a)(2)), the non-Federal sponsor must pay an additional 10 percent of the cost of the general navigation features of the project in cash over a period not to exceed 30 years, with interest. The additional 10% payment without interest is estimated to be $23,578,000. The value of lands, easements, rights-of-way, and relocations, estimated as $1,691,000, provided by the non-Federal sponsor under Section 101(a)(3) of WRDA 1986, as amended, will be credited toward payment of this amount.

d. Operations and Maintenance Costs. The additional annual cost of operation and maintenance for this recommended plan is estimated at $11,371,000. In accordance with Section 101(b) of WRDA 1986, as amended (33 U.S.C. 2211(b)), the non-Federal sponsor will be responsible for an amount equal to 50 percent of the excess of the cost of the operation and maintenance of the project over the cost which would be incurred for operation and maintenance of the project if the project had a depth of 45 feet. The Federal Government would be responsible for $6,254,000 of the incremental operations and maintenance costs and the non-Federal sponsor would be responsible for the remaining $5,117,000.

e. Associated Costs. Estimated associated costs of $58,881,000 include $39,695,000 in non-Federal costs associated with bulkhead modifications, $18,803,000 for dredging of non-Federal berthing areas adjacent to the Federal channel and $1,383,000 for aids to navigation (a U.S. Coast Guard expense).

f. Authorized Project Cost and Section 902 Calculation. The project first cost for the purpose of calculating the maximum cost of the project pursuant to Section 902 of WRDA 1986, as amended, includes the cost of constructing the GNFs and the value of lands, easements, and rights-of-way. Accordingly, as set forth in paragraph 5.a, above,based on October 2012 prices, the total estimated project first cost for these purposes is $237,474,000 with an estimated federal share of $121,132,000 and an estimated non-Federal share of $116,342,000. Based on October 2012 price levels, a discount rate of 3.75 percent, and a 50-year period of economic analysis, the project average annual benefits and costs for the FHCIP are estimated at $48,042,000 and $25,449,000, respectively, with resulting net excess benefits of $22,593,000 and a benefit-to-cost ratio of 1.9 to 1.

7. The goals and objectives included in the Campaign Plan of the Corps have been fully integrated into the Freeport Harbor Channel study process. The recommended plan was

developed in coordination and consultation with various Federal, State and local agencies using a systematic and regional approach to formulating solutions and evaluating the benefits and impacts that would result. The feasibility study evaluated navigation and environmental problems and opportunities for the entire study area of about 70 square-miles. Risk and uncertainty were addressed during the study by sensitivity analyses that evaluated the potential impacts of sea level change and economic assumptions as well as cost risk analysis.

8. In accordance with the Corps Engineering Circular on review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and vigorous review process to ensure technical quality. This included an Agency Technical Review (ATR), an Independent External Peer Review (IEPR), and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. An IEPR was completed by Battelle Memorial Institute in August 2008. A total of 22 comments were documented. The comments were related to plan formulation, vessel fleet analysis, benefits, water quality, and sensitivity analyses. An IEPR back-check was completed in June 2011, which resulted in follow-up comments related to the original 22 comments. In response, sections in the main report and EIS were expanded to include additional information. The IEPR responses were reviewed by the Deep Draft Navigation Planning Center of Expertise in June 2011 with all comments satisfactorily addressed.

9. Washington level review indicates that the plan recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies. The recommended plan complies with other administration and legislative policies and guidelines. The views of interested parties, including Federal, State and local agencies, have been considered. A Biological Opinion has been received from the National Marine Fisheries Service (NMFS) for potential incidental take of sea turtles during construction. The Biological Opinion has been reviewed and found acceptable.

State and agency comments received during review of the final report/environmental impact statement included comments by the U.S. Coast Guard (USCG) and the U.S. Environmental Protection Agency (USEPA). The USCG requested Corps assistance in obtaining funds for the necessary navigation aid modifications and the Corps response stated that the district would coordinate to request the necessary USCG funding in conjunction with project construction funds. The USEPA expressed concerns on a variety of topics in a letter dated October 5, 2012. The Corps response stated that expanded explanations were provided in the

report and FEIS on the rationale for plan formulation and selection, planned air pollution prevention/reduction measures during construction, dredged material placement procedures at ocean sites, and analyses of socio-economic/health and safety effects based on additional modeling and analyses. The Corps also committed to further USEPA review of sediment data collected during the pre-construction engineering and design phase and continued coordination as needed, depending upon the testing results.

10. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that navigation improvements for the Freeport Harbor Channel be authorized in accordance with the reporting officer's recommended plan at an estimated cost of $237,474,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 101 of WRDA 1986, as amended. This recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and policies including that the non-Federal sponsor must agree with the following requirements prior to project implementation.

a. Provide 10 percent of the total cost of construction of the general navigation features (GNF) attributable to dredging to a depth not in excess of 20 feet; plus 25 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 20 feet but not in excess of 45 feet; plus 50 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 45 feet as further specified below:

(1) Provide 25 percent of design costs allocated by the Government to commercial navigation in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

(2) Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs allocated by the Government to commercial navigation;

(3) Provide, during construction, any additional funds necessary to make its total contribution for commercial navigation equal to 10 percent of the total cost of construction of the GNFs attributable to dredging to a depth not in excess of 20 feet; plus 25 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 20 feet but not in excess of 45 feet; plus 50 percent of the total cost of construction of the GNFs attributable to dredging to a depth in excess of 45 feet;

b. Provide all lands, easement, and rights-of-way (LER), including those necessary for the borrowing of material and placement of dredged or excavated material, and perform or assure performance of all relocations, including utility relocations, all as determined by the Government to be necessary for the construction or operation and maintenance of the GNFs;

c. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the GNFs, an additional amount equal to 10 percent of the total cost of construction of GNFs less the amount of credit afforded by the Government for the value of the LER and relocations, including utility relocations, provided by the non-Federal sponsor for the GNFs. If the amount of credit afforded by the Government for the value of LER, and relocations, including utility relocations, provided by the non-Federal sponsor equals or exceeds 10 percent of the total cost of construction of the GNFs, the non-Federal sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of LER and relocations, including utility relocations, in excess of 10 percent of the total costs of construction of the GNFs;

d. Provide, operate, and maintain, at no cost to the Government, the local service facilities in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Government;

e. Provide 50 percent of the excess cost of operation and maintenance of the project over that cost which the Government determines would be incurred for operation and maintenance if the project had a depth of 45 feet;

f. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating and maintaining the GNFs;

g. Hold and save the United States free from all damages arising from the construction or operation and maintenance of the project, any betterments, and the local service facilities, except for damages due to the fault or negligence of the United States or its contractors;

h. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, and other evidence is required, to the extent and in such detail as will properly reflect total cost of construction of the project, and in accordance with the standards for financial management systems set forth in the

Uniform Administrative Requirements for Grants and Cooperative Agreements to State and local governments at 32 CFR, Section 33.20;

i. Perform, or ensure performance of, any investigations for hazardous substances as are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601–9675, that may exist in, on, or under LER that the Government determines to be necessary for the construction or operation and maintenance of the GNFs. However, for lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude, only the Government shall perform such investigation unless the Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

j. Assume complete financial responsibility, as between the Government and the non-Federal sponsor, for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under LER that the Government determines to be necessary for the construction or operation and maintenance of the project;

k. To the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA;

l. Comply with Section 221 of PL 91-611, Flood Control Act of 1970, as amended, (42 U.S.C. 1962d-5b) and Section 101(e) of the WRDA 86, Public Law99-662, as amended, (33 U.S.C. 2211(e)) which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element;

m. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, PL 91-646, as amended, (42 U.S.C. 4601-4655) and the Uniform Regulations contained in 49 CFR 24, in acquiring lands, easements, and rights-of-way, necessary for construction, operation and maintenance of the project including those necessary for relocations, the borrowing of material, or the placement of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said act;

n. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, PL 88-352 (42 USC 2000d), and

Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive changes the provision of the Davis-Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c);

o. Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation that are in excess of 1 percent of the total amount authorized to be appropriated for the project;

p. Not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefore, to meet any of the non-Federal sponsor's obligations for the project costs unless the Federal agency providing the Federal portion of such funds verifies in writing that such funds are authorized to be used to carry out the project; and

q. Complete the first phase of the Velasco Container Terminal (800-foot berth and 35 acres of supporting backland) on the Stauffer Channel prior to the initiation of construction of the Stauffer Channel portion of the project.

11. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the Executive Branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to the Congress, the State of Texas, Port Freeport (the non-Federal sponsor), interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers

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DAEN

FEB 25 2013

SUBJECT: Canaveral Harbor Section 203 (WRDA 1986) Navigation Study, Brevard County, Florida

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress the final feasibility report and environmental assessment on navigation improvements for Canaveral Harbor, Brevard County, Florida. It is accompanied by the reports of the Canaveral Port Authority (CPA), and the endorsements of the Jacksonville District Engineer and the South Atlantic Division Engineer. These reports were prepared by the CPA under the authority granted by Section 203 of Water Resources Development Act (WRDA) of 1986 (P.L. 99-662), which allows non-Federal interests, such as the CPA, to undertake feasibility studies of proposed harbor projects and submit them to the Secretary of the Army. This report constitutes the final report submitted to the Secretary as described in Section 203 of WRDA 1986.

2. The report recommends authorizing a project that will contribute to the economic efficiency of commercial navigation, provide greater safety for the operations of commercial and naval vessels, and increase the operational effectiveness of the national defense missions of the U.S. Army, U.S. Navy, and U.S. Air Force. The recommended plan increases the nominal depth of the federal channel to -44 feet mean lower low water (mllw) for the inner channel and -46 feet mllw for the outer channel (middle and outer reach), widens the federal channel to a width of 500 feet, increases the diameters of two turning circles, and widens the bend widener in the entrance channel. Widening the federal channel requires removal of 8 acres of U. S. Air Force property. The U. S. Air Force concurs with this action. Environmental impacts of the recommended plan are minor, short-term impacts, which, in coordination with the appropriate resource agencies, do not require mitigation. Effects on Threatened and Endangered species have been addressed through special measures and conditions. A portion of the material excavated for the project will be beneficially used as fill or for containment dike improvements. The remaining dredged material is suitable for placement in the U. S. Environmental Protection Agency designated Canaveral Ocean Dredged Material Disposal Site (ODMDS).

3. The reporting officers recommend the most economical plan analyzed, which is the plan that has the greatest net economic benefits of all plans considered. At the request of the non-Federal sponsor, plans greater in depth and width were not analyzed due to financial and logistical constraints[1]. The recommended plan is described in terms of outer, middle, and inner reaches, the Middle Turning Basin and west access channels, and the West Turning Basin. The outer reach is oriented on roughly a northwest-southeast alignment. The remainder of the channels is oriented in a generally east-west alignment. Various cuts comprise the outer, middle, and inner reaches. The recommended plan consists of widening the main ship channel from the harbor entrance inland to the West Turning Basin and West Access Channel, from its current authorized

[1] This plan is recommended under the Categorical Exemption to the NED Plan provision of ER 1105-2-100 (Paragraph 3-2.b.(10)).

width of 400 feet to 500 feet. In addition to widening, deepening of the existing Federal project and expansion of turning basins is recommended in the following reaches (all depths mllw):

a. Outer Reach, Cut 1A: deepen from -44' to -46' for a length of 11,000';

b. Outer Reach, Cut1B: deepen from -44' to -46' depth for a length of 5,500';

c. Outer Reach, Cut 1: deepen from -44' to -46' for the 5,300' long portion of Cut 1 that is seaward of buoys 7/8 (Station 0+00 to Station 53+00). The remainder of Cut 1 from buoys 7/8 to the apex of the channel turn, a length of 7,200', would also be deepened from -44' to -46';

d. New 203 Turn Widener: deepen to -46' X 23.1 acres (irregular shaped area) bounded to the north and northeast by the Civil Turn Widener and Outer Reach, Cut1;

e. US Navy Turn Widener: deepen from -44' to -46' X 7.7 acres (triangular shaped area) bounded by outer and middle reaches to the north and northeast and the Civil Turn Widener to the southwest;

f. Civil Turn Widener: deepen from -41' to -46' X 15.6 acres (irregular shaped area) bounded to the north and northeast by the middle reach and the US Navy Turn Widener;

g. Middle Reach: deepen from -44' to -46' for a length of 5,658'. The middle reach extends from the apex of the channel turn westward to the western boundary of the Trident access channel;

h. Inner Reach, Cut 2 and Cut 3: deepen from -40' to -44' for a length of 3,344';

i. Middle Turning Basin: expand and deepen to encompass 68.9 acres to a project depth of -43' and a turning circle diameter of 1422';

j. West Access Channel (east of Station 260+00): deepen from -39' to -43' for a length of 1,840'; and

k. West Turning Basin and West Access Channel (west of Station 260+00): expand the turning circle diameter from 1,400' to 1,725' X 141 acres at a depth of -35'.

4. Project Cost Breakdown Based on October 2012 Prices.

a. Project First Cost. The estimated project first cost is $40,240,000, which includes the cost of constructing the general navigation features and the value of lands, easements, rights-of-way and relocations (LERR) estimated as follows: $40,136,000 for channel modifications and

dredged material placement and $104,000 for the administrative costs of obtaining LERRs. There is no environmental mitigation required due to short term impacts.

b. Estimated Federal and non-Federal Shares. The estimated Federal and non-Federal shares of the project first cost are $28,652,000 and $11,588,000, respectively, as apportioned in accordance with the cost sharing provisions of Section 101 of WRDA 1986, as amended (33 U.S.C. 2211), as follows:

(1) The cost for dredging to a depth in excess of 20 feet, but not in excess of 45 feet will be shared at a rate of 75 percent by the Government and 25 percent by the non-Federal sponsor. Accordingly, the Federal and non-Federal shares of the costs in this zone are estimated to be $25,783,000 and $8,615,000, respectively. The cost for dredging in excess of 45 feet will be shared at a rate of 50 percent by the Government and 50 percent by the non-Federal sponsor. Accordingly, the Federal and non-Federal shares of the costs in this zone are estimated to be $2,870,000 and $2,870,000, respectively.

(2) In addition to the costs outlined in sub-paragraph (1) above, the project first cost includes administrative costs for LERR estimated at $104,000. The administrative costs include project real estate planning, review, and incidental costs between the U.S. Air Force and the U.S. Army Corps of Engineers (USACE). This cost will be a non-Federal cost. Credit is given for the incidental costs borne by the non-federal sponsor for LERR per Section 101 of WRDA 1986.

c. Additional 10 Percent Payment. In addition to the non-Federal sponsor's estimated share of the total first cost of constructing the project in the amount of $11,588,000, pursuant to Section 101(a)(2) of WRDA 1986, as amended, the non-Federal sponsor must pay an additional 10% of the costs of general navigation features of the project, $4,013,700, in cash over a period not to exceed 30 years, with interest. The value of the administrative costs for lands, easements, rights-of-way and relocations provided by the Federal sponsor under Section 101(a)(3) of WRDA 1986 as amended ($103,300) will be credited toward this payment, which results in a net 10% General Navigation Features (GNF) requirement of $3,910,400.

d. Operations and Maintenance Costs. Additional costs of operation and maintenance for this recommended plan, over and above the costs to operate and maintain the existing Federal project, are estimated to be $633,000 annually. In accordance with Section 101(b)(1) of WRDA 1986, as amended (33 U.S.C. 2211(b)(1))), the non-Federal sponsor will be responsible for an amount equal to 50 percent of the excess of the cost of operation and maintenance of the project over the cost of which would be incurred for operation and maintenance for the depth in excess of 45 feet. The excess annual cost attributable to operation and maintenance for the depth in excess of 45 feet is $364,000, with the non-Federal sponsor responsible for $182,000. Therefore the Federal share of the incremental annual maintenance cost is estimated to be $451,000.

e. Associated Costs. Estimated associated costs of $3,251,000 include $364,000 in non-Federal costs associated with development of local service facilities (including dredging of berthing areas) and $2,886,000 for navigation aids (a U.S. Coast Guard expense).

f. Authorized Project Cost and Section 902 Calculation. The project first cost, for the purposes of authorization and calculating the maximum cost of the project pursuant to Section 902 of WRDA 1986, as amended, includes the cost of constructing the (GNF) construction costs and the value of LERRs provided under Section 101(a)(3) of WRDA 1986, as amended (33 U.S.C. 221(A)(3)). Accordingly, as set forth in paragraph 4.a. above, based on October 2012 prices, the estimated project first cost for these purposes is $40,240,000 with a Federal share of $28,652,000 and a non-Federal share of $11,588,000.

5. Based on October 2012 price levels, a 3.75-percent discount rate, and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $2,647,000. The average annual equivalent benefits are estimated to be $5,393,000. The average annual net benefits are $2,747,000. The benefit-to-cost ratio for the recommended plan is 2.0.

6. In accordance with the Corps Engineering Circular EC 1165-2-212 on sea level change, the study performed an analysis of three Sea Level Rise (SLR) rates, a baseline estimate representing the minimum expected sea level change, an intermediate estimate, and a high estimate representing the maximum expected sea level change. The results of calculations from the project completion in 2014 through 2064 indicate that sea-level change estimates over a 50-year life of the project range from 0.120 meters (0.39 ft) for the low rate of change scenario, to 0.245 m (0.80 ft) for the intermediate rate scenario, and 0.653 m (2.14 ft) for the high rate scenario. Sea-level rise at these rates will have little or no impacts related to the proposed navigation improvements.

In accordance with the Corps Engineering Circular EC 1165-2-209 on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included District Quality Control (DQC), Agency Technical Review (ATR), Policy and Legal Compliance Review, Cost Engineering Directory of Expertise (DX) Review and Certification, and Model Review and Approval. Given the project uses standard economic analyses, has a cost estimate of less than $45 million; does not represent a threat to health and safety; is not controversial; and has not had a request for Independent External Peer Review (IEPR) from a Governor or the head of a Federal or State agency, I have granted an exclusion from the requirement to conduct a Type I IEPR.

7. Washington level review indicates that the plan recommended by the reporting officers is technically sound, environmentally and socially acceptable, and on the basis of congressional directives, economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies. The recommended plan complies with other administration and legislative policies and guidelines. The views of interested parties, including Federal, State and local agencies, have been considered.

8. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that navigation improvements for Canaveral Harbor be authorized in

accordance with the reporting officer's recommended plan at an estimated cost of $40,240,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 101 of WRDA 1986, as amended. This recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and policies including that the non-Federal sponsor must agree with the following requirements prior to project implementation.

The CPA will:

a. Provide 25 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

b. Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs;

c. Provide, during the period of construction, a cash contribution equal to the following percentages of the total cost of construction of the general navigation features:

i. Twenty-five percent of the costs attributable to dredging to a depth in excess of 20 feet, but not in excess of 45 feet; plus

ii. Fifty percent of the costs attributable to dredging to a depth in excess of 45 feet;

d. Provide 50 percent of the excess cost of operation and maintenance of the project over that cost which the Federal Government determines would be incurred for operation and maintenance for depths deeper than 45 feet;

e. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the project, up to an additional 10 percent of the total cost of construction of GNFs. The value of LERRs and deep-draft utility relocations provided by the Sponsor for the GNFs, described below, may be credited toward this required payment. The value of deep-draft utility relocations for which credit may be afforded shall be that portion borne by the Sponsor, but not to exceed 50 percent, of deep-draft utility relocation costs;

f. If the amount of credit equals or exceeds 10 percent of the total cost of construction of the general navigation features, the Sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of LERRs and deep-draft utility relocations in excess of 10 percent of the total cost of construction of the general navigation features;

g. Provide all LERRs and perform or ensure the performance of all relocations and deep-draft utility relocations determined by the Federal Government to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the general

navigation features (including all LERRs, and deep-draft utility relocations necessary for the dredged material disposal facilities);

h. Provide, operate, maintain, repair, replace, and rehabilitate, at its own expense, the local service facilities in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

i. Accomplish all removals determined necessary by the Federal Government other than those removals specifically assigned to the Federal Government;

j. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the Sponsor owns or controls for access to the project for the purpose of operating, maintaining, repairing, replacing, and rehabilitating the general navigation features;

k. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the project, any betterments, and the local service facilities, except for damages due to the fault or negligence of the United States or its contractors;

l. Keep, and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, and other evidence is required, to the extent and in such detail as will properly reflect total cost of construction of the general navigation features, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and local governments at 32 CFR, Section 33.20;

m. Perform, or cause to be performed, any investigations for hazardous substances as are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601-9675, that may exist in, on, or under lands, easements, or rights of way that the Federal Government determines to be necessary for construction, operation, maintenance, repair, replacement, or rehabilitation of the general navigation features. However, for lands that the Government determines to be subject to the navigation servitude, only the Government shall perform such investigation unless the Federal Government provides the Sponsor with prior specific written direction, in which case, the Sponsor shall perform such investigations in accordance with such written direction;

n. Assume complete financial responsibility, as between the Federal Government and the Sponsor, for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements, or rights of way that the Federal Government determines to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the project;

o. To the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA;

p. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended, and Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended, which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the Sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element;

q. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987, and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights of way, required for construction, operation, maintenance, repair, replacement, and rehabilitation of the general navigation features, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act;

r. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army." The State is also required to comply with all applicable Federal labor standards requirements including, but not limited to, the Davis-Bacon Act (40 USC 3144 et seq.), the Contract Work Hours and Safety Standards Act (40 USC 3701 et seq.), and the Copeland Anti-Kickback Act (40 USC 3145 et seq.);

s. Provide the non-Federal share that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project, in accordance with the cost sharing provisions of the agreement;

t. Prevent obstructions of or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) which might reduce the ecosystem restoration, hinder its operation and maintenance, or interfere with its proper function, such as any new development on project lands or the addition of facilities which would degrade the benefits of the project;

u. Do not use Federal funds to meet the Sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds in authorized;

v. Provide a cash contribution equal to the non-Federal cost share of the project's total historic preservation mitigation and data recovery costs attributable to commercial navigation

that are in excess of 1 percent of the total amount authorized to be appropriated for commercial navigation; and

w. In the case of a deep-draft harbor, provide 50 percent of the excess cost of operation and maintenance of the project over that cost which the Secretary determines would be incurred for operation and maintenance if the project had a depth of 45 feet.

9. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to the Congress, the State of Florida, the CPA (the non-Federal sponsor), interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers

DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
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DAEN

SEP 3 0 2013

SUBJECT: Boston Harbor Navigation Improvement Project, Massachusetts

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on navigation improvements for Boston Harbor, Massachusetts. It is accompanied by the reports of the New England District Engineer and the North Atlantic Division Engineer. These reports were prepared in response to a study authority contained in a Senate Subcommittee on Public Works Resolution dated September 11, 1969, which directed the Secretary of the Army to conduct a study to determine whether any modifications of the recommendations contained in the report of the Chief of Engineers on Boston Harbor, Massachusetts, published as House Document Numbered 733, Seventy-ninth Congress, and other pertinent reports, are advisable at this time, with particular reference to modifying the project dimensions of the Main Ship Channel from deep water in Broad Sound to the upstream limit of the federal project in the Mystic River. Further, the Energy and Water Development Appropriations Act for Fiscal Year 2000 provided funds to initiate the study with language requesting an evaluation of the deepening of the Main Ship, Reserved and Entrance Channels to Boston Harbor. Preconstruction, engineering and design activities for the Boston Harbor Navigation Improvement Project will continue under the authorities cited above.

2. The reporting officers recommend authorization of a project that will contribute significantly to the economic efficiency of commercial navigation in the New England region. Boston Harbor is located on the North Atlantic U.S. coast about 240 miles northeast of New York City and is New England's largest port. The harbor consists of entrance channels extending about three miles from Massachusetts Bay to President Roads, the main ship channel connecting the Roads to the inner harbor, anchorage areas in the Roads and lower inner harbor, and three principal deep-draft industrial tributaries in the Reserved Channel, Mystic River and Chelsea River. Improvements were considered from deep water in Massachusetts Bay to the heads of deep draft navigation on the three tributaries. The recommended plan will result in transportation cost savings by allowing cargo to shift from overland transport to ship transport and allowing the larger Post-Panamax vessels to operate more efficiently and experience fewer tidal and transit delays. The Massachusetts Port Authority (Massport) is the non-federal cost-sharing partner.

3. The reporting officers identified a plan for navigation improvements to four separable segments of the existing project which will contribute significantly to the economic efficiency of commercial navigation in the region. The recommended plan is the National Economic Development (NED) Plan and is supported by the non-federal sponsor.

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a. Main Channels Improvement Plan: The first improvement would provide deeper access from Massachusetts Bay to Massport's Conley Terminal on the Reserved Channel in South Boston. A depth of -51 feet at mean lower low water (MLLW) would be provided in the present 40-foot deep lane of the Broad Sound North Entrance Channel from the Bay to the Outer Confluence (approximately 3.4 miles), with the channel widened in the bend opposite Finn's Ledge. A depth of -47 feet MLLW would be provided in the Main Ship Channel between the Outer Confluence and the Reserved Channel, the President Roads Anchorage, the lower Reserved Channel along the Conley Terminal, and the Reserved Channel Turning Area (approximately 4.5 miles). The Main Ship Channel above the Roads would be widened to 900 feet downstream of Castle Island and 800 feet upstream of Castle Island to the turning area (approximately 1.7 miles), with additional width provided in the channel bends. The Reserved Channel Turning Area would be widened to1500 by1600 feet, and further widened in its transition to the Reserved Channel (approximately 0.5 miles).

b. Main Ship Channel Deepening Extension to Massport Marine Terminal: The second improvement would extend the deepening of the Main Ship Channel upstream of the Reserved Channel Turning Area to the Massport Marine Terminal (approximately 0.5 miles), at a depth of -45 feet MLLW and width of 600 feet. Massport would provide a depth of at least -45 feet MLLW in the berth at the Marine Terminal.

c. Mystic River Channel at Medford Street Terminal: The third improvement would deepen an approximately nine acre area (1350 feet by 575 feet) of the existing -35-foot MLLW lane of the Mystic River Channel to -40 MLLW feet to improve access to Massport's Medford Street Terminal in Charlestown. Massport has already deepened the berth at this terminal to -40 feet MLLW and would maintain that depth in the future.

d. Chelsea River Channel: The fourth improvement would deepen the existing -38-foot MLLW Chelsea River Channel to -40 feet MLLW (approximately 1.9 miles). The channel would be widened by about 50 feet along the East Boston shore in the bend immediately upstream (approximately 0.3 miles) of the McArdle Bridge and in the bend downstream of the Chelsea Street Bridge (approximately 0.3 miles). This recommended improvement is contingent on agreement of the five principal terminals to deepen their berths to at least -40 feet MLLW.

4. The project would require the removal of approximately 11 million cubic yards of dredged material and one million cubic yards of rock. The U.S. Environmental Protection Agency (EPA) has concurred in the determination that the improvement project dredged materials are parent materials (material below the authorized depth and not previously disturbed) of largely glacial origin and acceptable for unconfined ocean water placement. The recommended plan requires placement of all dredged material and rock at the Massachusetts Bay Disposal Site. However, it is the policy of the U.S. Army Corps of Engineers to use dredged material, where practicable, for beneficial use. Potential beneficial uses for the rock and other dredged materials were considered by the reporting officers. Use of the rock for offshore reef creation and shore

protection projects will be investigated in partnership with the state during project design. The feasibility of a concept from EPA to use the other dredged materials to cap the former Industrial Waste Site in Massachusetts Bay will also be investigated in partnership with that agency and others during project design to finalize plans. None of these potential beneficial uses are expected to add to the cost of the project and will be done within budgeted authorized amount.

5. Project costs are allocated to the commercial navigation purpose and are based on July 2011 price levels escalated to October 2012.

a. Project First Cost. The estimated project first cost of construction is $304,695,000 which includes the cost of constructing General Navigation Features (GNF) and the value of lands, easements, rights-of-way (LER) and relocations estimated as follows: $286,971,000 for channel modification and dredged material placement; $169,000 for LER provided by the non-federal sponsor; $6,525,000 for planning, engineering and design efforts; and $11,030,000 for construction management.

b. Estimated federal and non-federal shares: The estimated federal and non-federal shares of the project first cost are $212,084,000 and $92,611,000, respectively, as apportioned in accordance with the cost sharing provisions of Section 101(a) of the Water Resources Development Act (WRDA) of 1986, as amended (33 U.S.C. 2211(a)), as follows:

(1) The cost for deepening GNF under the Main Channels Improvement Plan to -47 feet (-51 feet in the entrance channel) to access the Conley Container Terminal will be shared as follows:

(a) The cost of $207,825,000 for deepening the GNF to -45 feet MLLW (49 feet in the entrance channel) will be shared at the rate of 75 percent by the government and 25 percent by the non-federal sponsor. Accordingly, the federal and non-federal shares of this zone of deepening are estimated to be $155,869,000 and $51,956,000, respectively.

(b) The cost of $65,241,000 for deepening the GNF from -45 feet to -47 feet feet MLLW (from -49 feet to -51 feet in the entrance channel) will be shared at the rate of 50 percent by the government and 50 percent by the non-federal sponsor. Accordingly, the federal and non-federal shares of this zone of deepening are estimated to be $32,620,500 and $32,620,500, respectively.

(2) The costs of for deepening GNF under the Main Ship Channel Deepening Extension to Massport Marine Terminal segment to 45 feet will be shared at the rate of 75 percent by the government and 25 percent by the non-federal sponsor for depths up to 45 feet. The total cost for GNF in this reach is $17,308,000 with $12,981,000 in federal costs and $4,327,000 in non-federal costs. A Limited Re-evaluation Report (LRR) is anticipated for this project segment during project design to confirm anticipated benefits and depth optimization.

(3) The costs for the deepening GNF under Mystic River Channel at Medford Street Terminal segment to 40 feet will be shared at the rate of 75 percent by the government and 25 percent by the non-federal sponsor. The total cost for GNF in this reach is $2,419,000 with $1,814,000 in federal costs and $605,000 in non-federal costs. A LRR will be prepared for this project segment during project design to confirm anticipated benefits and depth optimization.

(4) The costs for the deepening GNF under Chelsea River Channel segment to 40 feet will be shared at the rate of 75 percent by the Government and 25 percent by the non-federal Sponsor. The total cost for GNF in this reach is $11,734,000 with $8,801,000 in federal costs and $2,933,000 in non-federal costs.

(5) In addition to payment by the non-federal sponsor of its share of costs as estimated and described in sub-paragraphs b(1), b(2), b(3) and b(4) above, the estimated non-federal share of $92,611,000 includes $169,000 for the estimated value of LER that it must provide pursuant to Section 101(a)(3) of WRDA 1986, as amended (33 U.S.C.2211(a)(3)).

c. Additional 10 Percent Payment. In addition to payment by the non-federal sponsor of its share of the project first costs determined in sub-paragraphs b(1), b(2), b(3), and b(4) above, pursuant to Section 101(a)(2) of WRDA 1986, as amended (33 U.S.C. 2211(a)(2)), the non-federal sponsor must pay an additional 10 percent of the cost of the general navigation features of the project in cash over a period not to exceed 30 years, with interest. The additional 10 percent payment without interest is estimated to be $30,453,000. The value of LER and relocations, estimated as $169,000, provided by the non-federal sponsor under Section 101(a)(3) of WRDA 1986, as amended, will be credited toward payment of this amount.

d. Operations and Maintenance Costs. Due to lack of sediment sources the existing maintenance frequency at Boston Harbor ranges between 16 and 41 years depending on the project segment. The additional annual cost of operation and maintenance for this recommended plan is estimated at $338,000. In accordance with Section 101(b) of WRDA 1986, as amended (33 U.S.C. 2211(b)), the non-federal sponsor will be responsible for an amount equal to 50 percent of the excess of the cost of the operation and maintenance of the project over the cost which would be incurred for operation and maintenance of the project if the project had a depth of 45 feet. The federal government would be responsible for $322,000 of the incremental annual operations and maintenance costs and the non-federal sponsor would be responsible for the remaining $16,000.

e. Associated Costs. Estimated associated costs of $3,679,000 include $3,405,000 for dredging of non-federal berthing areas adjacent to the federal channel (non-federal expense) and $274,000 for aids to navigation (U.S. Coast Guard expense).

f. Authorized Project Cost and Section 902 Calculation. The project first cost for the purpose of calculating the maximum cost of the project pursuant to Section 902 of WRDA 1986, as amended, includes the cost of constructing the GNFs and the value of LER. Accordingly, as

set forth in paragraph 5.a, above, based on July 2011 price levels escalated to October 2012, the total estimated project first cost for these purposes is $304,695,000 with an estimated federal share of $212,084,000 and an estimated non-federal share of $92,611,000. Based on a discount rate of 3.75 percent, and a 50-year period of economic analysis, the project average annual benefits and costs are estimated at $103,469,000 and $14,305,000, respectively, with resulting net excess benefits of $89,191,000 and a benefit-to-cost ratio of 7.2 to 1.

6. The goals and objectives included in the Campaign Plan of the Corps have been fully integrated into the Boston Harbor planning process. The recommended plan was developed in coordination and consultation with various federal, state and local agencies using a systematic and regional approach to formulating solutions and evaluating the benefits and impacts. The project supports the President's National Export Initiative (Executive Order 13534) by improving the private sector's ability to export products at the Boston Harbor.

7. Risk and uncertainty were evaluated for economic benefits, costs, and sea level rise. Economic sensitivities examined the effects of reducing or increasing the number of carrier services calling on Boston, confidence limits on container volume shifts and growth, use of different vessel loading factors, limits on vessel drafts, and changes in sizes of vessels in service. In accordance with the Corps Engineering Circular on sea level change the study analyzed four sea level rise rates. Historic, baseline, mid-level and maximum expected sea level rise were estimated at 0.4, 0.9, 1.6 and 2.3 feet, respectively, over the 50-year project life. The study concluded that no impact would result from sea level rise with respect to dredging and channel use, and that terminal facilities would continue to operate under all conditions.

8. In accordance with the Corps Engineering Circular on review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and vigorous review process to ensure technical quality. This included District Quality Control, Agency Technical Review (ATR), Policy and Legal Compliance Review, Cost Engineering Directory of Expertise (DX) Review and Certification, Model Review and Approval, and Independent External Peer Review (IEPR). All concerns of the ATR have been addressed and incorporated into the final report. The IEPR was completed by Battelle Memorial Institute in June 2008. The panel had 14 comments, five of which they considered significant. The comments pertained to transportation cost savings documentation, port fees, vessel fleet analysis, impacts to water quality and air quality, blasting impacts, beneficial use of rock, and design analyses. In response to economic comments by both the IEPR and Corps Headquarters, more extensive analysis of the project's economic assumptions and benefits evaluation was conducted from 2009 to 2012. A revised economic analysis was conducted which resulted in a project depth of -47 feet MLLW that reasonably maximizes net benefits in the inner harbor segments of the Main Channels Improvement Plan. In response, the final Feasibility Report and Final Supplemental Environmetal Imapct Statement were expanded to include additional information and the revised recommendation.

9. Washington level review indicates that the plan recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies. Further the recommended plan complies with other administration and legislative policies and guidelines. The views of interested parties, including federal, state and local agencies, have been considered. State and agency comments received during review of the final report and environmental assessment were addressed. Concerns expressed by the National Ocean and Atmospheric Administration's National Marine Fisheries Service included dredging effects, potential blasting effects, the capping of the industrial waste site, Essential Fisheries Habitat impacts, Fish and Wildlife Coordination Act, and Endangered Species Act effects. The EPA expressed concerns regarding the beneficial use of both ordinary dredged material and rock, removal of rock from the project area by blasting, and air quality impacts. The Federal Aviation Administration expressed concerns that birds will be attracted to the exposed dredged material during the dredging process in the flight path for Boston Logan International Airport.

10. I concur with the findings, conclusions, and recommendation of the reporting officers. Accordingly, I recommend that navigation improvements for Boston Harbor be authorized in accordance with the reporting officers' recommended plan at an estimated cost of $304,695,000, with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal and state laws and policies, including Section 101 of WRDA 1986, as amended (33 U.S.C. 2211). The non-federal sponsor would provide the non-federal cost share and all lands, easements, and rights-of-way, including those necessary for the borrowing of material and the disposal of dredged or excavated material, and would perform or assure the performance of all relocations, including utility relocations. This recommendation is subject to the non-federal sponsor agreeing, in a Design Phase Agreement prior to initiating project design, and in a Project Partnership Agreement prior to project implementation, to comply with all applicable federal laws and policies, including but not limited to the following requirements:

a. Provide, during the periods of design and construction, funds necessary to make its total contribution for commercial navigation equal to:

(1) 25 percent of the cost of design and construction of the GNFs attributable to dredging to a depth in excess of -20 feet MLLW but not in excess of -45 feet MLLW, plus

(2) 50 percent of the costs attributable to dredging to a depth over -45 feet MLLW;

b. Provide all LER, including those necessary for the borrowing of material and placement of dredged or excavated material, and perform or assure performance of all relocations, including utility relocations, all as determined by the government to be necessary for the construction or operation and maintenance of the GNFs;

c. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the GNFs, an additional amount equal to 10 percent of the total cost of construction of GNFs less the amount of credit afforded by the government for the value of the LER and relocations, including utility relocations, provided by the non-federal sponsor for the GNFs. If the amount of credit afforded by the government for the value of LER, and relocations, including utility relocations, provided by the non-federal sponsor equals or exceeds 10 percent of the total cost of construction of the GNFs, the non-federal sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of LER and relocations, including utility relocations, in excess of 10 percent of the total costs of construction of the GNFs;

d. Provide, operate, and maintain, at no cost to the government, the local service facilities in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the government, including but not limited to the following;

(1) Providing depths in at least two berths at elevations at least three feet deeper than that provided by the federal channels accessing the Conley Terminal.

(2) For the Main Ship Channel Extension to the Massport Marine Terminal provide a berth depth equal to the depth provided by the adjacent reach of the federal Main Ship Channel.

(3) For the Medford Street Terminal on the Mystic River, provide a berth depth at least equal to that provided by the adjacent improved portion of the federal Mystic River Channel.

(4) For the Chelsea River Channel, provide berths at the Eastern Minerals, Sunoco-Logistics, Gulf, Irving and Global Terminals at least equal in depth to the federal Chelsea River Channel and Turning Basin.

e. In the case of project features greater than -45 feet MLLW in depth, provide 50 percent of the excess cost of operation and maintenance of the project over that cost which the government determines would be incurred for operation and maintenance if the project had a depth of 45 feet;

f. Give the government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating and maintaining the GNFs;

g. Hold and save the United States free from all damages arising from the construction or operation and maintenance of the project, any betterments, and the local service facilities, except for damages due to the fault or negligence of the United States or its contractors;

h. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, and other evidence is required, to the extent and in such detail as will properly reflect total cost of the project, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to state and local governments at 32 CFR, Section 33.20;

i. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601-9675, that may exist in, on, or under LER that the federal government determines to be necessary for the construction or operation and maintenance of the GNFs. However, for LER that the federal government determines to be subject to the navigation servitude, only the federal government shall perform such investigation unless the federal government provides the non-federal sponsor with prior specific written direction, in which case the non-federal sponsor shall perform such investigations in accordance with such written direction;

j. Assume complete financial responsibility, as between the federal government and the non-federal sponsor, for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under LER that the federal government determines to be necessary for the construction or operation and maintenance of the project;

k. To the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA;

l. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended, (42 U.S.C. 1962d-5b) and Section 101(e) of the WRDA 1986, Public Law 99-662, as amended, (33 U.S.C. 2211(e)) which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-federal sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element;

m. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, PL 91-646, as amended, (42 U.S.C. 4601-4655) and the Uniform Regulations contained in 49 CFR 24, in acquiring LER, necessary for construction, operation and maintenance of the project including those necessary for relocations, the borrowing of material, or the placement of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said act;

n. Comply with all applicable federal and state laws and regulations, including, but not

limited to, Section 601 of the Civil Rights Act of 1964, PL 88-352 (42 USC 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable federal labor standards requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive changes the provision of the Davis-Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c);

o. Provide the non-federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation that are in excess of one percent of the total amount authorized to be appropriated for the project; and

p. Not use funds from other federal programs, including any non-federal contribution required as a matching share therefore, to meet any of the non-federal sponsor's obligations for the project costs unless the federal agency providing the federal portion of such funds verifies in writing that such funds are authorized to be used to carry out the project.

11. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the Executive Branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the Commonwealth of Massachusetts, Massport (the non-federal sponsor), interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers

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DAEN

16 APR 2014

SUBJECT: Lake Worth Inlet, Palm Beach Harbor, Navigation Improvements Project, Palm Beach County, Florida

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on navigation improvements for Lake Worth Inlet, Palm Beach Harbor, Palm Beach County, Florida. It is accompanied by the reports of the district and division engineers. These reports were prepared as an interim response to a resolution by the House Committee on Transportation and Infrastructure dated 25 June 1998 which requested the Secretary of the Army to review the report of the Chief of Engineers on the Palm Beach Harbor, Florida, published as House Document 283, 86th Congress, 1st Session, and other pertinent reports, with a view of determining if the authorized project should be modified in any way at this time, with particular reference to widening the existing interior channel through Lake Worth Inlet. Preconstruction engineering and design (PED) activities for the Lake Worth Inlet, Palm Beach Harbor, Palm Beach County, Florida Navigation Project will continue under the authority cited above.

2. The reporting officers recommend authorization of a project that will contribute significantly to the economic efficiency and increased safety of commercial navigation in Palm Beach Harbor. The harbor entrance (also known as Lake Worth Inlet) is an artificial cut through the barrier island and limestone formation connecting Palm Beach Harbor to the Atlantic Ocean. The closest major ports to the Port of Palm Beach are Port Everglades, in Ft. Lauderdale, and Miami Harbor, approximately 40 miles and 65 miles to the south, respectively. Palm Beach Harbor is the 4th busiest container port in Florida and the eighteenth busiest in the continental United States. The port is a major center for the shipment of bulk sugar, molasses, cement, utility fuels, produce, break bulk and specialized items, and container shipments to the Caribbean. Lake Worth Inlet, serving as the entrance channel to the port, is inadequate both in width and depth, negatively impacting future port potential and creating economic inefficiencies with the current fleet of vessels. Based on existing fleet sizes, the port is operating with insufficient channel width and depth. As a result of these deficiencies, the local harbor pilots in conjunction with the U.S. Coast Guard have placed restrictions on vessel transit to ensure safety, resulting in economic inefficiencies and increased costs to the nation. The Port of Palm Beach is the non-federal cost-sharing sponsor.

3. The reporting officers identified a plan for improvements to the existing Lake Worth Inlet federal navigation project which will contribute significantly to the economic efficiency of commercial navigation in the region. The recommended plan is the National Economic

Development (NED) Plan and is supported by the non-federal sponsor. The recommended plan includes channel deepening, widening, improvements to the main turning basin, and an advanced maintenance plan to reduce the costs of future operations and maintenance:

a. Main Channels Improvement Plan: The project would deepen the inner channel from the -33 feet mean lower low water (MLLW) to a project depth of -39 feet MLLW and the entrance channel from -35 feet MLLW to -41 feet MLLW. The channel widening footprint includes the addition of a new channel flare on the south side of the outer portion of the entrance channel, widening of the entrance channel from 400 feet to between 440-460 feet, and widening the inner channel from 300-450 feet.

b. Turning Basins: The Main Turning Basin would be deepened from -33 feet MLLW to -39 feet MLLW and extend the southern boundary of the turning basin an additional 150 feet south. The project would also remove a notch south of Peanut Island on the north side of the turning basin. No additional navigational improvements are being recommended for the smaller North Turning Basin with depths remaining at -25 feet MLLW.

c. Advanced Maintenance Plan: Several settling basins critical to the advanced maintenence plan would be dredged to depths ranging from -26 feet MLLW to -51 feet MLLW just north of the entrance channel to catch sediment before it enters the entrance channel. A 1,700 linear foot section of the entrance channel would be deepened for advanced maintenance to depths of -51 feet MLLW in the more easterly half of the entrance channel and -44 feet MLLW in the westerly section. Due to the additional deepening of the entrance channel for advanced maintenance, the project also includes the cost of stabilizing the north jetty with a 600 linear-feet sheet pile wall installed along the oceanward length of the jetty to a depth of -60 feet MLLW. The advance maintenance plan will reduce the frequency of operation and maintenance (O&M) dredging to once every two years (currently once per year), resulting in an annual savings of $850,000 to the O&M program.

4. The project would require the removal of approximately 1.4 million cubic yards of rock that will be placed at the designated Palm Beach Ocean Dredged Material Disposal Site (ODMDS) located about 5 miles east of the project. The U.S. Army Corps of Engineers (Corps), in coordination with the U.S. Environmental Protection Agency, will complete a study during PED to increase the allowable disposal limit per dredging event in the ODMDS over and above the current limit of 500,000 cubic yards per dredging event. It is the policy of the Corps to beneficially use dredged material where practical. Approximately 450,000 cubic yards of sand dredged from the channels will be placed in the near shore zone below the mean high water line out to the -17 feet MLLW contour along an approximate 3,000 feet reach of coast south of the inlet.

5. Impacts caused by the navigational improvements include the losses of 4.5 acres of seagrass habitat and 4.9 acres of low relief hardbottom habitat, for which mitigation will be required. To mitigate for the impacts to seagrasses the project includes a mitigation plan that proposes filling existing borrow areas in Lake Worth Lagoon with approximately 125,000 cubic yards of dredged material to an elevation consistent with adjacent seagrass beds. Subsequent colonization of the restored substrate is anticipated by natural recruitment. The mitigation plan for the loss of hardbottom habitat is the creation of artificial reefs using limestone excavated from the entrance channel or quarried native limestone. The artificial reef construction would use about 25,100 cubic yards of rock to create mounds approximately 20 feet by 40 feet in size with a vertical relief of 3 to 4 feet. The exact locations of the mitigation sites and actual mitigation amounts will be determined after a more detailed resource survey and functional assessment conducted during PED. The current estimate of 11.25 acres of mitigation for both seagrasses and hardbottom is recommended based on the evaluation of comparable mitigation efforts from similar projects in the region. Monitoring of seagrass mitigation sites will be conducted on a monthly basis for the first year, then twice a year for years two and three, and once a year for years four and five. The monitoring program for the mitigation of hardbottoms will consist of physical monitoring to assess the degree of settling of the hardbottom materials after the first year, and biological monitoring to compare populations of algae, invertebrates and fish with natural hardbottom areas.

6. Project costs are allocated to the commercial navigation purpose and are based on October 2013 prices.

a. Project First Cost. The estimated project first cost is $88,531,000, which includes the cost of constructing the general navigation features (GNFs) and the lands, easements, rights-of-way, and relocations (LERR) estimated as follows: $87,209,000 for channel modifications and advanced maintenance settling basins, turbidity and endangered species monitoring, environmental mitigation, and dredged material placement; $1,290,000 for post construction mitigation monitoring; and $32,000 for real estate administrative costs.

b. Estimated Federal and Non-federal Shares. The estimated federal and non-federal shares of the project first cost are $57,556,000 and $30,975,000 respectively, as apportioned in accordance with the cost sharing provisions of Section 101 of Water Resources Development Act (WRDA) 1986, as amended (33 U.S.C. 2211), as follows:

(1) The cost for the GNFs from greater than 20 feet to 45 feet will be shared at a rate of 75 percent by the government and 25 percent by the non-federal sponsor, plus;

(2) In addition to the costs outlined in sub-paragraph (1) above, the project first cost includes federal administrative costs for lands, easements, rights of way and relocations

estimated at $32,000. The federal portion of these costs is $19,000. The non-federal portion is $13,000, all of which is eligible for LERR credit.

c. Additional 10 Percent Payment. In addition to the non-federal sponsor's estimated share of the total first cost of constructing the project in the amount of $21,125,000 pursuant to Section 101(a)(2) of WRDA 1986, as amended, the non-federal sponsor must pay an additional 10% of the costs of GNFs of the project, $8,849,900, in cash over a period not to exceed 30 years, with interest. The value of the LERR provided by the federal sponsor under Section 101(a)(3) of WRDA 1986 as amended will be credited toward this payment.

d. Operations and Maintenance Costs. The project results in a minor increase in the annual federal maintenance dredging from 117,500 to 120,000 cubic yards. However, the advanced maintenance plan will result in an average annual equivalent savings to the operation and maintenance program in the amount of $850,000 in comparison to the annual operations and maintenance costs of about $3,794,000 for the existing project.

e. Associated Costs. Estimated associated costs include $25,000 for aids to navigation (a U.S. Coast Guard expense).

f. Authorized Project Cost and Section 902 Calculation. The project first cost, for the purposes of authorization and calculating the maximum cost of the project pursuant to Section 902 of WRDA 1986, as amended, should include estimates for general navigation features (GNF) construction costs, the value of lands, easements, and rights-of-way and the value of relocations provided under Section 101(a)(3) of WRDA 1986, as amended. Accordingly, as set forth in paragraph 4.a. above, based on Price Level Fiscal Year (FY) 2014, the estimated project first cost for these purposes are $88,531,000. Based on FY 2014 price levels, a 3.5-percent discount rate, and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $3,960,000. The equivalent average annual benefits are estimated to be $7,940,000. The average annual net benefits are $3,980,000. The benefit-to-cost ratio for the recommended plan is 2.0.

7. The recommended plan was developed in coordination and consultation with various federal, state and local agencies using a systematic and regional approach to formulating solutions and evaluating the benefits and impacts. Risk and uncertainty were evaluated for economic benefits, costs and sea level rise. Economic sensitivities examined the effects of various commodity forecasts which included no growth, lower growth rates or capping the growth earlier in the period of analysis. These sensitivities showed that even with significantly reduced commodity throughput, the project would still be justified. In addition a cost and schedule risk analysis was completed. In accordance with the Corps Engineering Circular on sea level change the study analyzed three sea level rise rates. Historic (baseline), mid-level, and maximum rates were

estimated to be 0.39 feet, 0.89 feet, and 2.47 feet, respectively, over the 50-year project life. The study concluded that no impact would result from sea level rise with respect to dredging and channel use, and that the terminal facilities would continue to operate under all conditions.

8. In accordance with the Corps Engineering Circular on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included District Quality Control (DQC), Agency Technical Review (ATR), Policy and Legal Compliance Review, Cost Engineering Center of Expertise Review and Certification, Model Review and Approval, and Independent External Peer Review (IEPR). All concerns of the ATR have been addressed and incorporated into the final report. The IEPR was completed by Battelle Memorial Institute in July 2013 and a revised Comment Response Record was issued by the IEPR panel on 10 January 2014 indicating that all comments were satisfactorily addressed. The panel had seven comments, two of which they considered significant, two were medium significance and three were low significance. The most significant finding by the panel related to the commodity forecast and vessel costing documentation. While the 2017-2067 commodity growth forecast appeared reasonable, the assumed growth between 2013 and 2017 was not adequately supported by the report documentation which raised questions about the reliability of the benefit estimates. The panel also commented that documentation on vessel operations and costing was insufficient. Other comments raised by the panel included capacity of the ODMDS, long-term management of dredged material, role of the existing sand bypassing north of the project, air quality, and shoaling rates. In summary, the panel felt that the engineering, economics and environmental analysis were adequate and the additional sensitivity analysis and clarifications needed to be properly documented in the final report. The final report was revised accordingly.

9. The plan recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The views of interested parties, including federal, state and local agencies have been considered. The U.S. Coast Guard requested information on the relocation of the aids to navigation, including the cost and schedule which were not fully described in the final report. The requested information has been provided to the Coast Guard. The USEPA submitted a number of comments during State and Agency review concerning seagrass mitigation, potential for effects to groundwater resources, air quality analysis, induced storm surge increases, railroad alternatives to harbor deepening and purpose and need for harbor deepening. The Corps has determined that the existing report adequately addresses effects to groundwater resources, railroad alternatives to harbor deepening, and purpose and need for the recommended improvements. In regards to possible storm surge increases, the Corps does not anticipate any negative flooding effects to be caused by the project due to the insignificant amount of possible increase (0-4 inches), infrequency of the flooding event (1% flood) that could lead to an increase, and much greater effects anticipated due to sea

level rise. The following actions will be implemented as part of this project to address USEPA concerns:

a. Seagrass Mitigation. The Corps will conduct a survey prior to construction to confirm the extent of seagrasses at the site. The Corps will also continue to coordinate with Palm Beach County Department of Environmental Resources concerning siting of the seagrass mitigation areas. Lastly, the dredged material that would be used in the seagrass mitigation areas would be tested for contaminants prior to use.

b. Air Quality Analysis. The Corps has developed an errata sheet for the final feasibility report and EIS that clarifies that the air pollutants of concern are expressed in units of tons/year.

10. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that navigation improvements for Lake Worth Inlet be authorized in accordance with the reporting officers' recommended plan at an estimated cost of $88,531,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal and state laws and policies, including Section 101 of WRDA 1986, as amended. This recommendation is subject to the non-federal sponsor agreeing to comply with all applicable federal laws and policies including that the non-federal sponsor must agree with the following requirements prior to project implementation.

a. Provide, during the periods of design and construction, funds necessary to make its total contribution for commercial navigation equal to 25 percent of the cost of design and construction of the GNFs attributable to dredging to a depth in excess of -20 feet MLLW but not in excess of -45 feet MLLW.

b. Provide all lands, easement, and rights-of-way (LER), including those necessary for the borrowing of material and placement of dredged or excavated material, and perform or assure performance of all relocations, including utility relocations, all as determined by the government to be necessary for the construction or operation and maintenance of the GNFs.

c. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the GNFs, an additional amount equal to 10 percent of the total cost of construction of GNFs less the amount of credit afforded by the government for the value of the LER and relocations, including utility relocations, provided by the non-federal sponsor for the GNFs. If the amount of credit afforded by the government for the value of LER, and relocations, including utility relocations, provided by the non-federal sponsor equals or exceeds 10 percent of the total cost of construction of the GNFs, the non-federal sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of LER

and relocations, including utility relocations, in excess of 10 percent of the total costs of construction of the GNFs.

d. Provide, operate, and maintain, at no cost to the government, the local service facilities in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the government.

e. In the case of project features greater than -45 feet MLLW in depth, provide 50 percent of the excess cost of operation and maintenance of the project over that cost which the government determines would be incurred for O&M if the project had a depth of -45 feet MLLW.

f. Give the government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating and maintaining the GNFs.

g. Hold and save the United States free from all damages arising from the construction or operation and maintenance of the project, any betterments, and the local service facilities, except for damages due to the fault or negligence of the United States or its contractors.

h. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601–9675 that may exist in, on, or under LER that the federal government determines to be necessary for the construction or operation and maintenance of the GNFs. However, for lands, easements, or rights-of-way that the federal government determines to be subject to the navigation servitude, only the federal government shall perform such investigation unless the federal government provides the non-federal sponsor with prior specific written direction, in which case the non-federal sponsor shall perform such investigations in accordance with such written direction.

i. Assume complete financial responsibility, as between the federal government and the non-federal sponsor, for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under LER that the federal government determines to be necessary for the construction or operation and maintenance of the project.

j. To the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA.

k. Accomplish all removals determined necessary by the federal government other than those removals specifically assigned to the federal government.

l. Mitigation monitoring during construction and post construction shall be cost shared between the federal government and non-federal sponsor, 75 percent and 25 percent, respectively.

11. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to the Congress, the State of Florida, the Port of Palm Beach (the non-Federal sponsor), interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

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16 APR 2014

DAEN (1105-2-10a)

SUBJECT: Jacksonville Harbor Navigation Study Final Integrated General Reevaluation Report II and Supplemental Environmental Impact Statement, Duval County, Florida

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress the final integrated feasibility report and environmental impact statement on navigation improvements for Jacksonville Harbor, Duval County, Florida, located on the St. Johns River. It is accompanied by the report of the district and division engineer. This report was prepared as an interim response to a resolution from the Committee on Public Works and Transportation, United States House of Representatives, dated February 5, 1992. Preconstruction engineering and design activities for the Jacksonville Harbor, Duval County, Florida Navigation Project will continue under the authority provided by the resolution cited. The Port of Jacksonville is designated as a Strategic Port supporting the 832nd Transportation Battalion, as well as the Marines and Navy. It is also included in the President's "We Can't Wait" Initiative; Executive Order 13604 of March 22, 2012.

2. The reporting officers recommend a project that will contribute to the economic efficiency of commercial navigation. Based on an evaluation of alternative plan costs and economic benefits, the national economic development (NED) plan includes a channel depth of 45 feet with associated channel widening and turning basins. The non-federal sponsor, the Jacksonville Port Authority (JAXPORT), subsequently requested a locally preferred plan (LPP) of 47 feet deep with associated channel widening and turning basins. The LPP has positive net benefits and is economically justified. In accordance with U.S. Army Corps of Engineers (USACE) policy, the LPP was submitted for consideration to the Assistant Secretary of the Army for Civil Works (ASA-CW) and approved for consideration as the recommended plan on May 17, 2013. The recommended plan is the LPP and consists of the following improvements:

a) The project would be deepened from the existing 40-foot mean lower low water (MLLW) channel depth of the St. John's River to 47 feet MLLW from the entrance channel to approximately River Mile (RM) 13;

b) The following areas of widening are included as part of the new channel footprint for the LPP: Mile Point: Widen to the north by 200 feet for Cuts 8-13 (~(RM) 3-5), Training Wall Reach: widen to the south 100 feet for Cuts 14-16 (~RM 5-6) transitioning to 250 feet for Cut 17 (~RM 6) and back to 100 feet for Cuts 18-19 (~RM 6), and the St. Johns Bluff Reach: widen both sides of the channel varying amounts up to 300 feet for Cuts 40-41 (~RM 7-8);

c) The following turning basin areas are included in the recommended plan based on the ship simulation results: Blount Island: ~2,700 feet long by 1,500 feet wide located in Cut-42 (~RM 10) and Brills Cut: ~2,500 feet long by 1,500 feet wide located in Cut-45 (~RM 13).

d) Construction of the recommended plan involves dredging of approximately 18 million cubic yards of material. Fracturing (confined blasting) of consolidated sediments and underlying rock may be required prior to dredging. Based on analysis of the historical operation and maintenance (O&M) requirements and the proposed project expansion features, it is estimated that there will be an average annual increase of 137,000 cubic yards (CY) of shoal material to be dredged each year from the new project. All material dredged for construction is assumed to go to the ocean dredged material disposal site (ODMDS).

e) The following areas of advanced maintenance were identified; Area 1 (Entrance Channel to ~ River Mile 2) = Bar Cut-3 from Station 217+00 to Station 270+00 (Full Channel) plus Bar Cut-3 Station 270+00 to end/Station 300+00 (South side of channel or Range 0 to Range 380) plus Cut-4 entire length (South side of channel or Range 0 to Range 430) plus Cut-5 entire length (South side of channel or Range 0 to Range 455) plus Cut-6 entire length (South side of channel or Range 0 to Range 455); Area 2 (~River Mile 8) = Cut-41 Station 12+30 to Station 28+10 (North side of channel to include proposed widening or Range 0 to Range -500); Area 3 (~River Mile 9 to 11) = Cut-42 Station 19+79.05 to Station 135+00 (Full Channel); Area 4 (Adjacent to Cut-42) (~River Mile 10) = Entire Southern portion of Blount Island Turning Basin (Range -237.50 to Range -862.50); and Area 5 (~River Mile 13) = Entire Brills Cut Turning Basin (this covers the project channel by default from Cut-45 Station 3+18.43 to Station 28+18.43). Area 5 is the breakpoint where the project is going from the shallower and narrower 40-foot project depth to the new project depth of 47 feet which is deeper and will be wider with the incorporation of the Brill's Cut Turning Basin. It is expected that more shoaling will occur in this area as we have experienced historical increases in the Talleyrand area of the Terminal Channel where the depth goes from 34 feet to 40 feet. These areas represent similar surface areas to the previous advanced maintenance areas presented in the 2002 General Reevaluation Report (GRR) and also represent similar quantities of dredging. These items have been considered to maintain the lessened frequency of dredging in these areas.

f) An interagency assessment team was assembled to assist in conducting a Uniform Mitigation Assessment Method (UMAM) assessment for potential impacts and associated mitigation for the proposed deepening of Jacksonville Harbor. The team is composed of representatives from the following agencies: U.S. Environmental Protection Agency, USACE, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, National Marine Fisheries Service, and U.S. Fish and Wildlife Service. Numerous meetings and site visits were conducted to observe and discuss the characterization of the wetland areas/submerged aquatic vegetation (SAV), potential effects related to the proposed project and proposed compensatory mitigation. The effects assessment determined that the base

mitigation plan would offset impacts to wetlands (394.57 acres) and SAV (180.5 acres). On a functional value scale of 0-1, these resources would experience a functional loss of 0.1, which results in 39.46 units of compensatory mitigation for wetlands and 18.05 units of compensatory mitigation for SAV. Mitigation is required for wetlands and submerged aquatic vegetation affected by the deepening. A base mitigation plan, consisting of conservation land purchase of 638 acres of freshwater wetlands, uplands, river shoreline, and salt marsh wetlands has been proposed. The base mitigation plan total cost is $2,900,000. The USACE has determined that this plan would be sufficient to offset any minor effects that may occur as a result of the proposed project. As there were no discernible differences in the modeling results of impacts for the NED plan versus the recommended plan (LPP), there is no anticipated increase in mitigation needed for the LPP plan as compared to the NED plan. This total includes mitigation for fisheries effects.

g) Projected environmental impacts warrant initial mitigation (i.e. conservation land purchase) and monitoring during construction plus 1 year post construction. Although not required for the federal project, the non-federal sponsor has agreed to conduct additional monitoring and modeling efforts post construction at their cost. If based on the post construction monitoring the USACE determines that additional monitoring as part of the federal project is warranted, the USACE could share in the cost of the additional monitoring.

3. Project Cost Breakdown based on October 2013 Prices.

a) Project First Cost: The estimated project first cost is $600,900,000, which includes the cost of constructing the General Navigation Features (GNFs) and the lands, easements, rights of way, and relocations (LERR) estimated as follows: $600,200,000 for channel modifications, turbidity and endangered species monitoring, environmental mitigation, Planning Engineering and Design (PED), and Construction Management; and $700,000 for real estate administrative costs. The Jacksonville Port Authority is the non-federal cost-sharing sponsor for all features.

b) Estimated Federal and Non-federal Cost Shares: The estimated federal and non-federal shares of the project first cost are $362,000,000 and $238,900,000 respectively, as apportioned in accordance with the cost sharing provisions of Section 101 of WRDA 1986, as amended (33 U.S.C. 2211), as follows:

(1) The cost for the GNFs from greater than 20 feet to 45 feet MLLW will be shared at a rate of 75 percent by the government and 25 percent by the non-federal sponsor, plus

(2) 100 percent of the costs attributable to dredging to a depth below -45 feet MLLW;

(3) In addition to the costs outlined in sub-paragraph (1) above, the project first cost includes federal administrative costs for lands, easements, rights of way and relocations

estimated at $700,000. The non-federal portion of this cost is 25% of the administrative costs,

(4) $200,000, all of which is eligible for LERR credit.

c) Additional 10 Percent Payment. In addition to the non-federal sponsor's estimated share of the total first cost of constructing the project in the amount of $238,900,000 pursuant to Section 101(a)(2) of WRDA 1986, as amended, the non-federal sponsor must pay an additional 10% of the costs for NED GNFs of the project, $50,500,000, in cash over a period not to exceed 30 years, with interest. The value of the lands, easements, rights-of-way and relocations provided by the non-federal sponsor under Section 101(a)(3) of WRDA 1986 as amended will be credited toward this payment.

d) Operations and Maintenance Costs. It is estimated that there will be an average annual increase of 137,000 cubic yards (CY) of shoal material to be dredged each year from the new project with an added annual O&M cost of $1,100,000. Much of the increase is due to the construction of two new turning basins that will be needed to accommodate the post-panamax container ships. With the incorporation of advanced maintenance zones into these turning basins, it may be possible to reduce the frequency of dredging required and thus reduce contract costs and equipment mobilization costs.

e) Associated Costs. Estimated associated federal costs of $1,300,000 include navigation aids, (a U.S. Coast Guard expense).

f) Local Service Facilities. The associated cost for local service facilities is approximately $82 million and is primarily for upgrading the bulkheads and berths at facilities which benefit from the deeper channel. These costs are 100% non-federal and are not included in the first total cost of the recommended plan.

g) Authorized Project Cost and Section 902 Calculation. The project first cost, for the purposes of authorization and calculating the maximum cost of the project pursuant to Section 902 of WRDA 1986, as amended, should include estimates for GNFs construction costs, the value of lands, easements, and rights-of-way and the value of relocations provided under Section 101(a)(3) of WRDA 1986, as amended. Accordingly, as set forth in paragraph 4.a. above, based on Price Level FY 2014, the estimated project first cost for these purposes is $600,900,000 with a federal share of $362,000,000 and a non-federal share of $238,900,000.

5. Based on October 2013 (FY2014) price levels, a 3.5-percent discount rate, and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $33,700,000. The average annual equivalent benefits are estimated to be $89,700,000. The average annual net benefits are $56,000,000. The benefit-to-cost ratio for the recommended plan is 2.7.

6. The federal government would be responsible for operation and maintenance of the navigation improvements proposed in this report upon completion of the construction contract.

The federal government currently maintains the existing project. The contractor would be responsible for all maintenance during the construction contract.

7. Risk and uncertainty were evaluated for economic benefits, costs and sea level rise. Economic sensitivities examined the effects of commodity forecasts which had lower growth rates or capped the growth earlier in the period of analysis. In accordance with the Corps Engineering Circular on sea level change the study analyzed four sea level rise rates; historic (baseline), intermediate, and high. The historic sea level rise rate was determined to be 0.0078 ft/year. The baseline, intermediate, and high sea level rise values at the end of the 50-year period of analysis were projected to be 0.39 ft, 0.87 ft, and 2.4 ft, respectively. In general, regional sea level rise (baseline, intermediate, and high) will not affect the function of the project alternatives or the overall safety of the design vessel. There is expected to be a minor impact to non-federal structures or berths that the non-federal sponsor would manage without effects to the project. The majority of salinity changes will occur due to sea level change; with only minor impacts attributable to the project.

8. In accordance with the Corps Engineering Circular on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included District Quality Control (DQC), Agency Technical Review (ATR), Policy and Legal Compliance Review, Cost Engineering Directory of Expertise (DX) Review and Certification, Independent External Peer Review (IEPR), and Model Review and Approval. The IEPR was completed by Battelle Memorial Institute. A total of 13 comments were documented. The IEPR comments identified concerns in areas of the explanation of the economics, hydraulic analysis, and environmental analyses. This resulted in expanded narratives throughout the report to support the decision-making process and justify the recommended plan. All comments from the above referenced reviews have been addressed and incorporated into the final documents. Overall the reviews resulted in improvements to the technical quality of the report.

9. Washington level review indicates that the plan recommended by the reporting officers is technically sound, environmentally and socially acceptable, and on the basis of congressional directives, economically justified. The plan complies with all essential elements of the 1983 U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies. The recommended plan complies with other administration and legislative policies and guidelines. The views of interested parties, including federal, state and local agencies have been considered. The US Environmental Protection Agency (USEPA) submitted a comment regarding potential impacts of the project to

the existing source water supply, and the consequences for the Jacksonville water utility should the 8.45 million gallons per day (MGD) currently being withdrawn from the surficial aquifer have to be supplied by the Floridan aquifer. The Corps has determined that the existing report adequately addresses the effects to the existing water supply. This conclusion is based on the results of a USGS study that determined that the project will not significantly increase the surficial aquifer salinity exept at the boundary of the river channel where the surficial aquifer is likely already impacted from exposure to the high river salinity. The current consumptive use permit for the water utility permits a maximum base allocation of 142 MGD by the year 2021, thus, should an additional 8.45 MGD be required, additional pumping capacity would be available under the existing permit. Additionally, the USEPA, US Department of the Interior (USDOI), and Florida Department of Environmental Protection (FLDEP) requested that 10 years of post construction monitoring be done, and asked to be included as part of a Corrective Action Team (CAT) that would analyze monitoring results and advise the USACE on future potential actions related to monitoring and mitigation. The USACE will include these agencies as part of the CAT. The USACE has committed to cost share in monitoring efforts during the period of construction and one year post construction. In addition, the Port of Jacksonville has committed to funding on their own additional monitoring efforts up to 10 years post construction. The USACE will potentially cost share in the additional monitoring if we determine it is warranted based on the initial post construction monitoring results.

10. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that navigation improvements for Jacksonville Harbor be authorized in accordance with the reporting officers' recommended plan at an estimated first cost of $600,900,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal and state laws and policies, including Section 101 of WRDA 1986, as amended. This recommendation is subject to the non-federal sponsor agreeing to comply with all applicable federal laws and policies including that the non-federal sponsor must agree with the following requirements prior to project implementation.

a) Provide, during the periods of design and construction, funds necessary to make its total contribution for commercial navigation equal to:

(1) 25 percent of the cost of design and construction of the GNFs attributable to dredging to a depth in excess of -20 feet MLLW but not in excess of -45 feet MLLW, plus

(2) 100 percent of the costs attributable to dredging to a depth below -45 feet MLLW.

b) Provide all lands, easement, and rights-of-way (LER), including those necessary for the borrowing of material and placement of dredged or excavated material, and perform or assure performance of all relocations, including utility relocations, all as determined by the Government

to be necessary for the construction or operation and maintenance of the GNFs. Provide and maintain during the authorized life of the project the mitigation lands (approximately 638 acres) determined to be required for mitigation for impacts for the project.

c) Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the GNFs, an additional amount equal to 10 percent of the total cost of

construction of the NED GNFs less the amount of credit afforded by the government for the value of the LER and relocations, including utility relocations, provided by the non-federal sponsor for the GNFs. If the amount of credit afforded by the government for the value of LER, and relocations, including utility relocations, provided by the non-federal sponsor equals or exceeds 10 percent of the total cost of construction of the GNFs, the non-federal sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of LER and relocations, including utility relocations, in excess of 10 percent of the total costs of construction of the GNFs.

d) Provide, operate, and maintain, at no cost to the government, the local service facilities in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the government.

e) In the case of project features greater than -45 feet MLLW in depth, provide 100 percent of the excess cost of operation and maintenance of the project over that cost which the government determines would be incurred for operation and maintenance if the project had a depth of 45 feet.

f) Accomplish all removals determined necessary by the federal government other than those removals specifically assigned to the federal government.

g) Hold and save the United States free from all damages arising from the construction or operation and maintenance of the project, any betterments, and the local service facilities, except for damages due to the fault or negligence of the United States or its contractors.

h) Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601–9675, that may exist in, on, or under LER that the Government determines to be necessary for the construction or operation and maintenance of the GNFs. However, for lands, easements, or rights-of-way that the government determines to be subject to the navigation servitude, only the government shall perform such investigation unless the government provides the non-federal sponsor with prior specific written direction, in which case

the non-federal sponsor shall perform such investigations in accordance with such written direction.

i) Assume complete financial responsibility, as between the government and the non-federal sponsor, for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under LER that the government determines to be necessary for the construction or operation and maintenance of the project.

j) To the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA.

11. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to the Congress, the State of Florida, the Jacksonville Port Authority (the non-federal sponsor), interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

CECW-PC (1105-2-10a)

AUG 24 2009

SUBJECT: Topeka Flood Risk Management Project, Topeka, Kansas

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on flood risk management improvements on the Kansas River in the vicinity of Topeka, Kansas. It is accompanied by the report of the district and division engineer. These reports are submitted pursuant to Section 216 of the Flood Control Act of 1970, authorizing me to determine whether any modifications to the local flood risk management projects are advisable in order to improve the reliability and performance of the existing levee system. The existing units were originally authorized by the Flood Control Acts of 1936 and 1954. Project construction of the levee system was completed in 1974. The study was requested by the local sponsors and the Congress of the United States. Preconstruction engineering and design activities, if funded, would be continued under the authority provided by the act cited above.

2. The reporting officers recommend authorizing a plan to reduce flood damages by construction of modifications to significantly improve reliability and performance of the levee system in the vicinity of Topeka, Kansas. The recommendation is supported by the non-Federal Sponsors, the City of Topeka, Kansas, and the North Topeka Drainage District. The recommended plan is the National Economic Development (NED) plan. All features are located in the State of Kansas. The plan includes recommendations for modifications to four existing levee units within the Topeka Flood Risk Management Project: the South Topeka Unit, the Oakland Unit, the North Topeka Unit, and the Waterworks Unit.

a. South Topeka Unit. Levee under-seepage concerns will be addressed by installation of a control berm. Structural strength and uplift concerns will be improved by modifications of the Kansas Avenue Pump Station and three manholes. Approximately 2,000 linear feet of existing concrete floodwall on timber-pile foundations will be removed and replaced with a new floodwall on concrete piles following the same alignment and to the same height as the existing floodwall. The work in this unit will result in the removal of 7.5 acres of woodland habitat and appropriate mitigation measures are included in the Recommended Plan.

b. Oakland Unit. An area of under-seepage concern will be controlled with a berm and a stability berm will be installed to improve the stability factor of safety of the existing floodwall. Structural modification of the East Oakland Pump Station will be implemented to address uplift failure concerns.

c. North Topeka Unit: Two areas of low under-seepage reliability will be improved by installation of an under-seepage control berm and a series of pumped relief wells, respectively. One pump station that is no longer required, and currently poses an uplift failure risk, will be removed.

d. Waterworks Unit: Landside stability berms will be installed to increase the reliability of an existing concrete floodwall protecting the primary water source for the City of Topeka and surrounding communities.

3. Project costs are allocated to the Flood Risk Management purpose. Based on the October 2008 price levels, the estimated first cost to the plan is $21,157,000. In accordance with the cost sharing provisions of Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended by Section 202 of WRDA 1996, the Federal share of the total project cost would be $13,752,000 (65 percent) and the non-Federal share would be $7,405,000. The non-Federal costs include the costs of lands, easements, rights-of-way, relocations, and dredged (LERRD) or excavated material disposal areas, estimated at $1,279,000.

4. Based on a 4.625 percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project, including operation, maintenance, repair, replacement, and rehabilitation (OMRR&R), are estimated to be $1,168,000. The selected plan is estimated to be approximately 95 percent reliable in protecting the study area from the flood with a one percent chance of occurrence in any year (formerly referred to as the "100-year flood"). The selected plan would reduce average annual flood damages by about 67 percent and would leave average annual residual damages estimated at $7,438,000. Annual average economic benefits are estimated to be $15,428,000; net average annual benefits are $14,260,000. The system-wide benefit-to-cost ratio is 13.2 to 1. The selected plan is composed of three separable elements: South Topeka/Oakland, North Topeka, and Waterworks Units. Although South Topeka and Oakland are separate units, they are linked hydrologically and therefore combine to form a single, separable element. The South Topeka/Oakland Units would provide $4,014,000 in annual benefits with an annual cost of $996,000 for a benefit-to-cost ratio of 4.0. The North Topeka Unit would provide $11,408,000 in annual benefits with an annual cost of $169,000 for a benefit-to-cost ratio of 67.4. The Waterworks Unit would provide $6,000 in annual benefits with an annual cost of $3,000 for a benefit-to-cost ratio of 2.0.

5. The goals and objectives included in the Campaign Plan of the U.S. Army Corps of Engineers have been full integrated into the study process. The project effectively implements a comprehensive systems approach with full stakeholder participation. The project study has undergone rigorous quality control reviews in accordance with recent USACE guidance. These reviews included technical review of the engineering, economic, and environmental analyses by another USACE district. These reviews strengthened the recommendations of the reporting officers. The study report describes existing risks to the community, risks that will be reduced by the Recommended Plan, and residual risks that will remain from large, infrequent, flood events. In accordance with EC 1105-2-410, Appendix D, and future guidance that may be developed, a Safety Assurance Review (SAR) will be conducted prior to initiation of physical construction and periodically thereafter until construction activities are completed. The SAR

will be conducted by an independent (outside of the Corps of Engineers) panel. Establishment of the panel will be in accordance with applicable guidance at the time of project construction.

6. The levee system consist of six separately authorized units and is a component of a larger system of levees and reservoirs that provides flood damage reduction benefits to the Kansas River basin. There are no significant direct or cumulative environmental impacts associated with the recommended plan, primarily because it sustains the existing levee rather than encumbering additional resources for a "new" project. The long-term environmental and cultural consequences of plan implementation are positive as the increased reliability of the units act to guard the social and environmental fabric that has developed within the study area. The plan also contributes to regional economic development.

7. Washington level review indicates that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies and complies with other administration and legislative policies and guidelines. Also, the views of interested parties, including Federal, State, and local agencies have been considered. Agency Technical Review was conducted for the study and all issues were satisfactorily resolved. This study was not required to conduct an Independent External Peer Review (IEPR). A safety assurance review (TYPE II IEPR) will be conducted during the design phase of the project.

8. I generally concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to reduce flood damages for Topeka, Kansas, is authorized in accordance with the reporting officers' recommended plan at an estimated cost of $21,157,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of WRDA 1986, as amended, and in accordance with the following required items of cooperation that the non-Federal sponsor shall, prior to project implementation, agree to perform:

a. Provide a minimum of 35 percent, but not to exceed 50 percent of total project costs as further specified below:

    1. Provide 25 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

    2. Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs;

    3. Provide, during construction, a contribution of funds equal to 5 percent of total project costs;

4. Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the project;

5. Provide, during construction, any additional funds necessary to make its total contribution equal to at least 35 percent of total project costs;

b. Shall not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefore, to meet any of the non-Federal obligations for the project unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is authorized;

c. Not less than once each year, inform affected interests of the extent of protection afforded by the project;

d. Agree to participate in and comply with applicable Federal floodplain management and flood insurance programs;

e. Comply with Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to prepare a floodplain management plan within one year after the date of signing a project cooperation agreement, and to implement such plan not later than one year after completion of construction of the project;

f. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with protection levels provided by the project;

g. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the level of protection the project affords, hinder operation and maintenance of the project, or interfere with the project's proper function;

h. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected

persons of applicable benefits, policies, and procedures in connection with said Act;

i. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

j. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

k. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

l. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20;

m. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*);

n. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations

unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

o. Assume, as between the Federal Government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project;

p. Agree, as between the Federal Government and the non-Federal sponsor, that the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA; and

q. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-Federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

9. The recommendation contained herein reflects the information available at this time and current Departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before they are transmitted to the Congress as proposals for authorization and implementation funding. However, prior to transmittal to the Congress, the sponsors, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

R. L. VAN ANTWERP
Lieutenant General, US Army
Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, DC 20314-1000

REPLY TO
ATTENTION OF

CEMP-SPD (1105-2-10a)

DEC 30 2010

SUBJECT: American River Watershed (Common Features) Project, Natomas Basin, Sacramento and Sutter Counties, California

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on flood risk management for the Natomas Basin portion of the American River Watershed in the vicinity of Sacramento, California. It is accompanied by the report of the Sacramento District Engineer and the South Pacific Division Engineer. These reports supplement the 29 June 1992 and 27 June 1996 reports of the Chief of Engineers, and the March 2002 (revised July 2002) Post-Authorization Change Report, and were prepared as an interim general reevaluation study of the American River Common Features Project. The present study was conducted specifically to determine if there is a Federal interest in modifying the current authorized project features to address flood risk management issues related to levee seepage and stability in the Natomas Basin portion of the Common Features project area. The Common Features Project was authorized by Section 101(a)(1) of the Water Resources Development Act (WRDA) of 1996 (Public Law 104-303), as modified by Section 366 of WRDA 1999 (Public Law 106-53) and as further modified by Section 129 of the Energy and Water Development Appropriations Act, 2004 (Public Law 108-137); and as amended by Section 130 the Energy and Water Development and Related Agencies Appropriations Act, 2008 (Division C of Public Law 110-161).

2. The reporting officers recommend modifying the authorized Common Features project to include a comprehensive plan to reduce the systemic risk associated with seepage and stability for the ring levee system surrounding the Natomas Basin. The recommendation is supported by the non-Federal sponsors, the State of California and the Sacramento Area Flood Control Agency. The principal features of the recommended modifications include widening of about 41.9 miles of existing levee, installation of about 34.8 miles of soil bentonite cutoff wall and about 8.3 miles of seepage berms, and bridge remediation at State Route 99. In addition, mitigation features pursuant to the Endangered Species Act are recommended, including creation of 75 acres of canal habitat and up to 200 acres of marsh habitat, creation of up to 60 acres of landside woodlands, creation of 1,600 linear feet of tree plantings, and establishment of a monitoring program for assessing mitigation performance.

3. Based on October 2010 price levels, the estimated first cost of the recommended modifications for the Natomas Basin is $1,111,600,000. Adding these improvements to the currently authorized Common Feature project cost of $277,900,000 increases the estimated first cost of the total Common Features project to $1,389,500,000. The Federal share of the total

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project cost would be about $921,200,000 and the non-Federal share would be about $468,300,000. All project costs are allocated to the Flood Risk Management purpose.

4. In accordance with the cost sharing provisions of Section 103(a) of WRDA 1986 (Public Law 99-662), as amended by Section 202(a) of WRDA 1996, and of Section 366(c) of WRDA 1999, the Federal share of the first costs of the flood damage reduction features would be about $921,200,000 and the non-Federal share would be about $468,300,000. The cost of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas is estimated at $352,200,000. The State of California would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at about $5,300,000 per year.

5. Based on a 4.375-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $82,500,000, including operation, maintenance, repair, replacement, and rehabilitation (OMRR&R). The selected plan is estimated to be 81 percent reliable in providing flood risk management for the study area from the one-percent flood event. The selected plan would reduce average annual flood damages by about 96 percent and would leave average annual residual damages estimated at $19,000,000. Average annual economic benefits are estimated to be $502,500,000; net average annual benefits are $420,000,000. The benefit-to-cost ratio is 6 to 1.

6. In accordance with the provisions of Section 104 of WRDA 1986, the reporting officers recommend the non-Federal sponsor receive credit for work carried out which is compatible with the plan recommended for authorization, an amount currently estimated to be $519,230,000. This credit eligibility was approved in concept by the Assistant Secretary of the Army for Civil Works on 19 July 2007, 7 April 2009, 4 May 2010, and 10 November 2010, contingent upon the determination of the actual elements of such non-Federal work requiring authorization as features of the new Federal improvements, and inclusion of these elements in the plan recommended by this reevaluation report. Section 104 credit does not relieve the non-Federal sponsor of the requirement to pay five percent of the project costs in cash during construction of the remainder of the project. No Section 104 credit is available for non-Federal work commenced after project authorization. The non-Federal features of the plan constructed or being constructed that are recommended under the above criteria include the following:

a. Strengthen approximately 5.5 miles of the Natomas Cross Canal south levee by flattening the landside levee slope and installing seepage cut-off walls.

b. Strengthen approximately 4.9 miles of the Sacramento River east levee from Verona to Elverta Road by constructing a landside adjacent levee and installing seepage cut-off walls and landside seepage berms.

c. Strengthen approximately 4.0 miles of the Sacramento River east levee from Elverta Road past Interstate Highway 5 by constructing a landside adjacent levee and installing seepage cut-off walls and landside seepage berms.

d. Strengthen approximately 3.7 miles of the Sacramento River east levee from just downstream of Interstate Highway 5 to just past Powerline Road.

7. The goals and objectives included in the Campaign Plan of the U.S. Army Corps of Engineers (USACE) have been fully integrated into the Natomas Basin study process. The recommended plan was developed utilizing a systems approach in formulating flood risk management solutions and in evaluating the impacts and benefits of those solutions. The levee system was viewed in context with the overall Sacramento River Flood Control Project to ensure that the recommended plan complemented the goals of the larger system and did not induce any negative impacts to other system components. A collaborative approach to solving water resource problems was implemented that included engagement of the project sponsors throughout the feasibility process, integration of the recommended plan with the sponsors' Natomas Levee Improvement Program, coordination with State and Federal resource agencies during National Environmental Policy Act (NEPA) compliance document preparation, and incorporation of the agencies' draft report comments into the final report.

8. In accordance with the Corps Engineering Circular EC 1165-2-209 on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included an independent Agency Technical Review (ATR), an independent External Peer Review (IEPR), and a USACE Headquarters policy and legal review. The ATR resulted in comments on levee performance curves, the plan formulation process, appropriate cost sharing percentages, issues related to levee vegetation, and historic versus modeled flood damage comparison. Consensus and resolution was reached on all ATR comments. The IEPR was managed by an outside eligible organization (Battelle Memorial Institute) that assembled a panel of six experts with combined expertise in the fields of geotechnical, hydraulic engineering, economics, and environmental/NEPA. Ultimately, the panel identified and documented 35 comments. Six of the panel comments were classified as having high significance. These comments were related to the plan formulation process and the without project conditions, additional clarification of the discussion on induced floodplain development as related to Executive Order (EO) 11988, and clarification of including Native American residents in the discussion of EO 12898. An additional comment requested

clarification on the order of implementation for levee fixes. In response, sections in the main report and Economics Appendix were expanded to include additional information on the plan formulation and economic analysis process, including a reach-by-reach description of the problems and solutions that were considered in developing the system-wide alternatives. The rationale for the project not inducing growth was provided and the report was revised to clarify the discussion on EO 11988, and sections of the report were revised to indicate compliance with EO 12898 in that no Native American tribes currently reside in the project area as a distinct population group. Level II IEPR for Safety Assurance will be conducted in accordance with EC 1165-2-209 during the implementation of the Project Engineering and Design phase. The IEPR panel has concurred with all of the USACE responses and this process has led to improved report quality.

9. The USACE Headquarters review indicates that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The goal to reduce loss of life is incorporated into this project but it is a shared responsibility that can never be completely mitigated by structural solutions. Discussion in the report states that residual risk will remain with this plan in place and emphasizes the roles of all partners in addressing and communicating residual risk, including the need for a well coordinated flood evacuation plan and implementation of local measures to mitigate residual risk through prudent land use planning. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources implementation studies and complies with other administrative and legislative policies and guidelines.

10. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the Common Features project be modified to reduce flood risk for the Natomas Basin portion of the American River Watershed in the vicinity of Sacramento, California, in accordance with the reporting officers' recommended plan, at an estimated cost of $1,389,500,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of WRDA 1986, as amended, and in accordance with the required items of cooperation that the non-Federal sponsor shall agree to perform:

a. Provide a minimum of at least 25 percent of total project costs for the lower American River portion of the project and at least 35 percent for the Natomas Basin portion of the project but not to exceed 50 percent of total project costs as further specified below:

(1) Provide a cash contribution equal to five percent of total project costs;

(2) Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs;

(3) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the project;

(4) Provide, during construction, any additional funds necessary to make its total contribution equal to at least 25 percent of total project costs for the lower American River portion of the project and at least 35 percent for the Natomas Basin portion of the project;

b. Provide 100 percent of all costs for local betterments.

c. Shall not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefore, to meet any of the non-Federal obligations for the project unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is authorized;

d. Not less than once each year, inform affected interests of the extent of flood risk management afforded by the project;

e. Agree to participate in and comply with applicable Federal floodplain management and flood insurance programs;

f. Comply with Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to prepare a floodplain management plan within one year after the date of signing a project cooperation agreement, and to implement such plan not later than one year after completion of construction of the project;

g. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with flood risk managment levels provided by the project;

h. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on

project lands, easements, and rights-of-way or the addition of facilities which might reduce the level of flood risk managment the project affords, hinder operation and maintenance of the project, or interfere with the project's proper function;

i. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

j. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

k. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

l. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

m. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20;

n. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 106 of the National Historic Preservation Act of 1966, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination

on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c et seq.);

o. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

p. Assume, as between the Federal Government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project;

q. Agree, as between the Federal Government and the non-Federal sponsor, that the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA; and

r. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-Federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

11. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works

construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

R. L. VAN ANTWERP
Lieutenant General, US Army
Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF

CECW-MVD (1105-2-10a)

JAN 27 2011

SUBJECT: Cedar River, Cedar Rapids, Iowa

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on flood risk management along the Cedar River in Cedar Rapids, Iowa. It is accompanied by the report of the district and division engineers. These reports are in response to a House Resolution adopted April 5, 2006, by the Committee on Transportation and Infrastructure, and Senate Resolution adopted May 23, 2006, by the Committee on Environment and Public Works. Both resolutions "requested the review of past pertinent reports to determine whether any modifications to the recommendations are advisable in the interest of flood risk management, ecosystem restoration, recreation, and related purposes along the Cedar River in Cedar Rapids, Iowa." Preconstruction engineering and design activities for the Cedar River project will continue under the authority provided by the resolutions cited above.

2. The reporting officers recommend authorization of a plan to reduce flood risk along the east bank of the Cedar River in the City of Cedar Rapids. The recommended plan consists of 2.2 miles of floodwall and 0.8 miles of earthen levee with a height of approximately 14 feet, 15 closure structures, and six pumping stations constructed on the east bank of the Cedar River. Recreation or ecosystem restoration measures were found to be not justified and are therefore not part of the recommended plan. The project does not require any separable mitigation as the project has been design to offset any adverse impacts which may occur. The recommended plan is the National Economic Development (NED) plan.

3. Based on an October 2010 price level, the estimated total first cost of the recommended plan is $99,000,000. In accordance with the cost sharing provisions of the Section 103 of the Water Resources Development Act of 1986 (WRDA 1986), as amended by Section 202 of WRDA 1996, the Federal share of the total project cost is estimated at $64,350,000 (65 percent) and the non-Federal share is estimated at $34,650,000 (35 percent). The cost of lands, easements, rights-of-way, relocations, and excavated material disposal areas is estimated at $11,700,000. The City of Cedar Rapids, Iowa is the non-Federal cost sharing sponsor for the recommended plan. The City of Cedar Rapids would be responsible for the operation, maintenance, repair, replacement,

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and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at $18,000 per year.

4. Based on a 4.125-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project, including OMRR&R, are estimated to be $5,125,000. The equivalent average annual benefits are estimated to be $6,144,000 with net average annual benefits of $1,019,000. The benefit-cost ratio is approximately 1.2 to 1. The reporting officers estimate that the recommended plan has a 99.99 percent chance of containing a 1 percent flood event and a 91.24 percent chance of containing a 0.2 percent flood event. The recommended plan would reduce expected annual flood damages to the east bank area by about 84 percent.

5. The goals and objectives included in the Campaign Plan of the U.S. Army Corps of Engineers have been fully integrated into the Cedar Rapids study process. As part of an Integrated Water Resources Management Plan (IWRMP), the recommended plan was developed in coordination and consultation with various Federal, State and local agencies using a systems approach in formulating flood risk management solutions and in evaluating the impacts and benefits of those solutions. Study formulation looked at a wide range of non-structural and structural alternatives with only the downtown east bank being justified for structural flood risk reduction measures under Corps policy and guidelines. Alternative formulation optimized the costs and benefits of an array of design heights based on various flood event risks. Floodwall and levee components incorporate robust, sustainable designs like a T-wall atop a sheetpile curtain, and a clay levee with a 10-foot top width and 3 on 1 horizontal to vertical side slopes. In addition, the levee system was viewed in context with the sponsor's Preferred Flood Management System to ensure that the recommended plan complemented the goals of the larger system and did not induce any negative impacts to other system components. Since the record flood event in June 2008 flood (which exceeded the 0.2 percent flood), the District has participated in four meetings, multiple workshops and town halls hosted by the sponsor involving over 2,600 citizens. As part of the IWRMP, the non-Federal sponsor developed the locally Preferred Flood Management System in which providing a structural flood risk management alternative for both sides of the floodplain was viewed as critical. As the first phase of executing the IWRMP (which includes the Corps' east side plan), the non-Federal sponsor, Linn County, and private property owners are implementing non-structural measures using FEMA, HUD, and Local Option Sales Tax programs. This approach allows each agency's programs to provide funding targeted at reducing the risk to the west side floodplain and other areas within the City. Finally, the IWRMP includes the development of the overarching Iowa-Cedar River Comprehensive Plan which will work to formulate a comprehensive watershed plan and process for interagency collaboration to address water resource and related land resource problems and opportunities within the watershed. The development of this collaborative approach to solving water resource problems engaged the non-Federal sponsor throughout the feasibility process leading to the development of an overall

Integrated Water Resources Management Plan through integration of the recommended plan with the non-Federal sponsor's Preferred Flood Management System.

6. The non-Federal sponsor wishes to perform design and construction of structural flood risk management measures that are elements of the recommended plan. The non-Federal sponsor intends to design and construct a segment of floodwall on the east side of the Cedar River upstream of Interstate 380, from approximately station 165+00 to approximately station 186+00. This approximately 2,100-foot segment of floodwall would effectively reduce flood risk for the 1% flood event to industrial properties in this area. Pursuant to Section 221 of the Flood Control Act of 1970 as amended, the non-Federal sponsor will be eligible to receive credit for the work, subject to a determination by the Secretary of the Army that the work is integral to the project and execution of an agreement covering the work that is executed by the Corps and the non-Federal sponsor prior to work being carried out.

7. In accordance with the Corps Engineering Circular on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included an independent Agency Technical Review (ATR), an Independent External Peer Review (IEPR), and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. The IEPR report was completed by Battelle Memorial Institute and provided to the Rock Island District in 2010. A total of 12 comments were received, of which two were deemed significant regarding (a) the potential for additional sponsor costs for the ongoing Phase 1 Archeological and Architectural Survey and (b) the potential for the 2008 flood event to create additional economic uncertainties related to the existing and future project damage estimates. In response, sections in the district's main report and Economics Appendix were expanded to include additional information. All comments from the above referenced reviews have been addressed and incorporated into the final project documents and recommendation as appropriate. Level II IEPR for Safety Assurance will be conducted in accordance with EC 1165-2-209 during the implementation of the Preconstruction Engineering and Design phase. Overall the reviews have resulted in the improvement in the technical quality of the report.

8. The Washington level review indicates that the plan recommended by the reporting officers is technically sound, economically justified, and environmentally and socially acceptable. As the report discusses, residual risk will remain with this plan in place and emphasizes the role of the non-Federal sponsor in addressing and communicating residual risk. The plan complies with essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies and complies with other administration and legislative policies and guidelines. Also, the views of interested parties, including Federal, State, and local agencies have been considered.

9. I concur with the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the Cedar Rapids project be authorized in accordance with the reporting officer's recommended plan at a total estimated cost of $99,000,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of WRDA 1986, as amended by Section 202 of WRDA 1996. Accordingly, the non-Federal sponsor must agree with the following requirements prior to project implementation.

a. Provide a minimum of 35 percent, but not to exceed 50 percent of total first costs further specified as follows:

(1) Provide 25 percent of design costs allocated by the Federal Government to flood risk management in accordance with the terms of a design agreement entered into prior to commencement of design work for the flood risk management features;

(2) Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs allocated by the Federal Government to flood risk management;

(3) Provide, during construction, a contribution of funds equal to 5 percent of total flood risk management costs;

(4) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Federal Government to be required or to be necessary for the construction, operation, and maintenance of the flood risk management features;

(5) Provide, during construction, any additional funds necessary to make its total contribution for flood risk management equal to at least 35 percent of total flood risk management costs;

b. Not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefore, to meet any of the City obligations for the project unless the Federal agency providing the Federal portion of such funds verifies in writing that such funds are authorized to be used to carry out the project;

c. Not less than once each year, inform affected interests of the extent of flood damage reduction afforded by the flood risk management features;

d. Agree to participate in and comply with applicable Federal floodplain management and flood insurance programs;

e. Comply with Section 402 of the WRDA of 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to prepare a floodplain management plan within one year after the date of signing a project cooperation agreement, and to implement such plan not later than one year after completion of construction of the flood risk management features;

f. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with degrees of flood risk management provided by the flood risk management features;

g. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the level of protection the flood risk management features afford, hinder operation and maintenance of the project, or interfere with the project's proper function;

h. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

i. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and state laws and regulations and any specific directions prescribed by the Federal Government;

j. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the City owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

k. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

l. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations Section 33.20;

m. Comply with all applicable Federal and state laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*);

n. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under CERCLA, Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the City with prior specific written direction, in which case the City shall perform such investigations in accordance with such written direction;

o. Assume, as between the Federal Government and the City, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project;

p. Agree, as between the Federal Government and the City, that the City shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA; and

q. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the WRDA of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the City has entered into a written agreement to furnish its required cooperation for the project or separable element.

r. Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of one percent of the total amount authorized to be appropriated for the project.

s. Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of one percent of the total amount authorized to be appropriated for the project.

10. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the non-Federal sponsor, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

R. L. VAN ANTWERP
Lieutenant General, US Army
Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF

CECW-MVD (1105-2-10a)

DEC 19 2011

SUBJECT: Fargo-Moorhead Metropolitan Area Flood Risk Management Project, North Dakota and Minnesota

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on flood risk management in the Fargo-Moorhead metropolitan area of North Dakota and Minnesota. It is accompanied by the report of the district and division engineers. These reports are in response to a resolution of the Senate Committee on Public Works, adopted 30 September 1974. The resolution requested the review of "reports on the Red River of the North Drainage Basin, Minnesota, South Dakota and North Dakota, submitted in House Document Numbered 185, 81st Congress, 1st Session, and prior reports, with a view to determining if the recommendations contained therein should be modified at this time, with particular reference to flood control, water supply, wastewater management and allied purposes." Preconstruction engineering and design activities will be continued under the authority provided by the resolution cited above.

2. The reporting officers recommend authorization of a plan to reduce flood risk in the Fargo-Moorhead metropolitan area by constructing a diversion channel within North Dakota combined with upstream floodwater staging and storage. The recommended plan consists of a 36 mile 20,000 cubic feet per second (cfs) diversion channel that would start approximately four miles south of the confluence of the Red and Wild Rice rivers and extend west and north around the North Dakota cities of Horace, Fargo, West Fargo and Harwood and ultimately re-enter the Red River of the North downstream of the confluence of the Red and Sheyenne rivers near Georgetown, Minnesota. The diversion channel would cross the Wild Rice, Sheyenne, Maple, Lower Rush and Rush rivers and incorporate the existing Horace to West Fargo Sheyenne River diversion channel. The main line of protection at the south end of the project includes the embankments adjacent to the diversion channel, floodwater Storage Area 1 embankments, and two tie-back levees. Project features would be located in both North Dakota and Minnesota. Unavoidable environmental impacts would be mitigated for with construction of fish passage structures along the Red and Wild Rice rivers; construction of additional fish passage projects in the Red River basin; stream restorations on tributaries near the project; conversion of floodplain agricultural land to floodplain forest; and creating wetlands within the diversion channel footprint. These mitigation features along with adaptive management would be monitored for up

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to twenty years to ensure their performance. This would include pre- and post-project monitoring. The recommended plan is a deviation from the national economic development (NED) plan and is the locally preferred plan (LPP).

3. The currently identified NED Plan is a diversion channel located east of Moorhead, MN with a capacity of 40,000 cfs. The NED Plan diversion channel would be approximately 25 miles long with approximately 10 miles of tie-back levees and includes a large control structure on the Red River of the North. The NED Plan would reduce the stage from the 0.2 percent flood event from approximately 46.7 to 37.6 feet on the Fargo gage.

4. The recommended LPP (following an alignment in North Dakota) would reduce flood stages on the Red River to a lesser degree than the NED plan (following an alignment in Minnesota); the LPP would reduce the stage from the 0.2 percent flood event from approximately 46.7 to 40.0 on the Fargo gage. But the LPP would benefit a larger geographic area and address flooding on four tributaries to the Red River that are not addressed by the NED plan. The LPP provides approximately $6,000,000 less in average annual flood risk management benefits than the NED plan. Since the LPP provides fewer average annual benefits than the NED plan, a comparable smaller scale plan with similar outputs to the LPP was identified along the NED alignment to set the Federal cost share. This plan was identified as the Federally Comparable Plan (FCP) and serves as the basis to determine the project cost sharing apportionment. Federal investment in the flood risk management features of the LPP is capped at the investment that would have been made for the FCP. Based on October 2011 price levels, the estimated first cost of the FCP flood risk management features is $1,205,207,000. In accordance with the cost sharing provisions of Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended, the Federal share of the first cost of the FCP flood risk management features is estimated at $783,384,000 (65 percent).

5. Based on October 2011 price levels, the estimated first cost of the recommended LPP is $1,781,348,000. The first cost of the recommended LPP includes approximately $1,745,033,000 for flood risk reduction and approximately $36,315,000 for recreation. In accordance with Section 103 of WRDA 1986, as amended, recreation features would be shared 50 percent Federal and 50 percent non-Federal. Federal cost sharing in the recommended LPP is limited to the Federal share of the FCP and the non-Federal sponsor would be required to provide 100 percent of the additional costs associated with design and construction of the LPP. The flood risk management features have an estimated first cost of $1,745,033,000, with the Federal and non-Federal shares estimated at $783,384,000 and $961,649,000, respectively. The recreation features have an estimated first cost of $36,315,000, with the Federal and non-Federal shares estimated at $18,157,500 and $18,157,500 respectively. Thus, the overall Federal share of the first costs of the LPP, including recreation, is estimated at $801,542,000, and the non-Federal share is estimated at $979,806,000. The cost includes $17,600,000 for environmental monitoring and adaptive management. The cities of Fargo, North Dakota and Moorhead, Minnesota are the

non-Federal cost sharing sponsors for the recommended plan. The cities of Fargo and Moorhead would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at $3,631,000 per year. The OMRR&R estimate includes $527,135 for monitoring and adaptive management beyond the construction phase.

6. Based on a 4.0-percent discount rate, October 2011 price levels and a 50-year period of analysis, the total equivalent average annual costs of the recommended LPP, including OMRR&R, are estimated to be $99,952,000, including $98,098,000 for flood risk management and $1,854,000 for recreation. The recommended LPP would significantly reduce risk to the Fargo-Moorhead metropolitan area from a flood which has a 1-percent chance of occurrence in any year; the 1-percent chance stage would be reduced from approximately 42.4 feet to 30.6 feet on the Fargo gage, which would require only minimal emergency measures to pass safely. The recommended LPP would leave average annual residual damages estimated at $32,000,000. The equivalent average annual benefits are estimated to be $174,617,000 for flood risk management and $5,130,000 for recreation, respectively. The net average annual benefits would be $76,519,000 for flood risk management and $3,276,000 for recreation, respectively. The benefit-to-cost ratio for flood risk reduction is 1.78 to 1; and the benefit- to-cost ratio for recreation is 2.77 to 1; and the overall project benefit-to-cost ratio is 1.8 to 1.

7. The project would modify three existing Federal projects: the Rush River Channel Improvement project authorized by the Flood Control Acts of 1948 and 1950; the Lower Rush River Channel Improvement project authorized under provisions of Section 205 of the 1948 Flood Control Act; and the Sheyenne River project authorized by the 1986 Water Resources Development Act. The modifications to these projects will not impact the purposes for which they were authorized or the benefits they currently provide, and in some cases will curtail or eliminate the need for their continued operation and maintenance. All modifications will be carried out in a manner that fulfills the authorized purposes and provides the intended benefits of existing projects as well as the recommended plan. For example, approximately 2.1 miles of the Rush River project and 3.4 miles of the Lower Rush River project between the diversion channel and their respective confluences with the Sheyenne River, while no longer necessary to reduce flood risk in the same manner as when they were originally constructed, would continue to convey local drainage and need some measure of maintenance. The Horace to West Fargo portion of the existing Sheyenne River Diversion project would be incorporated into the LPP.

8. The recommended LPP was developed in coordination and consultation with various Federal, State and local agencies using a systems approach in formulating flood risk management solutions and in evaluating the impacts and benefits of those solutions. Study formulation looked at a wide range of structural and non-structural alternatives.

9. The non-Federal sponsors wish to perform design and construction of structural flood risk management measures that are elements of the recommended plan. Pursuant to Section 221 of the Flood Control Act of 1970 as amended, and in accordance with existing guidance governing in-kind contribution credit, the non-Federal sponsors will be eligible to receive credit for the work, not to exceed their share, subject to a determination by the Secretary of the Army that the work is integral to the project. Prior to the work being carried out by the non-Federal sponsors, an In-Kind Memorandum of Understanding must be executed between the Corps and the non-Federal sponsors.

10. In accordance with the Engineering Circular on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and rigorous review process to ensure technical quality. This included an independent Agency Technical Review (ATR), an Independent External Peer Review (IEPR), and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the report. The IEPR was conducted by the Battelle Memorial Institute. IEPR of the draft report was completed on July 6, 2010. A total of 23 comments were generated; all were resolved to the satisfaction of the IEPR panel. A second IEPR review began on April 21, 2011 to assess the Supplemental Draft Feasibility Report and EIS and supporting analyses. The IEPR report was completed in July 2011. A total of 16 comments were documented, one was flagged as high, eleven were flagged as medium, and four were flagged as low significance. The comment of high significance addressed the potential risks associated with the operation of the gates at the diversion control structures and the need for redundancy. In response, the Corps will conduct additional hydraulic modeling in the design phase to address the issue and ensure that all structures are designed to be safe and meet all Corps criteria. All other comments from this review have been addressed and incorporated into the final project documents and recommendation as appropriate. Type II IEPR for Safety Assurance will be conducted during the Preconstruction Engineering and Design phase and throughout implementation.

11. I concur with the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the Fargo-Moorhead project be authorized in accordance with the reporting officers' recommended plan at an estimated flood risk management cost of $1,745,033,000 and estimated recreation cost of $36,315,000 for an overall cost of $1,781,348,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of WRDA 1986, as amended by Section 202 of WRDA 1996. Accordingly, the non-Federal sponsors must agree with the following requirements prior to project implementation.

a. Provide a minimum of 35 percent, but not to exceed 50 percent of total FCP flood risk management costs as further specified below:

(1) Provide the non-Federal share of design costs allocated by the Government to flood risk management in accordance with the terms of a design agreement entered into prior to commencement of design work for the flood risk management features;

(2) Provide, during construction, a contribution of funds equal to 5 percent of total FCP flood risk management costs;

(3) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the flood risk management features;

(4) Provide, during construction, any additional funds necessary to make its total contribution for flood risk management equal to at least 35 percent of total FCP flood risk management costs;

(5) Provide 100 percent of all incremental costs of the Locally Preferred Plan.

b. Provide 50 percent of total recreation costs as further specified below:

(1) Provide the non-Federal share of design costs allocated by the Government to recreation in accordance with the terms of a design agreement entered into prior to commencement of design work for the recreation features;

(2) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the recreation features;

(3) Provide, during construction, any additional funds necessary to make its total contribution for recreation equal to 50 percent of total recreation costs;

(4) Provide, during construction, 100 percent of the total recreation costs that exceed an amount equal to 10 percent of the Federal share of total FCP flood risk management costs;

c. Shall not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefore, to meet any of the non-federal obligations for the project

unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is authorized;

d. Not less than once each year, inform affected interests of the extent of protection afforded by the flood risk management features;

e. Agree to participate in and comply with applicable Federal floodplain management and flood insurance programs;

f. Comply with Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to prepare a floodplain management plan within one year after the date of signing a project cooperation agreement, and to implement such plan not later than one year after completion of construction of the flood risk management features;

g. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with protection levels provided by the flood risk management features;

h. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the level of protection the flood risk management features afford, hinder operation and maintenance of the project, or interfere with the project's proper function;

i. Keep the recreation features, and access roads, parking areas, and other associated public use facilities, open and available to all on equal terms;

j. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

k. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes

and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

l. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

m. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

n. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20;

o. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*);

p. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the non-Federal

sponsors with prior specific written direction, in which case the non-Federal sponsors shall perform such investigations in accordance with such written direction;

q. Assume, as between the Federal Government and the non-Federal sponsors, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project;

r. Agree, as between the Federal Government and the non-Federal sponsors, that the non-federal sponsors shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA; and

s. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-Federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

12. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsors, the States, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

MERDITH W. B. TEMPLE
Major General, U.S. Army
Acting Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF

CECW-LRD (1105-2-10a) MAY 16 2012

SUBJECT: Ohio River Shoreline, Paducah, Kentucky Reconstruction

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on flood risk management along the left bank of the Ohio River at Paducah, Kentucky. It is accompanied by the report of the district and division engineers. This report responds to Section 5077 of the Water Resources Development Act (WRDA) 2007 which directs the Secretary to complete a feasibility report for rehabilitation (reconstruction) of the existing flood damage reduction project at Paducah, Kentucky (Paducah, Kentucky Local Flood Protection Project) authorized by Section 4 of the Flood Control Act of June 28, 1938. Further, Section 5077 authorizes the Secretary to carry out the project, if determined feasible, at a total cost of $3,000,000. The reconstruction project, as currently proposed, exceeds the amount authorized by Section 5077. Preconstruction engineering and design activities for the Ohio River Shoreline, Paducah, Kentucky Reconstruction project will continue under the authority provided by Section 5077 of WRDA 2007.

2. The existing Paducah, Kentucky, Local Flood Protection Project is a 12.2 mile-long levee and floodwall system completed in 1949. The project consists of about 9.2 miles of earthen levee and 3 miles of floodwalls and includes 12 floodwater pumping stations, and other interior drainage facilities. There are 47 movable closure and service openings in the floodwall system that must be manually secured in advance of flooding.

3. The reporting officers recommend authorizing a flood risk management plan to significantly improve reliability and restore system performance of the more than 60 year-old project at Paducah, Kentucky, by reconstructing certain features of the project. The proposed reconstruction work will extend functionality of, and update to modern design and safety standards, deteriorated mechanical, electrical, and structural components that have exceeded their design service lives. Additionally, the proposed plan provides for construction of one new floodwater pumping plant to address changes in interior flooding. The addition of this new pump plant will increase project efficiency and bring the reconstructed project features up to current design standards. Reconstruction items will generally consist of the following:

(a) Recondition pumps, motors and motor control systems, major pump plant components and other miscellaneous items at each of the 12 existing pumping plants;
(b) Construct a new pumping plant at Station 111+67A;
(c) Slip-line 37 existing deteriorated corrugated metal pipes;

(d) Stabilize diversion channel banks;
(e) Replace floodwall water stop joints;
(f) Plug and / or replace existing deteriorated toe drains;
(g) Replace existing drainage inlet structures (two new gatewell structures) at Bee Branch -at approximate stations 32+12C and 32+38C;
(h) Construct new gate well structures at stations 111+67A (at proposed pump plant #14) and 19+11 section B;
(i) Permanently close 8 existing floodwall closures and raise an existing closure sill;
(j) Install scour erosion control pad at Wall/Levee transitions; and
(k) Provide other miscellaneous items

The proposed project does not require separable mitigation. The report includes an Environmental Assessment and finding of no significant impact on the quality of the environment. The recommended plan is the national economic development (NED) plan.

4. The estimated total first cost of the recommended plan is $19,500,000 at the October 2011 price level. In accordance with the cost sharing provisions of the Section 103(a) of Public Law 99-662, as amended by Section 202 of WRDA 1996, the Federal share of the total cost of this project is estimated at $12,675,000 (65 percent) and the non-Federal share is estimated at $6,825,000 (35 percent), which includes $436,000 for the estimated value of lands, easements, rights-of-way, relocations, and disposal areas. The city of Paducah, Kentucky is the non-Federal cost sharing sponsor for the recommended plan. The city of Paducah would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at $636,000 per year.

5. Based on a 4.0-percent discount rate and a 50-year period of economic analysis, the total equivalent average annual costs of the project, including OMRR&R, are estimated to be $1,599,000. The equivalent average annual benefits are estimated to be $7,349,000. Net average annual benefits are estimated as $5,750,000. The benefit-to-cost ratio is approximately 4.6 to 1.

6. Implementation of the proposed reconstruction project would reduce expected equivalent annual flood damages in the project area by about 85 percent, from $8,174,000 to $1,257,000. The reporting officers estimate that the recommended plan has a 99.9 percent probability of containing a flood that has a 1-percent chance of happening in any year and a 99.6-percent probability of containing a flood that has a 0.2-percent chance of occurring in any year.

7. In accordance with implementation guidance on the in-kind contribution provisions of Section 221 of the Flood Control Act of 1970, as amended by Section 2003 of WRDA 2007, the reporting officers recommend that the non-Federal sponsor receive credit, currently estimated to be $2,100,000, for completed reconstruction of drainage structures, including corrugated metal pipes, at the Paducah, Kentucky Local Flood Protection Project. Crediting is subject to the Secretary's determination that such work is integral to the proposed project. This credit

eligibility was approved in concept by the Assistant Secretary of the Army for Civil Works on November 14, 2008. Affording this credit would not relieve the non-Federal sponsor of the requirement to pay 5 percent of the total project costs in cash during construction of the remainder of the proposed project.

8. All technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included an independent Agency Technical Review (ATR) and a Headquarters, USACE policy and legal review. All concerns of the ATR and policy and legal reviews have been addressed and incorporated into the final report. Given the nature of reconstructing an existing project in the original project footprint, I have granted an exclusion from the requirement to conduct a Type I Independent External Peer Review.

9. I concur with the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the Ohio River Shoreline, Paducah, Kentucky Reconstruction project be authorized in accordance with the reporting officer's recommended plan with such modifications as may be advisable in the discretion of the Chief of Engineers. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of WRDA 1986, as amended by Section 202 of WRDA 1996. Accordingly, the non-Federal sponsor must agree with the following requirements prior to project implementation:

a. Provide a minimum of 35 percent, but not to exceed 50 percent of total first costs further specified as follows:

(1) Provide 35 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for project;

(2) Provide, during construction, a contribution of funds equal to 5 percent of total project costs;

(3) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Federal Government to be required or to be necessary for the construction, operation, and maintenance of the project;

(4) Provide, during construction, any additional funds necessary to make its total contribution equal to at least 35 percent of total project costs;

b. Not use funds from other Federal programs, including any non-Federal contribution required as a matching share for that other program, to meet any of its obligations for the project

unless the Federal agency providing the Federal portion of such funds verifies in writing that such funds are authorized to be used to carry out the project;

c. Not less than once each year, inform affected interests of the extent of flood damage reduction afforded by the flood risk management features;

d. Agree to participate in and comply with applicable Federal floodplain management and flood insurance programs;

e. Comply with Section 402 of WRDA 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to prepare a floodplain management plan within one year after the date of signing a project cooperation agreement, and to implement such plan not later than one year after completion of construction of the flood risk management features;

f. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with degrees of flood risk management provided by the flood risk management features;

g. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the level of protection the flood risk management features afford, hinder operation and maintenance of the project, or interfere with the project's proper function;

h. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

i. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and state laws and regulations and any specific directions prescribed by the Federal Government;

j. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the City owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

k. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project, except for damages due to the fault or negligence of the United States or its contractors;

l. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations Section 33.20;

m. Comply with all applicable Federal and state laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.),* the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.),* and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.);*

n. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under CERCLA, Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the City with prior specific written direction, in which case the City shall perform such investigations in accordance with such written direction;

o. Assume, as between the Federal Government and the City, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project;

p. Agree, as between the Federal Government and the City, that the City shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent

practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA; and

q. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 1030) of WRDA 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the City has entered into a written agreement to furnish its required cooperation for the project or separable element.

r. Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of one percent of the total amount authorized to be appropriated for the project.

10. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

MERDITH W. B. TEMPLE
Major General, U.S. Army
Acting Commander

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
441 G STREET, NW
WASHINGTON, DC 20314-1000

REPLY TO
ATTENTION OF

AUG 2 6 2013

Office of the Chief of Staff

Honorable Bill Shuster
Chairman, Committee on Transportation
and Infrastructure
House of Representatives
2165 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

As required by Section 2033 of P.L. 110-114, I am enclosing a copy of the final report of the Chief of Engineers on the Jordan Creek Flood Risk Management Project, Springfield, Missouri. Under separate letter, and in accordance with Executive Order 12322 dated September 17, 1981, the Assistant Secretary of the Army (Civil Works) will provide her report and the advice from the Office of Management and Budget on how the proposed project relates to the policy and programs of the President, the Economic, and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies, and other applicable laws, regulations, and requirements relevant to the planning process.

I am sending an identical letter to the Honorable Barbara Boxer, Chairman of the Senate Committee on Environment and Public Works. Thank you for your interest in the Corps Civil Works Program.

Sincerely,

Richard M. Toy
Colonel, U.S. Army
Chief of Staff

Enclosure

Printed on Recycled Paper

DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
2600 ARMY PENTAGON
WASHINGTON, D.C. 20310-2600

DAEN

AUG 26 2013

SUBJECT: Jordan Creek Flood Risk Management Study, Springfield Missouri

THE SECRETARY OF THE ARMY

1. I submit, for transmission to the Congress, my report on the study of flood risk management along Jordan Creek in Springfield, Missouri. It is accompanied by the report of the district and the division engineers. This report is an interim response to a resolution by the Committee on Public Works of the United States Senate, adopted 11 May 1962. This resolution requested "to review the reports on the White River and Tributaries, Missouri and Arkansas, printed in House Document Numbered 499, Eighty-third Congress, second session, and other reports, with a view to determining the advisability of modifying the existing project at the present time, with particular reference to developing a comprehensive plan of improvement for the basin in the interest of flood-control, navigation, hydro-electric power development, water supply, and other purposes, coordinated with related land resources." Preconstruction, engineering and design activities for the Jordan Creek Flood Risk Management project will continue under the authority provided by the resolution cited above.

2. The reporting officers recommend authorization of a plan for flood risk management along Jordan Creek in Springfield, Missouri. The recommended plan includes flood risk management features consisting of five regional detention basins and 2,100 feet of channel widening. Two detention basins are situated on the North Branch and three are located on the South Branch of Jordan Creek. Collectively, these basins provide 165 acre-feet of storage and a seven to eight percent decrease in flows through the downtown area. The channel work will occur south of downtown Springfield from Scenic Avenue on Wilsons Creek to approximately 350 feet north of the Bennett Street Bridge on Jordan Creek (area referred to as Reach 1). The channel widening includes the replacement of one Railroad Bridge and the addition of a flood diversion structure. The top width of the widened channel will vary from 100 feet to 360 feet. The recommended plan, the National Economic Development (NED) plan, will nearly eliminate flood damages along Jordan Creek in Reach 1 from a 1 in 500 annual chance exceedance (ACE) flood event (.2 percent chance of occurring in any given year). The channel improvements will also allow emergency flood fighting vehicles to respond to emergencies. The project will reduce expected annual flood damages along Jordan Creek by 65 percent, with the greatest reduction occurring in Reach 1. The project will also reduce traffic interruptions and disruptions to health and safety services.

3. The recommended plan is the NED plan. The estimated project first cost of the recommended plan, based on October 2012 price levels, is $20,500,000. In accordance with the cost sharing provision of Section 103 of the Water Resources Development Act (WRDA) 1986, as amended

by Section 202 of WRDA 1996, the federal share of the first costs of the flood damage reduction features will be $13,200,000 (64.6 percent) and the non-federal share will be $7,300,000 (35.4 percent). The cost of the lands, easements, rights-of-way, relocations and dredged or excavated material disposal areas is estimated to be $6,270,000. The minimum cash contribution of five percent is $1,030,000 to be provided by the sponsor. Specific project features were developed to minimize adverse impacts to natural resources. Since there are no remaining significant environmental impacts, compensatory mitigation is not required for this project. The City of Springfield is responsible for the operation, maintenance, repair, replacement and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated to be about $230,000 annually. In addition to the above, the City of Springfield would be fully responsible for performing the investigation, cleanup and response of hazardous materials on the project site. The cost of hazardous material work is estimated to be no more than $340,000 and is solely the non-federal sponsor's responsibility. Based on a 3.75 percent discount rate, October 2012 price levels and a 50-year period of analysis, the total equivalent average annual cost of the project is estimated to be $1,170,000, including OMRR&R. The selected plan is not designed to any specific protection level. It will reduce average annual flood damages by 65 percent with the greatest reduction occurring in Reach 1. The selected plan will leave average annual residual damages in the watershed estimated at $1,730,000. The equivalent average annual benefit is estimated to be $3,130,000. The benefit-cost ratio is approximately 2.7 to 1.

4. The recommended plan was developed in coordination and consultation with various federal, state and local agencies using a systematic and regional approach to formulating solutions and evaluating the benefits and impacts that would result. The feasibility study evaluated flood risk management problems and opportunities for the entire study area of about 14 square-miles. Risk and uncertainty were addressed during the study by completing a cost risk analysis and a sensitivity analysis that evaluated the potential impacts of a change in economic assumptions. Flooding will still occur through the downtown area of Springfield, Missouri; however, there is minimal chance for a loss of life. The residual risks were explained to the sponsor and they understand and agree with this analysis.

5. In accordance with the Corps guidance on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and rigorous review process to ensure technical quality. This included an Agency Technical Review (ATR), an Independent External Peer Review (IEPR), and a Corps Headquarters policy and legal review. All concerns of the ATR were addressed and incorporated into the final report. An IEPR was completed by Battelle Memorial Institute in March 2013. A total of 15 comments were documented. In summary, the IEPR comments related to report inconsistencies and deficiencies in information. All comments were addressed by report revisions, and subsequently closed.

6. Washington level review indicated that the plan recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The plan complies with all essential elements of the 1983 U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation

Studies. The recommended plan complies with other administrative and legislative policies and guidelines. The views of interested parties, including federal, state and local agencies, were considered. Comments received from agencies during review of the draft feasibility report and environmental assessment indicated no adverse impacts from the selected plan. The U.S. Fish and Wildlife Service (USFWS) requested a low flow channel be added to the project to reduce potential scour. The USFWS comment was taken into consideration in the final report by adding a description of the low flow channel option. The suggested design change will be further examined during the pre-construction engineering and design phase. During state and agency review, comments were received from the Environmental Protection Agency (EPA) and the Missouri Department of Transportation (MoDOT). EPA was critical of the integration of the project report and NEPA document. MoDOT asked for continued coordination with them on technical issues as design and construction progresses.

7. I concur in the findings, conclusion and recommendations of the reporting officers. Accordingly, I recommend that improvements for flood risk management for the Jordan Creek Flood Risk Management Project be authorized generally in accordance with the reporting officer's recommended plan at an estimated project first cost of $20,500,000. My recommendation is subject to cost sharing, financing and other applicable requirements of ederal and state laws and policies, including Public Law 99-662, the Water Resources Development Act of 1986, as amended, and in accordance with the following required items of cooperation that the non-federal sponsor shall, prior to project implementation, agree to perform.

a. Provide a minimum of 35 percent, but not to exceed 50 percent, of the total flood risk management costs as further specified below:

(1) Provide the required non-federal share of design costs allocated by the government to flood risk management in accordance with the terms of a design agreement entered into prior to commencement of design work for the flood risk management features;

(2) Provide, during construction, a contribution of funds equal to 5 percent of the total flood risk management costs;

(3) Provide all lands, easements and rights-of-way, including those required for relocations, the borrowing of material and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the government to be required or to be necessary for the construction, operation and maintenance of the flood risk management features;

(4) Provide, during construction, any additional funds necessary to make its total contribution for flood risk management equal to at least 35 percent of the total flood risk management costs;

b. Not use funds from other federal programs, including any non-federal contribution required as a matching share, to meet any of the non-federal obligations for the project unless the federal agency providing the federal portion of such funds verifies in writing that such funds are authorized to be used to carry out the project;

c. Not less than once each year, inform affected interests of the extent of protection afforded by the flood risk management features;

d. Agree to participate in and comply with applicable federal floodplain management and flood insurance programs;

e. Comply with Section 402 of WRDA 1986, as amended (33 U.S.C. 701b-12), which requires a non-federal interest to prepare a floodplain management plan within one year of the date of signing a project cooperation agreement, and to implement such plan not later than one year after completion of construction of the flood risk management features;

f. Publicize floodplain information in the area concerned, and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development, and to ensure compatibility with protection levels provided by the flood risk management features;

g. Prevent obstructions or encroachments on the project (including prescription and enforcement of regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements or rights-of-way, or the addition of facilities that might reduce the level of protection of the flood risk management features, hinder operation and maintenance of the project or interfere with the project's proper function;

h. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements and rights-of-way required for construction, operation and maintenance of the project, including those necessary for relocations, the borrowing of materials or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies and procedures in connection with said Act;

i. For so long as the project remains authorized, OMRR&R the project, or functional portions of the project, including any mitigation features, at no cost to the federal government, in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the federal government;

j. Give the federal government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-federal sponsor owns or controls for access to the project for

the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating or replacing the project;

k. Hold and save the United States free from all damages arising from the OMRR&R of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

l. Keep and maintain books, records, documents or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents or other evidence are required, to the extent, and in such detail, as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to state and local governments at 32 Code of Federal Regulations (CFR) Section 33.20;

m. Comply with all applicable federal and state laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable federal labor standards requirements including, but not limited to, 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*);

n. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on or under lands, easements or rights-of-way that the federal government determines to be required for construction, operation and maintenance of the project. However, for lands that the federal government determines to be subject to the navigation servitude, only the federal government shall perform such investigations, unless the federal government provides the non-federal sponsors with prior specific written direction, in which case, the non-Federal sponsors shall perform such investigations in accordance with such written direction;

o. Assume, as between the federal government and the non-federal sponsors, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under the CERCLA that are located in, on or under lands, easements or rights-of-way that the federal government determines to be required for construction, operation and maintenance of the project;

p. Agree, as between the federal government and the non-federal sponsors, that the non-federal sponsors shall be considered the operators of the project for the purpose of CERCLA liability, and to the maximum extent practicable, OMRR&R the project in a manner that will not cause liability to arise under CERCLA; and

q. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the WRDA 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

8. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It neither reflects program and budgeting priorities inherent in the formulation of a national Civil Works construction program, nor the perspectives of higher review levels within the executive branch. Consequently, the recommendations may be modified before they are transmitted to the Congress as proposals for authorization and implementation funding. However, prior to transmittal to the Congress, the non-federal sponsor, the state, interested federal agencies and other parties will be advised of any modifications, and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers

DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
2600 ARMY PENTAGON
WASHINGTON, D.C. 20310-2600

SEP 2 5 2013

DAEN

SUBJECT: Orestimba Creek, West Stanislaus County, California

THE SECRETARY OF THE ARMY

1. I submit, for transmission to Congress, my report on the study of flood risk management along Orestimba Creek in the San Joaquin Basin near the City of Newman, California. It is accompanied by the report of the Sacramento District Engineer and the South Pacific Division Engineer. This report is a partial response to a Resolution by the Committee on Public Works of the House of Representatives, adopted 8 May 1964. This resolution requested a review of prior reports pertaining to the Sacramento-San Joaquin Basin, to determine whether any modifications of their recommendations are advisable, with particular reference to further coordinated development of water resources in the Basin. Preconstruction, engineering and design activities for the Orestimba Creek Flood Risk Management project will continue under the authority provided by the resolution cited above.

2. The reporting officers recommend authorization of a plan for flood risk management by construction of a levee along the City of Newman's northwestern perimeter, referred to as the Chevron Levee. The Chevron Levee maximizes benefits to the urban area by reducing flood damages associated with Orestimba Creek overflows. The north side of the Chevron Levee would be constructed along one mile of an unnamed farm road near Lundy Road about one mile north of town. The western segment would be about 4 miles of levee constructed along the eastern bank of an existing irrigation canal from the farm road south to the Newman Wasteway. The Chevron Levee would range in height from 5.5 to 10 feet, depending on the ground elevation changes along the levee alignment. The plan includes closure structures at four road crossings and one railroad crossing. Several non-structural features would be implemented by the non-federal sponsor to further reduce the consequences of flooding, manage the residual risk, and complement the recommended plan. These include development and implementation of an advanced warning system based on stream gauges at the points where the creek has historically overflowed its banks and placing informational warning signs along roads to alert drivers to the possibility of flooding in the area. This flood warning system would be combined with an emergency evacuation plan. A reverse 911 system would alert surrounding residents of the flood threat. The recommended plan is a Locally Preferred Plan (LPP) that includes the same elements as the National Economic Development (NED) Plan but raises the height of the Chevron Levee to include 3 feet of freeboard above the median 1/200 Average Chance Exceedance water surface elevation. This freeboard was requested by the non-federal sponsor in order to meet State of California requirements for an urban area which is identified as the 1/200 year median Water Surface Elevation plus 3 feet of freeboard. The estimated cost of the LPP is $45,333,000 which is $9,025,000 greater than the estimated cost of the NED Plan currently estimated to be $36,308,000.

3. The recommended LPP would reduce flood risk to the City of Newman. The proposed project would reduce Expected Annual Damages (EAD) within Newman by 94%, with a residual EAD of approximately $200,000. This residual EAD is a result of existing storm drainage flooding. Annual Exceedance Probabilities for flooding within Newman from Orestimba Creek, would be reduced from approximately 15% (1/15 chance of flooding in any given year) to less than 0.1%. The proposed project would have no significant long-term effects on environmental resources. In all cases, the potential adverse environmental effects would be reduced to a less than significant level through project design, construction practices, preconstruction surveys and analysis, regulatory requirements, and best management practices. No compensatory mitigation would be required. No jurisdictional wetlands were identified in the project footprint. Potential impacts to vegetation communities and special status species have been greatly reduced through feasibility level design. Direct impacts to nesting birds and other sensitive species would be avoided by implementing preconstruction surveys and scheduling of construction activities. The U.S. Fish & Wildlife Service has provided a biological opinion in which the agency had no recommendations for design refinement or mitigation. Impacts to agricultural land would be minimized by reducing the project footprint to the greatest extent practical.

4. Based on October 2013 price-levels, the estimated total first cost of the plan is $45,333,000. In accordance with the cost sharing provision of Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended (33 U.S.C. 2213), the City of Newman as the non-federal cost-sharing sponsor is responsible for the additional cost of the LPP. The federal share of the estimated first cost of initial construction would remain the same for the NED Plan and the LPP, currently estimated at $23,681,750. The non-federal cost share increases from about $12,626,000 with the NED Plan to about $21,651,250 with the LPP. The cost of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas is estimated at $10,159,000. The City of Newman, California, would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction. Operation and maintenance is currently estimated at about $180,000 per year.

5. Based on a 3.75-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $2,316,000, including OMRR&R. The selected plan is estimated to be 99.9 percent reliable in providing flood risk management for the City of Newman and vicinity, California, from a flood which has a one percent chance of occurrence in any year (100-year flood). The selected plan would reduce average annual flood damages by about 57 percent and would leave average annual residual damages estimated at $2,364,000. Average annual economic benefits are estimated to be $3,236,000; net average annual benefits are $920,000. The benefit-to-cost ratio is 1.4 to 1.

6. The goals and objectives included in the Campaign Plan of the U.S. Army Corps of Engineers have been fully integrated into the Orestimba Creek feasibility study process. The recommended plan has been designed to avoid or minimize environmental impacts, to reduce risk of loss of life which has occurred in recent floods and to reasonably maximize economic benefits to the community. The recommended plan allows for continued floodplain flooding while focusing the flood risk reduction on the established urban area. The Feasibility Study team organized and participated in stakeholder meetings and public workshops throughout the process and worked

with local groups to achieve a balance of project goals and public concerns. The study report fully describes flood risks associated with Orestimba Creek and risks that will not be reduced. The residual risks have been communicated to the City of Newman and they understand and agree with the analysis.

7. In accordance with the Corps guidance on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and rigorous review process to ensure technical quality. This included an Agency Technical Review (ATR), an Independent External Peer Review (IEPR) (Type I), and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. An IEPR was completed by Battelle Memorial Institute in October 2012. A total of fifteen (15) comments were documented. The IEPR comments identified significant concerns in areas of the plan formulation, engineering assumptions, and environmental analyses that needed improvements to support the decision-making process and plan selection. This resulted in expanded narratives throughout the report to support the decision-making process and justify the recommended plan. All comments from the above referenced reviews have been addressed and incorporated into the final documents. Overall the reviews resulted in improvements to the technical quality of the report. A safety assurance review (Type II IEPR) will be conducted during the design phase of the project.

8. Washington level review indicated that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The plan complies with all essential elements of the 1983 U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies. The recommended plan complies with other administrative and legislative policies and guidelines. The views of interested parties, including federal, state and local agencies have been considered. No comments were received during state and agency review.

9. I concur with the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to reduce flood damage along Orestimba Creek near the City of Newman, California, be authorized in accordance with the reporting officers' recommended plan at an estimated cost of $45,333,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal and state laws and policies, including Section 103 of WRDA 1986, as amended (33 U.S.C. 2213). The non-federal sponsor would provide the non-federal cost share and all Land, Easements, Rights-Of-Way, Relocation, and Disposal Areas (LERRD). Further, the non-federal sponsor would be responsible for all OMRR&R. This recommendation is subject to the non-federal sponsors agreeing to comply with all applicable federal laws and policies, including but not limited to:

a. Provide the non-federal share of total project costs, including a minimum of 35 percent but not to exceed 50 percent of total costs of the NED Plan, as further specified below:

1. Provide 35 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

2. Provide, during construction, a contribution of funds equal to 5 percent of total costs of the NED Plan;

3. Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the government to be required or to be necessary for the construction, operation, and maintenance of the project;

4. Provide, during construction, any additional funds necessary to make its total contribution equal to at least 35 percent of total costs of the NED Plan;

b. Provide 100 percent of all incremental costs of the LPP.

c. Shall not use funds from other federal programs, including any non-federal contribution required as a matching share therefore, to meet any of the non-federal obligations for the project unless the federal agency providing the federal portion of such funds verifies in writing that expenditure of such funds for such purpose is authorized;

d. Not less than once each year, inform affected interests of the extent of protection afforded by the flood risk management features;

e. Agree to participate in and comply with applicable federal flood plain management and flood insurance programs;

f. Comply with Section 402 of WRDA 1986, as amended (33 U.S.C. 701b-12), which requires a non-federal interest to prepare a flood plain management plan within one year after the date of signing a project partnership agreement, and to implement such plan not later than one year after completion of construction of the project;

g. Publicize flood plain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with protection levels provided by the flood risk management features;

h. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the level of protection the project affords, hinder operation and maintenance of the project, or interfere with the project's proper function;

i. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

j. For so long as the project remains authorized, OMRR&R of the project, or functional portions of the project, including any mitigation features, at no cost to the federal government, in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the federal government;

k. Give the federal government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

l. Hold and save the United States free from all damages arising from the construction, OMRR&R of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

m. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20;

n. Comply with all applicable federal and state laws and regulations, including, but not limited to Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable federal labor standards requirements including, but not limited to, 40 U.S.C. 3141 - 3148 and 40 U.S.C. 3701 - 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*);

o. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the federal government determines to be required for construction, operation, and maintenance of the project. However, for lands that the federal government determines to be subject to the navigation servitude, only the federal government shall perform such investigations unless the federal government provides the non-federal sponsor with prior specific written direction, in which case the non-federal sponsor shall perform such investigations in accordance with such written direction;

p. Assume, as between the federal government and the non-federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that

the federal government determines to be required for construction, operation, and maintenance of the project;

q. Agree, as between the federal government and the non-federal sponsor, that the non-federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, OMRR&R of the project in a manner that will not cause liability to arise under CERCLA; and

r. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the WRDA 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

10. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It neither reflects program and budgeting priorities inherent in the formulation of a national civil works construction program, nor the perspectives of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the state, interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, U.S. Army
Chief of Engineers

DEPARTMENT OF THE ARMY
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DAEN

MAR 1 2 2014

SUBJECT: Sutter Basin, California

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on flood risk management for the Sutter Basin, California. It is accompanied by the report of the district and the division engineers. This report was undertaken in partial response to the authority contained in Section 209 of the Flood Control Act of 1962, Public Law 87-874, 76 Stat. 1180, 1196, for the study of flood risk management and related water resources problems in the Sacramento River Basin, including the study area in Sutter and Butte Counties, California. The non-federal sponsors for this project are the state of California Department of Water Resources and the Sutter Butte Flood Control Agency. Pre-construction engineering and design activities for the Sutter Basin, California Flood Risk Management Project will continue under the authority cited above.

2. The reporting officers recommend authorizing a plan to reduce flood risk by strengthening approximately 41 miles of the existing Feather River West Levee from the Thermalito Afterbay to Laurel Avenue. The recommended plan would reduce adverse flooding effects, including risks to public and life safety, in the northern portion of the basin as well as in Yuba City. The primary method of strengthening the existing levee is the construction of soil-bentonite cutoff walls of various depths. Non-structural measures would be implemented in conjunction with the recommended plan. These measures include preparation of an emergency evacuation plan, identification of flood fight pre-staging areas, updates to the floodplain management plan, and flood risk awareness communication.

3. The recommended plan would reduce flood risk within the Sutter Basin. The proposed project would reduce Expected Annual Damages (EAD) within the Sutter Basin by 64 percent, with a residual EAD of approximately $50,000,000. This residual EAD is primarily a result of existing flooding from the lower end of the Feather River and the Sutter Bypass within the southern portion of the basin, which is largely agricultural land and rural homes. Residual flooding also exists for the entire basin in the form of Feather River levee overtopping from events less frequent than the 0.5 percent (1/200) Annual Chance Exceedance (ACE) event. Annual Exceedance Probabilities (AEP) for flooding within Sutter Basin's existing urban communities would be reduced from approximately 4 percent-8 percent (depending on location) to approximately 0.2 percent.

4. All consultations with the U.S. Fish and Wildlife Service and the U.S. National Marine Fisheries Service necessary for construction of the project have been completed, in order to mitigate for the detrimental effects of the flood risk management features of the recommended plan on fish and wildlife habitat. Environmental effects resulting from the construction of the recommended plan would cause some direct effects on riparian habitat and special status species habitats that cannot be avoided. The mitigation recommendations of the U.S. Fish and Wildlife Service (FWS) contained in the Final Fish and Wildlife Coordination Act Report are concurred in and are included in the recommended plan. The recommended plan includes a Fish and Wildlife Mitigation and Monitoring plan to compensate for adverse effects on fish and wildlife resources and to ensure the success of mitigation features. Other mitigation measures have been adopted to minimize the impact of construction on water quality, noise and vibration, and air quality. Endangered Species Act consultation with the FWS, in coordination with the non-federal sponsors, remains to be completed concerning the operations and maintenance of the project after construction, which is the responsibility of the non-federal sponsors under federal law. Cultural resource effects have been identified and coordinated with consideration of historical sites and structures in the Yuba City area and some prehistoric sites near the existing levee areas. The recommended plan would be in full compliance with the vegetation guidelines of Engineering Technical Letter 1110-2-571, Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams and Appurtenant Structures (Vegetation ETL) and maximum potential effects have been disclosed. During the preconstruction engineering and design (PED) phase, all options then available for compliance with the Vegetation ETL will be considered and consultation with resource agencies will be completed in coordination with the non-federal sponsors.

5. The first cost was estimated on the basis of October 2013 price levels and amounts to $688,930,000. Estimated average annual costs of $33,000,000 were based on a 3.50 percent discount rate, a period of analysis of 50 years, and construction ending in 2023. The cost of lands, easements, rights-of-way , relocations, and dredged or excavated material disposal areas (LERRD) is estimated at $141,005,000. The Sutter Butte Flood Control Agency would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at about $454,000 per year, an increase of $22,000 over existing costs from existing OMRR&R commitments of the existing levee.

6. The recommended plan encompasses two separable elements: the National Economic Development (NED) Plan, which will be cost shared with the non-federal sponsors, and a Locally Preferred Plan (LPP) increment, which will be funded 100 percent by the non-federal sponsors. The cost of the NED Plan is estimated to be $391,840,000, with an estimated federal cost of $255,270,000 and an estimated non-federal cost of $136,570,000. The cost of the separable element constituting the LPP increment is estimated to be $297,090,000. Since the non-federal sponsors would be responsible for the extra cost of the LPP increment, the non-federal cost share will increase from an estimated $136,570,000 for the non-federal share of the

NED Plan to an estimated total non-federal cost of $433,660,000 for the entire recommended plan. The LPP increment reduces the vulnerability of a larger population that is economically disadvantaged including an elderly population with limited mobility that are subject to sudden and unpredictable failures with minimal warning time. The plan increment provides more evacuation routes relative to the NED Plan and improves the reliability of critical infrastructure exposed to the same flood risk while reducing substantial economic flood damages.

7. Local interests have completed construction of the Star Bend setback levee to replace a section of the right bank of the Feather River levee to address critical underseepage and flow constriction issues. Prior to initiation of construction, local interests requested and by letter dated June 10, 2009, the ASA(CW) approved Section 104 credit consideration for the levee construction. Construction of the setback levee was completed in 2010 at an estimated cost of $20,776,349. The locally constructed setback levee is compatible to the recommended plan as an acceptable substitute. The Section 104 approval will allow design and construction dollars invested by the local sponsor to be considered for use as credit towards meeting the non-federal cost-share requirements for the project recommended by this feasibility study, if authorized.

8. Based on a 3.50 percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $33,000,000, including OMRR&R and interest during construction. The selected plan is estimated to be 97 percent reliable in providing flood risk management from a flood which has a one percent chance of occurrence in any year (100-year flood) for the communities of Biggs, Gridley, Live Oak, Yuba City and rural Butte County while only 22 percent reliable in reducing those risks for rural Sutter County south of Yuba City. The recommended plan would reduce average annual flood damages by approximately 64 percent and would leave average annual residual damages estimated at $50,000,000. The population at risk within the 1 percent ACE floodplain for the No Action Alternative is 94,600. The recommended plan would reduce the population at risk to approximately 6,600. Average annual economic benefits are estimated to be $87,000,000; net average annual economic benefits are $54,000,000. The benefit-to-cost ratio is 2.6 to 1.

9. The recommended plan is similar to an alternative considered in the Final Environmental Impact Statement (FEIS), filed by U.S. Army Corps of Engineers (USACE) with the Environmental Protection Agency (EPA) on June 7, 2013, and Record of Decisions (dated July 19, 2013 and September 13, 2013) for Section 408 approval for the alteration of federal project levees under the Feather River West Levee Project (FRWLP). The Sutter Basin Flood Risk Management Project (SBFRMP) and FRWLP affect the same general area, have similar flood risk management objectives, and share potential measures and effects. As a consequence, National Environmental Policy Act compliance for the SBFRMP was accomplished by supplementation of the Section 408 FRWLP FEIS to address the environmental effects of the

features of the SBFRMP that differ from the FRWLP. The Final Feasibility Report, Final Environmental Impact Statement, and Supplemental Environmental Impact Statement focuses on the additional effects that would result from the SBFRMP, incorporating by reference, where appropriate, information, analyses, and conclusions contained in the FRWLP FEIS.

10. The goals and objectives included in the Campaign Plan of the USACE have been fully integrated into the Sutter Basin Pilot Feasibility study process. The recommended plan has been designed to avoid or minimize environmental impacts while maximizing future safety and economic benefits to the community. The recommended plan uses environmentally sustainable design of fix-in-place levee construction that was in coordination with a local community coalition to integrate project objectives and public concerns.

11. In accordance with the Engineering Circular on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included an Agency Technical Review (ATR), an Independent External Peer Review (IEPR) (Type I), and USACE Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. The IEPR was completed by Battelle Memorial Institute with all comments documented. The panel had 19 comments, one of which they considered significant, 15 were medium significance and 3 were low significance. The comments pertained to hydrology and hydraulic engineering, geotechnical engineering, civil engineering, economics and environmental concerns. In summary, the panel felt that the engineering, economics and environmental analysis were adequate and the additional sensitivity analysis and clarifications needed to be properly documented in the final report. The IEPR review comments resulted in no significant changes to the plan formulation, engineering assumptions, and environmental analyses that supported the decision-making process and plan selection. The final report/environmental impact statement also underwent state and agency review. The state and agency comments received during review of the final report/programmatic environmental impact statement provided no additional comments than those provided on the draft report that were incorporated into the final report. All comments from the above referenced reviews have been addressed and incorporated into the final documents as appropriate. Overall the reviews resulted in improvements to the technical quality of the report including the enhanced communication of risk and uncertainty. A safety assurance review (IEPR Type II) will be conducted during the design phase of the project.

12. Washington level review indicates that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land related resources implementation studies and complies with other administrative and legislative policies and guidelines. Also, the views of interested parties, including federal, state and local agencies have been considered.

13. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to reduce flood risk in the Sutter Basin area including Yuba City, California, be authorized in accordance with the reporting officers' recommended plan at an estimated cost of $688,930,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal and state laws and policies, including Section 103 of Water Resources Development Act of 1986, as amended (33 U.S.C. 2213). The non-federal sponsor would provide the non-federal cost share and all LERRDs. Further, the non-federal sponsor would be responsible for all OMRR&R. This recommendation is subject to the non-federal sponsors agreeing to comply with all applicable federal laws and policies, including but not limited to:

a. Provide the non-federal share of total project costs, including a minimum of 35 percent but not to exceed 50 percent of total costs of the NED Plan, as further specified below:

(1) Provide 35 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

(2) Provide, during construction, a contribution of funds equal to 5 percent of total project costs;

(3) Provide all lands, easements, rights-of -way (LER), including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on LER to enable the disposal of dredged or excavated material all as determined by the government to be required or to be necessary for the construction, operation, and maintenance of the project;

(4) Provide, during construction, any additional funds necessary to make its total contribution equal to at least 35 percent of total costs of the NED Plan;

(5) Provide 100 percent of all costs of the LPP increment.

b. Shall not use funds from other federal programs, including any non-federal contribution required as a matching share, therefore, to meet any of the non-federal obligations for the project unless the federal agency providing the federal portion of such funds verifies in writing that expenditure of such funds for such purpose is authorized.

c. Not less than once each year, inform affected interests of the extent of protection afforded by the project.

d. Agree to participate in and comply with applicable federal flood plain management and flood insurance programs.

e. Comply with Section 402 of the WRDA of 1986, as amended (33 U.S.C. 701b-12), which requires a non-federal interest to prepare a flood plain management plan within one year after the date of signing a project cooperation agreement, and to implement such plan not later than one year after completion of construction of the project.

f. Publicize flood plain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with protection levels provided by the project.

g. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project LER or the addition of facilities which might reduce the level of protection the project affords, hinder operation and maintenance of the project, or interfere with the project's proper function.

h. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 Code of Federal Regulations (CFR) Part 24, in acquiring LER required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act.

i. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the federal government, in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the federal government.

j. Give the federal government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project.

k. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors.

l. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 CFR Section 33.20.

m. Comply with all applicable federal and state laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable federal labor standards requirements including, but not limited to, 40 U.S.C. 3141 - 3148 and 40 U.S.C. 3701 - 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*).

n. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the federal government determines to be required for construction, operation, and maintenance of the project. However, for lands that the federal government determines to be subject to the navigation servitude, only the federal government shall perform such investigations unless the federal government provides the non-federal sponsor with prior specific written direction, in which case the non-federal sponsor shall perform such investigations in accordance with such written direction.

o. Assume, as between the federal government and the non-federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under LER that the federal government determines to be required for construction, operation, and maintenance of the project.

p. Agree, as between the federal government and the non-federal sponsor, that the non-federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA.

q. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b); and Section 103(j) of the WRDA of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

14. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a

proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the state, interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers

DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
2600 ARMYPENTAGON
WASHINGTON, D.C. 20310-2600

DAEN

11 APR 2014

SUBJECT: Truckee Meadows, Nevada

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on flood risk management for the Truckee Meadows area near the city of Reno, Nevada. It is accompanied by the report of the Sacramento District Engineer and the South Pacific Division Engineer. The Truckee Meadows Flood Control Project was authorized by Section 3(a) (10) of P.L. 100-676, the Water Resources Development Act (WRDA) of 1988. The Secretary of the Army received additional guidance regarding the preparation of the General Reevaluation Report (GRR) pursuant to the House Report 104-293 associated with P.L. 104-46, the Energy and Water Development Appropriations Act (EWDAA) of 1996, to consider additional flood protection along the Truckee River downstream of Reno as well as potential for environmental restoration along the Truckee River and tributaries in the Reno-Sparks area. Congress also gave direction as to the crediting of certain non-federal contributions in Section 113 of P.L. 109-103, the EWDAA of 2006.

2. The reporting officers recommend authorizing a plan to reduce flood risk by construction of floodwalls, levees, and floodplain terracing in the Truckee Meadows Reach and basic recreation features. The recommended plan includes approximately 9,650 linear feet of on-bank (6,500 feet) and in-channel (3,150 feet) floodwalls along the north bank and 31,000 linear feet of levees along the north and south banks in the Truckee Meadows Reach. The floodplain terracing feature involves excavating a benched area along portions of the south (right) bank of the Truckee River between Greg Street and McCarran Boulevard. Floodplain terracing would increase the flood flow channel capacity and thereby reduce water surface elevations in the Truckee Meadows area during a flood. The recommended plan for recreation consists of one small group picnic shelter; one medium group picnic shelter, with parking, playground, and restrooms; and 50 individual picnic areas located north of Mill Street between Greg Street and McCarran Boulevard. In addition, approximately 9,700 linear feet of paved trails and 8,900 linear feet of unpaved trails will be constructed linking the picnic areas with four kayak and canoe input areas and 13 fishing areas along the river. All recreation features would be located on lands required for flood risk management purposes. The estimated project first cost of the recommended plan is $280,820,000.

3. The recommended plan would reduce flood risk to the Truckee Meadows area. The project would reduce Expected Annual Damages (EAD) within Truckee Meadows by approximately 40 percent ($24,880,000). The residual EAD ($36,601,000) would be caused by flooding from the Truckee River for infrequent flood events and flooding from small tributaries. Annual Exceedance Probabilities (AEP) for flooding within Truckee Meadows would be reduced from approximately 4-10 percent (depending on location) to approximately 1 percent. The project would increase the water surface elevations within the Truckee Meadows area along the downstream reaches of Steamboat Creek, Boynton Slough, and the North Truckee Drain by 4-8 inches for events between 2 percent and 1 percent Annual Chance Exceedance (ACE). The increased 1 percent ACE flood elevations would be inconsistent with National Flood Insurance Program (NFIP) regulatory requirements that prevent communities from allowing floodplain encroachments that would cause increased base flood elevations in areas with existing structures. Under U.S. Army Corps of Engineers (USACE) policy, compliance with the NFIP is a non-federal responsibility and compliance costs would be borne by non-federal interests. These estimated additional costs for NFIP regulatory compliance are identified as regulatory requirement costs which are not included as economic costs of the project. The recommended plan would cause temporary and permanent losses of riparian habitat from construction activities affecting about 28 acres of native riparian habitat. The recommended plan would convert about 66 acres of prime farmland for levee construction. The potential adverse environmental effects would be reduced to a less than significant level through project design, construction practices, preconstruction surveys and analysis, regulatory requirements, and best management practices. No compensatory mitigation would be required.

4. The project first cost was estimated on the basis of October 2013 price levels and amounts to $280,820,000. The federal portion of the estimated first cost is $181,652,000. The non-federal portion of the estimated first cost is $99,168,000 including $78,572, 000 for lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas (LERRD). The Truckee River Flood Management Authority would also be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project, a cost currently estimated at about $862,000 per year. The Authority is also responsible for the NFIP regulatory compliance requirements, currently estimated at $195,000,000. The NFIP regulatory compliance costs are not included in project first cost.

5. Based on a 3.5 percent discount rate and a 50-year period of analysis, the total equivalent average annual economic costs of the project (including OMRR&R) are estimated to be $11,823,000 ($11,211,000 for flood risk management and $612,000 for recreation). The recommended plan is estimated to be 95-99 percent reliable (depending on location) in providing flood risk management for the Truckee Meadows area, from a 2 percent ACE flood event. Total average annual economic benefits are estimated to be $25,505,000 ($24,880,000 for flood risk management and $625,000 for recreation); net average annual economic benefits are $13,682,000 ($13,669,000 for flood risk management and $13,000 for recreation). The overall benefit-to-cost ratio is 2.2 to 1 (1.0-to-1 for recreation).

6. The goals and objectives included in the Campaign Plan of the USACE have been fully integrated into the Truckee Meadows study process. The recommended plan has been designed to avoid or minimize environmental impacts while maximizing future safety and economic benefits to the community. The recommended plan uses environmentally sustainable design including revegetation of floodplain terraces with native species. Environmental experts were consulted during the planning process, and coordination was conducted with a local community coalition to integrate project goals and public concerns.

7. An earlier USACE project, designated as the Truckee River and Tributaries Project, was authorized and constructed in this area pursuant to Section 203 of P.L. 83-780, the Flood Control Act (FCA) of 1954, and Section 203 of P.L. 87-874, the FCA of 1962. The reporting officers have recommended that the part of the existing Truckee River and Tributaries Project between Glendale Avenue and Vista be modified in accordance with the recommended plan for the Truckee Meadows Flood Control Project within that same reach. The Truckee River and Tributaries Project involved improvements at various reaches of the Truckee River between Lake Tahoe and Pyramid Lake. In the Truckee Meadows reach, maintained by the State of Nevada, the first project involved channel straightening and enlargement to provide a channel capacity of 6,000 cubic feet per second (cfs) of flow for flood risk management purposes. The proposed project will modify the Truckee River and Tributaries Project by increasing channel capacity, and by the placement of rip rap on banks and around bridge piers to avoid scouring. The operations and maintenance responsibility will be transferred from the State of Nevada to the present non-federal sponsor. This transfer of operations and maintenance responsibility for the Truckee River and Tributaries Project will ensure that the non-federal sponsor for the Truckee Meadows Flood Control Project has full and clear responsibility to the Department of the Army for OMRR&R of all federal flood risk management elements between Glendale Avenue and Vista. OMRR&R responsibilities for the parts of the Truckee River and Tributaries Project upstream of Glendale Avenue or downstream of Vista would not be changed by the recommended plan.

8. The reporting officers have further recommended additional studies to investigate further reduction of the residual flood risk to the Reno-Sparks area and/or ecosystem restoration opportunities along the Truckee River. Such studies could be part of a future comprehensive investigation of the Truckee River watershed, or a portion thereof. The previously authorized purpose of fish and wildlife enhancement (i.e., ecosystem restoration) may be retained for the Truckee Meadows Flood Control Project for potential future implementation.

9. In accordance with the Engineer Circular 1165-2-214, entitled "Civil Works Review", all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included an Agency Technical Review (ATR), an Independent External Peer Review (IEPR) (Type I), and a USACE Headquarters policy and legal review. ATR concerns have been addressed and incorporated into the final report. The IEPR was completed by Battelle Memorial Institute. A total of 58 comments were documented. The IEPR comments identified significant concerns in areas of the explanation of the plan

formulation, hydraulic analysis, and environmental analyses. This resulted in expanded narratives throughout the report to support the decision-making process and justify the recommended plan. All comments from the above referenced reviews have been addressed and incorporated into the final documents. Overall the reviews resulted in improvements to the technical quality of the report. A safety assurance review (IEPR Type II) will be conducted during the design phase of the project.

10. The final GRR and EIS were published for State and Agency Review on 17 January 2014. Comments from other federal agencies generally requested minor clarifications and encouraged further cooperation through the project life. Two more extensive comment letters were received from the Pyramid Lake Paiute Tribe (PLPT) and Reno-Sparks Indian Colony (RSIC). The PLPT expressed concerns relating to tribal coordination and consultation, potential downstream impacts and impacts to the delta at Pyramid Lake, and cumulative impacts of other flood control projects. The PLPT also requested that ecosystem restoration work be included in this project. USACE responded to PLPT with commitments for further coordination and clarification on modeling analyses. Additional studies to investigate further ecosystem restoration opportunities are recommended in the report by the reporting officers. The RSIC letter expressed continued concern with not being a signatory to the Programmatic Agreement (PA) per Section 106 of the National Historic Preservation Act. The RSIC also requested revisions to the final EIS relating to Tribal claims, traditional cultural property (TCP) identification, and provision of funding for tribal monitors during construction. In the response letter sent to the RSIC, USACE committed to including RSIC as a signatory party to the PA and to abide by the stipulations of the PA, which will govern future activities to determine the presence of historic properties, including TCPs, and potential effects of the project.

11. Washington level review indicates that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The plan complies with all essential elements of the 1983 U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies and complies with other administrative and legislative policies and guidelines. Also the views of interested parties, including federal, state and local agencies have been considered.

12. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to reduce flood damage in the Truckee Meadows area near the City of Reno, Nevada, be authorized in accordance with the reporting officers' recommended plan at an estimated cost of $280,820,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal laws and policies, including Section 103 of P.L. 99-662, WRDA 1986, as amended (33 U.S.C. 2213). These requirements include, but are not limited to, the following items of local cooperation from the non-federal sponsor:

a. Provide a minimum of 35 percent, but not to exceed 50 percent, of total flood risk management costs and 50 percent of total recreation costs as further specified below:

(1) Provide, during design, 35 percent of design costs allocated to flood risk management and 50 percent of design costs allocated to recreation.

(2) Pay, during the first year of construction, funds so its contribution equals 35 percent of the costs of the reevaluation report for the project.

(3) Pay, during construction, 5 percent of total flood risk management costs.

(4) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material, and perform or ensure the performance of all relocations, as determined by the government to be required for the construction, operation, and maintenance of the project.

(5) During construction, pay any additional funds necessary to make its total contribution equal to at least 35 percent of total flood risk management costs and 50 percent of total recreation costs.

b. Provide, during construction, 100 percent of the total recreation costs that exceed 10 percent of the federal share of total flood risk management costs.

c. Inform affected interests, at least yearly, of the extent of protection afforded by the flood risk management features; participate in and comply with applicable federal floodplain management and flood insurance programs; comply with Section 402 of P.L. 99-662, the WRDA of 1986, as amended (33 U.S.C. 701b-12); and publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with protection levels provided by the flood risk management features.

d. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the level of protection the flood risk management features afford, hinder operation and maintenance of the project, or interfere with the project's proper function.

e. Keep the recreation features, and access roads, parking areas, and other associated public use facilities, open and available to all on equal terms.

f. Operate, maintain, repair, rehabilitate, and replace the project, at no cost to the federal government, in a manner compatible with the project's authorized purposes and in accordance

with applicable federal and state laws and regulations and any specific directions prescribed by the federal government.

g. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project, except for damages due to the fault or negligence of the United States or its contractors.

h. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), P.L. 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the federal government determines to be required for construction, operation, and maintenance of the project.

i. Assume, as between the federal government and the non-federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way required for construction, operation, and maintenance of the project.

j. Agree, as between the federal government and the non-federal sponsor, that the non-federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA.

13. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the state, interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
441 G Street N.W.
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

SEP 28 2009

CECW-SAD (1105-2-10a)

SUBJECT: West Onslow Beach and New River Inlet (Topsail Beach), North Carolina

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on hurricane and storm damage reduction along a 5-mile reach of Atlantic Ocean shoreline at Topsail Beach, North Carolina. It is accompanied by the report of the district and division engineers. These reports are in final response to the Energy and Water Development Appropriations Act for Fiscal Year 2001, Public Law 106-377, which included funds for the U.S. Army Corps of Engineers to initiate a General Reevaluation Report (GRR) of the West Onslow Beach and New River Inlet (Topsail Beach) Shore Protection Project, and the remaining shoreline at Topsail Beach. The original project was authorized in Section 101(15) of the Water Resources Development Act (WRDA) of 1992 at a total cost of $14,100,000, with an estimated Federal cost of $7,600,000, and an estimated non-Federal cost of $6,500,000. The authorized project was never constructed. Several recent coastal storms and hurricanes along many portions of North Carolina's shoreline and increasing threats to existing and new development within the Town of Topsail Beach led to initiation of this post-authorization investigation. Preconstruction engineering and design activities for Topsail Beach will be continued under the authorities above.

2. The reporting officers recommend a new authorization for a locally preferred plan (LPP) to reduce hurricane and storm damages by construction of a sand dune and berm along the Topsail Beach shoreline. The recommended plan includes a 26,200-foot long dune and berm system to be constructed to an elevation of 12 feet National Geodetic Vertical Datum (NGVD) fronted by a 50-foot wide berm at an elevation of 7-foot NGVD, with a main fill length of 23,200 feet and a 2,000-foot transition length on the north end into the Town of Surf City and a 1,000-foot transition on the south end. The recommended plan also includes periodic nourishment at four-year intervals. Other associated features of the project are dune vegetation and construction of 23 dune walkover structures for public access. The estimated in-place volume of fill for the initial project construction is 2,387,000 cubic yards, which does not include placement of 690,000 cubic yards for the first nourishment. Fill material for the sand dune and berm construction and nourishment will be dredged from offshore borrow sites identified off the coast of Topsail Beach. The recommended plan also includes post-construction monitoring over the life of the project to ensure project performance. Since the recommended plan does not have any significant adverse effects, no mitigation measures (beyond management practices and avoidance) or compensation measures are required. Compared to the National Economic Development (NED) Plan, the LPP has a dune three feet lower and extends the main fill protection 400-feet southwest to include properties south of Godwin Avenue that are vulnerable

to coastal storm damage. The Assistant Secretary of the Army (Civil Works) approved a policy exception allowing the Corps of Engineers to recommend the LPP by letter dated May 8, 2008. The 400-foot project extension costs an additional $320,000, and is not economically justified. The extension will therefore be funded entirely by the non-Federal sponsor. All features are located in North Carolina.

3. Based on October 2008 price levels the estimated total first cost of the NED plan is $50,332,000, of which $32,712,000 (65 percent) is Federal and $17,620,000 (35 percent) is non-Federal. The estimated first cost of the LPP is $37,712,000. The total initial cost of the recommended plan, including sunk preconstruction engineering and design (PED) costs from project authorization in 1992 through completion of this GRR and Environmental Impact Statement (EIS), is $42,558,000. These sunk PED costs include initial project PED costs of $616,000 and the GRR and EIS cost of $4,230,000, for a total of $4,846,000. The sunk PED costs for the original project are cost shared 75 percent Federal and 25 percent non-Federal and the expanded portion of the project is cost shared 50 percent Federal and 50 percent non-Federal. The total initial project construction cost is composed of both the total first cost of the LPP plus sunk PED costs. Cost sharing for the construction of the project is applied in accordance with the provisions of Section 103 of WRDA 1986, as amended by Section 215 of WRDA 1999. The Federal share of the total cost for the LPP is estimated to be $27,455,000 and the non-Federal share is estimated to be $15,103,000, but will be based upon conditions of public ownership and use of the shore when the Project Partnership Agreement is signed. The non-Federal share includes $320,000 for the incremental cost of the 400-foot berm and dune extension. The estimated cost of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas (LERRD) is $ 1,654,000, of which $1,481,000 is estimated to be creditable to the non-Federal sponsor's share.

4. Total periodic nourishment costs for the LPP are estimated to be $113,904,000 (October 2008 price level) over the 50-year period following initiation of construction. These costs are based on an estimated cost for each periodic nourishment of $9,492,000 occurring at four year intervals subsequent to completion of the initial construction (year zero) and include engineering and design and monitoring. The ultimate project cost, which includes initial construction, project monitoring, and periodic nourishment is estimated to be $170,032,000 (October 2008 price level). The equivalent annual cost of periodic nourishment is estimated to be $2,190,000, based on a Federal discount rate of 4.625 percent and a 50-year period of analysis. Based on WRDA 1996, as amended, subject to the availability of funds, periodic nourishment is cost-shared 50 percent Federal and 50 percent non-Federal, based upon conditions of public ownership and use of the shore. The Federal share of each periodic nourishment cost is estimated to be $4,746,000 (50 percent) and the non-Federal share is estimated to be $4,746,000 (50 percent). The project includes beach fill and environmental monitoring costs estimated at $269,000. Annual beach fill monitoring includes semi-annual beach profile surveys ($137,000), annual hydrographic surveys of New Topsail Inlet ($6,000), annual aerial photography of the inlet and beach (cost included in inlet hydrographic survey), an annual monitoring report ($93,000), and monitoring program coordination ($15,000). Annual environmental monitoring includes sea turtle nesting ($17,000) and sea beach amaranth surveys ($1,000), and a one-time cost for benthic invertebrate monitoring ($120,000). The estimated Federal share of annual monitoring costs is $134,500 (50 percent) and the estimated non-Federal share is $134,500 (50 percent). The estimated

Federal share of the one-time benthic invertebrate monitoring is $60,000 (50 percent) and the estimated non-Federal share is $60,000 (50 percent). The Town of Topsail Beach is the non-Federal cost-sharing sponsor for all features and is responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at about $22,000 per year.

5. Based on a 4.625-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $4,450,000, including monitoring and OMRR&R. The equivalent average annual benefits are estimated to be $13,328,000 with net average annual benefits of $8,878,000. The benefit-cost ratio is three to one.

6. The goals and objectives included in the Campaign Plan of the U.S. Army Corps of Engineers have been fully integrated into the Topsail Beach study process. From inception, the district has implemented an effective comprehensive systems approach with full stakeholder participation. The study included an integrated analysis of the Topsail Beach shoreline system and cumulative environmental effects. A statistical, risk based model was used to formulate and evaluate the project. The study report describes risks associated with residual coastal storm damages and risks that will not be reduced such as sound side flooding and wind damages. Loss of life is prevented by the existing procedure of evacuating the barrier island completely well before expected hurricane landfall, removing people from harm's way. The study recommends continuation of the evacuation policy both with and without the project. The selected plan would reduce average annual coastal storm damages by about 84 percent and would leave average annual residual damages estimated at $1,543,000. Additional institutional nonstructural measures to be implemented by the local government are contained in the study report recommendation. The project contains adaptive management measures through the development of borrow area contingency plans to be applied during construction and by an annual project monitoring program to reevaluate and adjust the periodic renourishment actions. The project monitoring program will be a useful research tool for other beach and shoreline studies.

7. I concur with the findings, conclusions, and recommendations of the reporting officers. The plan developed is technically sound, economically justified, and environmentally and socially acceptable. The plan conforms to essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies and complies with other administrative and legislative policies and guidelines. Also, the views of interested parties, including Federal, State, and local agencies have been considered. Substantive comments concerned borrow material compatibility, potential existence of near shore hard bottom areas, and avoiding impacts to sea turtles and piping plover. The comments resulted in some changes to the text of the GRR and EIS, but did not change the design of the recommended plan. Independent external peer review (IEPR) was not undertaken for this project, since it was not considered to be unusually complex, novel approaches or methods were not employed, there is no significant threat to public safety from project failure, and it was not controversial. Additionally, the project did not generate significant interagency interest, and only negligible adverse impacts would result.

8. Accordingly, I recommend that the plan to reduce hurricane and storm damages at Topsail Beach, North Carolina be authorized in accordance with the reporting officers' recommended

plan at an October 2008 estimated cost of $42,558,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of WRDA 1986, as amended by Section 215 of WRDA 1999. The non-Federal sponsor would provide the non-Federal cost share and all LERRD. Further, the non-Federal sponsor would be responsible for all OMRR&R. This recommendation is subject to the non-Federal sponsors agreeing to comply with all applicable Federal laws and policies.

9. I further recommend that construction of the proposed project be contingent on the project sponsor giving written assurances satisfactory to the Secretary of the Army that it will:

a. Provide 35 percent of initial construction costs assigned to hurricane and storm damage reduction plus 100 percent of initial construction costs assigned to protecting privately owned shores where use is limited to private interests, and as further specified below:

1. Provide 25 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

2. Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs;

3. Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the project; and

4. Provide, during initial construction, any additional funds necessary to make its total contribution equal to 35 percent of project costs assigned to hurricane and storm damage reduction plus 100 percent of costs assigned to protecting privately owned shores where use is limited to private interests..

b. Provide during the periodic nourishment period, 50 percent of periodic nourishment costs and 50 percent of monitoring costs assigned to hurricane and storm damage reduction plus 100 percent of periodic nourishment costs and 100 percent of monitoring assigned to protecting privately owned shores where use is limited to private interests.

c. Shall not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefore, to meet any of the non-Federal obligations for the project unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is authorized;

d. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the outputs produced by the project, hinder operation and maintenance of the project, or interfere with the project's proper function;

e. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

f. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

g. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

h. Hold and save the United States free from all damages arising from the construction, periodic nourishment, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

i. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20;

j. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*);

k. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such

investigations unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

l. Assume, as between the Federal Government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project;

m. Agree, as between the Federal Government and the non-Federal sponsor, that the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA;

n. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-Federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element;

o. Not less than once each year, inform affected interests of the extent of protection afforded by the project;

p. Agree to participate in and comply with applicable Federal floodplain management and flood insurance programs;

q. Comply with Section 402 of the Water Resources Development Act of 1986, as amended, (33 U.S.C. 701b-12) , which requires a non-Federal interest to prepare a floodplain management plan within one year from signing a project partnership agreement., and to implement such plan not later than one year after completion of construction of the project;

r. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with protection levels provided by the project;

s. For so long as the project remains authorized, the non-Federal Sponsor shall ensure continued conditions of public ownership, access, and use of the shore upon which the amount of Federal participation is based;

t. Provide and maintain necessary access roads, parking areas, and other public use facilities , open and available to all on equal terms; and

u. At least twice annually at no cost to the Federal Government, perform surveillance of the beach to determine losses of nourishment material from the project design section and provide the results of such surveillance to the Federal Government.

10. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the State of North Carolina, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

Vr,

R. L. VAN ANTWERP
Lieutenant General, US Army
Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

CECW-SAD (1105-2-10a)

DEC 30 2010

SUBJECT: Surf City and North Topsail Beach, North Carolina Coastal Storm Damage Reduction Report

THE SECRETARY OF THE ARMY

1. I submit for transmission my report on coastal storm damage reduction along the Atlantic Ocean shoreline of the towns of Surf City and North Topsail Beach, North Carolina. It is accompanied by the report of the district and division engineers. These reports are in response to two resolutions by the Committee on Transportation and Infrastructure of the House of Representatives, adopted on February 16, 2000 and April 11, 2000. The resolutions requested a review of the report of the Chief of Engineers on West Onslow Beach and New River Inlet, North Carolina, and other pertinent reports, to determine whether any modifications of the recommendations contained therein are advisable at the present time in the interest of shore protection and related purposes for Surf City and North Topsail Beach, North Carolina. Preconstruction engineering and design activities for this project will be continued under the authority provided by the resolutions cited above.

2. The reporting officers recommend authorization for a plan to reduce coastal storm damages by construction of a berm and dune along the Surf City and North Topsail Beach shorelines. The recommended plan includes a 52,150-foot long dune and berm system to be constructed to an elevation of 15 feet National Geodetic Vertical Datum (NGVD) fronted by a seven-foot NGVD (50-foot wide) beach berm with a main fill length of 52,150 feet, extending from the boundary between Topsail Beach and Surf City to the southern edge of the Coastal Barrier Resources Act (CBRA) Zone in North Topsail Beach. The recommended plan also includes renourishment at six-year intervals. Other associated features of the project are dune vegetation and construction of 60 dune walkover structures. Material for the dune and berm construction and renourishment will be dredged from borrow sites identified between one to six miles off the coast of Topsail Island. The recommended plan also includes post-construction monitoring over the period of Federal participation to ensure project performance and adjust renourishment plans as needed. Since the recommended plan would not have any significant adverse effects, no mitigation measures (beyond management practices and avoidance) or compensation measures would be required. The recommended plan is the National Economic Development (NED) Plan for coastal storm damage reduction.

3. The Towns of Surf City and North Topsail Beach are the non-Federal cost-sharing sponsors for all features. Based on October 2010 price levels the estimated total first cost of the plan is

$123,135,000. Renourishment is planned at six-year intervals. There will be seven renourishments with a total cost estimated at October 2010 price levels to be $205,539,000. The ultimate project cost, which includes initial construction, monitoring, and periodic renourishment is estimated to be $353,924,000. Cost sharing is applied in accordance with the provisions of Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended by Section 215 of WRDA 1999. Additional access points and nearby public parking will be necessary to meet the requirements for federal cost sharing; the sponsors anticipate no obstacles to develop such additional access and parking. The Federal and non-Federal shares shown below reflect anticipated development and satisfaction of access and parking requirements, but the final cost-share amounts will be based upon the conditions of public access, parking, development and use of the shore at the time when the Project Partnership Agreement (PPA) is signed.

a. The Federal share of the total first cost would be about $80,038,000 (65 percent) and the non-Federal share would be about $43,097,000 (35 percent).

b. The cost of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas (LERRD) is estimated at $4,814,000, all of which is eligible for LERRD credit.

c. The Federal share of the total renourishment cost would be about $102,769,500 (50 percent) and the non-Federal share would be about $102,769,500 (50 percent).

4. Based on a 4.125 percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $10,702,000, including monitoring and OMRR&R. All project costs are allocated to the authorized purpose of coastal storm damage reduction. The equivalent average annual benefits, which include recreation benefits, are estimated to be $40,129,000 with net average annual benefits of $29,427,000. The benefit cost ratio is approximately 3.7 to 1.

5. The goals and objectives included in the Campaign Plan of the U.S. Army Corps of Engineers have been fully integrated into the Surf City and North Topsail Beach study process. The project contains adaptive management measures through an annual project monitoring program in order to be able to reevaluate and adjust the periodic renourishment actions. The study was conducted using a systems perspective that considered the effects of other Federal (West Onslow and New River Inlet [Topsail Beach] Coastal Storm Damage Reduction study, New River and New Topsail Inlet Navigation features) and non-Federal projects in the area, particularly as related to borrow volume availability. A statistical, risk based model was used to formulate and evaluate the project. The study report fully describes risks associated with residual coastal storm damages and risks that will not be reduced, such as sound side flooding and wind damages. The project is intended to address erosion and prevent damages to structures and contents; it is not intended to

nor will it reduce the risk to loss of life during major storm events. Loss of life can only be prevented by the existing procedure of evacuating the barrier island completely well before expected hurricane landfall, thus removing people from harm's way. This study recommends continuation of the evacuation policy both with and without the project. Additional institutional nonstructural measures to be implemented by the local governments are contained in the study report recommendation. The selected plan would reduce average annual coastal storm damages by about 88 percent and would leave average annual damages estimated at $2,241,000. These residual risks have been communicated to both the Towns of Surf City and North Topsail Beach.

6. In accordance with the Corps Engineering Circular EC 1165-2-211 on sea level change, the study performed a sensitivity analysis to look at the economic effects that different rates of accelerated sea level rise could have on the recommended plan. The plan was formulated using a historical or low rate of sea level rise, and the sensitivity analysis used additional accelerated rates, which includes what the EC defines as medium and high rates. The sensitivity analysis indicates that at higher rates of sea level rise, the project costs increase; the project benefits however, increase even more.

7. In accordance with the Corps Engineering Circular EC 1165-2-209 on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included an independent Agency Technical Review (ATR) and an Independent External Peer Review (IEPR). The IEPR was managed by an outside eligible organization (Battelle) that assembled a panel of five experts with combined expertise in the fields of geotechnical and coastal engineering, plan formulation, environment/biology, economics, and recreation analysis. Ultimately, the panel identified and documented sixteen comments. Eight of the panel comments were classified as having high significance. These comments raised questions regarding various aspects of the coastal and non-structural analysis in the report, the availability of sufficient borrow material for the life of the project, and the methods used to determine property values in the economic analysis. Based on these comments, the report's coastal appendix was greatly expanded. To address the concern regarding borrow volume availability, additional analysis was conducted and the discussion in the report regarding risks and uncertainty in borrow availability was expanded. Also information regarding the economic feasibility of obtaining additional borrow material if the currently identified borrow sites were to be depleted in the latter years of the project was added. The panel did not concur with this last response and maintained that the plan formulation should still have been constrained by borrow availability due to uncertainty. I have considered the borrow availability issue and concluded it has been appropriately addressed in the project's risk management plan through the identification of additional sites with similar borrow cost and volume to mitigate the uncertainty. Even though uncertainty remains regarding utilization of specific borrow sites, the recommendation is viable and economically justifiable. Overall the reviews have resulted in the improvement of the technical quality of the report including the enhanced communication of risk and uncertainty.

8. The United States Army Corps of Engineers Headquarters review indicates that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The goal to reduce loss of life is incorporated into this project but it is a shared responsibility that can never be completely mitigated by structural solutions. Discussion in the report emphasizes that residual risk will remain after this project is executed; it also, emphasizes the roles of all partners in addressing and communicating residual risk to the public, including the need for a well coordinated hurricane storm warning and evacuation plan. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources implementation studies and complies with other administrative and legislative policies and guidelines.

9. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to reduce coastal storm damages for Surf City and North Topsail Beach, North Carolina be authorized in accordance with the reporting officers recommended plan at an October 2010 estimated initial cost of $123,135,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended by Section 215 of WRDA 1999. The non-Federal sponsors would provide the non-Federal cost share and all LERRD. Further, the non-Federal sponsors would be responsible for all Operation and Maintenance, Repair, Replacement and Rehabilitation (OMRR&R). This recommendation is subject to the non-Federal sponsors agreeing to comply with all applicable Federal laws and policies and in accordance with the required items of cooperation, and agreeing prior to project implementation, to perform as follows:

a. Provide 35 percent of initial project costs assigned to coastal storm damage reduction, plus 50 percent of initial project costs assigned to reducing damages to undeveloped public lands, plus 50 percent of initial project costs assigned to recreation, plus 100 percent of initial project costs assigned to reducing damages to undeveloped private lands and other private shores that do not provide public benefits; and 50 percent of periodic nourishment costs assigned to hurricane and storm damage reduction, plus 100 percent of periodic nourishment costs assigned to reducing damages to undeveloped private lands and other private shores that do not provide public benefits and as further specified below:

(1) Provide 25 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project.

(2) Provide, during the first year of construction, any additional funds needed to cover the non-Federal share of design costs.

(3) Provide all lands, easements, and rights-of-way, and perform or ensure the performance of all relocations determined by the Federal Government to be necessary for the initial construction, periodic nourishment, operation, and maintenance of the project.

(4) Provide, during construction, any additional amounts as are necessary to make it total contribution equal to 35 percent of initial project costs assigned to coastal storm damage reduction, plus 50 percent of initial project costs assigned to reducing damages to undeveloped public lands, plus 50 percent of initial project costs assigned to recreation, plus 100 percent of initial project costs assigned to reducing damages to undeveloped private lands and other private shores that do not provide public benefits; and 50 percent of periodic nourishment costs assigned to hurricane and storm damage reduction, plus 100 percent of periodic nourishment costs assigned to reducing damages to undeveloped private lands and other private shores that do not provide public benefits.

b. Operate, maintain, repair, rehabilitate and replace the completed project, or functional portion of the project, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government.

c. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, on property that the non-Federal sponsors, now or hereafter, owns or controls for access to the project for the purpose of inspecting, operating, maintaining, repairing, replacing, rehabilitating, or completing the project. OMRR&R by the Federal Government will not relieve the non-Federal sponsors of responsibility to meet the non-Federal sponsors' obligations, or to preclude the Federal Government from pursuing any other remedy at law or equity to ensure faithful performance.

d. Hold and save the United States free from all damages arising from the initial construction, periodic nourishment, OMRR&R of the project and any project related betterments, except for damages due to the fault or negligence of the United States or its contractors.

e. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, and other evidence is required, to the extent and in such detail as will properly reflect total costs of construction of the project, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 CFR 33.20.

f. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), P.L. 96-510, as amended, 42 U.S.C. 9601–9675, that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for the initial construction, periodic nourishment, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government will perform such investigations unless the Federal Government provides the non-Federal sponsors with prior specific written direction, in which case, the non-Federal sponsors will perform such investigations in accordance with such written direction.

g. Assume, as between the Federal Government and the non-Federal sponsors, complete financial responsibility for all necessary cleanup and response costs of any CERCLA-regulated materials in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be necessary for the initial construction, periodic nourishment, operation, or maintenance of the project.

h. Agree that, as between the Federal Government and the non-Federal sponsors, the non-Federal sponsor will be considered the operators of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, and repair the project in a manner that will not cause liability to arise under CERCLA.

i. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, P.L. 91-646, as amended by (42 U.S.C. 4601–4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way required for the initial construction, periodic nourishment, operation, and maintenance of the project, including those necessary for relocations, borrow materials, and dredged or excavated material disposal, and inform all affected persons of applicable benefits, policies, and procedures in connection with that Act.

j. Comply with all applicable Federal and State laws and regulations, including section 601 of the Civil Rights Act of 1964, P.L. 88-352 (42 U.S.C. 2000d), Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, titled *Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army*, and all applicable Federal labor standards and requirements, including, 40 U.S.C. 3141–3148 and 40 U.S.C. 3701–3708 (revising, codifying, and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*).

k. Comply with section 402 of the WRDA of 1986, as amended (33 U.S.C. 701b-12), which requires the non-Federal interest to participate in and comply with applicable Federal floodplain management and flood insurance programs, prepare a floodplain management plan within one year after the date of signing a PPA, and implement the plan no later than one year after project construction is complete.

l. Provide the non-Federal share of that portion of the costs of data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project, in accordance with the cost-sharing provisions of the agreement.

m. Participate in and comply with applicable Federal floodplain management and flood insurance programs.

n. Do not use Federal funds to meet the non-Federal sponsors' share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is authorized.

o. Prevent obstructions of or encroachment on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments), which might reduce the level of damage reduction it affords, hinder operation and maintenance or future periodic nourishment, or interfere with its proper function, such as any new developments on project lands or the addition of facilities that would degrade the benefits of the project.

p. Not less than once each year, inform affected interests of the extent of damage reduction afforded by the project.

q. Publicize floodplain information in the area concerned and provide such information to zoning and other regulatory agencies for their use in preventing unwise future development in the floodplain and in adopting such regulations as might be necessary to prevent unwise future development and to ensure compatibility with damage reduction levels provided by the project.

r. For so long as the project remains authorized, the non-Federal sponsors must ensure continued conditions of public ownership, access, and use of the shore on which the amount of Federal participation is based.

s. Provide and maintain necessary access roads, parking areas, and other public use facilities, open and available to all on equal terms.

t. At least twice annually and after storm events, perform surveillance of the beach to determine losses of nourishment material from the project design section and provide the results of such surveillance to the Federal Government.

u. Comply with section 221 of P.L. 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and section 103(j) of the WRDA of 1986, P.L. 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army must not commence the construction of any water resources project or separable element thereof, until the non-Federal interests have entered into a written agreement to furnish its required cooperation for the project or separable element.

10. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsors, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

R. L. VAN ANTWERP
Lieutenant General, US Army
Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

CEMP-SPD (1105-2-10a)

APR 15 2012

SUBJECT: San Clemente Shoreline, Orange County, California

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on coastal storm damage reduction along the Pacific Ocean shoreline in San Clemente, California. It is accompanied by the report of the Los Angeles District Engineer and the South Pacific Division Engineer. These reports are in partial response to the authority contained in Section 208 of the Flood Control Act of 1965 (Title II of P.L. 89-298), which provides for studies to determine the advisability of protection work against storm and tidal waves along the coasts of Washington, Oregon, and California. The Energy and Water Development Appropriations Act of 2000, P.L. 106-60, appropriated the funds for a reconnaissance study to investigate shoreline protection alternatives for San Clemente Shoreline, California. Preconstruction engineering and design activities for this project will be continued under the authority provided by the resolutions cited above.

2. The reporting officers recommend authorization for a plan to reduce coastal storm damages by constructing a beach fill/berm along the San Clemente shoreline. The recommended plan for coastal storm damage reduction includes construction of a 50-foot-wide beach nourishment project along a 3,412-foot-long stretch of shoreline using 251,000 cubic yards of compatible sediment, with renourishment on the average of every 6 years over a 50-year period of Federal participation, for a total of eight additional nourishments. The design berm will be constructed to an elevation of 17 feet MLLW with foreshore slope of 8H:1V (at equilibrium). Material for the beach fill will be dredged from a borrow site identified off the coast of San Diego County. Physical monitoring of the performance of the project will be required annually throughout the 50-year period of Federal participation. The recommended plan would provide coastal storm damage reduction throughout the project reach and would maintain the existing recreational beach. Monitoring of the environmental resources will be required for each construction event. The project is expected to have minimal impacts to environmental resources. A comprehensive monitoring and mitigation plan has been incorporated in the project in the event that impacts to habitat result. The recommended plan is the national economic development (NED) plan for coastal storm damage reduction.

3. The City of San Clemente is the non-Federal cost-sharing sponsor for all features. Based on October 2011 price levels, the estimated total nourishment cost of the plan is $98,100,000, which includes the project first cost of initial construction of $11,300,000 and a total of 8 periodic renourishments at a total cost of $86,800,000. Periodic renourishments are planned at 6-year

[1] This report contains the proposed recommendation of the Chief of Engineers. The recommendation is subject to change to reflect Washington level review and comments from Federal and State agencies.

intervals. In accordance with the cost share provisions in Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended (33 U.S.C. 2213), the Federal and non-Federal shares are as follows:

a. The Federal share of the project first cost would be $7,350,000 and the non-Federal share would be $3,960,000, which equates to 65 percent Federal and 35 percent non-Federal. The cost of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas (LERRD) is estimated at $11,000, all of which is eligible for LERRD credit.

b. The Federal share of the total renourishment cost would be $43,400,000 and the non-Federal share would be $43,400,000, which equates to 50 percent Federal and 50 percent non-Federal.

c. The total nourishment cost includes $4,460,000 for environmental monitoring, and $8,550,000 for physical monitoring over the life of the project.

d. The City of San Clemente would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction. The project is not currently estimated to result in a significant incremental increase over the sponsor's existing beach maintenance activities and costs.

4. Based on a 4-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $2,180,000, including monitoring. All project costs are allocated to the authorized purpose of coastal storm damage reduction. The selected plan would reduce average annual coastal storm damages by about 97 percent and would leave average annual damages estimated at $36,900. The equivalent average annual benefits, which include recreational benefits, are estimated to be $3,160,000, with net average annual benefits of $978,000. The benefit-cost ratio is approximately 1.4 to 1.

5. The goals and objectives included in the Campaign Plan of the U.S. Army Corps of Engineers have been fully integrated into the San Clemente Shoreline study process. The project includes an annual project monitoring program to reevaluate and adjust the periodic renourishment actions. The study was conducted using a watershed perspective to examine sediment supply changes within the San Juan Creek Watershed. A statistical, risk based model was used to formulate and evaluate the project. The project is intended to address erosion and prevent damages to structures and contents; it is not intended to, nor will it, reduce the risk to loss of life during major storm events. The study report fully describes risks associated with residual coastal storm damages and risks that will not be reduced. These residual risks have been communicated to the City of San Clemente.

6. Along the shoreline of San Clemente, a lack of sediment supply to the shoreline has resulted in chronic, mild, and long-term erosion. Without a coastal storm damage reduction project public properties and structures will continue to be susceptible to damages caused by erosion (including land loss and undermining of structures), inundation (structures), and wave attack (structures, railroad). The project area includes the LOSSAN (Los Angeles to San Diego)

railroad corridor which is a vital link for passenger and freight service and has been designated as a Strategic Rail Corridor by the Department of Defense. As the protective beach lessens over time and is eventually lost, it is expected that storm waves will act directly upon the railroad ballast, significantly threatening the operation of the LOSSAN railroad line. The narrowing beaches are also expected to subject ancillary beachfront public facilities to storm wave-induced damages, and further reduce recreational space on an already space-limited beach. The recommended plan was formulated to maximize coastal storm damage reduction, address potential environmental affects, and minimize cost.

7. In accordance with the Corps Engineering Circular (EC 1165-2-211) on sea level change, the study performed a sensitivity analysis to investigate the economic effects that different rates of accelerated sea level rise could have on the recommended plan. The plan was formulated using a historical or low rate of sea level rise, and the sensitivity analysis used additional accelerated rates, which includes what the EC defines as medium and high rates. The sensitivity analysis indicates that at higher rates of sea level rise, renourishment intervals increase and the reduction of storm damages decreases, but the plans are still justified.

8. In accordance with the Corps Engineering Circular (EC 1165-2-209) on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included an Agency Technical Review (ATR), an Independent External Peer Review (IEPR) (Type I), and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. The IEPR was completed by Battelle Memorial Institute. A total of 24 comments were documented. The IEPR comments identified significant concerns in areas of the plan formulation and engineering assumptions that are needed to support the decision-making process and plan selection. This resulted in expanded narratives throughout the report to support the decision-making process and justify the recommended plan. A safety assurance review (Type II IEPR) will be conducted during the design phase of the project. All comments from the above referenced reviews have been addressed and incorporated into the final documents. Overall the reviews resulted in improvements to the technical quality of the report.

9. Washington level review indicates that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land related resources implementation studies and complies with other administrative and legislative policies and guidelines. Also the views of interested parties, including Federal, State and local agencies have been considered.

10. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to reduce coastal storm damages for the San Clemente, California shoreline be authorized in accordance with the reporting officers' recommended plan at an estimated project first cost of $11,300,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of WRDA 1986, as amended by Section 215 of WRDA 1999. The non-Federal

sponsor would provide the non-Federal cost share and all LERRD. Further the non-Federal sponsor would be responsible for all OMRR&R. This recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and policies.

a. Provide a minimum of at least 35 percent of initial project costs assigned to coastal storm damage reduction, plus 50 percent of initial project costs assigned to reducing damages to undeveloped public lands, plus 50 percent of initial project costs assigned to recreation, plus 100 percent of initial project costs assigned to reducing damages to undeveloped private lands and other private shores that do not provide public benefits; and 50 percent of periodic nourishment costs assigned to hurricane and storm damage reduction, plus 100 percent of periodic nourishment costs assigned to reducing damages to undeveloped private lands and other private shores that do not provide public benefits and as further specified below:

(1) Provide 25 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project.

(2) Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs.

(3) Provide all lands, easements, and rights-of-way, and perform or ensure the performance of all relocations determined by the Federal Government to be necessary for the initial construction, periodic nourishment, operation, and maintenance of the project.

(4) Provide, during construction, any additional amounts as are necessary to make the total contribution equal to 35 percent of initial project costs assigned to coastal storm damage reduction, plus 50 percent of initial project costs assigned to reducing damages to undeveloped public lands, plus 50 percent of initial project costs assigned to recreation, plus 100 percent of initial project costs assigned to reducing damages to undeveloped private lands and other private shores that do not provide public benefits; and 50 percent of periodic nourishment costs assigned to hurricane and storm damage reduction, plus 100 percent of periodic nourishment costs assigned to reducing damages to undeveloped private lands and other private shores that do not provide public benefits.

b. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portion of the project, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government.

c. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal Sponsor, now or hereafter, owns or controls for access to the project for the purpose of inspecting, operating, maintaining, repairing, replacing, rehabilitating, or completing the project. No completion, operation, maintenance, repair, replacement, or rehabilitation by the Federal Government shall relieve the non-Federal Sponsor

of responsibility to meet the non-Federal Sponsor's obligations, or to preclude the Federal Government from pursuing any other remedy at law or equity to ensure faithful performance.

d. Hold and save the United States free from all damages arising from the initial construction, periodic nourishment, operation, maintenance, repair, replacement, and rehabilitation of the project and any project related betterments, except for damages due to the fault or negligence of the United States or its contractors.

e. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20.

f. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended, 42 U.S.C. 9601-9675, that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for the initial construction, periodic nourishment, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the non-Federal Sponsor with prior specific written direction, in which case the non-Federal Sponsor shall perform such investigations in accordance with such written direction.

g. Assume, as between the Federal Government and the Non-Federal Sponsor, complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be necessary for the initial construction, periodic nourishment, operation, or maintenance of the project.

h. Agree, as between the Federal Government and the Non-Federal Sponsor, that the non-Federal Sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, and repair the project in a manner that will not cause liability to arise under CERCLA.

i. If applicable, comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way, required for the initial construction, periodic nourishment, operation, and maintenance of the project, including those necessary for relocations, borrow materials, and dredged or excavated material disposal, and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act.

j. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), requiring non-Federal preparation and implementation of floodplain management plans; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c)).".

k. Comply with section 402 of the WRDA of 1986, as amended (33 U.S.C. 701b-12), which requires the non-Federal interest to participate in and comply with applicable Federal floodplain management and flood insurance programs, prepare a floodplain management plan within one year after the date of signing a Project Partnership Agreement (PPA), and implement the plan no later than one year after project construction is complete.

l. Provide the non-Federal share of that portion of the costs of data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project, in accordance with the cost sharing provisions of the agreement.

m. Participate in and comply with applicable Federal floodplain management and flood insurance programs.

n. Do not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is authorized.

o. Prescribe and enforce regulations to prevent obstruction of or encroachment on the project that would reduce the level of protection it affords or that would hinder future periodic nourishment and/or the operation and maintenance of the project.

p. Not less than once each year, inform affected interests of the extent of protection afforded by the project.

q. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in preventing unwise future development in the floodplain, and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with protection levels provided by the project.

r. For so long as the project remains authorized, the non-Federal Sponsor shall ensure continued conditions of public ownership and use of the shore upon which the amount of Federal participation is based;

s. Provide and maintain necessary access roads, parking areas, and other public use facilities, open and available to all on equal terms;

t. At least twice annually and after storm events, perform surveillance of the beach to determine losses of nourishment material from the project design section and provide the results of such surveillance to the Federal Government;

u. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-Federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

11. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

Merdith W B Temple

MERDITH W. B. TEMPLE
Major General, U.S. Army
Acting Commander

DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
2600 ARMY PENTAGON
WASHINGTON, D.C. 20310-2600

DAEN

JUL 1 6 2013

SUBJECT: Walton County, Florida, Hurricane and Storm Damage Reduction, General Investigations Study

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on hurricane and storm damage reduction along the Gulf of Mexico shoreline of Walton County, Florida. It is accompanied by the report of the district and division engineers. This report is in response to resolutions authorized both within the United States Senate and the U.S. House of Representatives. In the Senate, the Committee on Environment and Public Works adopted a committee resolution (unnumbered) on July 25, 2002, and in the House, the Committee on Transportation and Infrastructure adopted a resolution, Docket 2690, dated July 24, 2002. The resolutions requested the Secretary of the Army to review the feasibility of providing beach nourishment, shore protection and environmental restoration and protection in the vicinity of Walton County, Florida.

2. The reporting officers recommend authorization of a locally preferred plan (LPP) to reduce hurricane and storm damages by constructing a beach fill along the shoreline of Walton County, Florida. The recommended plan for hurricane and storm damage reduction includes construction of a 50-foot wide berm at elevation 5.5 NAVD that includes 25 feet of berm and an additional 25 feet of advanced nourishment along 18.8 miles of the Walton County shoreline. The project will also include added dune width in the construction area of either 10 or 30 feet. The design dune elevation will be constructed to match the existing 15 foot contour NAVD with a shoreward slope of 3H: 1V. The project will begin at the western boundary of the Walton County shoreline and extend eastward to the eastern boundary. The recommended plan includes the initial fill and four renourishments, for a total of five nourishments, in 50 years at an average of 10-year intervals. Initial construction of the recommended plan will require the placement of 3,868,000 cubic yards (cy) of material and a total of 7,157,000 cy for the four renourishments which average 1,789,000 cy of material each. Other associated features of the project are dune vegetation and replacement of dune walkover structures as required. Material for the berm and dune construction and renourishment will be dredged from a borrow site identified offshore of the shoreline area within state waters. Since the recommended plan would not have any significant adverse effects, no mitigation measures (beyond management practices and avoidance) or compensation measures would be required. The recommended plan is the Locally Preferred Plan for hurricane and storm damage reduction which includes areas requested by the non-Federal sponsor in addition to those included in the National Economic Development Plan (NED). Compared to the NED Plan, the LPP includes additional shoreline length of 3.6 miles to provide consistent shoreline protection in areas that were not economically justified. The LPP, similar to the NED Plan, will include a 50-foot berm with added dune widths of either 10 or 30

feet throughout the project length. The Assistant Secretary of the Army (Civil Works) approved a policy exception allowing the Corps of Engineers to recommend the LPP by letter dated February 7, 2012. The extension will be funded entirely by the non-Federal sponsor.

3. The Walton County Board of Commissioners is the non-Federal cost sharing sponsor for all features. Based on October 2012 price levels, the estimated total nourishment cost of the NED Plan is $143,340,000. Based on October 2012 price levels, the estimated total nourishment cost of the LPP is $164,437,000, which includes the project first cost of initial construction of $61,397,000 and a total of four periodic renourishments at a total cost of $103,040,000. Periodic renourishments are planned at 10-year intervals. Cost sharing is applied in accordance with the provisions of Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended by Section 215 of WRDA 1999, as follows:

a. The Federal share of the total first cost would be $17,191,000 and the non-Federal share would be about $44,206,000, which equates to 28 percent Federal and 72 percent non-Federal. The non-Federal costs include the value of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas (LERRD) estimated to be $737,000.

b. The Federal share of future periodic renourishment is estimated to be $23,699,000 and the non-Federal share is estimated to be $79,341,000 which equates to 23 percent Federal and 77 percent non-Federal.

c. Walton County would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at about $168,000 per year.

4. Based on a 3.75 percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $4,786,000, including monitoring and OMRR&R. All project costs are allocated to the authorized purpose of hurricane and storm damage reduction. The selected plan would reduce average annual coastal storm damages by about 92 percent and would leave average annual damages estimated at $637,000. The equivalent average annual benefits, which include recreation benefits, are estimated to be $7,570,000 with net average annual benefits of $2,784,000. The benefit to cost ratio is approximately 1.6 to 1.

5. Risk and uncertainty has been explicitly factored into the economic analysis of this project. Chapter 6 of ER 1105-2-100, entitled "Risk-Based Analysis for Evaluation of Hydrology/Hydraulics and Economics in Shore Protection Studies" specifies the analysis requirements for shore protection projects, the fundamental requirement being that all shore protection analyses adopt a life cycle approach. A statistical risk based model, Beach-fx, was used in this study to formulate and evaluate the project in a life-cycle approach. Beach-*fx* is a comprehensive analytical framework for evaluating the physical performance and economic benefits and costs of storm damage reduction projects, particularly beach nourishment along

sandy shores. The model has been implemented as an event-based Monte Carlo life-cycle simulation tool that is run on desktop computers. Beach-*fx* integrates the engineering and economic analyses and incorporates uncertainty in both physical parameters and environmental forcing, which enables quantification of risk with respect to project evolution and economic costs and benefits of project implementation. This approved modeling approach provides for a more realistic treatment of shore protection project evolution through the relaxation of a variety of simplifying assumptions that are made in existing, commonly applied approaches. The application of Beach-*fx* in this study is to estimate future without project damages and quantify the damages prevented by various storm damage reduction alternatives for Walton County over the 50 year project life. The project is intended to address erosion and prevent damages to structures and contents; it is not intended to, nor will it, reduce the risk to loss of life during major storm events. Loss of life can only be prevented by residents and visitors following the local evacuation plans that are already in place. These residual risks have been communicated to Walton County.

6. In accordance with the Corps Engineering Circular (EC 1165-2-211) on sea level change, the study performed a sensitivity analysis to look at the effects that different rates of accelerated sea level rise could have on the recommended plan. The plan was formulated using a historical or low rate of sea level rise, and the sensitivity analysis used additional accelerated rates, which includes what the EC defines as intermediate and high rates. The analysis found that the influence of current sea level rise on the project is relatively low as compared to other factors causing erosion (waves, currents, winds and storms). The magnitude of the short-term storm-induced erosion during hurricane events have a much greater affect along the beaches of Walton County than those indicated by the natural long term shoreline trends. The recommended plan was based on Beach-*fx* simulations that incorporated the observed rate of sea level rise. Adaptive management will be used including monitoring and adding additional volume of sand during renourishments to compensate for significant accelerated sea level rise beyond the current observed rate should it become necessary.

7. In accordance with the Corps Engineering Circular (EC 1165-2-209) on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and rigorous review process to ensure technical quality. This included an Agency Technical Review (ATR), an Independent External Peer Review (IEPR) (Type I), and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. The IEPR was completed by Battelle Memorial Institute. A total of 18 comments were documented. The IEPR comments identified significant concerns in areas of the economics and engineering assumptions and methodologies used to support the decision-making process and plan selection and the incorporation of risk and uncertainty into the project analyses. This resulted in expanded narratives throughout the report to support the decision-making process and justify the recommended plan. All comments from the above referenced reviews have been addressed and incorporated into the final documents. Overall the reviews resulted in improvements to the technical quality of the report.

8. Washington level review indicates that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, and economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land related resources implementation studies and complies with other administrative and legislative policies and guidelines. Also the views of interested parties, including Federal, State and local agencies have been considered. During the State and Agency review, comments were received from the Florida Department of Environmental Protection and Department of Interior. These comments expressed the need to protect endangered species during construction and asked for clarification on the economic modeling. The USACE has acknowledged the need to protect endangered species, in compliance with the USFWS biological opinion and clarified the modeling results. In addition, the Florida State Historic Preservation Office (SHPO) wrote concerning the need for additional information to complete their review. The USACE referred the SHPO to the results of a previous SHPO review, which completed the consultation process.

9. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to reduce hurricane and storm damages for Walton County, Florida be authorized in accordance with the reporting officers' recommended plan at an estimated project first cost of $61,397,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended by Section 215 of WRDA 1999. The non-Federal sponsor would provide the non-Federal cost share and all LERRD. Further, the non-Federal sponsor would be responsible for all OMRR&R. This recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and policies.

a. Provide a minimum of at least 35 percent of initial project costs assigned to coastal storm damage reduction, plus 50 percent of initial project costs assigned to protecting undeveloped public lands, plus 50 percent of initial project costs assigned to recreation, plus 100 percent of initial project costs assigned to protecting undeveloped private lands and other private shores which do not provide public benefits and 50 percent of periodic nourishment costs assigned to coastal storm damage reduction plus 100 percent of periodic nourishment costs assigned to protecting undeveloped private lands and other private shores which do not provide public benefits and as further specified below:

(1) Enter into an agreement which provides, prior to execution of the project partnership agreement, the non-Federal share of design costs;

(2) Provide all lands, easements, and rights-of-way, and perform or ensure the performance of all relocations determined by the Federal Government to be necessary for the initial construction, periodic nourishment, operation, and maintenance of the project;

(3) Provide, during construction, any additional amounts as are necessary to make its total contribution equal to 35 percent of initial project costs assigned to hurricane and storm damage reduction plus 100 percent of initial project costs assigned to protecting undeveloped private lands and other private shores which do not provide public benefits and 50 percent of periodic nourishment costs assigned to hurricane and storm damage reduction plus 100 percent of periodic nourishment costs assigned to protecting undeveloped private lands and other private shores which do not provide public benefits;

(4) Provide 100 percent of the total project costs that reflect the difference between the National Economic Development (NED) Plan and the Locally Preferred Plan (LPP);

b. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

c. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor, now or hereafter, owns or controls for access to the project for the purpose of inspecting, operating, maintaining, repairing, replacing, rehabilitating, or completing the project. No completion, operation, maintenance, repair, replacement, or rehabilitation by the Federal Government shall relieve the non-Federal sponsor of responsibility to meet the non-Federal sponsor's obligations, or to preclude the Federal Government from pursuing any other remedy at law or equity to ensure faithful performance;

d. Hold and save the United States free from all damages arising from the initial construction, periodic nourishment, operation, maintenance, repair, replacement, and rehabilitation of the project and any project-related betterments, except for damages due to the fault or negligence of the United States or its contractors;

e. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, and other evidence is required, to the extent and in such detail as will properly reflect total costs of construction of the project, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20;

f. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended, 42 U.S.C. 9601-9675, that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for the initial construction, periodic nourishment, operation, and maintenance of the project;

however, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

g. Assume, as between the Federal Government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be necessary for the initial construction, periodic nourishment, operation, or maintenance of the project;

h. Agree that, as between the Federal Government and the non-Federal sponsor, the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, and repair the project in a manner that will not cause liability to arise under CERCLA;

i. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, PL 91-646, as amended by (42 U.S.C. 4601 – 4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way, required for the initial construction, periodic nourishment, operation, and maintenance of the project, including those necessary for relocations, borrow materials, and dredged or excavated material disposal, and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

j. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, PL 88-352 (42 U.S.C. 2000d), Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army," and all applicable Federal labor standards and requirements, including but not limited to, 40 U./S.C. 3141 – 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying, and enacting without substantial change the provisions of the Davis- Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.) and the Copeland Anti-Kickback Act (formerly 40 U.S. C. 276c et seq.);

k. Comply with Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), which requires the non-Federal interest to participate in and comply with applicable Federal floodplain management and flood insurance programs, prepare a floodplain management plan within one year after the date of signing a Project Cooperation Agreement, and implement the plan not later than one year after completion of construction of the project;

l. Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of one percent of the total

amount authorized to be appropriated for the project, in accordance with the cost sharing provisions of the agreement;

m. Agree to participate in and comply with applicable Federal floodplain management and flood insurance programs;

n. Do not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is authorized.

o. Prevent obstructions of or encroachment on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) which might reduce the level of protection it affords, hinder operation and maintenance or future periodic nourishment, or interfere with its proper function, such as any new developments on project lands or the addition of facilities which would degrade the benefits of the project;

p. Not less than once each year, inform affected interests of the extent of protection afforded by the project;

q. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in preventing unwise future development in the floodplain, and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with protection levels provided by the project;

r. For so long as the project remains authorized, the non-Federal sponsor shall ensure continued conditions of public ownership, access, and use of the shore upon which the amount of Federal participation is based;

s. Provide, keep and maintain the recreation features, and access roads, parking areas, and other associated public use facilities, open and available to all on equal terms;

t. At least twice annually and after storm events, perform surveillance of the beach to determine losses of nourishment material from the project design section and provide the results of such surveillance to the Federal Government; and,

u. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103 of the Water Resources Development Act of 1986, PL 99-662, as amended (33 U.S.C. 22130, which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element.;

10. The recommendations contained herein reflect the information available at this time and current Departmental policies governing formulation of individual projects. These recommendations do not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program nor the perspective of higher review levels within the executive branch. Consequently, the recommendations may be modified before they are transmitted to the Congress as proposals for authorization and implementation funding." However, prior to transmittal to the Congress, the non-Federal sponsor, the State, interested Federal agencies, and other parties will be advised of any modifications and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers

DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
2600 ARMY PENTAGON
WASHINGTON, DC 20310-2600

REPLY TO
ATTENTION OF

JUL 0 8 2013

DAEN-ZA

MEMORANDUM FOR: THE SECRETARY OF THE ARMY

SUBJECT: Morganza to the Gulf of Mexico, Louisiana

1. I submit for transmission to Congress my report updating the authorized Morganza to the Gulf of Mexico, Louisiana project. This report supplements the reports of the Chief of Engineers dated 23 August 2002 and 22 July 2003 and is accompanied by the reports of the New Orleans District Commander, Mississippi Valley Division Commander and the Mississippi River Commission. This report presents the updated design and associated costs to the project as a result of applying more robust design and hydrologic and hydraulic modeling standards developed subsequent to Hurricane Katrina. These updated changes have caused the project to exceed the maximum authorized project cost limit under Section 902 of the Water Resources Development Act of (WRDA) 1986. While the project was not reformulated as part of this update, an analysis using the post-Katrina design criteria was initially performed that confirmed the authorized project alignment as the alignment that best meets the Federal objective.

2. The Morganza to the Gulf of Mexico, Louisiana hurricane and storm damage risk reduction project was authorized by Section 1001(24)(A) of the Water Resources Development Act (WRDA) of 2007 at a total cost of $886,700,000 consistent with the reports of the Chief of Engineers dated 23 August 2002 and 22 July 2003. In addition Section 1001(24)(B) of WRDA 2007 provides that operation, maintenance, repair, rehabilitation and replacement (OMRR&R) of the Houma Navigation Canal lock complex and the Gulf Intracoastal Waterway floodgate features of the project that provides for inland waterways transportation shall be a Federal responsibility in accordance with Section 102 of WRDA 1986 (33 U.S.C. 2212).

3. The authorized Morganza to the Gulf of Mexico, Louisiana project was designed to provide hurricane and storm damage risk reduction while maintaining navigational passage and tidal exchange. The project is located approximately 60 miles southwest of New Orleans, Louisiana and includes Terrebonne Parish and a portion of Lafourche Parish. The project recommended in the reports of the Chief of Engineers dated 23 August 2002 and 22 July 2003 was to reduce hurricane and storm damages by providing the one percent annual exceedance (1% annual exceedance probability (AEP)) probability level of risk reduction.

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4. The reporting officers considered the WRDA 2007 authorized project by applying two different water surface design elevation assumptions. The first assumption retained the pre-Katrina water surface design elevations used in developing the authorized project. The second assumption applied the post-Katrina water surface design elevations to the previously authorized project. Using post-Katrina water surface design elevation calculation methodologies, the pre-Katrina water surface design elevation is equal to approximately a 3% AEP. The post-Katrina water surface design elevation is equal to a 1% AEP as used for the second assumption. Of the two, the assumption associated with the post-Katrina 1% AEP water elevation project provided the greater net benefits, lower residual risk, and greatest adaptability to sea level rise. This 1% AEP project identified by the reporting officers provides the same target level of risk reduction as the authorized project and follows the same alignment with some refinements to address the new storm surge modeling which showed deeper and wider storm surge inundation. The updated project also involves no change in project purpose. However, the application of the more rigorous storm modeling and more robust post-Katrina design standards has resulted in expansion of the project features authorized by WRDA 2007. Changes to the major project features are as follows:

- Levee Length: The total levee length has increased from 72 miles to approximately 98 miles. The reason for the increase is to reduce risk of flanking, based on the assumption of higher rates of relative sea level rise, and higher surge and waves in the future.
- Levee/Structure Elevations: Levee and structure elevations were increased by 6 feet to 18 feet. Most of the increase in elevation is attributable to higher predicted surge and waves and post Katrina design criteria.
- Levee Widths: Levee widths have increased from approximately 40 feet to 200 feet wide to approximately 282 feet to 725 feet wide. The increased widths are attributable to increases in levee heights and the post Katrina geotechnical stability factors of safety.
- Houma Navigation Canal (HNC) lock complex and Gulf Intracoastal Waterway (GIWW) floodgate feature: These features which cross federal navigation channels are generally the same except the HNC structure sill depth would be increased by 5 feet as part of the requested sponsor funded work item and the HNC floodgate width increased from 200 feet to 250 feet. The HNC floodgate needed to be widened given that the pre-Katrina design was no longer technically feasible with the increased project height. The GIWW floodgate near Houma was redesigned to eliminate one of the two sector gates.
- Floodgates: The number of floodgates on other canals and bayous increased from 9 to 19 as several bayous were not previously identified as being used for navigation and with the extension of the levee length several additional navigable bayous were crossed.
- Environmental Control Structures: The number of environmental control structures increased from 12 to 23 sets of concrete box culverts with sluice gates. The increase in the number of structures is attributable to more refined set of design criteria, which considered precipitation event conditions water level and velocity and box culvert design criteria.

- Environmental Mitigation: Impacted acres requiring mitigation increased from approximately 3,740 acres to 4,100 acres. The increase is directly related to the increase in the foot print of the levee.
- Structures Afforded Protection: The number of structures afforded hurricane and storm damage risk reduction increased from approximately 26,000 structures to 53,000 structures. The increase in the number of structures afforded risk reduction is a result of post-Katrina change in 1% AEP water surface elevation.
- Hydraulic Mitigation: Costs have been included for measures to address a potential indirect impact of the construction to raise water levels outside the levees. Potential impact areas include portions of the communities of Gibson, Bayou Dularge, Dulac, and all of Cocodrie and Isle de Jean Charles. In addition, measures and associated costs have been included to offset potential induced stages on the existing Larose to Golden Meadows project.

5. Based on October 2012 price levels, the estimated first cost of the updated project is $10,265,000,000, with the Federal and non-Federal shares estimated at $6,672,000, 000 and $3,593,000,000, respectively. The Coastal Protection and Restoration Authority of Louisiana in coordination with the Terrebonne Levee and Conservation District has expressed intent to be the non-Federal cost sharing sponsor for the project. Upon completion of construction, the non-Federal sponsor would be responsible for the OMRR&R of the project, a cost currently estimated at $7,400,000 per year. In accordance with Section 1001(24)(B) of WRDA 2007 the OMRR&R for the GIWW floodgates and the Houma Navigation Canal Lock, estimated at $1,700,000 per year, is a Federal responsibility.

6. Based on a 3.75-percent discount rate, October 2012 price levels and a 50-year period of analysis, the total equivalent average annual costs of the updated project, including OMRR&R, are estimated to be $716,000,000. The equivalent average annual benefits are estimated to be $1,023,000,000. The net average annual benefits would be $307,000,000. The benefit-to-cost ratio is 1.4 to 1.

7. While the estimated project costs in the district's report are the best available and compliant with current post-Katrina design criteria, the U.S. Army Corps of Engineers Risk Management Center and the New Orleans District jointly evaluated the proposed Morganza to the Gulf project to assess whether the post-Katrina design criteria, specifically in the areas of global stability and overtopping and structural superiority, could be site adapted to reduce project cost without significantly increasing risk. Based on the results of this effort, site adaptations of the criteria were identified for consideration during the next phase of implementation, preconstruction, engineering and design.

8. The draft report / programmatic environmental impact statement underwent an independent external peer review by the Louisiana Water Resource Council (LWRC). The LWRC assessed the adequacy and acceptability of the economic, engineering, and environmental methods, models and analysis used, during two reviews. A second review was added to focus on the economics supporting the report findings. There were a total of 18 comments of which 13 were medium significance and five were low significance. In summary, the panel felt that the engineering, economics, plan formulation, and environmental analysis were adequate and needed to be properly documented in the final report. The final report / programmatic environmental impact statement also underwent state and agency review. The state and agency comments received during review of the final report/ programmatic environmental impact statement included comments from federal agencies and agencies from the state of Louisiana. Comments provided by the National Ocean and Atmospheric Administration's National Marine Fisheries Service included the need for additional detailed analysis of the potential direct, indirect, and cumulative impacts to Essential Fisheries Habitat related to the closure structures. They were informed this will be further analyzed during the design phase and that the Corps intends to use a certified habitat change model and appropriate fisheries impact models as part of these future analyses. The Department of Interior also expressed similar concerns that will also be addressed as the design is further analyzed. The United States Environmental Protection Agency expressed concerns regarding the need to provide continued coordination with affected communities in the project area to identify any disproportional effects to low income or minority populations in accordance with Executive Order 12898. In addition they were concerned with the impacts associated with potential sea level rise. We acknowledged that under some future relative sea level rise scenarios, increased frequency of closure of the system's gates and water control structures could result in significant adverse indirect impacts to wetlands, hydrology, fisheries, water quality, threatened/endangered species, and navigation. The level of those impacts cannot be fully quantified at this time and these will be analyzed further as well as that adaptive management measures may mitigate for that potentiality. The state of Louisiana had several agencies that provided comments which were generally in support of the project and recognized that earlier comments had been addressed in the final document but were still concerned over the cost of the risk reduction designs. The response noted that the Corps will continue to identify cost-reduction measures that do not sacrifice the overall level of risk reduction to the citizens of Louisiana. Concerns expressed by the Louisiana Department of Wildlife and Fisheries (LDWF) with the Pointe aux Chenes Wildlife Management Area and the Mandalay National Wildlife Refuge that will be unavoidably impacted by the construction. The impacts have been and will continue to be coordinated with the appropriate offices of USFWS and LDWF to ensure that appropriate and practicable efforts are made to minimize adverse environmental impacts to the areas. In summary, responses were provided re-iterating the considerations during the planning process and the extensive coordination that occurred regarding environmental effects and mitigation with the natural resource agencies and that a detailed analysis of the potential indirect and cumulative impacts to wildlife and fisheries related to the construction of this project and specifically to the closure of the structures will occur during the design phase. The Corps will

produce tiered National Environmental Policy Act documents as needed to document the analysis of the plans and the impacts to the human and natural environments and the informed decision being made as the project proceeds forward. The Corps will make a diligent effort to identify and assess ways to further avoid and minimize any significant adverse environmental and socioeconomic impacts.

9. I concur that the reporting officers have updated the plan identified within the previous reports of the Chief of Engineers and find that the updated plan is economically justified, environmentally acceptable and engineeringly sound. Post-Katrina engineering design criteria and standards for gulf coast communities were applied to reduce the potential of loss of life and property from coastal storms. These engineering practices were developed using the findings of the *Interagency Performance Evaluation Task Force* including key lessons learned from Hurricane Katrina and their implications for future hurricane preparedness and planning for south Louisiana. Project modifications were also found necessary to address developments after the project was authorized, including community resettlement patterns after Katrina, to incorporate improved water control elements and navigation features, and to update other outmoded aspects of the authorized project to more effectively provide the utility of function originally intended by Congress. Accordingly, I submit for transmission to Congress my report updating the authorized Morganza to the Gulf of Mexico, Louisiana project with the required modifications and changes necessary for engineering and construction reasons to produce the degree and extent of coastal storm damage reduction improvements intended by Congress. Finally, the non-Federal sponsor must agree with the following requirements prior to project implementation.

a. Provide 35 percent of total project costs as further specified below:

1. Provide the required non-Federal share of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

2. Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs;

3. Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the project;

4. Provide, during construction, any additional funds necessary to make its total contribution equal to 35 percent of total project costs;

b. Shall not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefore, to meet any of the non-Federal obligations for the project unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is authorized;

c. Not less than once each year, inform affected interests of the extent of protection afforded by the project;

d. Agree to participate in and comply with applicable Federal floodplain management and flood insurance programs;

e. Comply with Section 402 of the Water Resources Development Act of 1986, as amended (33U.S.C. 701b-12), which requires a non-Federal interest to prepare a floodplain management plan within one year after the date of signing a project cooperation agreement, and to implement such plan not later than one year after completion of construction of the project;

f. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with protection levels provided by the project;

g. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the level of protection the project affords, hinder operation and maintenance of the project, or interfere with the project's proper function;

h. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

i. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace (OMRR&R) the project or functional portions of the project, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government (except the HNC lock complex and the GIWW floodgate features of the project for which the

responsibility for OMRR&R is assigned to the Government under Section 1001(24) of WRDA 2007);

j. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

k. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

l. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20;

m. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c et seq.);

n. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

o. Assume, as between the Federal Government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project;

p. Agree, as between the Federal Government and the non-Federal sponsor, that the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA; and

q. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-Federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element;

r. Shall not use any project features or lands, easements, and rights-of-way required for such features as a wetlands bank or mitigation credit for any other project;

s. Pay all costs due to any project betterments or any additional work requested by the sponsor, subject to the sponsor's identification and request that the Government accomplish such betterments or additional work, and acknowledgement that if the Government in its sole discretion elects to accomplish the requested betterments or additional work, or any portion thereof, the Government shall so notify the Non-Federal Sponsor in writing that sets forth any applicable terms and conditions;

10. This report reflects the information available at this time. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, this supplemental report may be modified before it is transmitted to the Congress. However, prior to transmittal to Congress, the sponsor, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

THOMAS P.BOSTICK
LTG, USA

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, DC 20314-1000

REPLY TO
ATTENTION OF
CECW-SAD

06 SEP 2009

SUBJECT: Mississippi Coastal Improvements Program, Hancock, Harrison, and Jackson Counties, Mississippi, Comprehensive Plan Report

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my final report on water resources improvements associated with hurricane and storm damage risk reduction and ecosystem restoration in the coastal counties of Hancock, Harrison, and Jackson, Mississippi. It is accompanied by the report of the district and division engineers. These reports are a final response to authorizing legislation contained in the Department of Defense Appropriation Act of 2006 (P.L. 109-148), dated 30 December 2005. The study authorization states, in part, the following:

> *"... the Secretary shall conduct an analysis and design for comprehensive improvements or modifications to existing improvements in the coastal area of Mississippi in the interest of hurricane and storm damage reduction, prevention of saltwater intrusion, preservation of fish and wildlife, prevention of erosion, and other related water resource purposes at full Federal expense; Provided further, that the Secretary shall recommend a cost-effective project, but shall not perform an incremental benefit-cost analysis to identify the recommended project, and shall not make project recommendations based upon maximizing net national economic development benefits; Provided further, that interim recommendations for near term improvements shall be provided within 6 months of enactment of this act with final recommendations within 24 months of this enactment."*

Pre-construction engineering and design and additional studies will be initiated upon Congressional authorization.

2. The Mississippi Coastal Improvements Program Comprehensive Plan, hereinafter referred to as the MsCIP Comprehensive Plan, is a systemwide approach linking structural and nonstructural hurricane and storm damage risk reduction elements with ecosystem restoration elements, all with the goal of providing for a coastal community that is more resilient to hurricanes and storms. The MsCIP Comprehensive Plan for hurricane and storm damage risk reduction in coastal Mississippi was developed using a multiple lines-of-defense approach focusing on reducing hurricane and storm damages through barrier islands restoration, and employing beachfront protection, wetland restoration, and floodplain evacuation concepts of the MsCIP Comprehensive Plan. The reporting officers identify 12 elements to aid recovery of coastal Mississippi that was severely damaged by the hurricanes of 2005. Structural elements include restoring protective beaches and systems, restoring native habitats, and raising an

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existing levee. Non-structural elements include removing structures from floodplains or raising structures that are highly vulnerable to storm damage. The hurricanes of 2005 severely taxed the resources of local governments and institutions, making it unlikely that those resources could be employed to implement these proposed recovery actions without Federal assistance. Thus, this package of 12 elements and the identified further feasibility studies will help the people of coastal Mississippi in their recovery. Implementation of the 12 elements would provide for the restoration of over 3,000 acres of coastal forest and wetlands, approximately 30 miles of beach and dune restoration, and floodproofing or acquisition of approximately 2,000 tracts within the 100-year floodplain.

3. The MsCIP Comprehensive Plan also includes recommendations for additional studies to address the longer term needs over the next 30-40 years. These studies would evaluate the restoration of over 30,000 acres of coastal forest, wetlands, beaches and dunes; sustainable restoration of the barrier islands; structural measures; and floodproofing or acquisition of over 58,000 tracts within the 100-year floodplain.

4. The reporting officers developed the recommended 12 elements for coastal Mississippi consistent with the direction provided in the Department of Defense Appropriations Act of 2006 (P.L. 109-148), dated 30 December 2005. In accordance with P.L. 109-148, the reporting officers found each of the 12 elements to be cost-effective, technically sound, and environmentally and socially acceptable. These 12 elements are described below and include two non-structural hurricane storm risk reduction elements, one structural hurricane and storm damage risk reduction element, seven ecosystem restoration elements, and two coastal ecosystem restoration elements. The additional studies that are part of the MsCIP Comprehensive Plan could provide further improvements in the coastal area of Mississippi if implemented. Discussion of these studies is included in paragraphs 5 and 6.

a. High Hazard Area Risk Reduction Program (HARP). This project element consists of acquisition of approximately 2,000 tracts which are at the highest risk of being damaged by storm surge, demolition of existing structures, and retention of acquired tracts in an open space condition. The number of tracts was based on an estimate of what could be acquired during a five year period following the execution of the Project Partnership Agreement for implementation of this element. To the extent practicable, acquisition would be on a willing seller basis, but eminent domain could be utilized when determined to be warranted. As described in the report, acquisition will be in compliance with the provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act (P.L. 91-646), as amended, and the uniform regulations contained in 49 CFR, Part 24 including the provision of payment of relocation assistance benefits to eligible recipients. The tracts would include residential, commercial and unimproved tracts. In addition, buildings owned by the City of Moss Point that are used for municipal purposes will be replaced with buildings out of the Federal Emergency Management Agency (FEMA) designated Velocity Zone. Benefits of the HARP include approximately $22,000,000 – $33,000,000 in average annual hurricane and storm damage risk

reduction benefits, depending on the specific tracts acquired. At October 2008 price levels, the estimated first cost of this element is $407,860,000. The cost of this non-structural project element is allocated to hurricane and storm damage risk reduction. In accordance with the provisions of the Water Resources Development Act of 1986 (WRDA 1986), as amended, cost sharing would be 65-percent Federal and 35-percent non-Federal. The Federal share of the estimated first cost of this element would be $265,110,000 and the non-Federal share would be $142,750,000. The estimated annual cost for operation, maintenance, repair, replacement and rehabilitation of this project element is $75,000 and is a 100-percent non-Federal responsibility.

b. Waveland Floodproofing. This project element consists of elevating approximately 25 residential structures in the City of Waveland, Mississippi that are determined to be eligible for floodproofing by elevation out of the 1-percent chance storm event inundation level. Benefits of the Waveland Floodproofing include $224,000 in average annual hurricane and storm damage risk reduction benefits. At October 2008 price levels, the estimated first cost of this element is $4,450,000. The cost of this element is allocated to hurricane and storm damage risk reduction. In accordance with the provisions of WRDA 1986, as amended, cost sharing would be 65-percent Federal and 35-percent non-Federal. The Federal share of the estimated first cost of this project element is $2,890,000 and the non-Federal share is $1,560,000. Due to the non-structural nature of this element, the estimated annual costs for operation, maintenance, repair, replacement and rehabilitation are expected to be nominal. However any operation, maintenance, repair, replacement and rehabilitation that would be needed is a 100-percent non-Federal responsibility.

c. Forrest (Forest) Heights Levee. This project element for the Forrest Heights community in the Turkey Creek watershed of Gulfport, Mississippi consists of raising approximately 6,500 linear feet of an existing non-Federal levee to a levee crest elevation of 21 feet North Atlantic Vertical Datum of 1988 (NAVD-88). An existing publicly owned park with a surface elevation of 12 to 14 feet NAVD-88 would be included in the plan to serve as a water detention area for temporary containment of rainfall during storm events. This recommended project element will require the acquisition of two residential properties within the existing community. Unavoidable adverse environmental impacts have been identified and the cost of acquisition and restoration of approximately 3 acres of mitigation is included in total estimated cost of this element. Hurricane and storm damage risk reduction benefits are estimated at $101,000 to a historically significant minority community. In addition to these benefits, the levee would maintain cohesiveness of the historically significant community, and preserve the culture and heritage of its predominantly minority residential population. At October 2008 price levels, the estimated first cost of this element is $14,070,000. The cost of this element is allocated to hurricane and storm damage risk reduction. In accordance with the provisions of WRDA 1986, as amended, cost sharing would be 65-percent Federal and 35-percent non-Federal. The Federal share of the estimated first cost of this project element is $9,150,000 and the non-Federal share is $4,920,000. The estimated annual cost for operation, maintenance, repair, replacement, and rehabilitation of this project element is $114,000 and is a 100-percent non-Federal responsibility.

d. Turkey Creek Ecosystem Restoration. This project element consists of the restoration of 689 acres of an undeveloped site of degraded wet pine savannah habitat. Restoration of this area would provide an increase of 1,565 average annual functional habitat units. These habitats have been identified by the U.S. Fish and Wildlife Service as habitats of high value for native species and as relatively scarce or becoming scarce on a national basis or in the ecoregion. Measures required to restore hydrology and natural vegetation on the site include filling drainage ditches, road removal, and controlled burning. Rare and threatened and endangered birds that are expected to utilize the areas following burning and regrowth include Henslow's sparrow, Bachman's sparrow, red-cockaded woodpecker, and Mississippi Sandhill Crane. This restored ecosystem also may benefit the Mississippi Gopher frog and, in drier areas along ridges, the black pine snake and the gopher tortoise. At October 2008 price levels, the estimated first cost of this element is $6,840,000. The cost of this project is allocated to ecosystem restoration. In accordance with the provisions of WRDA 1986, as amended, cost sharing would be 65-percent Federal and 35-percent non-Federal. The Federal share of the estimated first cost of this project element is $4,450,000 and the non-Federal share is $2,390,000. The estimated annual cost for operation, maintenance, repair, replacement, and rehabilitation of this project element is $47,000 and is a 100-percent non-Federal responsibility. Post-implementation monitoring of this ecosystem restoration element is projected to be conducted for no more than five years at a cost of less than 1-percent of the total first cost of the ecosystem restoration elements. Adaptive management of ecosystem restoration element is expected to cost no more than 3-percent of the total first cost of the ecosystem restoration element. The cost of monitoring and adaptive management is included in the total estimated first cost of this element.

e. Dantzler Ecosystem Restoration. This project element consists of restoration of 385 acres of severely degraded wet pine savannah owned by the State of Mississippi. Measures required to restore hydrology and natural vegetative habitat to the site include removal of existing hurricane debris and sedimentation, filling drainage ditches, road removal, control of non-native species, and controlled burning. The proposed element would provide an increase of 1,244 average annual functional habitat units and restore the natural hydrologic character of the area. The site's location in proximity to the Pascagoula River delta, a Gulf Ecological Management Site, increases the value of this restoration element by minimizing the fracturing of biodiversity. At October 2008 price levels, the estimated first cost of this element is $2,210,000. The cost of this project is allocated to ecosystem restoration. In accordance with the provisions of WRDA 1986, as amended, cost sharing would be 65-percent Federal and 35-percent non-Federal. The Federal share of the estimated first cost of this project element is $1,440,000 and the non-Federal share is $770,000. The estimated annual cost for operation, maintenance, repair, replacement, and rehabilitation of this project element is $26,000 and is a 100-percent non-Federal responsibility. Post-implementation monitoring of this ecosystem restoration element is projected to be conducted for no more than five years at a cost of less than 1-percent of the total first cost of the ecosystem restoration elements. Adaptive management of ecosystem restoration element is expected to cost no more than 3-percent of the total first cost of the ecosystem restoration element. The cost of monitoring and adaptive management is included in the total estimated first cost of this element.

f. Franklin Creek Ecosystem Restoration. This project element includes restoration of hydrology and native habitats by removing ditches, excavating and removing existing roadbeds, installing culverts under U.S. Highway 90, control of non-native species, and controlled burning to restore 149 acres located north and south of U.S. Highway 90 with critical wet pine savannah habitat. This area routinely floods with only a slight rainfall; thus, this would also provide additional flood storage capacity by restoring the natural habitat. Pine savannah wetlands provide floodwater retention, groundwater recharge, and water purification. This habitat is becoming fragmented and with the increased development, fire maintenance is increasingly harder to perform. The proposed element would provide an increase of 516 average annual functional habitat units and restore the natural hydrology of the area. In addition, restoration of this area would provide for additional flood storage capacity within the Grand Bay area reducing flooding severity within the adjacent communities of Orange Grove and Pecan in Jackson County. The site's location in proximity to the Grand Bay National Wildlife Refuge (NWR) and the Grand Bay National Estuarine Research Reserve (NERR) increases the value of this restoration element by minimizing the fracturing of biodiversity. Incidental hurricane and storm damage risk reduction benefits would be realized from the removal of approximately 30 residential structures from the floodplain. At October 2008 price levels, the estimated first cost of this element is $1,860,000. The cost of this project is allocated to ecosystem restoration. In accordance with the provisions of WRDA 1986, as amended, cost sharing would be 65-percent Federal and 35-percent non Federal. The Federal share of the estimated first cost of this project element is $1,210,000 and the non-Federal share is $650,000. The estimated annual cost for operation, maintenance, repair, replacement, and rehabilitation of this project element is $11,000 and is a 100-percent non-Federal responsibility. Post-implementation monitoring of this ecosystem restoration element is projected to be conducted for no more than five years at a cost of less than 1-percent of the total first cost of the ecosystem restoration elements. Adaptive management of ecosystem restoration element is expected to cost no more than 3-percent of the total first cost of the ecosystem restoration element. The cost of monitoring and adaptive management is included in the total estimated first cost of this element.

g. Bayou Cumbest Ecosystem Restoration. This project element includes the acquisition of approximately 61 tracts, removal of 19 structures, excavation and removal of fill material from former home sites and adjacent lands, filling drainage ditches, control of non-native species, and planting with native emergent wetland species. Following acquisition of these tracts, 148 acres would be restored to emergent wetland (110 acres) and coastal scrub shrub habitat (38 acres). The estuarine wetland habitats provide nursery and foraging habitat that supports various species including economically-important marine fishery species, such as black drum, spotted seatrout, southern flounder, Gulf menhaden, bluefish, croaker, mullet, and blue crab. The proposed element would provide an increase of 637 average annual functional habitat units. The site's proximity to Franklin Creek, Grand Bay NWR and Grand Bay NERR increases the value of this project element by minimizing the fracturing of biodiversity. At October 2008 price levels, the estimated first cost of this element is $25,530,000. The cost of this project is allocated to ecosystem restoration. In accordance with the provisions of WRDA 1986, as amended, cost sharing would be 65-percent Federal and 35-percent non-Federal. The Federal share of the estimated first cost of this project

element is $16,590,000 and the non-Federal share is $8,940,000. The current estimated annual cost for operation, maintenance, repair, replacement, and rehabilitation of this project element is $114,000 and is a 100-percent non-Federal responsibility. Post-implementation monitoring of this ecosystem restoration element is projected to be conducted for no more than five years at a cost of less than 1-percent of the total first cost of the ecosystem restoration elements. Adaptive management of ecosystem restoration element is expected to cost no more than 3-percent of the total first cost of the ecosystem restoration element. The cost of monitoring and adaptive management is included in the total estimated first cost of this element.

h. Admiral Island Ecosystem Restoration. This project element consists of restoration of a severely degraded 123-acre tidal wetland area owned by the State of Mississippi. Measures required to restore hydrology and native habitat to the area include excavating fill material, filling ditches, control of non-native species and planting native tidal emergent species. The proposed element would provide an increase of 108 average annual functional habitat units. At October 2008 price levels, the estimated first cost of this element is $21,810,000. The cost of this project is allocated to ecosystem restoration. In accordance with the provisions of WRDA 1986, as amended, cost sharing would be 65-percent Federal and 35-percent non-Federal. The Federal share of the estimated first cost of this project element is $14,180,000 and the non-Federal share is $7,630,000. The current estimated annual cost for operation, maintenance, repair, replacement, and rehabilitation of this project element is $58,000 and is a 100-percent non-Federal responsibility. Post-implementation monitoring of this ecosystem restoration element is projected to be conducted for no more than five years at a cost of less than 1-percent of the total first cost of the ecosystem restoration elements. Adaptive management of ecosystem restoration element is expected to cost no more than 3-percent of the total first cost of the ecosystem restoration element. The cost of monitoring and adaptive management is included in the total estimated first cost of this element.

i. Deer Island Ecosystem Restoration. This project element includes actions that will complement existing Federal restoration projects by minimizing the fracturing of biodiversity. Measures include restoration of a portion of the northern and southern shorelines of the island, and new stone training dikes to prevent future erosion. The proposed element would provide an additional 400 acres of highly productive estuarine wetlands, restore beach and dune habitat, create hard bottom habitat, reduce coastal erosion, and restore the coastal maritime forest. This element would produce an increase of 2,125 average annual functional habitat units. In addition, the restoration of Deer Island provides incidental hurricane and storm damage risk reduction benefits to the developed mainland Biloxi area. At October 2008 price levels, the estimated first cost of this element is $21,520,000. The cost of this project is allocated to ecosystem restoration. In accordance with the provisions of WRDA 1986, as amended, cost sharing would be 65-percent Federal and 35-percent non-Federal. The Federal share of the estimated first cost of this project element is $13,990,000 and the non-Federal share is $7,530,000. All costs for operation, maintenance, repair, replacement and rehabilitation are a 100-percent non-Federal responsibility. Post-implementation monitoring of this ecosystem restoration element is projected to be conducted for no more than five years at a cost of less than 1-percent of the total first cost of the ecosystem

restoration elements. Adaptive management of ecosystem restoration element is expected to cost no more than 3-percent of the total first cost of the ecosystem restoration element. The cost of monitoring and adaptive management is included in the total estimated first cost of this element.

j. Submerged Aquatic Vegetation Element. This element consists of measures designed to evaluate techniques for restoring submerged aquatic vegetation (SAV), an essential component of an estuarine ecosystem. Specifically, five acres of SAVs in the Grand Bay National Estuarine Research Reserve (NERR) area that were destroyed by Hurricane Katrina will be restored using different techniques. The results will be used to guide and develop other SAV restoration projects that would be undertaken as future authorized elements of the overall Comprehensive Plan. At October 2008 price levels, the estimated first cost of this element is $900,000. Cost sharing would be 65-percent Federal and 35-percent non-Federal. The Federal share of the estimated first cost of this measure is $590,000 and the non-Federal share is $310,000.

k. Coast-wide Beach and Dune Ecosystem Restoration. This project element consists of beach and dune improvements to approximately 30 miles of the 60 miles of existing beaches on the mainland coast. These improvements would include construction of 60-foot wide vegetated dune fields approximately 50 feet seaward of the existing seawalls. The element would provide 248 average annual functional habitat units. These beach and dune areas are critical to nesting and resting shorebirds such as the State listed least tern and the threatened piping plover. In addition to the ecological benefits, the dunes would provide incidental hurricane and storm damage risk reduction benefits particularly during smaller storm events, tropical storms, and lower energy hurricanes. At October 2008 price levels, the estimated first cost of this element is $23,320,000. The cost of this project is allocated to ecosystem restoration. In accordance with the provisions of WRDA 1986, as amended, cost sharing would be 65-percent Federal and 35-percent non-Federal. The Federal share of the estimated first cost of this project element is $15,160,000 and the non-Federal share is $8,160,000. All costs for operation, maintenance, repair, replacement and rehabilitation are a 100-percent non-Federal responsibility. Post-implementation monitoring of this ecosystem restoration element is projected to be conducted for no more than five years at a cost of less than 1-percent of the total first cost of the ecosystem restoration elements. Adaptive management of ecosystem restoration element is expected to cost no more than 3-percent of the total first cost of the ecosystem restoration element. The cost of monitoring and adaptive management is included in the total estimated first cost of this element.

l. Barrier Island Restoration. This project element consists of the placement of approximately 22 million cubic yards of sand within the National Park Service's Gulf Islands National Seashore, Mississippi unit. Approximately 13 million cubic yards of sand would be used to close a gap between East Ship Island and West Ship Island, originally opened by Hurricane Camille, through the construction of a low level dune system. The remaining 9 million cubic yards of sand would be placed in the littoral zones at the eastern ends of Ship and Petit Bois Islands. This would result in the restoration of 1,150 acres of critical coastal zone habitats. In accordance with the requests of the National Park Service, the closure of the Ship Island gap and placement of sand into the littoral zones would be undertaken only once, and would not be nourished or otherwise maintained in the

future. The restoration of Ship Island would provide over 400 average annual functional habitat units and help to ensure the sustainability of the Mississippi Sound ecosystem by maintaining salinity inflows from the Gulf of Mexico. The estuarine habitats provide nursery and foraging habitat that supports various species including economically-important marine fishery species, such as black drum, spotted seatrout, southern flounder, Gulf menhaden, bluefish, croaker, mullet, and blue crab. These estuarine-dependent organisms serve as prey for other important fisheries, such as mackerels, snappers, and groupers, and highly migratory species, such as billfishes and sharks. Incidental benefits associated with this element include average annual hurricane and storm damage risk reduction benefits of $20,000,000 to mainland Mississippi, $470,000 in average annual recreation benefits, and $43,000,000 in average annual fishery benefits to Mississippi Sound. The placement of sand would also provide incidental protection to two cultural sites listed on the National Register of Historic Places. At October 2008 price levels, the estimated cost of this element is $479,710,000. The cost of this element is allocated to ecosystem restoration. Cost sharing would be 65-percent Federal and 35-percent non-Federal. The Federal share of the estimated cost of this project element is $311,810,000 and the non-Federal share is $167,900,000.

5. Further Detailed Investigations of Remaining Elements of the Comprehensive Plan. The MsCIP Comprehensive Plan describes a number of additional components that could provide further improvements in the coastal area of Mississippi if implemented. However, these components are not recommended for authorization for construction at this time because further feasibility level analysis under additional study authority would be required to support a recommendation for construction authorization. Consequently, the reporting officers recommended additional feasibility level studies as part of the MsCIP Comprehensive Plan. These follow-on feasibility studies would evaluate the potential for restoration of over 30,000 acres of coastal forest, wetlands, beaches and dunes; restoration of barrier islands; structural measures; and floodproofing of structures on, or acquisition of, over 58,000 tracts within the 100 year floodplain. The reporting officers worked closely with other Federal agencies, the State of Mississippi, environmental groups, stakeholders, and interested parties to ensure that the program recommended for implementation best meets the goals and objectives of the MsCIP Comprehensive Plan consistent with the Congressional authorization. The total study cost of the recommended follow-on feasibility level studies is estimated to be $143,200,000, which would be cost shared on a 50-percent Federal and 50-percent non-Federal basis consistent with cost sharing provisions of Section 105 of WRDA 86, as amended. Follow-on analysis would include:

- 6 additional ecosystem restoration studies to restore the hydrology and native habitat on undeveloped state owned property.
- Long-term High Hazard Area Risk Reduction Program element to evaluate the further acquisition of high risk properties.
- Escatawpa River Freshwater Diversion to evaluate a variety of freshwater diversion scenarios to restore wet pine savannah habitat and reduce salinities in Grand Bay.

- 30 long-term ecosystem restoration and hurricane and storm damage risk reduction studies to restore the hydrology and natural habitat and reduce storm damages in developed residential areas.
- 7 hurricane and storm damage risk reduction studies to evaluate additional hurricane and storm damage risk reduction opportunities in high density land use areas.

6. At October 2008 price levels, the estimated first cost of the 12 elements of the MsCIP Comprehensive Plan recommended for authorization is $1,010,080,000, of which $656,550,000 would be Federal and $353,530,000 would be non-Federal. The estimated first cost of the individual elements recommended for authorization is summarized below in Table 1. The first cost of the recommended feasibility studies is estimated at $143,200,000. The estimated first cost of the individual studies recommended are summarized below in Table 2.

Table 1
Mississippi Coastal Improvements Program
Cost Sharing (October 2008 Price Level)

Phase I Recommended Plan Element	Total First Cost	Federal Cost	Non-Federal Cost
Phase I High Hazard Area Risk Reduction Plan	$407,860,000	$265,110,000	$142,750,000
Waveland Floodproofing	$4,450,000	$2,890,000	$1,560,000
Forrest Heights Levee	$14,070,000	$9,150,000	$4,920,000
Turkey Creek Ecosystem Restoration	$6,840,000	$4,450,000	$2,390,000
Dantzler Ecosystem Restoration	$2,210,000	$1,440,000	$770,000
Franklin Creek Ecosystem Restoration	$1,860,000	$1,210,000	$650,000
Bayou Cumbest Ecosystem Restoration & Hurricane & Storm Damage Reduction	$25,530,000	$16,590,000	$8,940,000
Admiral Island Ecosystem Restoration	$21,810,000	$14,180,000	$7,630,000
Deer Island Ecosystem Restoration	$21,520,000	$13,990,000	$7,530,000
Submerged Aquatic Vegetation Pilot Program	$900,000	$590,000	$310,000
Coast-wide Beach and Dune Ecosystem Restoration	$23,320,000	$15,160,000	$8,160,000
Comprehensive Barrier Island Restoration	$479,710,000	$311,810,000	$167,900,000
Total MsCIP Authorization Request	$1,010,080,000	$656,550,000	$353,530,000

Table 2
Mississippi Coastal Improvements Program
Cost Sharing (October 2008 Price Level)

Feasibility Studies	Estimated Study Cost	Federal Cost	Non-Federal Cost
Long-term High Hazard Area Risk Reduction	$5,000,000	$2,500,000	$2,500,000
Escatawpa River Freshwater Diversion	$3,000,000	$1,500,000	$1,500,000
Ecosystem Restoration Studies	$1,700,000	$850,000	$850,000
Long-term Ecosystem Restoration and Hurricane and Storm Damage Risk Reduction	$48,500,000	$24,250,000	$24,250,000
Structural Hurricane and Storm Damage Risk Reduction	$85,000,000	$42,500,000	$42,500,000
Total First Cost of MsCIP Recommended Investigations	$143,200,000	$71,600,000	$71,600,000

7. In concert with the Corps Campaign Plan, the MsCIP Comprehensive Plan was developed utilizing a systematic and regional approach in formulating solutions and in evaluating the impacts and benefits of those solutions. All potential impacts, both adverse and beneficial, have been considered without regard to geographic boundaries. The MsCIP and Louisiana Coastal Protection and Restoration (LACPR) study teams collaborated fully their efforts on a systems scale to ensure consistency. A regional salinity and water quality model has been developed covering an area from west of Lake Pontchartrain to east of Mobile Bay and south beyond the Chandeleur Islands in the Gulf. Regional storm surge modeling has been applied to examine regional-scale changes to storm surge levels associated with several of the proposed project alternatives. A multi-disciplinary risk assessment team was assembled by the Corps to characterize the probabilities of different hurricanes that can impact the northern Gulf of Mexico region. The risk assessment team supported both the MsCIP and LACPR work and FEMA's remapping efforts, and developed a unified general coastal flooding methodology that is being applied by U.S. Army Corps of Engineers (Corps) and FEMA.

8. Independent External Peer Review (IEPR) of the MsCIP Comprehensive Plan was managed by Battelle Memorial Institute, a non-profit science and technology organization with experience in establishing and administering peer review panels for the Corps. The IEPR panel consisted of seven individuals selected by Battelle with technical expertise in engineering (civil and geotechnical); geology/geomorphology; hydrology; hydraulics; coastal environmental science, water quality/resource management; floodplain management; meteorology/hurricanes; socioeconomics; real estate; risk assessment; and modeling. The Final Report from the IEPR panel was issued November 7, 2008 and included 14 final comments. Overall, the IEPR panel found the MsCIP Comprehensive Plan is an impressive body of work that is wide-ranging in the scope of research used to inform plan selection and recommendations. However, they felt that the plan could be improved by inclusion of a concise statement of the project's long-term vision for the future coastal landscape and a figure illustrating the project in the Executive Summary. The panel also acknowledged that there has been extensive outreach and community engagement

in the scoping process. The panel encouraged continued Corps collaboration with the public, local and Federal agencies, and the inclusion of universities and research institutions to continue to inform this plan. Support of local communities and states should be fostered as it is also a critical component to project success. Of the 14 IEPR comments identified by the panel, four were classified as high significance by the panel. This first comment recommended including a refined analysis in certain areas before design and build is conducted. In response, additional clarification was added to the report to indicate that a refined analysis would be undertaken in the ensuing project phases. The second comment requested providing additional explanations on the preliminary evaluations of hurricane storm damage risk reduction, erosion control, and ecosystem restoration. In response, with assistance from recommendations in the IEPR report, the Comprehensive Plan was revised to provide further clarification in these areas. The third comment recommended that the redevelopment scenarios should include a range of possible outcomes for the economy. In response, the team provided further explanations on the preliminary analysis and possible outcomes for the redevelopment scenarios. The fourth comment recommended that adaptive management processes should be a more integral part of the Comprehensive Plan and must include a strong monitoring and feedback mechanism. In response, the adaptive management process was further integrated into the Comprehensive Plan, along with recognition that adaptive management will be developed more extensively in collaboration with others in the ensuing project phases. Eight of the IEPR panel comments were classified as medium significance by the panel. They included clarifying the extent of inclusion of public and agency engagement into plan selection; including additional information on future impacts to municipal and industrial waste facilities; including additional detail on human adaptation, as it relates to economic activities; including additional explanations on sea level rise; including a clearer description on how relative sea level rise is incorporated; providing a clearer explanation on the physics-based models; providing further descriptions on the factors in model selection; and providing further explanation on why oysters were used as an indicator species. As a result of these comments, additional discussions were added to the report to clarify these areas, including why decisions were made through the study process respective to these comments. The report was also revised to provide further explanation on the use of oysters as one of several indicator species that assisted in the identification of feasible alternatives. The final two comments from the IEPR panel were classified as low significance. They included reevaluating the goal to reduce loss of life by 100% as it is unrealistic for the project; and to clarify the process for weighting metrics, both of which were addressed with modifications to the report. While the goal to reduce loss of life by 100% remained in the study, additional discussion was added to the report to state that residual risk will remain with any type of plan in place, and to emphasize the roles of all partners in addressing and communicating residual risk, including the need for a well coordinated hurricane evacuation plan.

9. Washington level review indicated that the project is technically sound, environmentally acceptable, and cost effective. The plan conforms with essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation studies and complies with other administration and

legislative policies and guidelines. Also, the views of interested parties, including Federal, State and local agencies have been considered.

10. One or more of the 12 elements of the MsCIP Comprehensive Plan recommended in this report to be authorized for implementation may be implementable pursuant to statutory language included in Title IV of the Supplemental Appropriations Act, 2009 (Public Law 111-32) under the heading "Flood Control and Coastal Emergencies" that was enacted on June 24, 2009 (*see* 123 Stat. 1875-1876). Analysis as to which element or elements may be implemented pursuant to that language is ongoing.

11. I find that the reporting officers have addressed the provisions of P.L. 109-148, and I generally concur in their findings, conclusions, and recommendations. Accordingly, I recommend that the 12 elements described herein be authorized for implementation in accordance with the reporting officers' plan, with such modifications as in the discretion of the Chief of Engineers may be advisable. I further recommend that the additional studies as described herein be authorized subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including WRDA 1986, as amended. This recommendation of authorization for implementation of the 12 elements is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including WRDA 1986, as amended, and with the non-Federal sponsor agreeing to comply with applicable Federal law and policies, and with the following requirements:

a. Provide 35 percent of total project costs allocated to hurricane and storm damage risk reduction, as further specified below:

(1) Provide 25 percent of design costs allocated to hurricane and storm damage risk reduction in accordance with the terms of a design agreement entered into prior to commencement of design work for a project element for hurricane and storm damage risk reduction;

(2) Provide, during the first year of construction of a project element for hurricane and storm damage risk reduction, any additional funds necessary to pay the full non-Federal share of design costs allocated to hurricane and storm damage reduction;

(3) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of a project element for hurricane and storm damage risk reduction;

(4) Provide, during construction of a project element for hurricane and storm damage risk reduction, any additional funds necessary to make its total contribution for hurricane and storm damage risk reduction equal to 35 percent of total project costs allocated to hurricane and storm damage risk reduction;

b. Provide 35 percent of total project costs allocated to ecosystem restoration, as further specified below:

(1) Provide 25 percent of design costs allocated to ecosystem restoration in accordance with the terms of a design agreement entered into prior to commencement of design work for a project element for ecosystem restoration;

(2) Provide, during the first year of construction of a project element for ecosystem restoration, any additional funds necessary to pay the full non-Federal share of design costs allocated to ecosystem restoration;

(3) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of a project element for ecosystem restoration;

(4) Provide, during construction of a project element for ecosystem restoration, any additional funds necessary to make its total contribution for ecosystem restoration equal to 35 percent of total project costs allocated to ecosystem restoration;

c. Shall not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefore, to meet any of the non-Federal obligations for a project element unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is authorized;

d. Shall not use a project element for ecosystem restoration or lands, easements, and rights-of-way required for a project element for ecosystem restoration as a wetlands bank or mitigation credit for any other project or project element;

e. Not less than once each year, inform affected interests of the extent of protection afforded by the project elements for hurricane and storm damage risk reduction;

f. Agree to participate in and comply with applicable Federal floodplain management and flood insurance programs for project elements for hurricane and storm damage risk reduction;

g. Comply with Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to prepare a floodplain management plan within one year after the date of signing a project partnership agreement, and to implement such plan not later than one year after completion of construction of a project element for hurricane and storm damage risk reduction;

h. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with protection levels provided by a project element for hurricane and storm damage risk reduction;

i. Prevent obstructions or encroachments on a project element (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project element lands, easements, and rights-of-way or the addition of facilities which might reduce the level of protection a project element affords, reduce the outputs produced by a project element, hinder operation and maintenance of a project element, or interfere with a project element's proper function;

j. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of a project element, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

k. For so long as a project element remains authorized, operate, maintain, repair, rehabilitate, and replace the project element, or functional portions of the project element, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project element's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

l. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to a project element for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project element;

m. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of a project element and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

n. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to a project element, for a minimum of three years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20;

o. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*);

p. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of a project element. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

q. Assume, as between the Federal Government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of a project element;

r. Agree, as between the Federal Government and the non-Federal sponsor, that the non-Federal sponsor shall be considered the operator of a project element for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project element in a manner that will not cause liability to arise under CERCLA; and

s. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-Federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

12. The recommendations contained herein reflect the information available at this time and current Departmental policies governing formulation of individual projects. They do not reflect program and budgeting priorities inherent in the formulation of a national Civil Works construction program nor the perspective of higher review levels within the Executive Branch. Consequently, the recommendations may be modified before they are transmitted to the Congress as proposals for authorization and implementation funding. However, prior to transmittal to the Congress, the non-Federal sponsor, the State, interested Federal agencies, and other parties will be advised of any modifications and will be afforded an opportunity to comment further.

R. L. VAN ANTWERP
Lieutenant General, US Army
Chief of Engineers

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
441 G STREET, NW
WASHINGTON, DC 20314-1000

REPLY TO
ATTENTION OF

CEMP-NAD (1105-2-10a)

AUG 2 4 2009

SUBJECT: Mid-Chesapeake Bay Island Ecosystem Restoration Project, Chesapeake Bay, Dorchester County, Maryland

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration in the Middle Chesapeake Bay at James and Barren Islands. It is accompanied by the report of the Baltimore District Engineer and the North Atlantic Division Engineer. These reports are a partial response to a resolution by the Senate Committee on Environment and Public Works, adopted 5 June 1997. The resolution requested that the Secretary review the report of the Chief of Engineers on the Chesapeake Bay, Maryland and Virginia, published as House Document 176, Eighty-eighth Congress, First Session, and other pertinent reports with a view to conducting watershed management studies, in cooperation with other Federal agencies, the State of Maryland and the State of Delaware, their political subdivisions and agencies and instrumentalities thereof, of water resources improvements in the interest of navigation, flood control, hurricane protection, erosion control, environmental restoration, wetlands protection, and other allied purposes in watersheds of the Eastern Shore, Maryland and Delaware. The Eastern Shore, Maryland (MD) and Delaware (DE) Section 905(b) analysis concluded that a Federal interest existed to assess the needs and opportunities within the study area and recommended a variety of potential projects for further study. The Mid-Chesapeake Bay Island Ecosystem Restoration Study was initiated specifically to evaluate protecting and/or restoring island habitat loss because of erosion and subsidence through the beneficial use of dredged material, as recommended in the Section 905(b) analysis.

2. Land subsidence, rising sea level, and wave action are causing valuable remote island habitats to be lost throughout the Chesapeake Bay. Approximately 10,500 acres of island habitat has been lost in middle-eastern portion of Chesapeake Bay in the last 150 years, and should present island loss rates continue in the future, it is estimated that most remote island habitats will disappear from the Mid-Chesapeake Bay region within 20 years. The Mid-Chesapeake Bay Island Ecosystem Restoration Project consists of constructing environmental restoration projects at both James and Barren Islands. The reporting officers recommend authorizing a plan that will restore 2,144 acres of remote island habitat (2,072 acres at James Island and 72 acres at Barren Island), while also protecting approximately 1,325 acres of submerged aquatic vegetation (SAV) habitat adjacent to Barren Island and providing approximately 90 to 95 million cubic yards, or approximately 28 to 30 years, of dredged material placement capacity. Through the beneficial use of dredged material, the Mid-Chesapeake Bay Island Ecosystem Restoration Project would replace hundreds of acres of lost wetland and upland remote island habitat. This habitat would

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improve productivity in the surrounding area, while providing an environmentally sound method for the use of dredged material from the Chesapeake Bay approach channels to the Port of Baltimore. Cost effectiveness and incremental cost analysis techniques were used to evaluate alternative ecosystem restoration plans. Since the recommended plan would not have any significant adverse effects, no mitigation measures (beyond management practices and avoidance) or compensation measures would be required. The recommended plan is the most efficient and cost-effective of the alternatives considered and provides substantial environmental benefits. The recommended plan is the national ecosystem restoration plan (the NER plan).

3. The incremental cost of the disposal of dredged material for ecosystem restoration purposes over the least cost, environmentally acceptable method of disposal is shared in accordance with Section 210 of WRDA 1996 (PL 104-303). Project cost sharing for ecosystem restoration requires that the non-Federal sponsor provide 35 percent of the cost associated with construction of the project for the protection, restoration, and creation of aquatic and ecologically related habitats, including provision of all lands, easements, rights-of-way, and necessary relocations. Cost sharing for recreation features requires that the non-Federal sponsor provide 50 percent of the cost associated with construction cost. Recreation facilities will be constructed on existing project lands required for the environmental restoration. Further, the non-Federal project sponsor must pay 100 percent of the operation, maintenance, repair, replacement, and rehabilitation costs associated with the project.

4. The Maryland Port Administration, under the auspices of the Maryland Department of Transportation is the non-Federal sponsor for the project. The estimated total first cost including contingencies for the Mid-Chesapeake Bay Island Ecosystem Restoration Project is $1.612 billion based on October 2008 price levels. The Federal share of the total project costs would be $1.045 billion for the Federal government (65 percent) and $567 million for the non-Federal sponsor (35% percent). Operations, maintenance, repair, rehabilitation, and replacement (OMRR&R) costs for the completed project are projected to be less than 2 percent of the total project cost and would be a non-Federal responsibility. The first costs of the recommended recreation facilities are estimated at $210,000. The Federal Government and the non-Federal sponsor would each share 50 percent of the cost or $105,000. Since the recreation features are not planned to be constructed until the project is largely complete, OMRR&R costs would be incurred beyond to period of analysis for the project and so are not included in the project cost.

5. The cost of the recommended environmental restoration plan is justified by the restoration of 2,144 acres of remote island habitat (2,072 acres at James Island and 72 acres at Barren Island), the protection of approximately 1,325 acres of SAV habitat adjacent to Barren Island, and achieving habitat increases in the most cost-effective manner. The habitats constructed as part of the Mid-Bay Ecosystem Restoration Project will restore additional remote island habitat, a scarce and rapidly vanishing ecosystem niche within the Chesapeake Bay region that provide a vital

connection for avian species between open-water and mainland terrestrial habitats within the region and provide valuable nesting habitat for a variety of colonial nesting and wading bird species. Protection of the extensive SAV beds east of Barren Island will provide nursery habitat for blue crabs and many species of commercially important finfish species, while also providing foraging habitat for waterfowl. The restoration projects at James and Barren Islands would contribute to the goals of the Chesapeake Bay Program watershed partnership through its habitat and ecosystem recovery and preservation efforts. Both James and Barren Islands would contribute to the Chesapeake 2000 Agreement goals to restore tidal and non-tidal wetlands, to protect and restore submerged aquatic vegetation, and to develop strategies to address water clarity in areas of critical importance for submerged aquatic vegetation.

6. The Corps of Engineers uses a Campaign Plan to establish priorities, focus transformation initiatives, measure and guide progress, and adapt to the needs of the future. The second of four goals of the Campaign Plan is to deliver enduring and essential water resource solutions through collaboration with partners and stakeholders. In developing this project, the Corps of Engineers has focused its talents and energy on a comprehensive, sustainable and integrated solution to the one of the Chesapeake Bay's greatest water resources and related challenges, and has accomplished this through collaboration with a diverse group of organizations and individuals, ranging from large government agencies to local watermen making their living on the Chesapeake Bay in the vicinity of James and Barren Islands. They included numerous local, State, and Federal agencies; defined groups such as watermen's, fishermen's, and boating associations; and private citizens. Through this substantial network of stakeholders and the beneficial use of dredged material, this project is an integrated and holistic solution that not only sustains one of the Nation's most productive ports, but ensures that the invaluable remote island habitat that the project is restoring in the Nation's largest estuary is equally sustainable.

7. The plan as developed is technically sound, economically efficient, and environmentally and socially acceptable. The plan conforms with essential elements of the U.S. Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies and complies with other administration and legislative policies and guidelines. The development of this project benefited from an extensive review process that included the District Quality Control by the Baltimore District, Agency Technical Review by the Philadelphia District, and an Independent External Peer Review. District Quality Control reviewed basic science and engineering products. The Agency Technical Review was an in-depth review by senior Corps personnel to ensure the proper application of clearly established criteria, regulations, laws, codes, principles, and professional practices. In addition, the primary benefit model, the Island Community Units Model, was reviewed by the Corps of Engineers National Ecosystem Planning Center of Expertise and the Engineer Research and Development Center. Approval of the application of the Island Community Units model was recommended for the Mid-Chesapeake Bay Island Ecosystem Restoration Project. It was also determined that

use of the model for future projects would require additional documentation supporting model assumptions, justification of guild weightings, and a sensitivity analysis of individual guild models and guild weighting.

8. The Independent External Peer Review (IEPR) was managed by an outside eligible organization that assembled a panel of four experts in the fields of engineering, estuarine ecology, economics and plan formulation, and hydrology. Ultimately, the panel identified and documented 14 comments. Four were classified as low significance and included comments about the influence of climate change on design, the addition of figures to the main body of the report, citations for restoration literature, and clarification of the location for dredged material in the most probable future without project condition. These comments were addressed with minor modifications to the feasibility report. Eight of the comments were classified as medium significance. They included the level of rigor/review of the preferred alternative; the use of a sensitivity analysis and the documentation of risk and uncertainty; the schedule for establishment of a fully functioning marsh; further discussion of the link between the need and scale of the project with the target volume of dredged material; description of the environmental monitoring; connectivity between the salt marsh and the estuary; inclusion of climate change, sea level rise, and invasive species in the Adaptive Management Plan; and potential discounting of environmental outcomes over the project lifetime. As a result, clarification was added to the report, a cost and schedule risk assessment was conducted, and a detailed monitoring plan and Adaptive Management Plan are being developed with the assistance of the panel's recommendations. The remaining two panel comments were determined to be of high significance. One concern was that the analysis of environmental benefits was biased by the failure to subtract quantitative habitat injuries, making the selection process and justification of the preferred alignment unreliable. In response, the team worked with fishery managers to quantify adverse impacts from filling the water column and benthic habitat and provided a discussion to support the conclusions produced by the plan formulation selection process using net benefits. The second concern was that water quality impacts associated with construction and the potential negative impacts of resettled suspended sediment were not addressed. As suggested by the IEPR reviewers, the team prepared an assessment that considered sediment re-suspension, transport, and deposition, and oyster and submerged aquatic vegetation requirements to assess construction impacts for Barren and James Islands. Federal and State resource agencies were involved in the planning and assessment of impacts. The team concluded that there will be no significant turbidity or environmental impacts to the oyster bars or submerged aquatic vegetation from construction at Barren or James Islands.

9. The views of interested parties, including Federal, State and local agencies, have been considered. Specific requests have been made for additional coordination with U.S. Fish and Wildlife Service and the National Marine Fisheries Service as detailed designs proceed on the

project. USACE has agreed to continue close coordination with these agencies and other affected parties as the design and construction process continues.

10. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend implementation of the authorized project in accordance with the reporting officers' plan with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of WRDA 1986, as amended. The non-Federal sponsor would provide the non-Federal cost share and all LERRD. Further, the non-Federal sponsor would be responsible for all OMRR&R. This recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and policies, including the following requirements:

a. Provide a minimum of 35 percent of total ecosystem restoration costs as further specified below:

1) Provide *25* percent of design costs allocated by the Government to ecosystem restoration in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

2) Provide, during the first year of construction, any additional funds necessary to pay the full non-Federal share of design costs allocated by the Government to ecosystem restoration;

3) Provide all lands, easements, and rights-of-way, including suitable borrow, and perform or ensure the performance of all relocations determined by the Federal Government to be necessary for the construction, operation, and maintenance of the project;

4) Provide all improvements required on lands, easements, and rights-of-way to enable the proper placement of dredged or excavated material associated with the construction, operation, and maintenance of the project;

5) Provide, during construction, any additional amounts as are necessary to make its total contribution at least 35 percent of ecosystem restoration costs.

b. Provide 50 percent of total recreation costs as further specified below:

1) Provide 25 percent of design costs allocated by the Government to recreation in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

2) Provide during the first year of construction, any additional funds necessary to pay the non-Federal share of design costs allocated by the Government to recreation;

3) Provide all lands, easements, and rights-of-way, including those required for relocations, and borrowing of material, and the disposal of dredged or excavated material;

perform or ensure the performance of all relocations; and construct all of the improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated materials all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the recreation features;

4) Provide, during construction, any funds necessary to make its total contribution for recreation equal to 50 percent of the recreation costs;

5) Provide during construction, 100 percent of the total recreation costs that exceed an amount equal to 10 percent of the Federal share of total ecosystem restoration costs.

c. For so long as the project remains authorized, operate, maintain, repair, replace, and rehabilitate the project, or functional portion of the project, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government.

d. Shall not use the project or project lands, easements, and rights-of-way as a wetland bank or mitigation credit required for another project.

e. Provide and maintain recreation features and public use facilities open and available to all on equal terms.

f. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor, now or hereafter, owns or controls for access to the project for the purpose of inspection, and, if necessary after failure to perform by the non-Federal sponsor, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the project. No completion, operation, maintenance, repair, replacement, or rehabilitation by the Federal Government shall operate to relieve the non-Federal sponsor of responsibility to meet the non-Federal sponsor's obligations, or to preclude the Federal Government from pursuing any other remedy at law or equity to ensure faithful performance.

g. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the project and any project related betterments, except for damages due to the fault or negligence of the United States or its contractors.

h. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, or other evidence are required, to the

extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 CFR Section 33.20.

i. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), PL 96-510, as amended, 42 U.S.C. 9601-9675, that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for the construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal government provides the non-Federal sponsor with prior specific written direction, in which case, the non-Federal sponsor shall perform such investigations in accordance with such written direction.

j. Assume, as between the Federal government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated substances located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be necessary for the construction, operation, or maintenance of the project.

k. Agree, as between the Federal Government and the non-Federal sponsor, the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability. To the maximum extent practicable, operate, maintain, repair, replace, and rehabilitate the project in a manner that will not cause liability to arise under CERCLA.

l. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91 -646, as amended (42 U.S.C. 4601 - 4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way, required for the construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the placement of dredged or excavated material, and inform all affected persons of applicable benefits, policies, and procedures under said Act.

m. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of -the Civil Rights Act of 1964, PL 88-352 (42 U.S.C. 2000d); Department of Defense Directive 5500.1 1 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army;" and all applicable Federal labor standards including,

but not limited to, 40 U.S.C. 3 141 -48 and 40 U.S.C. 3701-08 (reversing, codifying, and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 267a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c et seq.),

11. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program nor the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to the Congress, the sponsors, the State, interested Federal agencies, and other parties will be advised of any modifications and will be afforded an opportunity to comment further.

R. L. VAN ANTWERP
Lieutenant General, US Army
Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:
CECW-SAD (1105-2-10a)

MAR 11 2010

SUBJECT: Comprehensive Everglades Restoration Plan, Central and Southern Florida, Caloosahatchee River (C-43) West Basin Storage Reservoir Project, Hendry County, Florida

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration improvements for the Caloosahatchee River (C-43) West Basin Storage Reservoir project, located in Hendry County, Florida. It is accompanied by the report of the district and division engineers. These reports are in response to Section 601 of the Water Resources Development Act (WRDA) of 2000, which authorized the Comprehensive Everglades Restoration Plan (CERP) as a framework for modifications and operational changes to the Central and Southern Florida Project that are needed to restore, preserve, and protect the South Florida ecosystem while providing for other water-related needs of the region, including water supply and flood protection. WRDA 2000 identified specific requirements for implementing components of the CERP, including development of a decision document known as a Project Implementation Report (PIR). The Caloosahatchee River (C-43) West Basin Storage Reservoir Project is a component of the CERP that was not specifically authorized in that Act. The authority for the preparation of the Caloosahatchee River (C-43) West Basin Storage Reservoir Project Implementation Report (PIR), one of a number of site-specific projects, is contained in Section 601(d) of WRDA 2000. Congress may authorize the project following review and approval of a PIR by the Secretary of the Army. The requirements of a PIR are addressed in this report. Preconstruction engineering and design activities for this Project will be continued under the existing CERP Design Agreement.

2. The PIR recommends a project that significantly contributes to two of the ecologic goals and objectives of the CERP: improving habitat and functional quality and improving native plant and animal species abundance and diversity. In addition, it contributes to the socioeconomic objective of providing recreational and navigation opportunities. Scientists have established that a mosaic of uplands, freshwater marsh, deep water sloughs, and estuarine habitats supporting a diverse community of fish and wildlife was one of the defining characteristics of the pre-drainage Everglades ecosystem. Currently in south Florida, habitat function and quality has significantly declined in remaining natural system areas due to water management projects and practices, resulting in a loss of suitable nesting, foraging, and fisheries habitat and a decline in native species diversity and abundance. The PIR confirms information in the CERP and provides project-level evaluation of costs and benefits associated with construction and operations of a reservoir. Constructing and operating a reservoir would reduce the extreme salinity changes in the Caloosahatchee Estuary by providing a more consistent flow of fresh water discharging at S-79 into the Caloosahatchee River Estuary. The extreme fresh water

fluctuations are due to fresh water flows from basin runoff and releases from Lake Okeechobee. Due to the advanced land acquisition activities conducted jointly by the Federal Government and the State of Florida, the Project can be implemented relatively quickly, significantly advancing the realization of project benefits in an area that has been degraded by past water management activities.

3. The reporting officers recommend implementing the Caloosahatchee River (C-43) West Basin Storage Reservoir to improve the ecological function of the Caloosahatchee Estuary by capturing and storing the excess surface water runoff from the Caloosahatchee River watershed (or C-43 Basin) and excess releases from Lake Okeechobee. Stored water will then be discharged to the estuary during the dry season to augment existing inadequate flows. The project site is located on farm land adjacent to the Caloosahatchee River (C-43) canal in Hendry County and totals approximately 10,700 acres. The reservoir will require approximately 10,480 acres of land in fee and 20 acres of perpetual channel easement. Approximately 200 additional acres will be required on a temporary basis during project construction for staging areas. Approximately 7,080 acres of project lands were acquired with a 50 percent Federal cost-share using funds appropriated via the 1996 Federal Farm Bill and the Land and Water Conservation Funds that were specifically designated for the acquisition of lands to restore the South Florida ecosystem. Major features of the reservoir include external (dam) embankments varying in height from 32-37 feet above existing grade, Soil-Bentonite slurry walls within and beneath the external embankments, an internal (dam) embankment separating the two reservoir cells with an approximate height of 31 feet above existing grade, an inflow pump station consisting of diesel-powered pumps with a total pumping capacity of 1,500 cfs, a perimeter canal, and pump station consisting of electric-powered pumps with a total pumping capacity of 195 cfs, and numerous spillways, culverts, perimeter canal structures, an internal cell balancing structure, and outlet structures. Recreational opportunities are also provided at the site within the project footprint.

4. The total first cost of the recommended plan from the Final PIR and Integrated EIS, dated September 2007, based on October 2009 price levels, is estimated to be $570,480,000. The fully funded cost, based on October 2009 price levels, is estimated to be $610,736,000. Project cost increases since the Central and Southern Florida Project Comprehensive Restudy Study Final Integrated Feasibility Report and Programmatic Environmental Impact Statement, April 1999, are primarily due to the fact that the recommended plan is a larger reservoir than originally envisioned (170,000 acre-feet of storage compared to 160,000 acre-feet in the Restudy), that design refinements were needed to incorporate current methods and criteria for addressing dam safety requirements, and that real estate costs increased. Project cost increases from the final PIR to present are due to revisions to the land valuation crediting policy for CERP.

5. In accordance with the cost-sharing requirements of Section 601(e) of the WRDA 2000, as amended, the Federal cost of the recommended plan would be $ 305,368,000 and the non-Federal cost would be $305,368,000. The estimated lands, easements, rights-of-way, and relocations costs for the recommended plan are $84,650,000 of which approximately

$27,566,500 (Rounded) has been provided to the State through the Federal Department of Interior Grant Funds. Based on October 2009 price levels, a 40-year period of economic evaluation and a 4.375 percent discount rate, the equivalent annual cost of the proposed project is estimated at $37,600,000, which includes operation, maintenance, repair, rehabilitation and replacement (OMRR&R), interest and amortization. The estimated annual costs for restoration OMRR&R are $3,100,000. The annual OMRR&R costs for recreation are estimated at $25,000. As a component of the CERP program, the interagency/interdisciplinary scientific and technical team, formed to ensure that system-wide goals are met, will participate in the annual monitoring to assess system-wide changes. In accordance with Sections 601(e)(4) and 601(e)(5)(D) of WRDA 2000 as amended, OMRR&R costs and adaptive assessment and monitoring costs will be shared equally between the Federal Government and the non-Federal sponsor. OMRR&R costs related to recreation features will be funded 100 percent by the non-Federal sponsor.

6. To ensure that an effective ecosystem restoration plan was recommended, cost effectiveness/incremental cost analysis techniques were used to evaluate alternative restoration plans. These techniques determined the selected alternative plan to be cost effective. The plan recommended for implementation is an increment of the National Ecosystem Restoration (NER) plan, it supports the adaptive management recommendations established by the National Research Council, and it meets the policy criteria established in U.S Army Corps of Engineers (USACE) guidance for planning in a collaborative environment. The recommended plan provides benefits by: 1) reducing harmful discharges to the Caloosahatchee Estuary by capturing a portion of high flow releases from Lake Okeechobee and basin runoff from the lower West Caloosahatchee River Basin during the wet season, 2) storing the water until needed in a reservoir, and 3) discharging stored water to supplement inadequate flows over S-79 to Caloosahatchee Estuary during the dry season, thereby reducing stress on the natural system. Hydrologic output comparisons were made between the flow frequency distribution of each alternative plan and the target frequency distribution for the combined monthly and weekly average freshwater inflows at S-79 for a nine year period of record. The nine years chosen out of the 36 year period of record contain three wet, three dry and three normal years. Biological outputs used to compare plans are based on several parameters that indicate the degree to which natural vegetative conditions and key indicator species are restored. The parameters for both hydrologic outputs and biological outputs are based on established peer-reviewed hydrologic and conceptual ecological models developed to guide the restoration of the South Florida ecosystem.

7. The recommended plan improves functional fish and wildlife habitat in the Caloosahatchee River Estuary. The Everglades has been designated an International Biosphere Reserve (1976) and a World Heritage Site (1979) by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and a Wetland of International Importance (1987) in accordance with the Ramsar Convention. The portion of the Everglades ecosystem directly affected by the Caloosahatchee River (C-43) West Basin Storage Reservoir, including the project site and the Caloosahatchee River and Estuary, provides habitat for 21 federally-listed endangered or threatened species, including the Florida panther, Everglades snail kite, wood stork, manatee, eastern indigo snake, Audubon's crested caracara and five species of sea turtles. In accordance

with the WRDA 2000 Section 601(f)(2), individual CERP projects shall be justified by the environmental benefits derived by the South Florida ecosystem. Similarly, Section 385.9(a) of the CERP Programmatic Regulations (33 CFR Part 385) requires that individual projects shall be formulated, evaluated, and justified based on their ability to contribute to the goals and purposes of the Plan and on their ability to provide benefits that justify costs on a next-added increment basis. The Caloosahatchee River (C-43) West Basin Storage Reservoir Project, operating in conjunction with other projects in the comprehensive plan produces an average annual increase of 12,809 habitat units in the Caloosahatchee River Estuary. On a next-added increment (NAI) basis (meaning adding the Caloosahatchee River (C-43) West Basin Storage Reservoir as the next project to be added to a system of projects) the Caloosahatchee River (C-43) West Basin Storage Reservoir project delivers about 15,300 average annual habitat units. Based on restoration first cost and the Caloosahatchee Estuary, the cost per acre benefited is about $8,034. On a next-added increment basis, the average annual cost per average annual habitat unit is approximately $2,825. Based on these parameters, the Caloosahatchee River (C-43) West Basin Storage Reservoir project is justified by the environmental benefits derived by the South Florida ecosystem and on a next-added increment basis. All NEPA compliance requirements have been completed. Final EIS coordination began on 21 September 2007 and concluded on 22 October 2007. No significant environmental changes have occurred since the EIS coordination was finalized in 2007.

8. Section 601(e)(5)(B) of the Water Resources Development Act of 2000, as amended by Section 6004 of the Water Resources Development Act of 2007, authorizes credit toward the non-Federal share for non-Federal design and construction work completed during the period of design or construction, subject to the execution of the design or project partnership agreement, and subject to a determination by the Secretary that the work is integral to the project. This project is included in the "Expedited Projects" formerly called Acceler8. The reporting officers recommend that the non-Federal sponsor be credited for all reasonable, allowable, necessary, auditable, and allocable costs applicable to The Caloosahatchee River (C-43) West Basin Storage Reservoir Project as may be authorized by law, including those incurred in advance of executing a project partnership agreement for this project, subject to authorization of the Project by law, a determination by the Assistant Secretary of the Army (Civil Works) or his/her designee that the In-kind work is integral to the Authorized CERP Project, that the costs are reasonable, allowable, necessary, auditable, and allocable, and that the In-kind work has been implemented in accordance with Government standards and applicable Federal and State laws.

9. Credits for non-Federal design and construction will be evaluated in accordance with the terms of the Master Agreement Between the Department of the Army and South Florida Water Management District for Cooperation in Constructing and Operating, Maintaining, Repairing, Replacing, and Rehabilitating Projects Authorized to be Undertaken Pursuant to the Comprehensive Everglades Restoration Plan, executed on 13 August 2009 (hereinafter "Master Agreement"). All documentation provided by the non-Federal sponsor will be thoroughly reviewed by USACE to determine reasonable, allowable, necessary, auditable, and allocable costs. Upon completion of this review, a financial audit will be conducted prior to granting final

credit. Coordination between USACE and the Sponsor will occur throughout design and construction via the USACE Regulatory process. The credit afforded to the non-Federal sponsor will be limited to the lesser of the following: (1) actual costs that are reasonable, allowable, necessary, auditable, and allocable to the Project; or (2) the USACE estimate of the cost of the work allocable to the Project had USACE performed the work. The non-Federal sponsor intends to implement this work using its own funds and would not use funds originating from other Federal sources unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized by statute and in accordance with Section 601 (e)(3) of WRDA 2000 as amended and the Master Agreement.

10. The plan recommended by the reporting officers is environmentally justified, technically sound, cost effective, and socially acceptable. The plan conforms to essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies and complies with other administration and legislative policies and guidelines. Also, the views of interested parties, including Federal, State and local agencies, have been considered.

State and Agency comments received during review of the Final PIR/EIS included concerns raised by the Florida Department of Agriculture and Consumer Services (FDACS) related to savings clause requirements and water reservations within the Caloosahatchee Basin. These concerns were addressed through several multi-agency meetings and ultimately resolved in a Headquarters, US Army Corps of Engineers (HQUSACE) response dated August 11, 2009. This letter stated that "all water to be protected for the natural system is a result of being able to capture and store excess Lake Okeechobee discharges to tide, and then delivering that water at the right time to meet estuary salinity targets. This project as simulated in the modeling, and as it will be operated, will not reduce the amount of water available from existing sources in the C-43 Basin or the amount available to existing legal users."

The U.S. Environmental Protection Agency, the Southwest Florida Regional Planning Council (SWFRPC), Lee County, and the City of Sanibel provided comments expressing water quality concerns associated with the construction and operations of the reservoir. In response, USACE and the non-Federal sponsor explained that the intent of this project is to focus on meeting salinity targets in the estuary. Future CERP planning efforts will focus on other problems, including water quality, identified in the Caloosahatchee River Basin. This project is permitted through the Florida Department of Environmental Protection (FDEP) and compliant with State water quality standards. The FDEP finds that there are reasonable assurances that "State water quality standards, including water quality criteria and moderating provisions, will be met." (FDEP letter to the Mayor of Sanibel dated April 30, 2007). USACE will require the permit holder to conduct limited algal monitoring. The primary purpose of monitoring for algae in the reservoir will be for the prevention of harmful algal bloom exposure to recreationists and users of the downstream potable water supply systems. This initial monitoring program will be assessed after two years to determine if modifications are needed. USACE also intends to require that the permit holder develop an Algal Monitoring and Management Plan for the

reservoir. This plan should include a long-term monitoring program as well as management plans should an algal bloom develop. Additionally, the non-Federal sponsor in conjunction with Lee County has acquired the Boma Property immediately east of S-78 along the Caloosahatchee River for the construction of a water quality treatment facility targeting nitrogen removal. Plans for this facility are being developed as part of the Northern Everglades Program, Caloosahatchee River Watershed Protection Plan, a cooperative State effort between the non-Federal sponsor, FDEP, and FDACS.

The SWFRPC additionally expressed concerns with the intended use of the Picayune Strand Restoration Project lands as mitigation for Florida panther habitat impacted by the construction and operation of the Caloosahatchee River (C-43) West Basin Storage Reservoir. In response, USACE stated that the USFWS has lead responsibility for programmatic tracking of Florida panther habitat losses and gains associated with CERP projects. Although individual projects may cause some panther habitat loss, this loss is being evaluated in the context of the conservation of the species range-wide. Acquisition of lands for this project and other CERP projects has resulted in preservation of important lands that may have otherwise been used for development. A majority of Florida panther habitat to be preserved is associated with the nearby Picayune Strand Restoration Project (PSRP), which is adjacent to other large tracts of natural and preserved lands including Fakahatchee Strand Preserve State Park and Big Cypress National Preserve. Acquisition and preservation of lands in the Caloosahatchee River (C-43) West Basin Storage Reservoir study area are consistent with the USFWS' goal to locate, preserve, and restore tracts of lands containing sufficient area and appropriate land cover types to ensure the long-term survival of the Florida panther.

11. The Project complies with the following requirements of WRDA 2000 as amended:

a. Project Implementation Report (PIR). The requirements of a PIR as defined by Section 601(h)(4)(A).

b. Water Reservations. Sections 601(h)(4)(A)(iii)(IV) and (V) require identification of the appropriate quantity, timing, and distribution of water dedicated and managed for the natural system and the amount of water to be reserved or allocated for the natural system. Additional water delivered to and retained in natural areas was identified and will be reserved or allocated by the State of Florida.

c. Elimination or Transfer of Existing Legal Sources of Water. Section 601(h)(5)(A) states that existing legal sources of water shall not be eliminated or transferred until a new source of water supply of comparable quantity and quality is available to replace the water to be lost as a result of the Plan. Implementation of the Caloosahatchee River (C-43) West Basin Storage Reservoir project will not result in a transfer or elimination of sources of water to meet agricultural and urban demand in the Caloosahatchee River (C-43 Canal) Basin (remaining the same as before the project). Sources of water for the Seminole and Miccosukee Tribes and Everglades National Park are influenced by the regional water management system (C&SF

Project, including Lake Okeechobee), and will not be affected by this project. Therefore, there will be no elimination or transfer as a result of this project on existing legal sources of supply for: agricultural or urban water supply, allocation or entitlement to the Seminole Indian Tribe of Florida under Section 7 of the Seminole Indian Land Claims Settlement Act of 1987 (25 U.S.C. 1772e), the Miccosukee Tribe of Florida, water supply for Everglades National Park, or water supply for fish and wildlife.

d. Maintenance of Flood Protection. Section 601 (h)(5)(B) states that CERP shall not reduce levels of service for flood protection that are in existence on the date of enactment of this Act and in accordance with applicable law. Potential effects of the storage reservoir on water levels on adjacent lands were evaluated. In response to these evaluations, the Project includes a seepage management system, consisting of a seepage cut-off wall, seepage canal, and pump to ensure that adjacent lands in the immediate vicinity of the project are not adversely affected. The operations of this project will not change the operations of the Caloosahatchee River (C-43 Canal); therefore, there will be no system-wide effects on flood protection that will impact the regional basin as a result of the Project.

12. Agency technical reviews (ATR) of the Caloosahatchee River (C-43) West Basin Storage Reservoir document were carried out through collaboration with the National Ecosystem Restoration Planning Center of Expertise (PCX) in compliance with guidance at the time of Final PIR completion (2007). Extensive external scientific peer review through the National Academy of Science (NAS) has been conducted at the CERP programmatic level and will continue throughout the planning and implementation of the CERP program through the NAS biennial reports to Congress. In particular, the NAS promoted the use of traditional water storage technologies and the use of adaptive management principles within the formulation process. Both of these comments have been integrated into the formulation and design of the C-43 project. No further IEPR was deemed necessary or recommended for the study. In addition, no further IEPR is needed in response to WRDA 2007, since C-43 studies had been initiated and alternatives identified more than two years prior to its enactment and the final report had been submitted for approval prior to its passage.

13. I generally concur with the findings, conclusions, and recommendations of the reporting officers. The Caloosahatchee River (C-43) West Basin Storage Reservoir Project requires specific authorization by Congress in accordance with Section 601(d) of the WRDA 2000. Accordingly, I recommend that the plan described herein for ecosystem restoration be authorized for implementation as a Federal Project, with such modifications as in the discretion of the Chief of Engineers may be advisable, and subject to cost-sharing, financing, and other applicable requirements of Section 601 of WRDA 2000 as amended. In addition, I recommend that the non-Federal sponsor be authorized to receive credit for work accomplished prior to the execution of a Project Partnership Agreement (PPA) for this Project, in accordance with Section 601 of WRDA 2000, as amended, and the terms of the Master Agreement.

Further, this recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and agreeing to perform the following items of local cooperation:

a. Provide 50 percent of total project costs consistent with the provisions of Section 601(e) of the Water Resources Development Act of 2000 as amended including authority to perform design and construction of project features consistent with Federal law and regulation;

b. Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations that the Government and the Non-Federal Sponsor jointly determine to be necessary for the construction, operation, maintenance, repair, replacement and rehabilitation of the Project and valuation will be in accordance with the Master Agreement;

c. Shall not use the ecosystem restoration features or lands, easements, and rights-of-way required for such features as a wetlands bank or mitigation credit for any other projects.

d. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon land that the non-Federal sponsor owns or controls for access to the Project for the purpose of inspection, and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the Project;

e. Assume responsibility for operating, maintaining, repairing, replacing, and rehabilitating (OMRR&R) the Project or completed functional portions of the Project, including mitigation features, in a manner compatible with the Project's authorized purposes and in accordance with applicable Federal and State laws and specific directions prescribed in the OMRR&R manuals and any subsequent amendments thereto. Cost sharing for OMRR&R will be in accordance with Section 601 of WRDA 2000 as amended;

f. The non-Federal Sponsor shall operate, maintain, repair, replace and rehabilitate the recreation features of the Project with responsibility for 100 percent of the cost;

g. Keep the recreation features, and access roads, parking areas, and other associated public use facilities, open and available to all on equal terms;

h. Unless otherwise provided for in the statutory authorization for this Project, comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended, and Section 103 of the WRDA of 1986, Public Law 99-662, as amended, which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the Project or separable element;

i. Hold and save the Government free from all damages arising from construction, operation, maintenance, repair, replacement and rehabilitation of the Project and any project-related

betterments, except for damages due to the fault or negligence of the Government or the Government's contractors;

j. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the Project to the extent and in such detail as will properly reflect total project costs and comply with the provisions of the Master Agreement;

k. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601-9675, that may exist in, on, or under lands, easements or rights-of-way necessary for the construction, operation, and maintenance of the Project; except that the non-Federal sponsor shall not perform such investigations on lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude without prior specific written direction by the Government;

l. Assume complete financial responsibility for all necessary cleanup and response costs of any CERCLA-regulated materials located in, on, or under lands, easements, or rights-of-ways that the Government determines necessary for construction, operation, maintenance, repair, replacement and rehabilitation;

m. As between the Government and the non-Federal Sponsor, the non-Federal Sponsor shall be considered the operator of the Project for purposes of CERCLA liability. To the maximum extent practicable, the non-Federal Sponsor shall operate, maintain, repair, replace, and rehabilitate the Project in a manner that will not cause liability to arise under CERCLA;

n. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the outputs produced by the ecosystem restoration features, hinder operation and maintenance of the project, or interfere with the project's proper function;

o. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public law 91-646, as amended by title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and the Uniform Regulations contained in 49 CFR part 24, in acquiring lands, easements, and rights-of-way, and performing relocations for construction, operation, and maintenance of the Project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act;

p. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7,

entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army;" and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708[revising, codifying and enacting without substantive change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c)];

q. Comply with Section 106 of the National Historic Preservation Act in completion of all consultation with the Florida State Historic Preservation Officer, and as necessary, the Advisory Council on Historic Preservation, prior to construction as part of the preconstruction engineering and design phase of the project;

r. Provide 50 percent of that portion of total cultural resource preservation mitigation and data recovery costs attributable to the Project that are in excess of one percent of the total amount authorized to be appropriated for the Project;

s. Do not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized and in accordance with Section 601 (e)(3) of the WRDA of 2000, as amended, and in accordance with the Master Agreement;

t. The Non-Federal Sponsor agrees to participate in and comply with applicable Federal floodplain management and flood insurance programs consistent with its statutory authority.

(1) Not less than once each year the Non-Federal Sponsor shall inform affected interests of the extent of protection afforded by the Project.

(2) The Non-Federal Sponsor shall publicize flood plain information in the area concerned and shall provide this information to zoning and other regulatory agencies for their use in preventing unwise future development in the flood plain and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with protection levels provided by the Project.

(3) The Non-Federal Sponsor shall comply with Section 402 of WRDA 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to have prepared, within one year after the date of signing a PPA for the Project, a floodplain management plan. The plan shall be designed to reduce the impacts of future flood events in the project area, including but not limited to, addressing those measures to be undertaken by non-Federal interests to preserve the level of flood protection provided by the Project. As required by Section 402, as amended, the non-Federal interest shall implement such plan not later than one year after completion of construction of the Project. The Non-Federal Sponsor shall provide an information copy of the plan to the Government upon its preparation.

(4) The Non-Federal Sponsor shall prescribe and enforce regulations to prevent obstruction of or encroachment on the Project or on the lands, easements, and rights-of-way determined by the Government to be required for the construction, operation, maintenance, repair, replacement, and rehabilitation of the Project, that could reduce the level of protection the Project affords, hinder operation or maintenance of the Project, or interfere with the Project's proper function.

u. The overarching objective of the Plan is the restoration, preservation, and protection of the South Florida ecosystem while providing for other water-related needs of the region, including water supply and flood protection. The Federal Government and the non-Federal sponsor are committed to the protection of the appropriate quantity, quality, timing, and distribution of water to ensure the restoration, preservation, and protection of the natural system as defined in Section 601 of WRDA 2000, for so long as the project remains authorized. This quantity, quality, timing, and distribution of water shall meet applicable water quality standards and be consistent with the natural system restoration goals and objectives of the CERP, as the Plan is defined in the Programmatic Regulations. The non-Federal sponsor will protect the water for the natural system by taking the following actions to achieve the overarching natural system objectives of the Plan:

(1) Ensure, through appropriate and legally enforceable means under Florida law, that the quantity, quality, timing, and distribution of existing water that the Federal Government and the non-Federal sponsor have determined in this Project Implementation Report is available and beneficial to the natural system, will be available at the time the Project Partnership Agreement for the project is executed and will remain available for so long as the Project remains authorized.

(a) Prior to the execution of the Project Partnership Agreement, reserve or allocate for the natural system the necessary amount of water that will be made available by the project that the Federal Government and the non-Federal sponsor have determined in this Project Implementation Report.

(b) After the Project Partnership Agreement is signed and the project becomes operational, make such revisions under Florida law to this reservation or allocation of water that the non-Federal sponsor determines, as a result of changed circumstances or new information, is necessary for the natural system.

(2) For so long as the Project remains authorized, notify and consult with the Secretary of the Army should any revision in the reservation of water or other legally enforceable means of protecting water be proposed by the non-Federal sponsor, so that the Federal Government can assure itself that the changed reservation or legally enforceable means of protecting water conform with the non-Federal sponsor's commitments under paragraphs 1 and 2. Any change to

a reservation of water made available by the project shall require an amendment to the Project Partnership Agreement.

14. The recommendation contained herein reflects the information available at this time and current Departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities in the formulation of a national Civil Works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding.

R. L. VAN ANTWERP
Lieutenant General, US Army
Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

JAN 0 6 2011

CECW-SAD (1105-2-10a)

SUBJECT: Comprehensive Everglades Restoration Plan, Central and Southern Florida, Caloosahatchee River (C-43) West Basin Storage Reservoir Project, Hendry County, Florida - Supplemental

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress this supplement to my report on ecosystem restoration and recreation for the Caloosahatchee River (C 43) West Basin Storage Reservoir project, located in Hendry County, Florida, dated March 11, 2010. The purpose of this supplement is to clarify the authority for cost sharing of the recreational features recommended for the project.

2. In accordance with the Federal Water Project Recreation Act of 1965, full consideration was given to opportunities the project affords for recreation. The recommended C-43 West Basin Storage Reservoir project contains approximately $3,000,000 of recreation features, including a 12-mile multi-purpose trail and associated parking and toilet facilities, information kiosk, canoe/kayak launch facility, a shade structure, traffic control fencing, and a pedestrian footbridge to provide public access to the reservoir. These recreation features have been justified in accordance with policy.

3. Although cost sharing of the ecosystem restoration features for this project is governed by Section 601 of the Water Resources Development Act (WRDA) of 2000, as amended, cost sharing of the recreation features is governed by Section 103 of the WRDA 1986, as amended. In particular, in accordance with Section 103(j) of WRDA 1986, 100 percent of the cost of operation, maintenance, repair, replacement, and rehabilitation of the recreation features is the non-Federal sponsor's responsibility. In addition, Section 601(e)(5)(B) of WRDA 2000, as amended, governs credit for non-Federal sponsor design and construction work on the ecosystem restoration features of the project, whereas Section 221(a)(4) of the Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b(a)(4)) governs credit for non-Federal sponsor design and construction work on the recreation features of the project.

4. As part of this supplement, the costs of the project have been escalated and updated to October 2010 price levels and the reporting format has been changed from fully funded costs to initial investment. The total first cost of the recommended plan from the Final Project Implementation Report and Integrated Environmental Impact Statement, dated September 2007, based on October 2010 price levels, is estimated to be $579,599,000, including $576,643,000 for ecosystem restoration and $2,956,000 for recreation. In accordance with Section 601 of the

WRDA 2000, as amended, for the ecosystem restoration features of the recommended plan, the estimated Federal cost is $288,321,500 and the estimated non-Federal cost is $288,321,500. In accordance with Section 103(c) of the WRDA 1986, as amended, for the recreational features of the recommended plan, the estimated Federal cost of $1,478,000; and the non-Federal cost is $1,478,000. The estimated lands, easements, rights-of-way, and relocations costs for the recommended plan are $84,650,000 of which approximately $27,567,000 has been provided to the State through the Federal Department of Interior Grant Funds. Based on October 2010 price levels, a 40-year period of economic evaluation and a 4.12 percent discount rate, the equivalent annual cost of the proposed project is estimated at $35,500,000, which includes operation, maintenance, repair, rehabilitation and replacement (OMRR&R), interest and amortization. The estimated annual OMRR&R costs for ecosystem restoration are $3,160,000. The annual OMRR&R costs for recreation are estimated at $25,000. In accordance with Section 601 of WRDA 2000 as amended, OMRR&R costs and adaptive assessment and monitoring costs for ecosystem restoration will be shared equally between the Federal Government and the non-Federal sponsor. In accordance with Section 103(j) of the WRDA 1986, as amended, OMRR&R costs related to recreation features will be funded 100 percent by the non-Federal sponsor.

Respectfully,

R. L. VAN ANTWERP
Lieutenant General, US Army
Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, DC 20314-1000

REPLY TO
ATTENTION OF
CECW-MVD

DEC 30 2010

SUBJECT: Louisiana Coastal Area, Louisiana, Ecosystem Restoration, Six Projects Authorized by Section 7006(e)(3) of Water Resources Development Act of 2007

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my favorable report on ecosystem restoration for six projects in multiple locations in coastal Louisiana. It is accompanied by the report of the New Orleans District Engineer and Mississippi Valley Division Engineer. These reports are in response to the authorization contained in Section 7006(e)(3) of the Water Resources Development Act (WRDA) of 2007. Section 7006(e)(3) identifies six projects referred to in the Report of the Chief of Engineers for ecosystem restoration for the Louisiana Coastal Area dated January 31, 2005, and states, in part, as follows:

> *"The Secretary may carry out the projects under subparagraph (A) substantially in accordance with the plans and subject to the conditions, recommended in a final report of the Chief of Engineers if a favorable report of the Chief is completed by not later than December 31, 2010."*

Preconstruction engineering and design of all six projects will be undertaken under the authority provided in Section 7006(e)(3). Construction of these projects will be undertaken under the Section 7006(e)(3) authority as well, except for construction of the Medium Diversion at White Ditch and the elements of the Terrebonne Basin Barrier Shoreline Restoration beyond the Whiskey Island component.

2. The Report of the Chief of Engineers for ecosystem restoration for the Louisiana Coastal Area, dated January 31, 2005, (hereinafter referred to as the "restoration plan"), describes a program to address the most critical restoration needs to reduce the severe wetland losses occurring in Louisiana. The restoration plan includes 15 near-term ecosystem restoration features, a demonstration project program, beneficial use of dredged material program, project modifications program, and a science and technology program. These features and programs were all aimed at addressing the critical restoration needs of coastal Louisiana, with Congress authorizing the features for construction, in WRDA 2007, subject to the conditions recommended in a final report of the Chief of Engineers, if a favorable Chief's Report is completed no later than December 31, 2010. This report addresses six of the 15 near-term ecosystem restoration features described in the restoration plan.

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3. In accordance with Section 7006(e)(3), the reporting officers recommend that the Secretary carry out under the existing authorization the following five projects: Amite River Diversion Canal Modification; Convey Atchafalaya River Water to Northern Terrebonne Marshes; Multipurpose Operation of the Houma Navigation Canal Lock; Small Diversion at Convent / Blind River; and the Whiskey Island component of the Terrebonne Basin Barrier Shoreline Restoration. The recommended plans for each project contain post-construction monitoring and adaptive management for a period of no more than ten years to ensure project performance. Because the recommended plans are ecosystem restoration plans, they do not have any significant adverse effects and no mitigation measures would be required. While the reporting officers recommend that the Secretary carry out the Multipurpose Operation of the Houma Navigation Canal Lock Project, implementation of this project would be contingent on the construction of a lock at Houma under separate authority.

4. The reporting officers also recommend that the Congress raise the total project cost for the Medium Diversion at White Ditch Project and the recommended plan for the Terrebonne Basin Barrier Shoreline Restoration Project. These projects are consistent with the authorization in Section 7006(e)(3) of WRDA 2007, but modification of that authorization is required, because the total costs for these projects exceed the authorized costs as defined in Section 902 of WRDA 1986, as amended.

5. The reporting officers developed the recommended six projects for Louisiana Coastal Area consistent with the direction provided in WRDA 2007. The reporting officers found each of the six projects to be cost effective, technically sound, and environmentally and socially acceptable. Further refinement and additional analysis of these projects will be performed during preconstruction engineering and design and modifications made, as appropriate, prior to project implementation. Such analysis or modifications will continue to be coordinated with Federal, State, and local agencies and other parties. The following paragraphs describe each of the projects in greater detail.

a. Amite River Diversion Canal Modification. The LCA Amite River Diversion Canal Modification (ARDC) study area is located approximately 30 miles southeast of the City of Baton Rouge and west of Lake Maurepas within one of the largest remaining cypress swamps in coastal Louisiana. This ecosystem provides habitat to threatened and endangered species and buffers the highly developed Interstate 10 corridor between New Orleans and Baton Rouge and Lake Maurepas. The 2004 LCA report recommended several projects to address the restoration and stability of the Maurepas Swamp ecosystem including the Small Diversion at Covent / Blind River also included in this report. The ARDC study area includes portions of the Maurepas Swamp adjacent to the Amite River Diversion Canal which connects, and diverts flows from, the Amite River to the lower Blind River near Lake Maurepas. The ARDC recommended plan (Alternative 33) will restore the most degraded portion of the Maurepas Swamp within the study area by restoring the natural hydrology modified by the construction of the Amite River

Diversion Canal and from the resulting impoundment of water, lack of freshwater, sediment and nutrients, and surge-related saltwater intrusion. The recommended plan includes the creation of three gaps and delivery channels through the north bank of the Amite River Diversion Canal. The bank gaps are 70-foot wide cuts with 25-foot benches through the dredged material berm. The channel cross section is 70, 50 and 30 foot wide as it moves into the swamp. Freshwater swamp tree species will be planted on 438 acres in the swamp. One cut will also be created in the railroad grade approximately 0.9 miles north of the ARDC to improve sheetflow. The recommended plan is an implementable increment of the national ecosystem restoration (NER) plan, meets the LCA Program and project objectives, and is within the cost and scope of the authorization contained in Section 7006(e)(3) of WRDA 2007. The NER plan would create gaps on both the north and south bank of the ARDC along with deliery channels, gaps in the railroad grade and vegetative plantings benefiting 3,881 acres of swamp. The NER plan also includes all the areas addressed by the recommended plan and an additional area that is expected to need restoration in the next 20 years. The NER plan would provide 1,602 average annual habitat units (AAHUs) with a total estimated cost for construction of $15,200,000, which exceeds the current authorization. The State of Louisiana, acting as the non-Federal sponsor, supports the recommended plan. The recommended plan will improve habitat function by 679 AAHUs over the 50-year period of analysis and benefit approximately 1,602 acres of existing freshwater swamp. The estimated first cost of the recommended plan is $8,136,000 and in accordance with the cost sharing provisions of WRDA of 1986, as amended by Section 210 of WRDA 1996, the project will be cost shared 65 percent Federal and 35 percent non-Federal. The Federal share of the estimated first cost of this project is estimated at $5,288,000 and the non-Federal share is estimated at $2,848,000. The operation, maintenance, repair, replacement, and rehabilitation costs for the project are estimated at $10,000 per year and are 100-percent non-Federal responsibility. Based on a 4.375-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated at $489,000, including operation, maintenance, repair, replacement, and rehabilitation. Post-construction monitoring and adaptive management of this ecosystem restoration project is projected to be conducted for no more than 10 years at an estimated cost of $2,971,000.

b. Convey Atchafalaya River Water to Northern Terrebonne Marshes / Multipurpose Operation of the Houma Navigation Canal Lock. The LCA Convey Atchafalaya River Water to Northern Terrebonne Marshes (ARTM) / Multipurpose Operation of the Houma Navigation Lock (MOHNL) study area is located in coastal Louisiana south of Houma, between the Atchafalaya River and Bayou Lafourche. These two projects are hydrologically linked and subsequently have been analyzed and are presented as a combined feature. The ARTM/MOHNL recommended plan (Alternative 2), which is also the national ecosystem restoration plan, will reduce the current trend of marsh degradation in the project area resulting from subsidence, sea level rise, erosion, saltwater intrusion, and lack of sediment and nutrient deposition. The project proposes to accomplish this by utilizing fresh water and nutrients from the Atchafalaya River and the Gulf Intracoastal Waterway (GIWW). The recommended plan features consist of elimination of Gulf Intracoastal Waterway (GIWW) flow constrictions and construction of flow management

features in the interior portions of the Study Area. The recommended plan consists of construction of 56 structures and other water management features. The Carencro Bayou channel would be dredged to restore historic freshwater flow to southeast Penchant basin marshes. A weir would be constructed in Grand Pass to restrict saltwater intrusion into Lake Mechant and surrounding marshes. Several connections would be created between the Houma Navigation Canal and the Lake Boudreaux basin. St. Louis Canal and Grand Bayou would be enlarged to allow for increased fresh water flows into the eastern Terrebonne marshes. These new and enlarged channels would be controlled with water management features such as culverts with stop logs, gates or flap gates. Additionally, marsh berms and terracing would be constructed at strategic locations within the project area to prevent salt water intrusion and slow fresh water outflow. The recommended plan also includes the multipurpose operation of the proposed Houma Navigation Canal (HNC) Lock, if and when constructed. The lock complex would be closed and operated more frequently in order to maximize distribution of freshwater into wetlands downstream of the lock and minimizing saltwater intrusion upstream of the lock. For vessels exceeding the lock size, a traffic management system will be developed to open the sector gates to let these vessels pass. The recommended plan would improve habitat function by approximately 3,220 AAHUs, with the ARTM project providing approximately 2,977 AAHUs and the MOHNL operation providing 243 AAHUs. The project would improve habitat for fish and wildlife species including migratory birds , estuarine fish and shellfish. Benefits include the reduction of projected wetland loss by approximately 9,655 acres of existing wetlands over the 50-year period of analysis. The ARTM/MOHNL recommended plan meets the LCA Program and project objectives, is the NER Plan, and is within the cost and scope of the authorization. The State of Louisiana, acting as the non-Federal sponsor, supports the recommended plan.

The estimated total first cost of the ARTM recommended plan is $283,534,000. In accordance with the cost sharing provisions of WRDA of 1986, as amended by Section 210 of WRDA 1996, the project will be cost shared 65 percent Federal and 35 percent non-Federal. The Federal share of the estimated first cost of the ARTM project is $184,298,000 and the non-Federal share is estimated at $99,236,000. Post-construction monitoring and adaptive management of the ARTM ecosystem restoration project is projected to be conducted for no more than 10 years at an estimated cost of $21,204,000. The operation, maintenance, repair, replacement, and rehabilitation of the ARTM project is estimated at $73,000 per year and is a 100-percent non-Federal responsibility. Based on a 4.375-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the ARTM project are estimated at $15,907,000, including operation, maintenance, repair, replacement, and rehabilitation.

The estimated first cost of MOHNL project which is the incremental cost of operations of the proposed constructed lock, for ecosystem restoration is $1,496,000 and in accordance with the cost sharing provisions of WRDA of 1986, as amended by Section 210 of WRDA 1996, the project will be cost shared 65 percent Federal and 35 percent non-Federal. Federal share of the estimated first cost of the MOHNL project is $972,000 and the non-Federal share is estimated at $524,000. Post-construction monitoring and adaptive management of this ecosystem restoration

project is projected to be conducted for no more than ten years at an estimated cost of $98,000. There is no additional operation, maintenance, repair, replacement, and rehabilitation cost forecast for the modification of the lock project. However should any additional OMRR&R cost be identified in subsequent project design and operation investigations they would be a 100-percent non-Federal responsibility. Based on a 4.375-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated at $83,000, including operation, maintenance, repair, replacement, and rehabilitation. While the reporting officers recommend that the Secretary carry out the Multipurpose Operation of the Houma Navigation Canal Lock Project, this project cannot be implemented until a lock at Houma is constructed under separate authority.

c. Small Diversion at Convent / Blind River. The LCA Small Diversion at Convent/Blind River study area is located approximately equidistant between Baton Rouge and New Orleans, Louisiana within the Maurepas Swamp, one of the largest remaining cypress swamps in coastal Louisiana. The recommended plan (Alternative 2), which is also the national ecosystem restoration plan, will reintroduce the natural periodic, nearly annual flooding by the Mississippi River to the Maurepas Swamp and Blind River, that was cut off by construction of the Mississippi River and Tributaries (MR&T) flood control system. The recommended plan consists of a 3,000 cubic feet per second (cfs) capacity gated box culvert diversion on the Mississippi River with a delivery channel to be constructed in the vicinity of Romeville, Louisiana. The recommended plan has six major components: a diversion structure, a transmission canal, control structures, approximately 30 berm gaps, cross culverts at four locations along U.S. highway 61, and instrumentation to monitor and control the diversion flow rate and the water surface elevations in the diversion, transmission, and distribution system in the swamp. The recommended plan will restore freshwater, nutrients, and sediment input from the Mississippi River. It will promote water distribution in the swamp, facilitate swamp building, and establish hydrologic period fluctuation in the swamp, improving fish and wildlife habitat. The recommended plan will improve habitat function by 6,421 AAHUs over a total of 21,369 acres of bald cypress-tupelo swamp. The recommended plan would improve habitat for many fish and wildlife species including migratory birds, bald eagles, alligators, gulf sturgeon, and the manatee. The recommended plan meets the LCA program and project objectives and is within the scope of the authorization. The State of Louisiana, acting as the non-Federal sponsor, supports the recommended plan. The estimated total first cost of the recommended plan is $116,791,000 and in accordance with the cost sharing provisions of WRDA of 1986, as amended by Section 210 of WRDA 1996, the project will be cost shared 65 percent Federal and 35 percent non-Federal. The Federal share of the estimated first cost of this project is $75,914,000 and the non-Federal share is estimated at $40,877,000. Post-construction monitoring and adaptive management of this project is projected to be conducted for no more than 10 years at a cost of $6,620,000. The operation, maintenance, repair, replacement, and rehabilitation costs of the project are estimated at $2,754,000 per year and are a 100-percent non-Federal responsibility. If further analysis determines that the project increases maintenance dredging requirements for the Mississippi River, Baton Rouge to the Gulf of Mexico project by inducing shoaling, the

incremental costs of any additional maintenance dredging would also be a 100-percent non-Federal responsibility. Based on a 4.375-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated at $8,859,000, including operation, maintenance, repair, replacement, and rehabilitation.

d. Terrebonne Basin Barrier Shoreline Restoration. The LCA Terrebonne Basin Barrier Shoreline Restoration (TBBSR) study area is located in Terrebonne Parish 30 miles south of the city of Houma, Louisiana and includes the Isles Dernieres and the Timbalier Islands. The Isles Dernieres reach includes Raccoon, Whiskey, Trinity, East, and Wine Islands. The Timbalier Island reach includes Timbalier and East Timbalier Islands. These barrier islands have undergone significant reductions in size due to a number of natural processes and human actions including lack of sediment, storm-induced erosion and breaching, subsidence, sea level rise and hydrologic modifications such as navigation and oil and gas canals. These habitat losses have had a direct adverse impact on wildlife and fisheries resources including threatened and endangered species. Loss of the barrier island habitat also leaves the saline, brackish, and fresh marshes in the upper reaches of the Terrebonne Basin more vulnerable to the high energy marine coastal processes which have exacerbated wetland loss in these areas. The barrier islands also protect oil and gas infrastructure investments including hundreds of wells and pipelines which are of regional and national importance. Furthermore, numerical modeling indicates that the barrier islands reduce storm surges which can mitigate the damage associated with tropical storms on human populations and infrastructure in Terrebonne and Lafourche Parishes. The national ecosystem restoration (NER) plan (Alternative 5), will reintroduce sediment to the coastal sediment transport system. The NER plan includes the restoration of Raccoon Island with 25 years of advanced fill and construction of a terminal groin. The NER plan also includes restoration of Whiskey and Trinity Islands with five years of advanced fill and restoration of Timbalier Island with 25 years of advanced fill. The NER plan includes beach, dune, and marsh restoration and proposes dune heights ranging from +6.4 feet NAVD 88 for Whiskey Island to +7.7 feet NAVD 88 for Raccoon Island with a crest width of 100 feet to marsh heights ranging from +2.4 feet NAVD 88 on Whiskey Island to +3.2 NAVD 88 on Raccoon Island. The NER plan includes renourishment at staggered intervals to maintain the islands. Raccoon Island will be renourished at Target Year (TY) 30. Whiskey Island will require two renourishment intervals. The first will occur at TY20 and the second renourishment interval will occur at TY40. Trinity Island will be renourished at TY25. Timbalier Island will be renourished at TY30. The NER plan will restore geomorphic and hydrologic form provided by barrier island systems and restore and improve essential habitats for fish, migratory birds, and terrestrial and aquatic species. This barrier shoreline system is also a key component in regulating the hydrology, and ultimately the rate of wetland erosion, throughout the estuary. The NER plan consists of restoration of four islands (Whiskey, Raccoon, Trinity, and Timbalier) improving habitat function by 2,833 AAHUs by adding 3,283 acres to the islands for a total size of 5,840 acres. The restored acreage would include 472 acres of dune, 4,320 acres of supratidal habitat, and 1,048 acres of intertidal habitat and ensure the geomorphic and hydrologic form and ecological function of the majority of the estuary over the period of analysis. The recommended plan meets

the LCA program and project objectives and is within the scope of the authorization. However, it exceeds the authorized cost. The State of Louisiana, acting as the non-Federal sponsor, concurs with the reporting officers' recommendation that additional Congressional authorization be requested to allow implementation of the NER plan. The estimated total first cost of the NER plan is $646,931,000 and in accordance with the cost sharing provisions of WRDA of 1986, as amended by Section 210 of WRDA 1996, the project will be cost shared 65 percent Federal and 35 percent non-Federal. The Federal share of the estimated first cost of this project is $420,505,000 and the non-Federal share is estimated at $226,426,000. Post-construction monitoring and adaptive management of this ecosystem restoration project is projected to be conducted for no more than ten years at a cost estimated to be $5,280,000. The operation, maintenance, repair, replacement, and rehabilitation costs of the project, including periodic nourishment, are estimated at $9,960,000 per year and are a 100-percent non-Federal responsibility. Based on a 4.375-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated at $26,400,000, including operation, maintenance, repair, replacement, and rehabilitation.

While additional authority is needed to raise the total project cost to allow implementation of the entire NER plan, the reporting officers recommend that the Whiskey Island component (Alternative 11) of the NER plan be implemented under the existing authority provided in Section 7006(e)(3) of WRDA 2007. The Whiskey Island component includes renourishment every 20 years to maintain the constructed features. Restoration of the one island will increase habitat function by 678 AAHUs by restoring a total of 1,272 acres on the island, including 65 acres of dune, 830 acres of supratidal habitat, and 377 acres of intertidal habitat. The Whiskey Island component is an implementable increment of the NER plan, meets the LCA Program objectives, and is within the cost and scope of the current WRDA authorization. The State of Louisiana, acting as the non-Federal sponsor, supports immediate implementation of the Whiskey Island component. The estimated total first cost of the Whiskey Island component is $113,434,000 and in accordance with the cost sharing provisions of WRDA of 1986, as amended by Section 210 of WRDA 1996, the project will be cost shared 65 percent Federal and 35 percent non-Federal. The Federal share of the estimated first cost of this project is $73,732,000 and the non-Federal share is $39,702,000. Post-construction monitoring and adaptive management of this ecosystem restoration project is projected to be conducted for no more than ten years at an estimated cost of $5,820,000. The operation, maintenance, repair, replacement, and rehabilitation cost of the project, including periodic nourishment, are estimated at $6,900,000 per year and is a 100-percent non-Federal responsibility. Based on a 4.375-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated at $9,508,000, including operation, maintenance, repair, replacement, and rehabilitation.

e. Medium Diversion at White Ditch. The LCA Medium Diversion at White Ditch (MDWD) project area is located on the east bank of the Mississippi River south of New Orleans in Plaquemines Parish near the town of Phoenix, Louisiana. The area includes a portion of the Breton Sound basin framed by the Mississippi River and the River aux Chenes ridge as well as

the gulfward extent of the Breton Sound. The recommended plan, (Alternative 4), which is also the national ecosystem restoration plan, will restore the supply and distribution of freshwater and sediment disrupted by the construction of the Mississippi River and Tributaries flood control. The recommended plan includes a 35,000 cubic feet per second (cfs) capacity gated box culvert diversion on the Mississippi River with a delivery channel to be constructed in the vicinity of Phoenix, Louisiana. The structure will consist of ten 15-foot by 15-foot box culverts and an approximately 9,500 foot conveyance channel to move the diverted water into surrounding marshes. Additionally, notched weirs will be constructed at existing channel intersections to help control and direct the flow of water into the study area. Dredged material from the conveyance channel will be used beneficially to create approximately 416 acres of marsh and ridge habitat. The recommended operational plan consists of pulsing diversion flows up to 35,000 cfs through the structure during March and April and maintaining maintenance flows up to 1,000 cfs the rest of the year. The recommended plan will improve habitat function by 13,353 AAHUs by creating and nourishing approximately 20,315 acres of fresh, intermediate, brackish, and saline wetlands. This project is one of the key components to demonstrating both the ability to stem or reverse the coastal land loss trend and provide a mechanism to combat relative sea level rise in coastal Louisiana. The recommended plan meets the LCA Program objectives and is within the scope of the WRDA authorization, however, it exceeds the authorized project cost. The State of Louisiana, acting as the non-Federal sponsor, supports the reporting officers' recommendation that Congress increase the total project cost to allow implementation of the recommended plan to fully address the restoration needs of the study area identified in this report. Supplemental environmental analysis will be performed prior to construction of the recommended plan to address potential impacts on water quality and fisheries, including coordination with Federal, State, and local agencies and other interested parties as appropriate. The estimated total first cost of the recommended plan is $365,201,000 and in accordance with the cost sharing provisions of WRDA of 1986, as amended by Section 210 of WRDA 1996, the project will be cost shared 65 percent Federal and 35 percent non-Federal. The Federal share of the estimated first cost of this project is $237,381,000 and the non-Federal share is estimated at $127,820,000. Post-construction monitoring and adaptive management of this ecosystem restoration project is projected to be conducted for no more than ten years at an estimated cost of $11,143,000. The operation, maintenance, repair, replacement, and rehabilitation costs of the project are estimated at $1,468,000 per year and are a 100-percent non-Federal responsibility. If further analysis determines that the project increases maintenance dredging requirements for the Mississippi River, Baton Rouge to the Gulf of Mexico project by inducing river shoaling, the incremental costs of any additional channel maintenance dredging would also be a 100-percent non-Federal responsibility. Based on a 4.375-percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated at $21,237,000, including operation, maintenance, repair, replacement, and rehabilitation.

6. The State of Louisiana supports the recommended plans for the six projects described herein. At October 2010 price levels, the estimated total first cost for the recommended plans for the six

projects is $1,422,089,000. The estimated total first costs for each of the six projects are summarized below in Table 1.

Table 1
LCA Section 7006(e)(3) Projects
Recommended Plan Cost and Benefit Summary
(October 2010 Price Level)

Project	Alternative	Total First Cost	Impacted Acres	Average Annual Habitat Units
Amite River Diversion Canal Modification	Alt. 33	$8,136,000	1,602	679
Convey Atchafalaya River Water to Northern Terrebonne Marshes	Alt. 2	$283,534,000	9,655	3,220
Houma Navigation Control Lock	Alt. 2	$1,496,000	0***	243
Small Diversion at Convent/Blind River	Alt. 2	$116,791,000	21,369	6,421
Terrebonne Basin Barrier Shoreline Restoration	Alt. 11*	$646,931,000	5,840	2,063
	(Alt. 5)**	($113,434,000)	(1,272)	(379)
Medium Diversion at White Ditch	Alt. 4*	$365,201,000	35,146	13,353
Total		$1,422,089,000	73,612	25,979

* Implementation of the recommended plan to fully address the restoration needs of the study area identified in this report requires additional authorization by Congress by raising the total project cost.
** Alternative 5 (Whiskey Island) is an increment of Alternative 11 (the recommended plan).
*** Impacted acres overlap with Convey Atchafalaya River Water to Northern Terrebonne Marshes

7. In accordance with the cost sharing provisions of WRDA of 1986, as amended by Section 210 of WRDA 1996, the Federal share of the first cost of the six projects is estimated at $924,358,000 (65 percent) and the non-Federal share is estimated at $497,731,000 (35 percent). The cost of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas is estimated at $13,454,000. The total cost includes an estimated $47,856,000 for environmental monitoring, and adaptive management. The State of Louisiana, the non-Federal sponsor, would be responsible for the OMRR&R of the projects after construction, a cost currently estimated at about $15,605,000 per year.

Table 2 shows the Federal and non Federal cost of the projects.

Table 2
LCA Section 7006(e)(3) Projects
Cost Apportionment (October 2010 Price Level)

Project	Total First Cost	Federal Cost (65%)	Non-Federal Cost (35%)	Total Monitoring	Total Adaptive Management	Annual OMRR&R
Amite River Diversion Canal Modification	$8,136,000	$5,288,000	$2,848,000	$2,113,000	$858,000	$10,000
Convey Atchafalaya River Water to Northern Terrebonne Marshes	$283,534,000	$184,298,000	$99,236,000	$18,874,000	$2,428,000	$73,000
Houma Navigation Control Lock*	$1,496,000	$972,000	$524,000	$98,000	$0	$0
Small Diversion at Convent/Blind River	$116,791,000	$75,914,000	$40,877,000	$4,284,000	$2,336,000	$2,754,000
Terrebonne Basin Barrier Shoreline Restoration	$646,931,000	$420,505,000	$226,426,000	$8,280,000	$1,680,000	$11,300,000
	($113,434,000)	($73,732,000)	($39,702,000)	($4,140,000)	($1,680,000)	($6,900,000)
Medium Diversion at White Ditch	$365,201,000	$237,381,000	$127,820,000	$8,807,000	$2,336,000	$1,468,000
Total LCA	**$1,422,089,000**	**$924,358,000**	**$497,731,000**	**$38,218,000**	**$9,638,000**	**$15,605,000**

8. In concert with the Corps Campaign Plan, the plans recommended in this report were developed utilizing a systematic and regional approach in formulating solutions and in evaluating the impacts and benefits of those solutions. Specifically the projects individually and collectively provide enduring and essential water resources management solutions. The plans were developed through a broad based collaborative process that resulted in wetland restoration that enhances the sustainability of, and is integrated with, the multiple socio-economic purposes supported by the coastal ecosystem. The development of these projects also demonstrates the Corps goal to cultivate competent, disciplined teams to deliver quality plans.

9. Independent External Peer Review (IEPR) of the six conditionally authorized LCA projects was coordinated through the Planning Center of Expertise for Ecosystem Restoration and performed by Battelle Corporation. Independent technical review teams were assembled for each project. The technical review considered all aspects of the project evaluations and the resulting output. The IEPR comments identified concerns in areas of the evaluations that would benefit from additional refinement. The IEPR reviews concurred with the project recommendations and all comments were satisfactorily resolved. Several significant recommendations will be further evaluated during project implementation. In concurrence with

IEPR comments, additional documentation of hydrodynamic model and land change evaluations were provided for the Amite River Diversion Canal Modification, Convey Atchafalaya River Water to Northern Terrebonne Marshes, Multipurpose Operation of the Houma Navigation Canal Lock, and Small Diversion at Convent / Blind River projects. Additional documentation to support the alternative comparison and plan selection process was provided for all the presented projects to address the comments. Other actions will be taken in response to IEPR comments during project preconstruction engineering and design (PED). For the Amite River Diversion Canal Modification project, additional model refinements will be used to improve the forecast of relative sea level rise (RSLR) effects and revise the adaptive management (AM) plan. For the Convey Atchafalaya River Water to Northern Terrebonne Marshes / Multipurpose Operation of the Houma Navigation Canal Lock Canal Lock project, additional refinements of land change, RSLR, and wetland benefit forecast tools to better correlate them to the high complexity of the project area will be undertaken. For the Convent / Blind river project, additional data collection and refinement of the hydrodynamic model will be undertaken to minimize potential local drainage effects and identify specific management actions for swamp enhancement, as well as refine the AM plan. For the Terrebonne Barrier Shoreline project, refined assessment of estuary-wide current and wave conditions and physical process modeling will be undertaken to better capture the systemic benefits and allow better coordination of project implementation and O&M. Specific construction effects will also be assessed and construction modifications applied to minimize critical habitat disruption. For the White Ditch project, a refinement of the land change evaluation, and an assessment of the effect of RSLR will be undertaken to allow a clearer understanding of potential adaptive management needs and revision of the AM plan. Finally, for the Small Diversion at Convent / Blind River and the Medium Diversion at White's Ditch projects a comprehensive assessment of cumulative diversion impacts on the Mississippi River will be undertaken prior to the initiation of construction to improve the assessments of cumulative project effects and help set operational criteria.

10. The LCA plans recommended by the reporting officers are environmentally justified, technically sound, cost-effective, and socially acceptable. The recommended plans conform to essential elements of the U.S. Water Resources Council's Economic and Environmental Studies and comply with other administration and legislative policies and guidelines. Also, the views of interested parties, including Federal, State, and local agencies have been considered.

11. I concur in the findings, conclusions, and recommendation of the reporting officers. Accordingly, I recommend implementation of these projects, in accordance with the reporting officers' recommendations with such modifications as in the discretion of the Chief of Engineers may be advisable. I further recommend, in accordance with the reporting officers recommendations, that the authorizations for Terrebonne Basin Barrier Shoreline Restoration and Medium Diversion at White Ditch be modified to raise the total project cost to allow for construction of the national ecosystem restoration plans for those projects. My recommendations are subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including WRDA 1986, as amended by Section 210 of

WRDA 1996. The State of Louisiana, acting as the non-Federal sponsor, would provide the non-Federal cost share and all lands, easements, relocations, right-of-ways and disposals. Further, the non-Federal sponsor would be responsible for all OMRR&R. This recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and policies, including but not limited to its agreeing to:

a. Provide a minimum of 35 percent of total project costs as further specified below:

(1) Enter into an agreement which provides, prior to execution of the project partnership agreement, 25 percent of design costs;

(2) Provide, during the first year of construction, any additional funds needed to cover the non-Federal share of design costs;

(3) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material that the Government determines to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the project;

(4) Provide, during construction, any additional funds necessary to make its total contribution equal to 35 percent of the total project costs allocated to the project;

b. Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project;

c. Not use funds provided by a Federal agency under any other Federal program, to satisfy, in whole or in part, the non-Federal share of the cost of the project unless the Federal agency that provides the funds determines that the funds are authorized to be used to carry out the study or project;

d. Not use project or lands, easements, and rights-of-way required for the project as a wetlands bank or mitigation credit for any other project;

e. For as long as the project remains authorized, operate, maintain, repair, replace, and rehabilitate the project, or functional portion of the project, including mitigation, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and state laws and regulations and any specific directions prescribed by the Federal Government;

f. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor, now or hereafter, owns or controls for access to the project for the purpose of inspecting, operating, maintaining, repairing, replacing, rehabilitating, or completing the project. No completion, operation, maintenance, repair, replacement, or rehabilitation by the Federal Government shall relieve the non-Federal sponsor of responsibility to meet the non-Federal sponsor's obligations, or to preclude the Federal Government from pursuing any other remedy at law or equity to ensure faithful performance;

g. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the project and any project-related betterments, except for damages due to the fault or negligence of the United States or its contractors;

h. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for the initial construction, periodic nourishment, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

i. Assume, as between the Federal Government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be necessary for the initial construction, periodic nourishment, operation, or maintenance of the project;

j. Agree that, as between the Federal Government and the non-Federal sponsor, the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, and repair the project in a manner that would not cause liability to arise under CERCLA;

k. Prevent obstructions of or encroachments on the project (including prescribing and enforcing regulations to prevent such obstruction or encroachments) which might reduce ecosystem restoration benefits, hinder operation and maintenance, or interfere with the project's proper function, such as any new developments on project lands or the addition of facilities which would degrade the benefits of the project;

l. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, and other evidence is required, to the extent and in such detail as would properly reflect total costs of construction of the project, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20;

m. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5), and Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element;

n. Comply with all applicable Federal and state laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army," and all applicable Federal labor standards and requirements, including but not limited to 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying, and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c et seq.); and

o. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way necessary for the initial construction, periodic nourishment, operation, and maintenance of the project, including those necessary for relocations, borrow materials, and dredged or excavated material disposal, and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act.

12. The recommendations contained herein reflect the information available at this time and current departmental policies governing the formulation of individual projects. They do not reflect program and budgeting priorities inherent in the formulation of the national civil works construction program or the perspective of higher levels within the executive branch. Consequently, the recommendations may be modified before they are transmitted to Congress for authorization and/or implementation funding. However, prior to transmittal to Congress, the State of Louisiana, interested Federal agencies, and other parties will be advised of any significant modifications in the recommendations and will be afforded an opportunity to comment further.

R. L. VAN ANTWERP
Lieutenant General, US Army
Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

CECW-MVD (1105-2-10a)

DEC 30 2011

SUBJECT: Minnesota River, Marsh Lake Ecosystem Restoration Project, Minnesota

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration along the Minnesota River at Marsh Lake, a part of the Lac qui Parle Reservoir, west of Appleton, Minnesota. It is accompanied by the report of the district and division engineers. These reports were completed under authorities granted by a May 10, 1962, resolution of the Committee on Public Works of the U.S. House of Representatives. This resolution requested the review of "the report of the Chief of Engineers on the Minnesota River, Minnesota, published as House Document 230, 74th Congress, First Session and other pertinent reports, with a view to determining the advisability of further improvements in the Minnesota River Basin for navigation, flood control, recreation, low flow augmentation, and other related water and land resources." Preconstruction engineering and design activities for the Marsh Lake Ecosystem Restoration Project will continue under the authority provided by the resolution above.

2. The Marsh Lake ecosystem function and connectivity has degraded over time primarily as a result of artificial changes to the hydrologic conditions at the site. The ecosystem significance of the area is demonstrated on the national, regional and local level. Marsh Lake provides critical stop-over refuge for migratory waterfowl moving through the Mississippi River flyway as well as breeding grounds for the largest white pelican population in North America. Many other fish and bird species are also dependent on the resource for life requisites including both migrating and nesting bald eagles. Ecosystem values provided by Marsh Lake have increased in importance over time as 90 percent of the wetland areas within the watershed have been drained.

3. The reporting officers recommend authorization of a plan to restore aquatic ecosystem structure and function as well as implementation of ancillary recreation features to Marsh Lake and surrounding resources in the upper portion of the Lac qui Parle reservoir. The recommended plan consists of ecosystem restoration features including returning the Pomme de Terre River to its historic channel, modifying the Marsh Lake Dam for fish passage, construction of a drawdown water control structure at the Marsh Lake Dam, installation of gated culverts at Louisburg Grade Road, and the breaching of a dike at an abandoned fish pond adjacent to the Marsh Lake Dam. The plan also contains recreation features including shoreline fishing access structures, interpretive signage, a canoe landing, benches, picnic tables, trash receptacles, toilets, and parking lot improvements. The project requires mitigation to offset adverse impacts to Marsh Lake Dam through photographic documentation of the existing site conditions prior to construction since Marsh Lake Dam was determined individually eligible to the National Register of Historic Places. The recommended plan is the National Ecosystem Restoration Plan. Implementation of the recommended plan will have a substantial beneficial impact on fish and

wildlife species in the area. While the project will not directly affect federally-listed endangered or threatened species, the reduction of the suspended sediments in the waters of Marsh Lake and improved water clarity will benefit a wide-range of fish and wildlife species including species of concern such as the bald eagle, that are known to use the Marsh Lake site.

4. Based on an October 2011 price level, the estimated project first cost is $9,967,000. The project first cost includes approximately $9,463,000 for ecosystem restoration and approximately $504,000 for recreation. In accordance with the cost sharing provisions of Section 103(c) of the Water Resources Development Act of 1986 (WRDA 1986), as amended (33 U.S.C. 2213(c)), ecosystem restoration features are cost-shared at a rate of 65 percent Federal and 35 percent non-Federal; and recreation features are cost-shared at a rate of 50 percent Federal and 50 percent non-Federal. Thus, the Federal share of the project first costs is estimated to be $6,403,000 and the non-Federal share is estimated at $3,564,000, which equate to 64 percent Federal and 36 percent non-Federal. The costs of lands, easements, rights-of-way, relocations, and excavated material disposal areas is estimated to have no cost, given the existing Federal ownership over the project area. The State of Minnesota, Department of Natural Resources is the non-Federal cost share sponsor for the recommended plan. The State of Minnesota, Department of Natural Resources would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at $35,000 per year.

5. Based on a 4.0-percent discount rate and a 50-year period of analysis, the total equivalent annual costs of the project, including OMRR&R, are estimated to be $490,000.

a. The equivalent average annual costs of ecosystem restoration features are estimated to be $464,000, including OMRR&R. The cost of the recommended aquatic ecosystem restoration features is justified by the restoration of about 8,400 average annual habitat units which includes restoration of approximately two linear miles of historic riverine habitat.

b. The equivalent average annual costs of recreation features are estimated to be $26,000, including OMRR&R. The annual benefits of the proposed recreation features are estimated at $230,000. The benefit-to-cost ratio for recreation is 8.9 to 1.

6. The recommended plan was developed in coordination and consultation with various Federal, State, and local agencies using a systems approach in formulating ecosystem restoration solutions and in evaluating the impacts and benefits of those solutions. Plan formulation evaluated a wide range of non-structural and structural alternatives under Corps policy and guidelines as well as consideration of a variety of economic, social and environmental goals. The recommended plan delivers a holistic, comprehensive approach to solve water resources challenges in a sustainable manner. The resulting recommended plan has received broad public support.

7. In accordance with EC 1165-2-209, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included Agency Technical Review (ATR) and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. An exclusion from the Independent External Peer Review (IEPR) was granted by the Director of Civil Works.

8. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to restore the ecosystem of Marsh Lake be authorized in accordance with the reporting officers' recommended plan at an estimated project first cost of $9,967,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of WRDA 1986, as amended by Section 202 of WRDA 1996, and WRDA 1986, as amended by Section 210 of WRDA 1996. Accordingly, the non-Federal sponsor must agree with the following requirements prior to project implementation.

a. Provide 35 percent of total ecosystem restoration costs as further specified below:

1. Provide the non-Federal share of design costs allocated by the Government to ecosystem restoration in accordance with the terms of a design agreement entered into prior to commencement of design work for the ecosystem restoration features;

2. Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the project;

3. Provide, during the design and implementation phase, any funds necessary to make its total contribution equal to 35 percent of total project costs;

b. Provide 50 percent of total recreation costs as further specified below:

1. Provide the non-Federal share of design costs allocated by the Government to recreation in accordance with the terms of a design agreement entered into prior to commencement of design work for the recreation features;

2. Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material

all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the recreation features;

3. Provide, during construction, any additional funds necessary to make its total contribution for recreation equal to 50 percent of total recreation costs;

4. Provide, during construction, 100 percent of the total recreation costs that exceed an amount equal to 10 percent of the Federal share of total ecosystem restoration costs;

c. Provide, during the design and implementation phase, 100 percent of all costs of planning, design, and construction for the project that exceed the Federal share of the total project costs;

d. Shall not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefore, to meet any of the non-Federal obligations for the project unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is authorized by Federal law;

e. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the outputs produced by the project, hinder operation and maintenance of the project, or interfere with the project's proper function;

f. Shall not use the project or lands, easements, and rights-of-way required for the project as a wetlands bank or mitigation credit for any other project;

g. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 Code of Federal Regulations (CFR) Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

h. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

i. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the project for

the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

j. Hold and save the United States free from all damages arising from the design, construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

k. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 CFR Section 33.20;

l. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*);

m. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

n. Assume, as between the Federal Government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project;

o. Agree, as between the Federal Government and the non-Federal sponsor, that the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA;

p. Provide, during the design and implementation phase, 35 percent of all costs that exceed $50,000 for data recovery activities associated with historic preservation for the project; and

q. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-Federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

9. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

Merdith W. B. Temple

MERDITH W. B. TEMPLE
Major General, U.S. Army
Acting Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

CECW-SAD (1105-2-10a)

JAN 3 0 2012

SUBJECT: C-111 Spreader Canal Western Project, Comprehensive Everglades Restoration Plan, Central and Southern Florida Project, Miami-Dade County, Florida.

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration improvements for the C-111 Spreader Canal Western Project, located in Miami-Dade County, Florida. It is accompanied by the reports of the Jacksonville District Engineer and South Atlantic Division Engineer. These reports are in response to Section 601 of the Water Resources Development Act (WRDA) of 2000, which authorized the Comprehensive Everglades Restoration Plan (CERP) as a framework for modifications and operational changes to the Central and Southern Florida Project that are needed to restore, preserve, and protect the South Florida ecosystem while providing for other water-related needs of the region, including water supply and flood protection. WRDA 2000 identified specific requirements for implementing components of the CERP, including the development of a decision document known as a Project Implementation Report (PIR). The requirements of a PIR are addressed in this report and are subject to review and approval by the Secretary of the Army. Preconstruction engineering and design activities for this project will be continued under the CERP Design Agreement.

2. The proposed C-111 Spreader Canal project was conditionally authorized by Section 601(b)(2)(C)(x) of WRDA 2000, but is not being recommended for implementation under that authority. The proposed C-111 Spreader Canal project was split into Western and Eastern Projects. Due to changes in scope and intended restoration area, the C-111 Spreader Canal Western project will be recommended for new specific Congressional authorization consistent with WRDA 2000, Section 601(d), Authorization of Future Projects. The Western Project focuses on the restoration of flows to Florida Bay via Taylor Slough as well as the restoration of the Southern Glades and Model Lands. Due to numerous uncertainties associated with the actual spreader canal feature, a spreader canal design test will be implemented to gain information that will guide planning efforts for the Eastern Project. The Eastern Project will address the restoration of the remainder of the project area through such features as a spreader canal, backfilling of the C-111 Canal, etc. It is expected that the Eastern Project will also seek authorization under 601(d). The reporting officers determined that the original authority for the C-111 Spreader Canal Project contained 601(b)(2)(C)(x) of WRDA 2000 is no longer needed. As such, the reporting officers recommend that C-111 Spreader Canal authorized in 601(b)(2)(C)(x) of WRDA 2000 be deauthorized.

3. Although cost sharing of the ecosystem restoration features for this project is governed by Section 601 of WRDA 2000, as amended, cost sharing of the recreation features is governed by Section 103 of the WRDA 1986, as amended. In particular, in accordance with Section 103(j) of WRDA 1986, 100 percent of the cost of operation, maintenance, repair, replacement and rehabilitation (OMRR&R) of the recreation features is the non-Federal sponsor's responsibility. In

addition, section 601(e)(5)(B) of WRDA 2000, as amended, governs credit for non-Federal sponsor design and construction work on the ecosystem restoration features of the project, whereas section 221(a)(4) of the Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b(a)(4)), governs credit for non-Federal sponsor design and construction work on the recreation features of the project.

4. The final PIR with integrated Environmental Impact Statement (EIS) recommends a project that contributes significantly to all of the ecological goals and objectives of the CERP: (1) increasing the spatial extent of natural areas; (2) improving habitat function and quality; and (3) improving native plant and animal abundance and diversity. In addition, it contributes to the economic values and social well being of the project area by providing recreational opportunities. Scientists have established that a mosaic of uplands, freshwater marsh, deep water sloughs, and estuarine habitats supporting a diverse community of fish and wildlife was one of the defining characteristics of the pre-drainage Everglades ecosystem. Currently in south Florida, habitat function and quality has significantly declined in remaining natural system areas due to water management projects and practices, resulting in a loss of suitable nesting, foraging, and fisheries habitat and a decline in native species diversity and abundance. The PIR confirms information in the CERP and provides project level evaluation of costs and benefits associated with construction and operations of this ecosystem restoration project which will reverse the damaging trends and increase freshwater retention in Everglades National Park, restoring a natural deepwater slough and the surrounding freshwater marsh habitat. Water levels across the project area will be increased, boosting species abundance and diversity while providing suitable nesting and foraging areas for wading birds. Florida Bay and its estuaries will benefit from decreased salinity levels and improved health of the fisheries habitat. Overall, approximately 252,000 acres of wetlands and coastal habitat will benefit from the project. The South Florida Water Management District (SFWMD), the non-Federal sponsor, has begun land acquisition and construction of the project through its expedited construction program. As such, the C-111 Spreader Canal Western project can be implemented quickly, substantially advancing the realization of project benefits in an area that has been degraded by past water management practices.

5. The reporting officers recommend a plan for ecosystem restoration and recreation. The recommended C-111 Spreader Canal Western project would improve the ecological function of Everglades National Park by creating a hydraulic ridge that will reduce drainage of the area by the C-111 Canal. The Recommended Plan, Alternative 2DS, will consist of two above-ground detention areas, the approximately 590-acre Frog Pond Detention Area and an approximately 50-acre Aerojet Canal, which will serve to create a continuous and protective hydraulic ridge along the eastern boundary of Everglades National Park. Five additional features will be included that are intended to raise water levels in the eastern portion of the project area and restore wetlands in the Southern Glades and Model Lands. Major features of the detention areas include the construction of external levees and one approximately 225-cubic feet per second pump station for each detention area. The five additional features will include the following: incremental operational changes at existing structure S-18C; one new operable structure in the lower C-111 Canal; ten plugs in the C-110 Canal; operational changes at existing structure S-20; and, one plug in the existing L-31E Canal (near inoperable structure S-20A). Recreation components consist of a trailhead with parking, traffic controls, a shade shelter with interpretive board, and approximately 6.8 miles of multi-use levee trails atop impoundment levees. Restoration-compatible recreation includes hiking, biking, fishing, nature study, bird watching, state-managed hunts and equestrian use.

6. The cost of the initially authorized C-111 Spreader Canal component of the CERP, escalated to October 2011 (FY 12) price levels, is $143,540,000. The total first cost of the Recommended Plan

from the final PIR/EIS, based upon October 2011 price levels, is estimated at $165,098,000. Total first cost for the ecosystem restoration features is estimated to be $164,832,000 and for recreation is estimated to be $266,000. The proposed project costs have increased primarily due to the fact that the project has increased in scope to address ecological problems in Everglades National Park and Florida Bay as identified by the public and stakeholders.

7. In accordance with the cost-sharing requirements of Section 601(e) of the WRDA 2000, as amended, the Federal cost of the Recommended Plan is $82,549,000 and the non-Federal cost is $82,549,000. The estimated lands, easements, right-of-way, and relocation (LERRs) costs for the recommended plan are $68,451,000. LERRs valued at approximately $18,610,000 are already owned by the State of Florida. Based on October 2011 price levels, a 40-year period of economic evaluation and a 4.0 percent discount rate, the equivalent annual cost of the proposed project is estimated at $10,268,000, which includes OMRR&R, interest and amortization. The estimated annual costs for ecosystem restoration OMRR&R, including project monitoring costs, vegetation management, and endangered species monitoring, are $1,468,000. The estimated annual OMRR&R costs for recreation are $25,000. The project monitoring period is five years except for endangered species monitoring, which is 10 years. Any costs associated with project monitoring beyond 10 years after completion of construction of the Project (or a component of the Project) shall be a non-Federal responsibility.

8. As a component of the CERP program, the interagency/interdisciplinary scientific and technical team, formed to ensure that system-wide goals are met, will participate in the annual monitoring to assess system-wide changes. In accordance with Sections 601(e)(4) and 601(e)(5)(D) of WRDA 2000, as amended, OMRR&R costs and adaptive assessment and monitoring costs for ecosystem restoration will be shared equally between the Federal Government and the non-Federal sponsor. The Project Monitoring Plan was developed assuming that major, ongoing monitoring programs that are not funded by the Project would continue to supply data relevant to the Project. The Project Monitoring Plan shall not include items that are already required to be monitored by another Federal agency or other entity as part of their regular responsibilities or required by law. Should any of these monitoring programs (e.g. coastal water quality and seagrass monitoring) be discontinued or significantly curtailed, then monitoring priorities and funding options may be re-evaluated to ensure proper Project evaluation. In accordance with Section 103(j) of the WRDA 1986, as amended, OMRR&R costs related to recreation features will be funded 100 percent by the non-Federal sponsor.

9. To ensure that an effective ecosystem restoration plan was recommended, cost effectiveness/ incremental cost analysis techniques were used to evaluate alternative restoration plans. These techniques determined the selected alternative plan to be cost effective and incrementally justified. The hydraulic model and ecological model utilized to estimate the ecological outputs that were used in the economic analysis were both peer-reviewed and certified for use in the project. The plan recommended for implementation is the National Ecosystem Restoration (NER) plan, supports the Incremental Adaptive Restoration principles established by the National Research Council, and was prepared in a collaborative environment. The recommended plan provides benefits by: (1) restoring the quantity, timing, and distribution of water delivered to Florida Bay via Taylor Slough; (2) improving hydroperiods and hydropatterns in the Southern Glades and Model Lands; and, (3) restoring coastal zone salinities in Florida Bay and its tributaries.

10. In accordance with the WRDA 2000 Section 601(f)(2), individual CERP projects may be justified by the environmental benefits derived by the South Florida ecosystem. Similarly, Section

385.9(a) of the CERP Programmatic Regulations (33 CFR Part 385) requires that individual projects shall be formulated, evaluated, and justified based on their ability to contribute to the goals and purposes of the CERP and on their ability to provide benefits that justify costs on a next-added increment basis. Due to the project location at the terminus of the Everglades system, the C-111 Spreader Canal Western project does not depend on any other CERP or non-CERP projects to achieve the estimated ecological benefits. As such, the Next-Added Increment (NAI) is equivalent to the total, System-Wide benefits that were calculated for the proposed project. The Recommended Plan will produce an average annual increase of 8,271 habitat units per year at an annual cost of $10,268,000. In coordination with Fish and Wildlife Service, this project could benefit threatened and endangered species and migratory birds. The average annual cost per average annual habitat unit is $1,240. Based on restoration first cost, the cost per acre benefited is approximately $654 per acre. Based on these parameters, the C-111 Spreader Canal Western project is justified by the environmental benefits derived by the South Florida ecosystem. The recreation first cost of the recommended plan is $266,000. The average annual cost for recreation is $39,000 and the average annual recreation benefits are $122,000, providing a benefit cost ratio of 3.1 to 1.

11. Of the 12,176 acres of land identified for the Project, approximately 611 acres were provided as items of local cooperation for existing Federal projects and will be used for construction of C-111 Spreader Canal Western Project. Approximately 11,565 acres of land are predicted to be impacted by the Recommended Plan: Approximately 9,688 acres will be provided in fee and have already been purchased by the non-Federal sponsor. Approximately 146 acres of impacted lands will be provided under a supplemental agreement with the State of Florida and Miami-Dade County. Approximately 955 acres will be provided by perpetual flowage/conservation easements by the Florida Power and Light Company. The planning level model predicted that the remaining 776 acres of privately-owned land identified for the Project may be affected by operation of the Project, as indicated in the PIR. WRDA 2000 requires that implementation of the CERP shall not reduce existing levels of service for flood protection. The SFWMD is constructing the majority of the project under its State expedited construction program and as part of its independent effort to implement the Project, the SFWMD will monitor the impacts of the current construction and continually adjust operations to ensure the protection of privately-owned lands. If SFWMD is able to provide new information that these operations provide anticipated ecological benefits without reducing existing levels of service for flood protection for the 776 acres, the Corps will consider this information and accordingly document any changes to its takings analysis and the continued compliance with the statutory requirements regarding maintenance of level of service for flood protection. The reassessment of effects on existing levels of service for flood protection will utilize a method similar to the original method of determination. Like the analysis in the PIR, the reassessment will be conducted in a manner consistent with the CERP Programmatic Regulations and guidance. In addition, the takings analysis will be similarly reassessed. Any reassessment done will be completed prior to the execution of a Project Partnership Agreement (PPA). The new information must document that operational adjustments implemented to avoid a reduction of the level of service for flood protection on a particular property or properties can also provide the anticipated ecological benefits. After the documentation is complete, then those operations may be made permanent and incorporated into the Final Project Operating Manual of the Federally-authorized project. Otherwise, the non-Federal sponsor will acquire the necessary interests in the lands, and will provide real estate certification of those lands to the Corps.

12. In accordance with the Corps Engineering Circular on review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and vigorous review

process to ensure technical quality. This included Agency Technical Review (ATR), and Independent External Peer Review (IEPR), and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. The IEPR was completed by Battelle Memorial Institute, a non-profit science and technology organization with experience in establishing and administering peer review panels for the Corps. A total of 23 comments were documented. The comments of high significance were related to current and future conditions, assessment of secondary effects and climatic cycles, and technical sections of the document such as Real Estate and Modeling. In response, sections in the PIR/EIS and appendices were expanded to include additional information. The final IEPR Report was completed in October 2009, and certification from the IEPR Panel was issued 25 November 2009.

13. The Final PIR/EIS was published for State and Agency Review on 4 February 2011. The majority of the comments received were favorable and in support of the project. A letter from the Florida Department of Agriculture and Consumer Services (FDACS), dated 10 March 2011, stated a concern that the proposed project would result in negative impacts to privately-owned agricultural lands in the vicinity of the project. Specifically, the concern was that a rise in groundwater elevations would result in root zone flooding that would be detrimental to crops. The FDACS also expressed concern that any adverse impacts identified after project implementation would be based upon criteria not specified in the Final PIR. In a 29 July 2011 reply letter, the Corps responded to these concerns by describing the monitoring being conducted by the SFWMD as part of its expedited construction program and the Corps' consideration of additional information to reassess the takings analysis and whether the project will reduce the existing levels of service for flood protection on the 776 acres, or a portion thereof, as described previously in Paragraph 11. The final PIR was revised to clarify this position.

14. Section 601(e)(5)(B) of WRDA 2000, as amended by Section 6004 of the WRDA 2007, authorizes credit toward the non-Federal share for non-Federal design and construction work completed during the period of design or construction, subject to execution of the design or project partnership agreement and subject to a determination by the Secretary that the work is integral to the project. As part of its initiative for early implementation of certain CERP projects, the non-Federal sponsor has stated that it is constructing the C-111 Spreader Canal Western project consistent with the PIR, in advance of Congressional authorization and the signing of a project partnership agreement. As such, a separate EIS has been completed and a Department of the Army permit has been issued to the non-Federal sponsor for expedited construction of this project, and construction of the project has already begun by the State of Florida. As required by the February 2008 Implementation Guidance for Section 6004 of WRDA 2007 – CERP Work In-Kind Credits, the non-Federal sponsor entered into a Pre-Partnership Credit Agreement for the C-111 Spreader Canal Western Project on 13 August 2009. The reporting officers believe that it is in the public interest for this Project to be implemented expeditiously due to the early restoration of Federal lands in Everglades National Park and ecological benefits to the wetlands and estuaries in other portions of the South Florida ecosystem. Therefore, the reporting officers recommend that the non-Federal sponsor be credited for all reasonable, allowable, necessary, auditable, and allocable costs applicable to the C-111 Spreader Canal Western project as may be authorized by law including those incurred prior to the execution of a PPA, subject to authorization of the Project by law, a determination by the Assistant Secretary of the Army (Civil Works) or his/her designee that the In-kind work is integral to the authorized CERP Project, that the costs are reasonable, allowable, necessary, auditable, and allocable, and that the In-kind work has been implemented in accordance with government standards and applicable Federal and state laws.

15. The non-Federal Sponsor and the U.S. Department of the Army entered into an agreement known as the Master Agreement Between the Department of the Army and South Florida Water Management District for Cooperation in Constructing and Operating, Maintaining, Repairing, Replacing and Rehabilitating Projects Authorized to be Undertaken Pursuant to the Comprehensive Everglades Restoration Plan dated 13 August 2009 (hereinafter "Master Agreement"). The Master Agreement sets forth the terms of participation in the construction and OMRR&R of projects under CERP that will apply to any future project for which the non-Federal sponsor and the Government have entered into a PPA. The uniform terms of the Master Agreement will be incorporated by reference into the C-111 Spreader Canal Western Project PPA.

16. Credits for non-Federal design and construction will be evaluated in accordance with the terms of the Master Agreement. All documentation provided by the non-Federal sponsor will be thoroughly reviewed by the Corps to determine reasonable, allowable, necessary, auditable, and allocable costs. Upon completion of this review, a financial audit will be conducted prior to granting final credit. Coordination between the Corps and the Sponsor will occur throughout design and construction via the Corps' Regulatory process. The credit afforded to the non-Federal sponsor will be limited to the lesser of the following: (1) actual costs that are reasonable, allowable, necessary, auditable, and allocable to the Project; or (2) the Corps estimate of the cost of the work allocable to the Project had the Corps performed the work. The non-Federal sponsor intends to implement this work using its own funds and would not use funds originating from other Federal sources unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized by statute and in accordance with Section 601 (e)(3) of WRDA 2000 as amended and the Master Agreement.

17. Washington level review indicates that the plan recommended by the reporting officers is environmentally justified, technically sound, cost effective, and socially acceptable. The plan conforms to essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies and complies with other administration and legislative policies and guidelines. The views of interested parties, including Federal, state and local agencies have been considered.

18. The Project complies with the following requirements of the WRDA 2000, as amended:

a. Project Implementation Report (PIR). The requirements of a PIR as defined by Section 601(h)(4)(A).

b. Reservation or Allocation of Water for the Natural System. Sections 601(h)(4)(A)(iii)(IV) and (V) require identification of the appropriate quantity, timing, and distribution of water dedicated and managed for the natural system and the amount of water to be reserved or allocated for the natural system. In accordance with the regulations, an analysis was conducted to identify water dedicated and managed for the natural system. Accordingly, the non-Federal sponsor will protect the water that was identified as necessary to achieve the benefits of the Project, using water reservation or allocation authority under Florida law.

c. Elimination or Transfer of Existing Legal Sources of Water. Section 601(h)(5)(A) states that existing legal sources of water shall not be eliminated or transferred until a new source

of water supply of comparable quantity and quality is available to replace the water to be lost as a result of the CERP. An analysis of project effects on existing legal sources of water was conducted and it was determined that implementation of the C-111 Spreader Canal Western project will not result in a transfer or elimination of existing legal sources of water.

d. Maintenance of Flood Protection. Section 601 (h)(5)(B) states that the Plan shall not reduce levels of service for flood protection that are in existence on the date of enactment of WRDA 2000 (December 2000) and in accordance with applicable law. Potential flooding effects as a result of the proposed project were analyzed and the results indicated that the proposed project would have an adverse impact on the level of service for flood protection in the project area. The analysis identified 776 acres of privately-owned lands that may be impacted as a result of the operation of the proposed project. Total impacted lands, including the 776 acres identified above, were approximately 11,565 acres. As such, the non-Federal sponsor will provide the 11,565 acres of lands either in fee, perpetual flowage easements, or by supplemental agreements, and will be responsible for those real estate interests as a project cost. Under the specific circumstances detailed in paragraph 11, the non-Federal sponsor may not be required to provide an interest in all or part of the 776 acres of privately-owned lands identified.

19. I generally concur with the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan described herein for ecosystem restoration and recreation be authorized for implementation as a Federal Project, with such modifications as in the discretion of the Chief of Engineers may be advisable, and subject to cost-sharing, financing, and other applicable requirements of Section 601 of WRDA 2000, as amended. In addition, I recommend that the non-Federal sponsor be authorized to receive credit for work accomplished prior to execution of a PPA for this Project, in accordance with the terms described in paragraphs 14 and 16 of this report.

Further, this recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and the following items of local cooperation:

a. Provide 50 percent of total project costs consistent with the provisions of Section 601(e) of the WRDA 2000, as amended, including authority to perform design and construction of project features consistent with Federal law and regulation.

b. Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations that the Government and the non-Federal sponsor jointly determine to be necessary for the construction and OMRR&R of the Project and valuation will be in accordance with the Master Agreement.

c. Shall not use the ecosystem restoration features or lands, easements, and rights-of-way required for such features as a wetlands bank or mitigation credit for any other non-CERP projects.

d. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon land that the non-Federal sponsor owns or controls for access to the Project for the

purpose of inspection, and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the Project.

e. Assume responsibility for operating, maintaining, repairing, replacing, and rehabilitating the Project or completed functional portions of the Project in a manner compatible with the Project's authorized purposes and in accordance with applicable Federal and State laws and specific directions prescribed in the OMRR&R manuals and any subsequent amendments thereto. Notwithstanding Section 528(e)(3) of WRDA 1996 (110 Stat. 3770), the non-Federal sponsor shall be responsible for 50 percent of the cost of OMRR&R activities authorized under this section.

f. The non-Federal sponsor shall operate, maintain, repair, replace and rehabilitate the recreational features of the Project and is responsible for 100 percent of the costs.

g. Keep the recreation features, and access roads, parking areas, and other associated public use facilities, open and available to all on equal terms.

h. Unless otherwise provided for in the statutory authorization for this Project, comply with Section 221 of PL 91-611, Flood Control Act of 1970, as amended, and Section 103 of the WRDA of 1986, PL 99-662, as amended which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the Project or separable element.

i. Hold and save the Government free from all damages arising from the construction, OMRR&R of the Project, and any project-related betterments, except for damages due to the fault or negligence of the Government or the Government's contractors.

j. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the Project to the extent and in such detail as will properly reflect total project costs and comply with the provisions of the CERP Master Agreement between the Department of Army and the South Florida Water Management District for Cooperation in Constructing and Operating, Maintaining, Repairing, Replacing, and Rehabilitating Projects Authorized to be Undertaken Pursuant to the Comprehensive Everglades Restoration Plan, executed on 13 August 2009, including Article XI Maintenance of Records and Audit.

k. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601-9675, that may exist in, on, or under lands, easements or rights-of-way necessary for the construction and operation and maintenance (O&M) of the Project; except that the non-Federal sponsor shall not perform such investigations on lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude without prior specific written direction by the Government.

l. Assume complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated materials located in, on or under lands, easements, or right-of-ways

necessary for the construction and OMRR&R.

m. As between the Government and the non-Federal sponsor, the non-Federal sponsor shall be considered the operator of the Project for the purposes of CERCLA liability. To the maximum extent practicable, the non-Federal sponsor shall OMRR&R the Project in a manner that will not cause liability to arise under CERCLA.

n. Prevent obstructions of and encroachments on the Project (including prescribing and enforcing regulations to prevent such obstruction or encroachments) which might reduce ecosystem restoration benefits, hinder O&M, or interfere with the Project's proper function, such as any new developments on Project lands or the addition of facilities which would degrade the benefits of the Project.

o. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, PL 91-646, as amended by the title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (PL 100-17), and Uniform Regulations contained in 49 CFR part 24, in acquiring lands, easements, and rights-of-way, and performing relocations for construction, O&M of the Project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act.

p. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, PL 88-352, and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled, "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army," and all applicable Federal labor standards and requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change the provisions of the Davis-Bacon Act [formerly 40 U.S.C. 276a et seq.], the Contract Work Hours and Safety Standards Act [formerly 40 U.S.C. 327 et seq.] and the Copeland Anti-Kickback Act [formerly 40 U.S.C. 276c]).

q. Comply with Section 106 of the National Historic Preservation Act in completion of all consultation with Florida's State Historic Preservation Office and, as necessary, the Advisory Council on Historic Preservation prior to construction as part of the Pre-construction Engineering and Design phase of the Project.

r. Provide 50 percent of that portion of total cultural resource preservation mitigation and data recovery costs attributable to the Project that are in excess of one percent of the total amount authorized to be appropriated for the Project.

s. Do not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized and in accordance with Section 601(e)(3) of WRDA 2000.

t. The non-Federal sponsor agrees to participate in and comply with applicable Federal floodplain management and flood insurance programs consistent with its statutory authority.

(1) Not less than once each year the non-Federal sponsor shall inform affected interests of the extent of protection afforded by the Project.

(2) The non-Federal sponsor shall publicize flood plain information in the area concerned and shall provide this information to zoning and other regulatory agencies for their use in preventing unwise future development in the flood plain and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with protection levels provided by the Project.

(3) The non-Federal sponsor shall comply with Section 402 of WRDA 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to have prepared, within one year after the date of signing a project partnership agreement for the Project, a floodplain management plan. The plan shall be designed to reduce the impacts of future flood events in the project area, including but not limited to, addressing those measures to be undertaken by non-Federal interests to preserve the level of flood protection provided by the Project. As required by Section 402, as amended, the non-Federal interest shall implement such plan not later than one year after completion of construction of the Project. The non-Federal sponsor shall provide an information copy of the plan to the Government upon its preparation.

(4) The non-Federal sponsor shall prescribe and enforce regulations to prevent obstruction of or encroachment on the Project or on the lands, easements, and rights-of-way determined by the Government to be required for the construction, operation, maintenance, repair, replacement, and rehabilitation of the Project, that could reduce the level of protection the Project affords, hinder operation or maintenance of the Project, or interfere with the Project's proper function.

u. The non-Federal Sponsor shall execute under State law the reservation or allocation of water for the natural system as identified in the PIR for this authorized CERP Project as required by Sections 601(h)(4)(B)(ii) of WRDA 2000 and the non-Federal Sponsor shall provide information to the Government regarding such execution. In compliance with 33 CFR 385, the District Engineer will verify such reservation or allocation in writing. Any change to such reservation or allocation of water shall require an amendment to the PPA after the District Engineer verifies in writing in compliance with 33 CFR 385 that the revised reservation or allocation continues to provide for an appropriate quantity, timing, and distribution of water dedicated and managed for the natural system after considering any changed circumstances or new information since completion of the PIR for the authorized CERP Project.

20. The recommendation contained herein reflects the information available at this time and current Departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation

may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding.

MERDITH W.B. TEMPLE
Major General, USA
Acting Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

MAY 2 2012

CECW-SAD (1105-2-10a)

SUBJECT: Biscayne Bay Coastal Wetlands Phase I Project, Comprehensive Everglades Restoration Plan, Central and Southern Florida Project, Miami-Dade County, Florida.

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration improvements for Phase I of the Biscayne Bay Coastal Wetlands (BBCW) Project, located in Miami-Dade County, Florida. It is accompanied by the reports of the Jacksonville District Engineer and the South Atlantic Division Engineer. These reports are in response to Section 601 of the Water Resources Development Act (WRDA) of 2000, which authorized the Comprehensive Everglades Restoration Plan (CERP) as a framework for modifications and operational changes to the Central and Southern Florida project that are needed to restore, preserve, and protect the South Florida ecosystem while providing for other water-related needs of the region, including water supply and flood protection. WRDA 2000 identified specific requirements for implementing components of the CERP, including the development of a decision document known as a Project Implementation Report (PIR). The requirements of a PIR are addressed in this report and are subject to review and approval by the Secretary of the Army. Preconstruction engineering and design activities for this project will be continued under the CERP Design Agreement.

2. The proposed Biscayne Bay Coastal Wetlands project was previously identified in CERP and requires specific authorization under Section 601(d) of WRDA 2000. The original scope of the project has been altered in order to better address restoration goals in the study area and the BBCW project was split into two phases. Phase I is the first step toward meeting restoration goals in the study area. By rehydrating coastal wetlands and reducing damaging point source freshwater discharge to Biscayne Bay, the Phase I Recommended Plan is integral to the health of the south Florida ecosystem. Due to changes in scope and intended restoration area, Phase I of the proposed BBCW project is recommended for specific Congressional authorization consistent with WRDA 2000, Section 601(d). The second phase of the project would consider restoration of freshwater wetlands in the Model Lands/Barnes Sound area, the southernmost portion of the study area. It is expected that the second phase will also seek authorization under Section 601(d).

3. Although cost sharing of the ecosystem restoration features for this project is governed by Section 601 of WRDA 2000, as amended, cost sharing of the recreation features is governed by Section 103 of the WRDA 1986, as amended. In particular, in accordance with Section 103(j) of WRDA 1986, 100 percent of the cost of Operation, Maintenance, Repair, Replacement and Rehabilitation (OMRR&R) of the recreation features is the non-Federal sponsor's responsibility. In addition, section 601(e)(5)(B) of WRDA 2000, as amended, governs credit for non-Federal sponsor design and construction work on the ecosystem restoration features of the project, whereas

section 221(a)(4) of the Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b(a)(4)), governs credit for non-Federal sponsor design and construction work on the recreation features of the project.

4. The final PIR and integrated Environmental Impact Statement (EIS) recommends a project that contributes significantly to all of the ecological goals and objectives of the CERP: (1) increasing the spatial extent of natural areas; (2) improving habitat function and quality; and (3) improving native plant and animal abundance and diversity. In addition, it contributes to the economic values and social well being of the project area by providing recreational opportunities. The historical Everglades ecosystem was previously defined by a mosaic of uplands, freshwater marsh, deepwater sloughs, and estuarine habitats that supported a diverse community of fish and wildlife. Today nearly all aspects of south Florida's flora and fauna have been affected by development, altered hydrology, nutrient input and spread of non-native species that have resulted directly or indirectly from a century of water management for human needs. Significant areas within the project study boundary are characterized by a low-productivity dwarf mangrove forest, known as the "white zone" - due to its appearance on aerial photos - which are caused by salt deposits on the soil surface that are primarily a result of wide seasonal fluctuations in salinity and the absence of freshwater input from upstream sources. The PIR confirms information in the CERP and provides a project-level evaluation of costs and benefits associated with construction and operation of this ecosystem restoration project. The Recommended Plan will improve functional fish and wildlife habitat in Florida Bay and Biscayne Bay. The portion of the Everglades ecosystem directly affected by the BBCW project provides habitat for 21 Federally-listed endangered or threatened species, including the West Indian Manatee, Florida Panther, Cape Sable Seaside Sparrow, and the American Crocodile. Overall, approximately 11,000 acres will benefit from restored overland sheetflow. The South Florida Water Management District (SFWMD), the non-Federal sponsor, has begun land acquisition and construction of the project through its expedited construction program. As such, the BBCW Phase I project can be implemented quickly, substantially advancing the realization of project benefits in an area that has been degraded by past water management practices.

5. The reporting officers recommend a plan for ecosystem restoration and recreation. The Recommended Plan would improve the ecological function of coastal wetlands in Biscayne Bay by redirecting freshwater - currently discharged through man-made canals directly to the Bay - to coastal wetlands adjacent to the Bay. This will provide a more natural and historic flow and restore healthier salinity patterns in Biscayne Bay. Biscayne Bay is located in Miami-Dade County south of the city of Miami on the Atlantic coast and east of the city of Homestead, Florida. The Recommended Plan, Alternative O Phase I, encompasses a footprint of approximately 3,761 acres and includes features in three of the project's four sub-components (hydrologically distinct regions of the study area): Deering Estate, Cutler Wetlands, and L-31 East Flow Way. There are no features in the fourth region, Model Land Basin. A description of the features recommended for the sub-component areas is as follows:

Deering Estate: This region is in the northern part of the project area and includes an approximately 500-foot extension of the C-100A Spur Canal through the Power's Addition Parcel (Power's Parcel), construction of a freshwater wetland on the Power's Parcel and delivery of fresh water to Cutler Creek and ultimately to coastal wetlands along Biscayne Bay.

Cutler Wetlands: Features in this region, which is in the central portion of the project area, include a pump station, a conveyance canal, a spreader canal, culverts and mosquito control ditch plugs. The pump station, located on C-1, will deliver water to a 6,900-foot lined conveyance canal that will run under SW 97th Avenue, SW 87th Avenue (L-31E Levee), and across the L-31E Borrow Canal via concrete box culverts and deliver water to the spreader canal located in the saltwater wetlands. The spreader canal is divided into four segments.

L-31 East Flow Way: Features in this region, which is in the southern portion of the project area, will isolate the L-31E Borrow Canal from the major discharge canals (C-102, Military Canal and C-103) and allow freshwater flow through the L-31E Levee to the saltwater wetlands. Gated culverts and inverted siphon structures will isolate the L-31E Borrow Canal from these canals, allowing L-31E Borrow Canal to maintain higher water levels. Two pump stations and a series of culverts will move fresh water directly to the saltwater wetlands east of L-31E. Two more pump stations and a spreader canal will deliver water to the freshwater wetlands south of C-103.

Recreational opportunities are also provided at the site within the project footprint.

Recreation Features: The recreation activities proposed include biking/walking trails, environmental interpretation, canoeing/kayaking, bank fishing, tent camping and nature study. Proposed facilities include interpretive signage, shade shelter, handicapped accessible waterless restrooms, handicapped parking, tent platforms, pedestrian bridge, benches, bike rack, trash receptacles, park security gate, trail signage, potable water source and a bird watching platform.

6. The total first cost of the Recommend Plan from the final PIR/EIS, based upon October 2011 (FY12) price levels, is estimated to be $164,070,000. The total first cost for the ecosystem restoration features is estimated to be $162,229,000 and the recreation first cost is estimated to be $1,841,000. The total project cost being sought for authorization is $192,418,000, which includes all costs for construction; lands, easements, rights-of-way, and relocations; recreation facilities; pre-construction, engineering and design (PED) and construction management costs; and sunk PIR costs ($28,348,700).

7. In accordance with the cost-sharing requirements of Section 601(e) of the WRDA 2000, as amended, the Federal cost of the Recommended Plan is $96,209,000 and the non-Federal cost is $96,209,000. The estimated lands, easements, right-of-way, and relocation (LERRs) costs for the Recommended Plan are $80,985,000. Based on FY12 price levels, a 40-year period of economic evaluation and a 4.00% discount rate, the equivalent annual cost of the proposed project is estimated to be $11,126,000, which includes OMRR&R, monitoring, interest during construction and amortization, but not sunk costs. The estimated annual costs for ecosystem restoration OMRR&R, including vegetation management, is $1,873,000. The total project monitoring cost is estimated to be $1,917,000 with an average annual cost of $193,000. The project monitoring period is five years except for endangered species monitoring, which is 10 years. Any costs associated with project monitoring beyond 10 years after completion of construction of the Project (or a component of the Project) shall be a non-Federal responsibility. The annual OMRR&R costs for recreation are estimated at $25,000.

8. As a component of the CERP program, the interagency/interdisciplinary scientific and technical team, formed to ensure that system-wide goals are met, will participate in the annual monitoring to assess system-wide changes. In accordance with Sections 601(e)(4) and 601(e)(5)(D) of WRDA 2000, OMRR&R costs and adaptive assessment and monitoring costs for ecosystem restoration will be shared equally between the Federal Government and the non-Federal sponsor. The Project Monitoring Plan was developed assuming that major, ongoing monitoring programs that are not funded by the Project would continue to supply data relevant to the Project. The Project Monitoring Plan shall not include items that are already required to be monitored by another Federal agency or other entity as part of their regular responsibilities or required by law. Should any of these monitoring programs be discontinued or significantly curtailed, then monitoring priorities and funding options may be re-evaluated to ensure proper Project evaluation. In accordance with Section 103(j) of the WRDA 1986, as amended, OMRR&R costs related to recreation features will be funded 100 percent by the non-Federal sponsor.

9. To ensure that an effective ecosystem restoration plan was recommended, cost effectiveness/incremental cost analysis techniques were used to evaluate alternative restoration plans. These techniques determined the selected alternative plan to be cost-effective and incrementally justified. The hydraulic model and ecological model utilized to estimate the ecological outputs that were used in the economic analysis were both peer-reviewed and certified for use in the project. The plan recommended for implementation is the National Ecosystem Restoration (NER) plan, supports the Incremental Adaptive Restoration principles established by the National Research Council, and was prepared in a collaborative environment. The Recommended Plan provides benefits by: (1) restoring the quantity, timing, and distribution of water delivered to Biscayne Bay; (2) improving hydroperiods and hydropatterns in the project area; and, (3) restoring coastal zone salinities in Biscayne Bay and its tributaries. The project will restore the overland sheetflow in an approximately 11,000-acre area and improve the ecology of Biscayne Bay, including its freshwater and saltwater wetlands, nearshore bay habitat, marine nursery habitat, and the oyster reef community.

10. In accordance with the WRDA 2000 Section 601(f)(2), individual CERP projects may be justified by the environmental benefits derived by the South Florida ecosystem. Similarly, Section 385.9(a) of the CERP Programmatic Regulations (33 CFR Part 385) requires that individual projects shall be formulated, evaluated, and justified based on their ability to contribute to the goals and purposes of the Plan and on their ability to provide benefits that justify costs on a next-added increment (NAI) basis. Due to the project location at the terminus of the Everglades system, the BBCW Phase I project does not depend on any other CERP or non-CERP projects to achieve the estimated ecological benefits. The NAI analysis evaluates the effects, or outputs, of the Recommended Plan as the next project to be added to the group of already approved CERP projects. The results of the NAI analysis showed that as a stand-alone project, the BBCW Recommended Plan nearly doubles the spatial extent of the functional habitat expected to exist in the future without-project condition. The Recommended Plan will produce an average annual increase of 9,276 habitat units at an annual cost of $11,003,000 for a cost of $1,186 per habitat unit. Based on these parameters, the BBCW Phase I project is justified by the environmental benefits derived by the South Florida ecosystem. The average annual cost for recreation is $123,000 and average annual net benefits are $58,000. The benefit to cost ratio for the proposed recreation features is approximately 2.1 to 1.

11. Of the total 3,761 acres identified for the Project, approximately 1,421 acres would be required in fee and approximately 149 acres would require perpetual easement interest. Additionally, approximately 1,254 acres would be provided through the execution of Supplemental Agreements between the SFWMD, the State of Florida and local Miami-Dade County government entities. Approximately 937 acres are currently owned by the United States; National Park Service for Biscayne National Park (BNP) which will provide a Memorandum of Agreement to the SFWMD for the use of these lands.

12. In accordance with the Corps of Engineers' (Corps) Engineering Circular on review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and vigorous review process to ensure technical quality. This included Agency Technical Review (ATR), Independent External Peer Review (IEPR), and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. The IEPR was managed by Battelle Memorial Institute, a non-profit science and technology organization with experience in establishing and administering peer review panels for the Corps. A total of 19 comments were documented. Overall, the Panel found the BBCW PIR/EIS a well-written document that contained adequate information to interpret plan selection and recommendations. The panel also acknowledged the public involvement and collaborative efforts in the development of the report, and encouraged the Corps to document the usage of recent scientific data in the expansion of the project to include additional restoration opportunities. The comments of high significance included requests to expand the discussion and analysis of the future conditions relating to sea level rise and water availability. In response to these comments, the PIR was modified to include an expanded and more quantitative and graphical discussion of the potential impacts of sea level rise and clarification of the relationship between the water available for diversion and the hydrologic regimes needed to achieve the target level of wetlands area and function. The Final Report and Certification from the IEPR Panel was issued 1 December 2009.

13. The Final PIR/EIS was published for State and Agency Review on 7 January 2012. The majority of the comments received were favorable and in support of the project. In response to comments received from the Florida Department of Environmental Protection (FDEP), the Corps sent a letter in April 2012 that clarified the roles and responsibilities of the Corps and the non-Federal sponsor in addressing residual agricultural chemicals on project lands. The Corps also sent a letter in response to comments from Homestead Air Reserve Base (HARB). HARB requested additional information on the potential for bird strikes to aircraft operating from the airbase and expressed concerns regarding increases in bird populations, and specifically whether predatory birds, most implicated in aircraft strikes, would increase due to the ecological improvements. HARB requested that the Corps further research predator/prey avian relationships. The Corps has done this by soliciting information from avian experts at Everglades National Park, Biscayne Bay National Park, U.S. Fish and Wildlife Service, Audubon Florida, Fish and Wildlife Conservation Commission and the University of Florida, all of whom are familiar with the BBCW Phase I project area, the project objectives and the hydrological modeling predictions. There was agreement amongst resource agencies that there will not be an increase in predatory birds such as raptors and vultures as a result of the restoration. Specifically, wetland rehydration achieved by the BBCW Phase I project and resulting wading bird increase are not likely to serve as an additional attractant to predatory birds beyond the geographic features already serving to guide raptors and other migratory birds along Florida coasts. The Corps Jacksonville District staff met with HARB

representatives to discuss their concerns and the Recommended Plan. The Corps sent a response letter to HARB in April 2012 that provided the Corps' analysis and indicated the Corps' willingness to continue to work through the concerns of the airbase. The letter also requested that HARB continue to share information with the Corps in order to realize opportunities to minimize wildlife risks to aviation and human safety, as necessary, while protecting valuable environmental resources.

14. Section 601(e)(5)(B) of WRDA 2000, as amended by Section 6004 of the WRDA 2007, authorizes credit toward the non-Federal share for non-Federal design and construction work completed during the period of design or construction, subject to execution of the design or project partnership agreement and subject to a determination by the Secretary that the work is integral to the project. As part of its initiative for early implementation of certain CERP projects, the non-Federal sponsor has stated that it is constructing several features of Phase I of the BBCW project consistent with the PIR, in advance of Congressional authorization and the signing of a project partnership agreement. As such, a separate EIS has been completed and a Department of the Army permit has been issued to the non-Federal sponsor for expedited construction of this project; construction of the project has already begun by the State of Florida in the Deering Estates and L-31E Flow Way areas of the project. As required by the February 2008 Implementation Guidance for Section 6004 of WRDA 2007 – CERP Work In-Kind Credits, the non-Federal sponsor entered into a Pre-Partnership Credit Agreement for the BBCW project on 13 August 2009. The reporting officers believe that it is in the public interest for this Project to be implemented expeditiously due to the early restoration of Federal lands in Everglades National Park and ecological benefits to the wetlands and estuaries in other portions of the South Florida ecosystem. Therefore, the reporting officers recommend that the non-Federal sponsor be credited for all reasonable, allowable, necessary, auditable, and allocable costs applicable to the Biscayne Bay Coastal Wetlands Phase I Project, as may be authorized by law including those incurred prior to the execution of a project partnership agreement, subject to authorization of the Project by law, a determination by the Assistant Secretary of the Army (Civil Works) or his/her designee that the In-kind work is integral to the authorized CERP Project, that the costs are reasonable, allowable, necessary, auditable, and allocable, and that the In-kind work has been implemented in accordance with government standards and applicable Federal and state laws.

15. The Non-Federal Sponsor and the U.S. Department of the Army entered into an agreement known as the Master Agreement Between the Department of the Army and South Florida Water Management District for Cooperation in Constructing and Operating, Maintaining, Repairing, Replacing and Rehabilitating Projects Authorized to be Undertaken Pursuant to the Comprehensive Everglades Restoration Plan dated 13 August 2009 (hereinafter "Master Agreement"). The Master Agreement sets forth the terms of participation in the construction and OMRR&R of projects under CERP that will apply to any future project for which the non-Federal sponsor and the Government have entered into a PPA. The uniform terms of the Master Agreement will be incorporated by reference into the BBCW Project, Phase I, PPA.

16. Credits for non-Federal design and construction will be evaluated in accordance with the terms of the Master Agreement. All documentation provided by the non-Federal sponsor will be thoroughly reviewed by the Corps to determine reasonable, allowable, necessary, auditable, and allocable costs. Upon completion of this review, a financial audit will be conducted prior to

granting final credit. Coordination between Corps and the non-Federal sponsor will occur throughout design and construction via the Corps' Regulatory process. The credit afforded to the non-Federal sponsor will be limited to the lesser of the following: (1) actual costs that are reasonable, allowable, necessary, auditable, and allocable to the Project; or (2) the Corps' estimate of the cost of the work allocable to the Project had the Corps performed the work. The non-Federal sponsor intends to implement this work using its own funds and would not use funds originating from other Federal sources unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized by statute and in accordance with Section 601 (e)(3) of WRDA 2000 as amended and the Master Agreement.

17. Washington level review indicates that the plan recommended by the reporting officers is environmentally justified, technically sound, cost effective, and socially acceptable. The plan conforms to essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies and complies with other administration and legislative policies and guidelines. Also, the views of interested parties, including Federal, State and local agencies, have been considered.

18. The Project complies with the following requirements of the WRDA 2000, as amended:

a. Project Implementation Report (PIR). The requirements of a PIR as defined by Section 601(h)(4)(A).

b. Reservation or Allocation of Water for the Natural System. Sections 601(h)(4)(A)(iii)(IV) and (V) require identification of the appropriate quantity, timing, and distribution of water dedicated and managed for the natural system and the amount of water to be reserved or allocated for the natural system. In accordance with the regulations, an analysis was conducted to identify water dedicated and managed for the natural system. Accordingly, the non-Federal sponsor will protect the water that was identified as necessary to achieve the benefits of the Project, using water reservation or allocation authority under Florida law.

c. Elimination or Transfer of Existing Legal Sources of Water. Section 601(h)(5)(A) states that existing legal sources of water shall not be eliminated or transferred until a new source of water supply of comparable quantity and quality is available to replace the water to be lost as a result of the CERP. An analysis of project effects on existing legal sources of water was conducted and it was determined that implementation of the BBCW Phase I project will not result in a transfer or elimination of existing legal sources of water.

d. Maintenance of Flood Protection. Section 601 (h)(5)(B) states that the Plan shall not reduce levels of service for flood protection that are in existence on the date of enactment of this Act and in accordance with applicable law. Potential flooding effects as a result of the proposed project were analyzed and the results indicated that the proposed project would not have an adverse impact on the level of service for flood protection in the project area.

19. I generally concur with the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan described herein for ecosystem restoration and recreation be authorized for implementation as a Federal Project, with such modifications as in the

discretion of the Chief of Engineers may be advisable, and subject to cost-sharing, financing, and other applicable requirements of Section 601 of WRDA 2000, as amended. In addition, I recommend that the non-Federal sponsor be authorized to receive credit for work accomplished prior to execution of a PPA for this Project, in accordance with the terms described in paragraphs 14 and 16 of this report.

Further, this recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and the following items of local cooperation:

a. Provide 50 percent of total project costs consistent with the provisions of Section 601(e) of the WRDA 2000, as amended, including authority to perform design and construction of project features consistent with Federal law and regulation.

b. Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations that the Government and the non-Federal sponsor jointly determine to be necessary for the construction and OMRR&R of the Project and valuation will be in accordance with the Master Agreement.

c. Shall not use the ecosystem restoration features or lands, easements, and rights-of-way required for such features as a wetlands bank or mitigation credit for any other non-CERP projects.

d. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon land that the non-Federal sponsor owns or controls for access to the Project for the purpose of inspection, and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the Project.

e. Assume responsibility for operating, maintaining, repairing, replacing, and rehabilitating the Project or completed functional portions of the Project in a manner compatible with the Project's authorized purposes and in accordance with applicable Federal and State laws and specific directions prescribed in the OMRR&R manuals and any subsequent amendments thereto. Notwithstanding Section 528(e)(3) of WRDA 1996 (110 Stat. 3770), the non-Federal sponsor shall be responsible for 50 percent of the cost of OMRR&R activities authorized under this section.

f. The non-Federal sponsor shall operate, maintain, repair, replace and rehabilitate the recreational features of the Project and is responsible for 100 percent of the costs.

g. Keep the recreation features, and access roads, parking areas, and other associated public use facilities, open and available to all on equal terms.

h. Unless otherwise provided for in the statutory authorization for this Project, comply with Section 221 of PL 91-611, Flood Control Act of 1970, as amended, and Section 103 of the WRDA of 1986, PL 99-662, as amended which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof,

until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the Project or separable element.

i. Hold and save the Government free from all damages arising from the construction, OMRR&R of the Project, and any project-related betterments, except for damages due to the fault or negligence of the Government or the Government's contractors.

j. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the Project to the extent and in such detail as will properly reflect total project costs and comply with the provisions of the CERP Master Agreement between the Department of Army and the South Florida Water Management District for Cooperation in Constructing and Operating, Maintaining, Repairing, Replacing, and Rehabilitating Projects Authorized to be Undertaken Pursuant to the Comprehensive Everglades Restoration Plan, executed on 13 August 2009, including Article XI Maintenance of Records and Audit.

k. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601-9675, that may exist in, on, or under lands, easements or rights-of-way necessary for the construction and operation and maintenance (O&M) of the Project; except that the non-Federal sponsor shall not perform such investigations on lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude without prior specific written direction by the Government.

l. Assume complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated materials located in, on or under lands, easements, or right-of-ways necessary for the construction and OMRR&R.

m. As between the Government and the non-Federal sponsor, the non-Federal sponsor shall be considered the operator of the Project for the purposes of CERCLA liability. To the maximum extent practicable, the non-Federal sponsor shall OMRR&R the Project in a manner that will not cause liability to arise under CERCLA.

n. Prevent obstructions of and encroachments on the Project (including prescribing and enforcing regulations to prevent such obstruction or encroachments) which might reduce ecosystem restoration benefits, hinder O&M, or interfere with the Project's proper function, such as any new developments on Project lands or the addition of facilities which would degrade the benefits of the Project.

o. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, PL 91-646, as amended by the title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (PL 100-17), and Uniform Regulations contained in 49 CFR part 24, in acquiring lands, easements, and rights-of-way, and performing relocations for construction, O&M of the Project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act.

p. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, PL 88-352, and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled, "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army," and all applicable Federal labor standards and requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change the provisions of the Davis-Bacon Act [formerly 40 U.S.C. 276a et seq.], the Contract Work Hours and Safety Standards Act [formerly 40 U.S.C. 327 et seq.] and the Copeland Anti-Kickback Act [formerly 40 U.S.C. 276c]).

q. Comply with Section 106 of the National Historic Preservation Act in completion of all consultation with Florida's State Historic Preservation Office and, as necessary, the Advisory Council on Historic Preservation prior to construction as part of the Pre-construction Engineering and Design phase of the Project.

r. Provide 50 percent of that portion of total cultural resource preservation mitigation and data recovery costs attributable to the Project that are in excess of one percent of the total amount authorized to be appropriated for the Project.

s. Do not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized and in accordance with Section 601(e)(3) of WRDA 2000.

t. The non-Federal sponsor agrees to participate in and comply with applicable Federal floodplain management and flood insurance programs consistent with its statutory authority.

(1) Not less than once each year the non-Federal sponsor shall inform affected interests of the extent of protection afforded by the Project.

(2) The non-Federal sponsor shall publicize flood plain information in the area concerned and shall provide this information to zoning and other regulatory agencies for their use in preventing unwise future development in the flood plain and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with protection levels provided by the Project.

(3) The non-Federal sponsor shall comply with Section 402 of WRDA 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to have prepared, within one year after the date of signing a project partnership agreement for the Project, a floodplain management plan. The plan shall be designed to reduce the impacts of future flood events in the project area, including but not limited to, addressing those measures to be undertaken by non-Federal interests to preserve the level of flood protection provided by the Project. As required by Section 402, as amended, the non-Federal interest shall implement such plan not later than one year after completion of construction of the Project. The non-Federal

sponsor shall provide an information copy of the plan to the Government upon its preparation.

(4) The non-Federal sponsor shall prescribe and enforce regulations to prevent obstruction of or encroachment on the Project or on the lands, easements, and rights-of-way determined by the Government to be required for the construction, operation, maintenance, repair, replacement, and rehabilitation of the Project, that could reduce the level of protection the Project affords, hinder operation or maintenance of the Project, or interfere with the Project's proper function.

u. The non-Federal sponsor shall execute under State law the reservation or allocation of water for the natural system as identified in the PIR for this authorized CERP Project as required by Sections 601(h)(4)(B)(ii) of WRDA 2000 and the non-Federal Sponsor shall provide information to the Government regarding such execution. In compliance with 33 CFR 385, the District Engineer will verify such reservation or allocation in writing. Any change to such reservation or allocation of water shall require an amendment to the PPA after the District Engineer verifies in writing in compliance with 33 CFR 385 that the revised reservation or allocation continues to provide for an appropriate quantity, timing, and distribution of water dedicated and managed for the natural system after considering any changed circumstances or new information since completion of the PIR for the authorized CERP Project.

20. The recommendation contained herein reflects the information available at this time and current Departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities in the formulation of a national Civil Works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding.

Merdith W.B. Temple

MERDITH W.B. TEMPLE
Major General, USA
Acting Commander

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

CECW-SAD (1105-2-10a) MAY 2 1 2012

SUBJECT: Broward County Water Preserve Areas Project, Comprehensive Everglades Restoration Plan, Central and Southern Florida Project, Broward and Miami-Dade Counties, Florida

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration improvements for the Broward County Water Preserve Areas (BCWPA) Project, located in Broward and Miami-Dade Counties, Florida. It is accompanied by the report of the Jacksonville District Engineer and South Atlantic Division Engineer. These reports are in response to Section 601 of the Water Resources Development Act (WRDA) of 2000, which authorized the Comprehensive Everglades Restoration Plan (CERP) as a framework for modifications and operational changes to the Central and Southern Florida Project that are needed to restore, preserve and protect the south Florida ecosystem while providing for other water-related needs of the region, including water supply and flood protection. WRDA 2000 identified specific requirements for implementing components of the CERP, including the development of a decision document known as a Project Implementation Report (PIR). The requirements of a PIR are addressed in this report and are subject to the review and approval by the Secretary of the Army. Preconstruction engineering and design activities for this project will be continued under the CERP Design Agreement.

2. The three components comprising the proposed BCWPA Project were conditionally authorized by Sections 601(b)(2)(C)(iv), 601(b)(2)(C)(v), and 601(b)(2)(C)(vi) of WRDA 2000, but are not being recommended for implementation under those authorities. The PIR recommends a project that combines implementation of three projects identified in the CERP. Due to changes in scope and combining of CERP components, the BCWPA Project is recommended for new specific Congressional authorization consistent with WRDA 2000, Section 601(d). The reporting officers determined that the original authorities for the individual components of the BCWPA Project contained in Sections 601(b)(2)(C)(iv), (v) and (vi) of WRDA 2000, are no longer needed. As such, the reporting officers recommend that the projects authorized in Section 601(b)(2)(C)(iv), (v) and (vi) of WRDA 2000 be deauthorized.

3. Although cost sharing of the ecosystem restoration features for the BCWPA Project is governed by Section 601 of WRDA 2000, as amended, cost sharing of recreation features is governed by Section 103 of WRDA 1986, as amended. In particular, in accordance with Section 103(j) of WRDA 1986, 100 percent of the cost of Operation, Maintenance, Repair, Replacement and Rehabilitation (OMRR&R) of the recreation features is the non-federal sponsor's responsibility. In addition, section 601(e)(5)(B) of WRDA 2000, as amended, governs credit for non-federal sponsor design and construction work on the ecosystem restoration features of the project, whereas section 221(a)(4) of the Flood Control Act of 1970, as amended (42 U.S.C.

1962d-5b(a)(4)), governs credit for non-federal sponsor design and construction work on the recreation features of the project.

4. The final PIR and integrated Environmental Impact Statement (EIS) recommends a project that contributes significantly to all the ecological goals and objectives of the CERP: (1) increasing spatial extent of natural areas; (2) improving habitat function and quality; and (3) improving native plant and animal abundance and diversity. In addition, it contributes to the economic values and social well being of the project area by providing recreational opportunities. The historical Everglades ecosystem was previously defined by a mosaic of uplands, freshwater marsh, deepwater sloughs, and estuarine habitats that supported a diverse community of fish and wildlife. Today nearly all aspects of south Florida's flora and fauna have been affected by development, altered hydrology, nutrient input and spread of non-native species that have resulted directly or indirectly from a century of water management for human needs. Significant areas within the project study boundary are characterized by undesirable dense cattail (Typha spp.) stands, drydowns and degraded ridge and slough habitat. The BCWPA Project addresses loss of ecosystem function within the Everglades as a result of (1) damaging discharges of runoff from developed areas in western Broward County into the Everglades (Water Conservation Area 3A); (2) excessive nutrient loading to the Everglades, and; (3) excessive seepage of water out of the Everglades to developed areas in western Broward County. The project also addresses insufficient quantities of water available in the regional water management system during dry periods to meet municipal, agricultural, and environmental water supply demands. The PIR confirms information in the CERP and provides a project-level evaluation of costs and benefits associated with construction and operation of this ecosystem restoration project. The Recommended Plan will improve functional fish and wildlife habitat in Water Conservation Areas (WCA) 3A/3B, and in Everglades National Park. The portion of the Everglades ecosystem directly affected by the project provides habitat for five federally-listed species: West Indian manatee, Florida panther, wood stork, snail kite and Eastern indigo snake. Overall, an ecological lift of approximately 166,211 average annual habitat units will occur due to improved hydroperiods and hydropatterns in the project area. Overall, approximately 563,000 acres in Water Conservation Area 3 and 200,000 acres in the greater Everglades will benefit from project implementation.

5. The reporting officers recommend a plan for ecosystem restoration and recreation. The Recommended Plan would improve the ecological function of the Everglades ecosystem by capturing and storing the excess surface water runoff from the C-11 watershed and reducing excess releases to the WCA 3A/3B, and will minimize seepage losses during dry periods. The Recommended Plan, Alternative A4, would include a footprint of approximately 7,990 acres based on the three components: C-11 Impoundment, WCA 3A/3B Seepage Management Area (SMA), and C-9 Impoundment, as well as recreation features. A description of the individual components follows:

C-11 Impoundment: The C-11 Impoundment is located in the northern part of the project area and requires 1,830 acres to construct an above-ground impoundment (interior storage of 1,068 acres). Major elements include canals, levees, water control structures and buffer marsh. Water control structures consist of pump stations, a gated spillway, gated and non-gated culverts and a non-gated fixed weir. The purpose of the C-11 Impoundment is to capture and store surface runoff from the C-11 Basin, reduce pumping of surface water into the WCA 3A/3B, and provide releases for regional benefits.

WCA 3A/3B Seepage Management Area: The WCA 3A/3B SMA makes up the western project border and requires 4,353 acres. Elements include levees, canals, pumps, bridges and water control structures. The C-502A and C-502B conveyance canals are major components that will transfer water between the C-11 and C-9 impoundments, assist with creating a hydraulic ridge, and transfer water to the southern project region for future CERP Projects. The purpose of this rain-driven component is to establish a buffer, reduce seepage to and from the WCA 3A/3B by creating a hydraulic head, and maintain the level of service flood protection.

C-9 Impoundment: The C-9 Impoundment is located north and adjacent to the Snake Creek Canal (C-9) and requires approximately 1,807 acres to construct an above-ground impoundment (storage of 1,641 acres). Elements include levees, canals, pumps, bridges and water control structures. The purpose of the C-9 Impoundment is to capture and store surface runoff from the C-9 Basin, store C-11 Impoundment overflow, assist with WCA 3A/3B seepage management, and provide releases for regional benefits.

Recreation Features: The recreation amenities proposed are ancillary, work harmoniously with the Project and are on fee owned lands. The amenities include 14 miles of improved trail surface, parking areas with ADA accessible waterless toilets, walkway to canoe launch facilities, an information kiosk, shaded benches, footbridges, trash receptacles and signage. Walking, jogging and biking are proposed on the levee crowns. Equestrian use is proposed at the levee base. Nature-based activities and fishing would be allowed.

6. The total first cost of the Recommended Plan from the final PIR/EIS, based on February 2012 price levels, is estimated at $840,657,000. Total first cost for the ecosystem restoration features is estimated to be $834,211,000, and the recreation first cost is estimated to be $6,446,000. The total project cost being sought for authorization is $866,707,000, which includes all costs for construction; lands, easements, rights-of-way and relocations; recreation facilities; pre-construction, engineering and design (PED) and construction management costs; and sunk PIR costs ($26,050,000).

7. In accordance with cost sharing requirements of Section 601(e) of the WRDA 2000, as

amended, the federal cost of the Recommended Plan is $433,353,500 and the non-federal cost is $433,353,500. The estimated lands, easements, rights-of-way and relocation (LERRs) costs for the Recommended Plan are $380,633,000. Based on FY12 price levels, a 38-year period of economic evaluation and a 4.00% discount rate, the equivalent annual cost of the proposed project is estimated at $49,415,000 which includes OMRR&R, interest during construction and amortization, but not sunk costs. The estimated annual costs for ecosystem restoration OMRR&R, including project monitoring costs, vegetation management and endangered species monitoring, are $3,510,000. The project monitoring period is five years except for endangered species monitoring, which is 10 years. Any costs associated with project monitoring beyond 10 years after completion of the construction of the Project (or a component of the Project) shall be a non-federal responsibility. The estimated annual OMRR&R cost for recreation is $412,000.

8. As a component of the CERP program, the interagency/interdisciplinary scientific and technical team, formed to ensure that the system-wide goals are met, will participate in the annual monitoring to assess system-wide changes. In accordance with Section 601(e)(4) and 601(e)(5)(D) of WRDA 2000, as amended, OMRR&R costs and adaptive assessment and monitoring costs for ecosystem restoration will be shared equally between the federal government and the non-federal sponsor. The Project Monitoring Plan was developed assuming that major, ongoing monitoring programs that are not funded by the Project would continue to supply data relevant to the Project. The Project Monitoring Plan shall not include items that are already required to be monitored by another federal agency or other entity as part of their regular responsibilities or required by law. Should any of these monitoring programs be discontinued or significantly curtailed, then monitoring priorities and funding options may be re-evaluated to ensure proper Project evaluations. In accordance with Section 103(j) of the WRDA 1986, as amended, OMRR&R costs related to recreation features will be funded 100 percent by the non-federal sponsor.

9. To ensure that an effective ecosystem restoration plan was recommended, cost effectiveness/ incremental cost analysis (CE/ICA) techniques were used to evaluate alternative restoration plans. These techniques determined the selected alternative plan to be cost effective and incrementally justified. The hydraulic model and ecological model utilized to estimate the ecological outputs that were used in the economic analysis were both peer reviewed and certified for use in the project. The plan recommended for implementation is the National Ecosystem Restoration (NER) plan, supports the Incremental Adaptive Management principles established by the National Research Council and was prepared in a collaborative environment. The Recommended Plan provides benefits by: (1) restoring quantity, timing and distribution of water for the Water Conservation Areas 3A and 3B and Everglades National Park; (2) improving hydroperiods and hydropatterns in the project area; and (3) providing water for other CERP projects within the vicinity of the project area.

10. In accordance with the WRDA 2000 Section 601(f)(2), individual CERP projects may be justified by the environmental benefits realized in the south Florida ecosystem. Similarly, Section 385.9(a) of the CERP Programmatic Regulations (33 CFR Part 385) requires that individual projects shall be formulated, evaluated, and justified based on their ability to contribute to the goals and purposes of the CERP and on their ability to provide benefits that justify costs on a next-added increment (NAI) basis. Due to the project location at the terminus of the Everglades system, the BCWPA Project does not depend on any other CERP or non-CERP projects to achieve estimated ecological benefits. The NAI analysis evaluates the effects, or outputs, of the Recommended Plan as the next project to be added to the group of already approved CERP projects. The results of the NAI analysis show that as a stand-alone project, the BCWPA Recommended Plan greatly increases the ecological function of the Everglades ecosystem in project area habitats over the expected future without project condition. The Recommended Plan will produce an average annual increase of 166,211 habitat units at an annual cost of $49,415,000, for a cost of $297.00 per habitat unit. The average annual cost for the recreation features is $748,000, the average annual benefit is $1,376,000, and the average annual net benefit of approximately $628,000. The benefit to cost ratio for the recommended recreation plan is approximately 1.8.

11. Of the total 7,990.47 acres of land identified for the Project, approximately 6,607.58 acres would be required in fee, approximately 851.39 acres owned by FPL would be required in perpetual flowage easements, 42 acres owned by FDOT would be provided by Supplemental Agreement, and 490 acres acquired as part of the original Central & Southern Florida Project would be recertified for this Project. No credit shall be afforded and no reimbursement shall be provided for the value of any lands, easements, rights-of-way, or relocations that have been provided previously as an item of cooperation for another federal project. The Recommended Plan will result in some unavoidable impacts to existing mitigation sites required by Department of the Army (DA) Section 404 Permits that are located within both of the impoundment footprints. The Recommended Plan addresses this issue through the acquisition of mitigation bank credits from an established mitigation bank to replace established DA mitigation areas within the impoundment. However, should mitigation bank credits not be available at the time of construction, the optional FDOT wetland mitigation area described in this paragraph and further detailed in the PIR will be constructed. The original plan called for the rehydration of wetland areas on FDOT lands as mitigation to offset wetland impacts resulting from the project. Due to USFWS concerns about selenium tainted soils on the FDOT land and their ecological risk to USFWS trust species, the project will not use these lands for the purpose of wetland mitigation at this time. The current mitigation plan will avoid the FDOT lands, and calls for the purchase of wetland mitigation bank credits (estimated 54 FCUs) to offset the loss of the FDOT lands that would have been used to satisfy project wetland impacts. In order to be ecologically successful, the mitigation areas within the impoundments need additional water (above and beyond what would be provided in a rainfall driven system) which will be supplied by the BCWPA Project.

The ecological lift that would occur as a result of the replacement mitigation in the impoundments is not being counted for Project benefits. The storage provided by the replacement mitigation areas, though not used to justify federal participation in the Project, would contribute to provide downstream benefits.

12. In accordance with the Corps of Engineers' Engineering Circular on review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and vigorous review process to ensure technical quality. This included Agency Technical Review (ATR), external scientific review of CERP through the National Academy of Science at the programmatic level, and Corps Headquarters policy and legal review. Independent External Peer Review is not required for this Project because the study was initiated and an array of alternatives was selected over two years prior to the enactment of WRDA 2007. All concerns have been addressed and incorporated into the final PIR. The final PIR/EIS was published for state and agency review on 4 May 2007. In response to comments received from the Florida Department of Environmental Protection (FDEP), the Corps sent a letter in May 2012 that clarified the roles and responsibilities of the Corps and the non-federal sponsor in addressing residual agricultural chemicals on project lands and a parcel known as the Naval Bomb Target, the same parcel is sometimes referred to as the Fort Lauderdale Bombing Target #7 (tract #W92000-001). The Corps clarified that based on past investigations, concurred in by FDEP, that there is no known contamination requiring remediation at the Naval Bomb Target. A number of interest parties commented on the mitigation plan. The Corps has revised the PIR to further clarify that in accordance with Section 2036(c) of WRDA 2007, the mitigation plan is to purchase mitigation bank credits. However, should mitigation bank credits be unavailable at the time of construction, the mitigation will be accomplished by creating the optional FDOT wetland mitigation area described in the PIR and explained in paragraph 11 of this Report. The agencies supported implementation of the recommended plan. The revised final PIR/EIS was also published in the Federal Register and sent to federal and state agencies in April 2012.

13. Section 601(e)(5)(B) of WRDA 2000, as amended by Section 6004 of WRDA 2007, authorizes credit toward the non-federal share for non-federal design and construction work completed during the period of design or construction, subject to execution of the design or project partnership agreement (PPA) and subject to a determination by the Secretary that the work is integral to the Project. As part of its initiative for early implementation of certain CERP projects, the BCWPA Project was included in the "State Expedited Projects and Program" to allow the non-federal sponsor to execute work expeditiously. The work completed by the non-federal sponsor prior to a PPA has focused on engineering and design aspects now a part of the PIR. At this time, the non-federal sponsor does expect to commence construction prior to signing a PPA. The reporting officers believe that it is in the public interest for the Project to be implemented expeditiously due to the regional restoration of federal lands in the Everglades National Park, Water Conservation Areas 3A/3B, and ecological benefits to the south Florida

ecosystems. Therefore, the reporting officers recommend that the non-federal sponsor be credited for all reasonable, allowable, necessary, auditable and allocable costs applicable to the BCWPA Project as may be authorized by law, including those incurred prior to the execution of a PPA, subject to authorization of the Project by law, a determination by the Assistant Secretary of the Army (Civil Works) or his/her designee that the in-kind work is integral to the authorized CERP project, that the costs are reasonable, allowable, necessary, auditable and allocable, and that the in-kind work has been implemented in accordance with government standards and applicable federal and state laws.

14. The non-federal sponsor and the U.S. Department of the Army entered into an agreement known as the Master Agreement Between the Department of the Army and South Florida Water Management District for Cooperation in Constructing and Operating, Maintaining, Repairing, Replacing and Rehabilitating Projects Authorized to be Undertaken Pursuant to the Comprehensive Everglades Restoration Plan, dated 13 August 2009 (hereinafter "Master Agreement"). The Master Agreement sets forth the terms of participation in the construction and OMRR&R of projects under CERP that will apply to any future project for which the non-federal sponsor and the Government have entered into a PPA. The uniform terms of the Master Agreement will be incorporated by reference into the BCWPA Project PPA.

15. Credits for the non-federal sponsor's design and construction work will be evaluated in accordance with the terms of the Master Agreement and Design Agreement. All documentation provided by the non-federal sponsor will be thoroughly reviewed by the Corps to determine reasonable, allowable, necessary, auditable, and allocable costs. Upon completion of this review, a financial audit will be conducted prior to granting final credit. The credit afforded to the non-federal sponsor will be limited to the lesser of the following: (1) actual costs that are reasonable, allowable, necessary, auditable, and allocable to the Project; or (2) the Corps estimate of the cost of the work allocable to the Project had the Corps performed the work. The non-federal sponsor has completed design work using its own funds and would not use funds originating from other federal sources unless the federal granting agency verifies in writing that the expenditure of such funds is expressly authorized by statute and in accordance with Section 601(e)(3) of WRDA 2000 as amended by the Master Agreement.

16. Washington level review indicates that the plan recommended by the reporting officers is environmentally justified, technically sound, cost effective, and socially acceptable. The plan conforms to essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies and complies with other administration and legislative policies and guidelines. Also, the views of interested parties, including federal, state and local agencies, have been considered.

17. The Project complies with the following requirements of the WRDA 2000, as amended:

a. Project Implementation Report (PIR). The requirements of a PIR as defined by Section 601(h)(4)(A).

b. Reservation or Allocation of Water for the Natural System. Sections 601(h)(4)(A)(iii)(IV) and (V) require identification of the appropriate quantity, timing, and distribution of water dedicated and managed for the natural system and the amount of water to be reserved or allocated for the natural system. In accordance with the regulations, an analysis was conducted to identify water dedicated and managed for the natural system. Accordingly, the non-federal sponsor will protect the water that was identified as necessary to achieve the benefits of the Project, using water reservation or allocation authority under Florida law.

c. Elimination or Transfer of Existing Legal Sources of Water. Section 601(h)(5)(A) states that existing legal sources of water shall not be eliminated or transferred until a new source of water supply of comparable quantity and quality is available to replace the water to be lost as a result of the CERP. An analysis of project effects on existing legal sources of water was conducted and it was determined that implementation of the Broward County Water Preserve Areas Project will not result in a transfer or elimination of existing legal sources of water.

d. Maintenance of Flood Protection. Section 601 (h)(5)(B) states that the Plan shall not reduce levels of service for flood protection that are in existence on the date of enactment of this Act and in accordance with applicable law. Potential flooding effects as a result of the proposed project were analyzed and the results indicated that the proposed project would not have an adverse impact on the level of service for flood protection in the project area.

18. I generally concur with the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan described herein for ecosystem restoration and recreation be authorized for implementation as a federal project, with such modifications as in the discretion of the Chief of Engineers may be advisable, and subject to cost-sharing, financing, and other applicable requirements of Section 601 of WRDA 2000, as amended. In addition, I recommend that the non-federal sponsor be authorized to receive credit for work accomplished prior to execution of a PPA for this project, in accordance with the terms described in paragraphs 13 and 15 of this report.

Further, this recommendation is subject to the non-federal sponsor agreeing to comply with all applicable federal laws and the following items of local cooperation:

a. Provide 50 percent of total project costs consistent with the provisions of Section 601(e) of the WRDA 2000, as amended, including authority to perform design and construction of project features consistent with federal law and regulation.

b. Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations that the Government and the non-Federal sponsor jointly determine to be necessary for the construction and OMRR&R of the Project and valuation will be in accordance with the Master Agreement.

c. Shall not use the ecosystem restoration features or lands, easements, and rights-of-way required for such features as a wetlands bank or mitigation credit for any other non-CERP projects.

d. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon land that the non-Federal sponsor owns or controls for access to the Project for the purpose of inspection and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the Project.

e. Assume responsibility for operating, maintaining, repairing, replacing, and rehabilitating the Project or completed functional portions of the Project, including mitigation features, in a manner compatible with the Project's authorized purposes and in accordance with applicable Federal and State laws and specific directions prescribed in the OMRR&R manuals and any subsequent amendments thereto. Notwithstanding Section 528(e)(3) of WRDA 1996 (110 Stat. 3770), the non-Federal sponsor shall be responsible for 50 percent of the cost of OMRR&R activities authorized under this section.

f. The non-Federal sponsor shall operate, maintain, repair, replace and rehabilitate the recreational features of the Project and is responsible for 100 percent of the costs.

g. Keep the recreation features, and access roads, parking areas, and other associated public use facilities, open and available to all on equal terms.

h. Unless otherwise provided for in the statutory authorization for this Project, comply with Section 221 of PL 91-611, Flood Control Act of 1970, as amended, and Section 103 of the WRDA of 1986, PL 99-662, as amended which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the Project or separable element.

i. Hold and save the Government free from all damages arising from the construction, OMRR&R of the Project, and any project-related betterments, except for damages due to the fault or negligence of the Government or the Government's contractors.

j. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the Project to the extent and in such detail as will properly reflect total project costs and comply with the provisions of the CERP Master Agreement between the Department of Army and the South Florida Water Management District for Cooperation in Constructing and Operating, Maintaining, Repairing, Replacing, and Rehabilitating Projects Authorized to be Undertaken Pursuant to the Comprehensive Everglades Restoration Plan, executed on 13 August 2009, including Article XI Maintenance of Records and Audit.

k. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601-9675, that may exist in, on, or under lands, easements or rights-of-way necessary for the construction and operation and maintenance (O&M) of the Project; except that the non-Federal sponsor shall not perform such investigations on lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude without prior specific written direction by the Government.

l. Assume complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated materials located in, on or under lands, easements, or right-of-ways necessary for the construction and OMRR&R.

m. As between the Government and the non-Federal sponsor, the non-Federal sponsor shall be considered the operator of the Project for the purposes of CERCLA liability. To the maximum extent practicable, the non-Federal sponsor shall OMRR&R the Project in a manner that will not cause liability to arise under CERCLA.

n. Prevent obstructions of and encroachments on the Project (including prescribing and enforcing regulations to prevent such obstruction or encroachments) which might reduce ecosystem restoration benefits, hinder O&M, or interfere with the Project's proper function, such as any new developments on Project lands or the addition of facilities which would degrade the benefits of the Project.

o. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, PL 91-646, as amended by the title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (PL 100-17), and Uniform Regulations contained in 49 CFR part 24, in acquiring lands, easements, and rights-of-way, and performing relocations for construction, O&M of the Project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act.

p. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, PL 88-352, and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled, "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army," and all applicable Federal labor standards and requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change the provisions of the Davis-Bacon Act [formerly 40 U.S.C. 276a et seq.], the Contract Work Hours and Safety Standards Act [formerly 40 U.S.C. 327 et seq.] and the Copeland Anti-Kickback Act [formerly 40 U.S.C. 276c]).

q. Comply with Section 106 of the National Historic Preservation Act in completion of all consultation with Florida's State Historic Preservation Office and, as necessary, the Advisory Council on Historic Preservation prior to construction as part of the Pre-construction Engineering and Design phase of the Project.

r. Provide 50 percent of that portion of total cultural resource preservation mitigation and data recovery costs attributable to the Project that are in excess of one percent of the total amount authorized to be appropriated for the Project.

s. Do not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized and in accordance with Section 601(e)(3) of WRDA 2000.

t. The non-Federal sponsor agrees to participate in and comply with applicable Federal floodplain management and flood insurance programs consistent with its statutory authority.

(1) Not less than once each year the non-Federal sponsor shall inform affected interests of the extent of protection afforded by the Project.

(2) The non-Federal sponsor shall publicize flood plain information in the area concerned and shall provide this information to zoning and other regulatory agencies for their use in preventing unwise future development in the flood plain and in adopting such regulations as may be necessary to prevent unwise future development and to ensure compatibility with protection levels provided by the Project.

(3) The non-Federal sponsor shall comply with Section 402 of WRDA 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to have prepared, within one year after the date of signing a project partnership agreement for the Project, a floodplain management plan. The plan shall be designed to reduce the impacts of future flood events in the project area, including but not limited to, addressing those measures to be undertaken by non-

Federal interests to preserve the level of flood protection provided by the Project. As required by Section 402, as amended, the non-Federal interest shall implement such plan not later than one year after completion of construction of the Project. The non-Federal sponsor shall provide an information copy of the plan to the Government upon its preparation.

(4) The non-Federal sponsor shall prescribe and enforce regulations to prevent obstruction of or encroachment on the Project or on the lands, easements, and rights-of-way determined by the Government to be required for the construction, operation, maintenance, repair, replacement, and rehabilitation of the Project, that could reduce the level of protection the Project affords, hinder operation or maintenance of the Project, or interfere with the Project's proper function.

u. The non-federal sponsor shall execute under State law the reservation or allocation of water for the natural system as identified in the PIR for this authorized CERP Project as required by Sections 601(h)(4)(B)(ii) of WRDA 2000 and the non-Federal sponsor shall provide information to the Government regarding such execution. In compliance with 33 CFR 385, the District Engineer will verify such reservation or allocation in writing. Any change to such reservation or allocation of water shall require an amendment to the PPA after the District Engineer verifies in writing in compliance with 33 CFR 385 that the revised reservation or allocation continues to provide for an appropriate quantity, timing, and distribution of water dedicated and managed for the natural system after considering any changed circumstances or new information since completion of the PIR for the authorized CERP Project.

19. The recommendation contained herein reflects the information available at this time and current Departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities in the formulation of a national Civil Works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding.

MERDITH W.B. TEMPLE
Major General, USA
Acting Commander

DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
2600 ARMY PENTAGON
WASHINGTON, DC 20310-2600

REPLY TO
ATTENTION OF

CECW-MVD (1105-2-10a)

22 JUN 2012

SUBJECT: Louisiana Coastal Area (LCA), Barataria Basin Barrier Shoreline Restoration Project, Lafourche, Jefferson, and Plaquemines Parishes, Louisiana

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration for Barataria Basin Barrier Shoreline (BBBS) in Lafourche, Jefferson, and Plaquemines Parishes, Louisiana. It is accompanied by the report of the New Orleans District Engineer and the Mississippi Valley Division Engineer. These reports are in final response to the authorization for BBBS contained in Section 7006(c)(1)(C) of the Water Resources Development Act of 2007 (WRDA 2007).

2. Section 7006(c)(1) of WRDA 2007 authorizes the Secretary to carry out five projects, including the BBBS project, substantially in accordance with the Report of the Chief of Engineers for ecosystem restoration for the Louisiana Coastal Area dated January 31, 2005. Section 7006(c)(3) states that before beginning construction of any project under Section 7006(c), the Secretary shall submit a report documenting any modifications to the project, including cost changes, to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate. Section 7006(c)(4) states that notwithstanding Section 902 of the Water Resources Development Act of 1986, the cost of a project under Section 7006(c), including any modifications to the project, shall not exceed 150 percent of the cost of such project set forth in Section 7006(c)(1). Preconstruction engineering and design activities on the BBBS project will be continued under the authority provided by Section 7006(c)(1)(C). Construction of the recommended plan for BBBS will be undertaken under the Section 7006(c)(1)(C) authority as well, except for construction of the Shell Island component.

3. The Report of the Chief of Engineers for ecosystem restoration for the Louisiana Coastal Area, dated January 31, 2005, (hereinafter referred to as the LCA Chief's report), describes a plan to address the most critical restoration needs in coastal Louisiana. Congress authorized these projects for construction in WRDA 2007 Title VII. This report addresses BBBS, one of the 15 near-term ecosystem restoration features described in the LCA Chief's report.

4. In accordance with Section 7006(c)(1)(C), the reporting officers recommend that the Secretary carry out the Caminada Headland component of the recommended plan for BBBS under the existing authorization. The reporting officers also recommend that the Congress raise the total project cost for the recommended plan for BBBS. The recommended plan for BBBS is consistent

with the authorization in Section 7006(c)(1)(C) of WRDA 2007, but modification of that authorization is required because the total costs for the recommended plan for BBBS, including both the Caminada Headland component and Shell Island component, exceeds the authorized cost for the BBBS project as defined in Section 7006(c)(4) of WRDA 2007.

5. The BBBS is located approximately 55 miles south of New Orleans, Louisiana. It is a key component in regulating estuary hydrology and slowing the rate of wetland loss. Caminada Headland, forming the western portion of the barrier shoreline, has experienced some of the highest rates of shoreline retreat on the Gulf coast. Shell Island forms the eastern portion of the barrier and has disintegrated into several smaller islands and shoals and is gradually converting to a series of bays directly connected to the Gulf of Mexico. The two reaches were identified in the LCA Chief's Report as the most critical to maintaining Barataria shoreline integrity and protecting the interior coast from further degradation. The BBBS project described in the LCA Chief's report consisted of dredging and placing sediments to restore barrier dunes and marshes. At Caminada Headland, about 9-10 million cubic yards (mcy) of sand would be placed to create a dune approximately 6 feet high with a shoreward berm about 1000 feet wide and13 miles long. Approximately 6 mcy of material would be placed to create about 3,000 acres of marsh. The project would provide a net increase of 640 acres of dune/berm habitat and 1,780 acres of saline marsh habitat at Caminada Headland. Shell Island would be restored to a two-island configuration. At Shell Island (west) approximately 3.4 mcy of sand would be placed to create about 139 acres of dune and about 74 acres of marsh. Approximately 6.6 mcy of sand would be placed at Shell Island (east) to create about 223 acres of dune/berm and about 191 acres of marsh. The project would provide about 147 acres of shoreline habitat on Shell Island.

6. The reporting officers reviewed the BBBS project described in the LCA Chief's report, as well as the changed physical conditions of the shoreline. Since 2005 it has continued to degrade and has been heavily impacted by hurricanes and tropical storms. Based on this review the reporting officers developed the recommended plan presented in this report to respond to the changed conditions and to be consistent with the direction provided in WRDA 2007. As in the LCA Chief's Report, this recommended plan includes dune and marsh restoration at Caminada Headland and Shell Island, the barrier system's most critical components. The recommended plan is the National Ecosystem Restoration (NER) plan. It will restore the barrier system's geomorphic and hydrologic form. It will restore critical habitat for the threatened piping plover, as well as valuable stopover habitats for migratory birds and Essential Fish Habitats for a variety of fish and shellfish. It will protect the interior coast from further degradation, and the sediment input will supplement long shore sediment transport processes, increasing the restored area's sustainability.

7. The recommended plan consists of dredging and placing approximately 5.1 mcy of sand to restore and create about 880 acres of dune at Caminada Headland. Dune height would be + 7 feet North American Vertical Datum of 1988 (NAVD88) with a crown width of 290 feet and

slopes of 20 feet horizontal to 1 foot vertical. The proposed borrow source for Caminada dune material is Ship Shoal, located about 40 miles from the project site. Approximately 5.4 mcy of material would be placed landward of the dune to restore and create approximately 1,186 acres of marsh at an elevation of +2.0 feet NAVD88. The proposed borrow source for Caminada marsh material is located approximately 1.5 miles south of the Headland. Approximately 71,500 feet of sand fencing would be installed and a variety of native vegetation species would be planted on approximately 8 foot centers. Shell Island would be restored to its pre-Hurricane Bob (1979) single island configuration. About 5.6 mcy of sand and 23,800 feet of sand fencing would be placed to build approximately 317 acres of dunes to a height of +6 feet NAVD88 with a crown width of 189 feet and slopes of 45 feet horizontal to 1 foot vertical. The proposed borrow source for Shell Island dune material is the Mississippi River, about 11 miles north of the project site. Approximately 2.1 mcy of sediment would be placed to restore about 466 acres of marsh at an elevation of +2 feet NAVD88. The proposed borrow source for marsh material is an offshore site south of the Empire Jetties. A variety of native vegetation species would be planted on approximately 8 foot centers.

8. The recommended plan includes renourishment at staggered intervals to maintain the headland and island over time. As part of the non-Federal sponsor's Operation, Maintenance, Repair, Replacement and Rehabilitation (OMRR&R) responsibilities, renourishment of the Caminada Headland would be implemented every 1.5 to 2 years in conjunction with Corps operation and maintenance dredging of the Bayou Lafourche, Louisiana (Belle Pass) navigation project. Shell Island would be renourished by the non-Federal sponsor 20 and 40 years after initial construction to the original construction template, as part of its OMRR&R responsibilities.

9. The recommended plan contains post-construction monitoring and adaptive management at an estimated cost of $1,300,000 to be conducted for a period of no more than ten years to ensure project performance. Monitoring may be cost-shared for a period of no more than ten years. The non-Federal sponsor is responsible for monitoring required beyond ten years. Because the recommended plan is an ecosystem restoration plan, it does not have any significant adverse effects, and no mitigation measures would be required.

10. The State of Louisiana is the non-Federal cost-sharing sponsor for all features and supports the recommended plan described herein. Based on October 2011 price levels, the estimated project first cost for the recommended plan is $428,000,000. In accordance with the cost sharing provisions in WRDA 1986, as amended by Section 210 of WRDA 1996 the Federal share of the total first cost would be about $278,000,000 (65 percent) and the non-Federal share would be about $150,000,000 (35 percent). The project first cost includes an estimated $1,300,000 for environmental monitoring and adaptive management. The State of Louisiana, acting as the non-Federal sponsor, is required to provide all lands, easements, relocations, right-of-ways and dredged or excavated material disposal areas (LERRDs), the costs of which are estimated at $3,660,000. Further, the non-Federal sponsor is responsible for OMRR&R of the project after

construction, including renourishment, currently estimated at about $6,180,000 annually. Based on a 4 percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the recommended plan are estimated to be $27,000,000 including OMRR&R.

11. The reporting officers recommend that the Caminada Headland component of the NER plan be implemented under the existing authority provided in Section 7006(c)(1)(C) of WRDA 2007. The reporting officers also recommend that the Congress increase the authorized total project cost so that the entire recommended (NER) plan can be implemented. Modification of the authorization provided by Section 7006(c)(1)(C) is required because the cost of the recommended NER plan, including both the Caminada Headland and Shell Island components, exceeds the authorized cost limit as defined in Section 7006(c)(4). Costs to accomplish the original goals of the BBBS project have increased because the shoreline system has continued to degrade since the LCA Chief's report was completed. In addition, the cost of dredging and placing material, the largest component of this project, has increased because of increases in fuel and construction costs post-hurricane Katrina. The State of Louisiana, acting as the non-Federal sponsor, supports immediate implementation of the Caminada component.

12. Based on October 2011 price levels, the estimated first cost for the Caminada Headland component is $224,000,000. In accordance with the cost sharing provisions in WRDA 1986, as amended by Section 210 of WRDA 1996, the Federal share of the first cost would be about $146,000,000 (65 percent) and the non-Federal share would be about $78,000,000 (35 percent). The first cost includes an estimated $630,000 for environmental monitoring and adaptive management. The State of Louisiana, acting as the non-Federal sponsor, is required to provide all LERRDs, the costs of which are estimated at $1,650,000. Further, the non-Federal sponsor is responsible for OMRR&R of the project after construction, including renourishment, currently estimated at about $4,250,000 annually. Based on a 4 percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the recommended plan are estimated to be $14,600,000 including OMRR&R.

13. The reporting officers found the recommended plan and each of the components to be cost effective, technically sound, and environmentally and socially acceptable. The cost of the recommended aquatic ecosystem restoration features is justified by the decrease in shoreline erosion and loss of wetlands; the restored barrier system's regulation of salinity gradients and maintenance of the estuary critical to fish and wildlife, such as white and brown shrimp; the maintenance of geomorphic form that attenuates storm surge for interior wetlands and surrounding coastal communities, including Port Fourchon, major oil and gas infrastructure and the regional hurricane evacuation route for residents of southern Lafourche Parish; and the approximately 1719 AAHUs of beach/dune and marsh habitats provided 988 AAHUs on Caminada Headland and 731 AAHUs on Shell Island. The recommended plan conforms to essential elements of the U.S. Water Resources Council's Economic and Environmental Studies and complies with other administration and legislative policies and guidelines. The

recommended plan was developed in coordination and consultation with various Federal, State and local agencies using a systems approach in formulating ecosystem restoration solutions and in evaluating the impacts and benefits of those solutions. Study formulation looked at a wide range of structural and non-structural alternatives. Further refinement and additional analysis of the project will be performed during preconstruction engineering and design, and modifications will be made, as appropriate, prior to project implementation. Such analysis or modifications will continue to be coordinated with Federal, State, and local agencies and other parties.

14. In accordance with the Engineering Circular on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and rigorous review process to ensure technical quality. This included an independent Agency Technical Review (ATR), an Independent External Peer Review (IEPR), and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the report. The IEPR was conducted by the Battelle Memorial Institute. IEPR of the draft report was completed on December 2, 2011. A total of 16 comments were generated. No comments were rated high significance, 15 were rated medium, and 1 was rated low significance. All comments from this review have been addressed and incorporated into the final project documents and recommendation as appropriate.

15. I concur in the findings, conclusions, and recommendation of the reporting officers. Accordingly, I recommend project implementation, in accordance with the reporting officers' recommendations with such modifications as in the discretion of the Chief of Engineers may be advisable. I further recommend, in accordance with the reporting officers recommendations, that the authorization be modified to raise the total project cost to allow for construction of the entire NER plan. My recommendations are subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including WRDA 1986, as amended by Section 210 of WRDA 1996. The State of Louisiana, acting as the non-Federal sponsor, would provide the non-Federal cost share and all lands, easements, relocations, right-of-ways and disposals. Further, the non-Federal sponsor would be responsible for all OMRR&R. This recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and policies, including but not limited to its agreeing to:

a. Provide 35 percent of ecosystem restoration project costs as further specified below:

(1) Provide the non-Federal share of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

(2) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material that

the Government determines to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the project;

(3) Provide, during construction, any additional funds necessary to make its total contribution equal to 35 percent of the total project costs allocated to the project;

b. Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project;

c. Not use funds provided by a Federal agency under any other Federal program, to satisfy, in whole or in part, the non-Federal share of the cost of the project unless the Federal agency that provides the funds determines that the funds are authorized to be used to carry out the study or project;

d. Not use the project or lands, easements, and rights-of-way required for the project as a wetlands bank or mitigation credit for any other project;

e. For as long as the project remains authorized, operate, maintain, repair, replace, and rehabilitate the project, or functional portion of the project, including mitigation, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

f. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor, now or hereafter, owns or controls for access to the project for the purpose of inspecting, operating, maintaining, repairing, replacing, rehabilitating, or completing the project. No completion, operation, maintenance, repair, replacement, or rehabilitation by the Federal Government shall relieve the non-Federal sponsor of responsibility to meet the non-Federal sponsor's obligations, or to preclude the Federal Government from pursuing any other remedy at law or equity to ensure faithful performance;

g. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the project and any project-related betterments, except for damages due to the fault or negligence of the United States or its contractors;

h. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or

under lands, easements, or rights-of-way that the Federal Government determines to be required for the initial construction, periodic nourishment, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigations unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

i. Assume, as between the Federal Government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be necessary for the initial construction, periodic nourishment, operation, or maintenance of the project;

j. Agree that, as between the Federal Government and the non-Federal sponsor, the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, and repair the project in a manner that would not cause liability to arise under CERCLA;

k. Prevent obstructions of or encroachments on the project (including prescribing and enforcing regulations to prevent such obstruction or encroachments) which might reduce ecosystem restoration benefits, hinder operation and maintenance, or interfere with the project's proper function, such as any new developments on project lands or the addition of facilities which would degrade the benefits of the project;

l. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, and other evidence is required, to the extent and in such detail as would properly reflect total costs of construction of the project, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 Code of Federal Regulations (CFR) Section 33.20;

m. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5), and Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element;

n. Comply with all applicable Federal and state laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army," and all applicable Federal labor standards and requirements, including but not limited to 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying, and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a et seq.), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 et seq.) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c et seq.); and

o. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way necessary for the initial construction, periodic nourishment, operation, and maintenance of the project, including those necessary for relocations, borrow materials, and dredged or excavated material disposal, and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act.

16. The recommendations contained herein reflect the information available at this time and current departmental policies governing the formulation of individual projects. They do not reflect program and budgeting priorities inherent in the formulation of the national civil works construction program or the perspective of higher levels within the executive branch. Consequently, the recommendations may be modified before they are transmitted to Congress for additional authorization and/or implementation funding. However, prior to transmittal to Congress, the State of Louisiana, interested Federal agencies, and other parties will be advised of any significant modifications in the recommendations and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, US Army
Commanding

DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
2600 ARMY PENTAGON
WASHINGTON, D.C. 20310-2600

DAEN

APR 2 3 2013

SUBJECT: Neuse River Basin, Ecosystem Restoration Project, North Carolina

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration in the Neuse River Basin, North Carolina. It is accompanied by the report of the district and division engineers. These reports are in final response to two resolutions by the Committee of Public Works of the United States House of Representatives, adopted April 15, 1966, and the Committee on Transportation and Infrastructure, adopted July 23, 1997. The 1966 resolution requested a review of the report of the Chief of Engineers on the Neuse River Basin, North Carolina, published as House Document Numbered 175, Eighty-ninth Congress, and other pertinent reports to determine whether any modifications to the recommendations contained in the report are advisable. The 1997 resolution further requested a review of House Document 175 to determine where modifications of the recommendations are advisable in the interest of flood control (flood risk management), environmental protection and restoration, and related purposes. Preconstruction engineering and design activities for the Neuse River Basin ecosystem restoration project will continue under the authority adopted in July 1997.

2. The Neuse River Basin, the third-largest river basin in North Carolina contains a total area of 6,234 square miles, is one of only four watersheds entirely within the state. It originates at the confluence of the Eno and Flat Rivers in north central North Carolina near the city of Durham and flows southeasterly until reaching tidal waters upstream of the city of New Bern, North Carolina where the river broadens dramatically and changes from a unidirectional freshwater regime to a mixed tidal regime of the Neuse River Estuary before flowing out into Pamlico Sound and the Atlantic Ocean. The Neuse River Basin has experienced severe flooding in the past; consequently elements of the Basin ecosystem have shown signs of significant stress and degradation.

The ecosystem significance of the area is demonstrated on the national, regional, and local level. The Neuse River Basin includes 7 essential fish habitats and 12 significant natural heritage areas. The Neuse River Basin feeds one of the nation's largest and most productive coastal estuaries (Albemarle-Pamlico Sounds). The Albemarle-Pamlico estuary system, which is in the National Estuary Program, is a nursery for 90 percent of the commercial seafood species caught in North Carolina. In 2011 the value of seafood landed in North Carolina had an estimated dockside value of $72.8 million.

The federally listed shortnosed sturgeon will directly benefit from the opening of the dam which will improve passage for migration. The Neuse River Basin is also home to 17 species of rare freshwater mussels, two of which are federally listed as endangered, and a rare snail species. The federally listed dwarf wedgemussel and Tar River spinymussel will benefit from the restoration by increasing fish host for transportation. The Neuse River basin also provides habitat for 7 other federally listed

endangered species which include, the West Indian manatee, Red-cockaded woodpecker, Leatherback sea turtle and the Kemp's Ridley sea turtle.

3. The reporting officers recommend authorization of a plan to restore four components of the Neuse River Basin ecosystem. The plan includes construction of rock sills approximately 3,500 feet long at Gum Thicket Creek and 5,200 feet long at Cedar Creek, built at distances of about 60 feet offshore; regrading a previously filled area within the Kinston East wetland complex to the approximate elevation of the adjacent bottomland hardwood forest and allowing natural revegetation of the site by bottomland hardwood species and limited planting; modifying the Low-head Dam on the Little River to allow migration of anadromous fish; and the creation of 10 acres of 4 foot-high oyster reef within an 80 acre service area. The recommended plan is the National Ecosystem Restoration Plan. Implementation of the recommended plan will have a substantial beneficial impact on biological integrity, freshwater mussel populations, anadromous fish populations, emergent wetlands, and the quantity and quality of oyster reef habitat.

4. Based on an October 2012 (FY13) price level the estimated project first cost is $35,774,000. In accordance with the cost sharing provisions contained in Section 103(c) of the Water Resources Development Act of 1986 (WRDA 1986), as amended (33 U.S.C. 2213(c)), ecosystem restoration features are cost-shared at a rate of 65 percent Federal and 35 percent non-Federal. Thus the Federal share of the project first cost is estimated to be $23,253,100 and the non-Federal share is estimated at $12,520,900, which includes the costs of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas (LERRD) estimated at $254,000. The non-Federal will receive credit for the costs of LERRD towards the non-Federal share. The North Carolina Department of Environment and Natural Resources (NCDENR) Division of Water Resources (NCDWR) is the non-Federal cost-sharing sponsor for the recommended plan. The State of North Carolina would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, an average annual cost currently estimated at $24,000.

5. Based on a 3.75 percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $1,671,000, including monitoring estimated at $312,000 and OMRR&R. All project costs are allocated to the authorized purpose of ecosystem restoration and are justified by the restoration of 241 average annual functional units in the Basin. The plan would restore the habitats in the most cost-effective manner. The restoration would include 1) creating 80 acres of oyster reef sanctuary with approximately 10 acres of reef top resulting in improved water quality and habitat for commercial and recreational seafood, 2) increasing wetland habitat by 14.5 acres of bottomland hardwoods, creating 15 acres of estuarine marsh, preventing degradation of another 60 acres of estuarine march and protecting a 240 acre wetland conservation easement area for wetland species and improved water resource function, and 3) restoring hydrologic connectivity for 46 miles of important spawning habitat for anadromous fish species.

6. The recommended plan was developed in coordination and consultation with various Federal, State, and local agencies using cost effectiveness and incremental cost analysis techniques to formulate ecosystem restoration solutions and evaluate the impacts and benefits of those solutions. Plan formulation evaluated a wide range of non-structural and structural alternatives under Corps policy and guidelines as well as consideration of a variety of economic, social and environmental

goals. The recommended plan delivers a holistic, comprehensive approach to solve water resources challenges in a sustainable manner.

7. In accordance with the Corps Engineering Circular on sea level change, the study performed an analysis of three Sea Level Rise rates, a baseline estimate representing the minimum expected sea level change, an intermediate estimate, and a high estimate representing the maximum expected sea level change. Projecting the three rates of change over a 50 year period provides a predicted low level rise of 0.42 feet (ft), an intermediate level rise of 0.85 ft and a high level rise of 2.2 ft. Accelerated sea level rise is expected to impact only one part of the recommended plan, which is the Gum Thicket/Cedar Creek site. Accelerated rates of future sea level rise may lead to drowning scenarios of North Carolinas tidal coastal wetlands. It is estimated in the without project condition, at the Gum Thicket reach up to 450 ft of erosion could occur under the historical rate of sea level rise, 671 ft of erosion could occur under the baseline estimate and up to 1,381 ft of erosion could occur under the high estimate over the 50 year period of analysis. At the Cedar Creek reach, 100 ft, 149 ft and 306 ft of erosion could occur under historical sea level rise and for baseline, intermediate and high scenarios, respectively, over the 50 year period of analysis. The environmental benefits of the recommended were based on erosion occurring at the historical rate of sea level rise, this means that the environmental benefits from the plan would actually increase with the accelerated sea level rise scenarios. Average annual habitat benefits for the recommended plan at Gum Thicket/Cedar Creek under the baseline scenario are estimated at 52.7 habitat units (a 10.0 habitat unit increase as compared to the historical sea level rate). Both the shoreline stabilization and marsh creation at Gum Thicket and Cedar Creeks would be affected by sea level rise. The project is designed based upon a historical rate of sea level rise. To reduce risks from potential accelerated sea level rise on the plantings, marsh restoration would include both low and high marshes allowing upslope mitigation of low-lying marshes. The sill design accounts for the historical rate of sea level rise applied over 50 years.

8. In accordance with Corps Engineering Circular on review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included District Quality Control, Agency Technical Review (ECO-PCX), Policy and Legal Compliance Review, Cost Engineering Directory of Expertise Review and Certification, and Model Review and Approval. Given the nature of the project, an exclusion from the requirement to conduct a Type I Independent External Peer Review was granted on 18 May 2012. Concerns expressed by the ECO-PCX team have been addressed and incorporated in the final report.

9. Washington level review indicates the plan recommended by the reporting officers is technically sound, environmentally and socially acceptable, and on the basis of Congressional directives, economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principal and Guidelines for Water and Land Related Resources Implementation Studies. The recommended plan complies with other administration and legislative policies and guidelines. The views of interested parties including Federal, State and local agencies have been considered. State and Agency comments received during review of the final report and environmental assessment included concerns raised by the North Carolina Clearinghouse, the Environmental Protection Agency and the United States Coast Guard with design refinements for compliance with regulations and benefit improvements, as well as a request for continued coordination during the Preconstruction, Engineering and Design phase. The concerns were addressed through USACE response letters dated 7 March 2013, 12 February 2013,

and 26 February 2013, respectively.

10. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan for ecosystem restoration in the Neuse River Basin, North Carolina be authorized in accordance with the reporting officers' recommended plan at an October 2012 (FY13) estimated cost of $35,774,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended (33 U.S.C. 2213). Accordingly, the non-Federal sponsor must agree with the following requirements prior to project implementation.

a. Provide 35 percent of total ecosystem restoration costs as further specified below:

(1) Provide 35 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

(2) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the Government to be required or to be necessary for the construction, operation, and maintenance of the project;

(3) Provide, during construction, any additional funds necessary to make its total contribution equal to 35 percent of total project costs;

b. Shall not use funds from other Federal programs, including any non-Federal contribution required as a matching share therefore, to meet any of the non-Federal obligations for the project unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is authorized by Federal law;

c. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the outputs produced by the project, hinder operation and maintenance of the project, or interfere with the project's proper function;

d. Shall not use the project or lands, easements, and rights-of-way required for the project as a wetlands bank or mitigation credit for any other project;

e. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 Code of Federal Regulations (CFR) Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

f. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the Federal Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

g. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

h. Hold and save the United States free from all damages arising from the design, construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

i. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three years after completion of the accounting for which such books, records, documents, and other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 CFR Section 33.20;

j. Comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulations 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*); the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*), and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*));

k. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under the lands, easements, or rights-of-way that the Federal Government determines to be required for construction, operation, and maintenance of the project. However, for lands that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigation unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

l. Assume, as between the Federal Government and the non-Federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be required for construction or operation and maintenance of the project;

m. Agree, as between the Federal Government and the non-Federal sponsor, that the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA;

n. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-Federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

11. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

DAEN

MAR 27 2018

SUBJECT: Lynnhaven River Basin Ecosystem Restoration Project, Virginia

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration in the Lynnhaven River Basin, Virginia. It is accompanied by the report of the district and division engineers. These reports are an interim response to a resolution by the Committee on Transportation and Infrastructure of the United States House of Representatives, Docket 2558, adopted May 1998. The resolution requested the review of the report of the Chief of Engineers on the Lynnhaven Inlet, Bay, and Connecting Waters, Virginia, published as House Document 580, 80th Congress, 2nd Session, and other pertinent reports to determine whether any modifications of the recommendations contained therein are advisable at the present time in the interest of environmental restoration and protection and other related water resources purposes for the Lynnhaven River Basin, Virginia. Preconstruction, engineering, and design activities for the Lynnhaven River Basin Ecosystem Restoration Project will continue under the authority provided by the resolution cited above.

2. The Lynnhaven River Basin, the southernmost tributary to the Chesapeake Bay in Virginia, is a 64 square mile tidal estuary in the lower Chesapeake Bay Watershed. The Lynnhaven River's three branches, the Eastern, Western, and the Broad Bay/Linkhorn Bay, represent approximately 0.4 percent of the area of Virginia and approximately 0.2 percent of the Chesapeake Bay Watershed. However, the basin encompasses one-fourth of the area of the city of Virginia Beach and provides vital functions to the city and its residents. As has happened throughout the Chesapeake Bay, the Lynnhaven River Basin has seen declines in essential habitat - submerged aquatic vegetation (SAV), wetlands, oysters and scallops - and an overall reduced water quality from alterations to the ecosystem primarily stemming from increased development and population.

3. The significance of this ecosystem is demonstrated on the national, regional, and local level. Five federal and state endangered species occur or potentially occur in the Lynnhaven River Basin, including the hawksbill, Kemp's Ridley and leatherback sea turtles and the roseate tern. Also within the basin there are four additional state endangered species to include the eastern chicken turtle, Wilson's plover, Rafinesque's big-eared bat, and the canebrake rattlesnake. The Lynnhaven River Basin includes essential fish habitats for 19 species of fin fish, which demonstrates the important of estuaries as rearing grounds not only for fin fish sought by commercial and recreational fishermen, but for shell fish as well. During 2012, more than 149,000 pounds of fin fish, 369,000 pounds of blue crabs, 2,400 pounds of conch and 18,500 pounds of hard shell clams were landed in the Lynnhaven River Basin with an approximate value

of $1 million. In 1983, 1987 and 2000, the states of Virginia, Maryland, and Pennsylvania, the District of Columbia, the Chesapeake Bay Commission, and the U.S. Environmental Protection Agency (EPA), representing the federal government, signed historic agreements establishing the Chesapeake Bay Program, a strong partnership to protect and restore the Chesapeake Bay ecosystem. In addition, Section 704(b) of the Water Resources Development Act (WRDA) of 1986, as amended through Section 505 of the WRDA of 1996; the re-authorization of Section 704(b); Section 342 of the WRDA of 2000; and the Section 704(b) as amended by Section 5021 of WRDA 2007 provided for the restoration of oysters within the Chesapeake Bay and its tributaries. Recently, all of the laws and agreements affecting the restoration, protection, and conservation of the Chesapeake Bay have been brought into focus under the Chesapeake Bay Protection and Restoration Executive Order (EO 13508) signed by President Barack Obama on 12 May 2009. Locally, the city of Virginia Beach, The Trust for Public Land, and the Chesapeake Bay Foundation have partnered to purchase and protect 122 acres of natural lands known as Pleasure House Point, one of the largest undeveloped tracts of land on the Lynnhaven River.

4. The reporting officers recommend authorization of a plan to restore approximately 38 acres of wetlands, 94 acres of SAV, reintroduction of the bay scallop on 22 acres of the restored SAV, and construction of 31 acres of artificial reef habitat. The restoration measures, at various sites throughout the basin, will significantly increase three types of habitats, at least two of which are an essential part of the food web for several of the endangered species and form the basis of many of the essential fish habitats. The recommended plan is the National Ecosystem Restoration (NER) Plan. Implementation of the recommended plan will have substantial beneficial impact on the biological integrity, habitat diversity, and resiliency of the Lynnhaven River Basin.

5. Based on an October 2013 FY14 price level, the estimated project first cost of the NER Plan is $35,110,000, which includes a 10-year monitoring and adaptive management program at an estimated cost of $1,750,000, developed to adequately address the uncertainties inherent in a large environmental restoration project and to improve the overall performance of the project. In accordance with the cost sharing provisions contained in Section 103(c) of the WRDA 1986, as amended (33 U.S.C. 2213(c)), ecosystem restoration features are cost-shared at a rate of 65 percent federal and 35 percent non-federal. Thus the federal share of the project first cost is $22,821,500 and the non-federal share is estimated at $12,288,500, which includes the costs of land, easements, rights-of-way, relocations, and dredged or excavated material disposal areas (LERRD) estimated at $740,000. The non-federal sponsor will receive credit for the costs of LERRD toward the non-federal share. The City of Virginia Beach is the non-federal cost-sharing sponsor for the recommended plan. The city would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, an average annual cost currently estimated at $2,000.

6. Based on a 3.5 percent discount rate and a 50-year period of analysis, the total equivalent average annual costs of the project are estimated to be $1,554,000, including monitoring estimated at $30,000 and $2,000 for OMRR&R. All project costs are allocated to the authorized purpose of ecosystem restoration and are justified by an increase in species diversity (measured

using a biological index), an increase in secondary production, and an increase in marsh productivity (an average increase of 70 points using the EPA Marsh Assessment Score). The plan would improve essential estuarine habitats in the most cost-effective and sustainable manner.

7. The recommended plan was developed in coordination and consultation with various federal, state, and local agencies using our cost effectiveness and incremental cost analysis techniques to formulate ecosystem restoration solutions and evaluate the impacts and benefits of those solutions. Plan formulation evaluated a wide range of non-structural and structural alternatives under Corps policy and guidelines as well as consideration of a variety of economic, social, and environmental goals. The recommended plan delivers a sustainable approach to solve water resources and ecosystem challenges while contributing towards the goals of the EO 13508 strategy to restore tidal wetlands, enhance degraded wetlands, sustain fish and wildlife by restoring oyster habitat in a tributary of the Chesapeake Bay, and restore priority habitat such as submerged aquatic vegetation.

8. In accordance with the Corps Engineering Circular on sea level change (SLC), three sea level rise rates; a baseline estimate representing the minimum expected SLC, an intermediate estimate, and a high estimate representing the maximum expected SLC were analyzed during the study. Projecting the three rates over the 50-year period provides a predicted low level rise of 0.73 feet (ft), an intermediate level rise of 1.14ft, and a high level rise of 2.48ft. The project is designed based upon the historical, or minimum rate of SLC. The two elements of the project that would be most impacted by SLC are the SAV and wetland restoration, while SLC would have little or no effect on the reef habitat or scallop restoration. Marshes within the Lynnhaven basin have historically sustained themselves from the effect of SLC through vertical accretion, although migration landward is a possibility. Similarly, as the water column becomes deeper due to SLC, the SAV will migrate into shallow waters if allowed by the geography and development of the inundated shoreline. Because a large amount of the Lynnhaven shoreline is developed, the ability of the SAV and marshes to adjust to SLC may be limited.

9. In accordance with Corps Engineering Circular on review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and vigorous review process to ensure technical quality. This included District Quality Control, Agency Technical Review (ATR) - coordinated by the Ecosystem Restoration Planning Center of Expertise (ECO-PCX), policy and Legal Compliance Review, Cost Engineering Directory of Expertise Review and Certification, and Model Review and Approval. All concerns of the ATR have been addressed and incorporated in the final report. Given the nature of the project, an exclusion from the requirement to conduct Type I Independent Peer Review was granted on 31 July 2013. Concerns expressed by the ECO-PCX team have been addressed and incorporated in the final report.

10. Washington level review indicates the plan recommended by the reporting officers is technically sound, environmentally and socially acceptable, and on the basis of Congressional directives, economically justified. The plan complies with all essential elements of the U.S. Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for

Water and Land Related Resources Implementation Studies. The recommended plan complies with other administration and legislative policies and guidelines. The views of interested parties, including federal, state, and local agencies, have been considered. State and agency comments received during review of the final report and environmental assessment were addressed. The EPA inquired whether information on sea level rise from another study in the area was considered. The Commonwealth of Virginia expressed concern regarding whether the required leases would be able to be obtained expeditiously; summarized prior coordination with and commitments to Virginia's regulatory and resource agencies; and made recommendations concerning project methods.

11. I concur with the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan for ecosystem restoration in the Lynnhaven River Basin, Virginia be authorized in accordance with the reporting officers' recommended plan at an estimated cost of $35,110,000 with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal and state laws and policies, including Section 103 of WRDA 1986, as amended (33 U.S.C. 2213). Accordingly, the non-federal sponsor must agree with the following requirements prior to project implementation.

a. Provide 35 percent of total ecosystem restoration costs as further specified below:

(1) Provide 35 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

(2) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements desired on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material as determined by the government to be required or to be necessary for the construction, operation, and maintenance of the project;

(3) Provide, during construction, any additional funds necessary to make its total contribution equal to 35 percent of total project costs.

b. Prior to initiation of construction, obtain approval from the Commonwealth of Virginia of an administrative designation in perpetuity for the river bottom areas required for the artificial reef and aquatic vegetation features of the project that provides sufficient protection to those areas from uses incompatible with the project;

c. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the outputs produced by the project, hinder operation and maintenance of the project, or interfere with the project's proper function;

d. Shall not use project or lands, easements, and rights-of-way required for the project as a wetlands bank or mitigation credit for any other project;

e. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4601-4655), and the Uniform Regulations contained in 49 Code of Federal Regulations Part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

f. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the federal government, in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the federal government;

g. Hold and save the United States free from all damages arising from the design, construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors.

h. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under the lands, easements, or rights-of-way that the federal government determines to be required for construction, operation, and maintenance of the project. However, for lands that the federal government determines to be subject to the navigation servitude, only the federal government shall perform such investigation unless the federal government provides the non-federal sponsor with prior specific written direction, in which case the non-federal sponsor shall perform such investigations in accordance with such written direction;

i. Assume, as between the federal government and the non-federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the federal government determines to be required for construction or operation and maintenance of the project;

j. Agree, as between the federal government and the non-federal sponsor, that the non-federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA.

12. The recommendation contained herein reflects the information available at this time and current departmental policies governing the formulation of individual projects. It does not reflect

program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the City of Virginia Beach, Virginia (the non-federal sponsor), the state, interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
441 G STREET, NW
WASHINGTON, DC 20314-1000

REPLY TO
ATTENTION OF

DAEN

- 6 JAN 2014

SUBJECT: Willamette River Floodplain Restoration Project, Lower Coast Fork and Middle Fork, Oregon.

THE SECRETARY OF THE ARMY

1. I submit, for transmission to Congress, my report on the study of ecosystem restoration along the Willamette River, Lower Coast and Middle Forks near Eugene, Oregon. It is accompanied by the reports of the district and the division engineers. This report is an interim response to a resolution by the Committee on Public Works of the United States Senate, adopted November 15, 1961. This resolution authorized the Chief of Engineers to determine "whether any modification of the existing project is advisable at the present time, with particular reference to providing additional improvements for flood control, navigation, hydroelectric power development, and other purposes, coordinated with related land resources, on the Willamette River and Tributaries, Oregon." It is further an interim response to a resolution by the Committee on Public Works of the United States House of Representatives, adopted September 8, 1988. This resolution authorized the Chief of Engineers to determine "whether modifications to the existing projects are warranted and determine the need for further improvements within the Willamette River Basin (the Basin) in the interest of water resources improvements." Preconstruction engineering and design activities for the Willamette River Floodplain Restoration project will continue under the authority provided by the resolutions cited above.

2. The reporting officers recommend authorizing a plan to restore floodplain ecosystem functions by reconnecting floodplain habitats to the rivers and improving fish and wildlife habitats in the vicinity of Eugene, Oregon. The recommended plan for ecosystem restoration includes restoration at five project sites along the lower two miles of both the Coast Fork and Middle Fork of Willamette River. Restoration measures include excavation of connection channels, restoration of gravel-mined ponds, installation of large wood and engineered logjams, removal of invasive plant species, revegetation with native plant species, and installation of culverts for channel crossings. The recommended plan provides restoration on a total of 574 acres of floodplain and provides substantial benefits to fish and wildlife and the ecosystem. Minor adverse environmental effects will be avoided and minimized during construction by the use of conservation measures and best management practices. The long-term effects are beneficial. The recommended plan also includes post-construction monitoring and adaptive management for a period of ten years to ensure project performance. Monitoring will measure the following key elements: vegetation, connector channel hydrology and hydraulics, river and floodplain morphology, wildlife, physical habitat, and fish. Since the recommended plan would

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not have any significant adverse effects, no mitigation measures (beyond avoidance and management practices) or compensation measures are required.

3. The recommended plan is the Locally Preferred Plan (LPP) that is smaller scale and lower cost than the National Ecosystem Restoration (NER) plan. All features are located within the State of Oregon. The Nature Conservancy is the non-federal cost-sharing sponsor for all features. Based on October 2013 price levels, the estimated total first cost of the plan is $42,155,000. In accordance with the cost sharing provisions the Water Resources Development Act (WRDA) of 1986, as amended, the federal share of the first costs of the ecosystem restoration features would be $27,401,000 (65 percent) and the non-federal share would be $14,754,000 (35 percent). The cost of lands, easements, rights-of-way, relocations and dredged or excavated material disposal areas is currently estimated at $428,000. The total project cost includes $429,000 for post-construction monitoring and $535,000 for adaptive management. The Nature Conservancy would be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction, a cost currently estimated at approximately $150,000 per year. Based on a 3.5 percent discount rate, October 2013 price levels and a 50-year period of analysis, the total equivalent average annual cost of the project is estimated to be $1,947,000, including OMRR&R.

4. Cost effectiveness and incremental cost analysis techniques were used to evaluate the alternative plans to ensure that a cost effective ecosystem restoration plan was recommended. The cost of the recommended restoration features is justified by restoring 182 average annual habitat units on 574 acres of floodplain and aquatic habitats. The restored aquatic habitat would increase habitat for Upper Willamette River Chinook salmon, bull trout, and Oregon chub listed as threatened under the Endangered Species Act, and would improve floodplain and aquatic habitats for a variety of fish and wildlife species in the Lower Coast and Middle Forks of the Willamette River for approximately 2 miles upstream on each river from their confluence. The restored habitat would increase scarce off-channel rearing and refuge habitat for fish species, and scarce forested riparian and emergent and shrub wetland habitats for sensitive amphibian species, and nesting, feeding, and rearing habitat for migratory waterfowl and neotropical migrant birds using the internationally significant Western Flyway.

5. The recommended plan was developed in coordination and consultation with various federal, state, and local agencies using a systematic and regional approach to formulating solutions and evaluating the benefits and impacts that would result. Risk and uncertainty were addressed during the study by completing a cost and schedule risk analysis and a sensitivity analyses that evaluated the potential impacts of a change in economic assumptions.

6. In accordance with the Corps' guidance on review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and rigorous review process to ensure technical quality. This included an Agency Technical Review (ATR), an Independent External Peer Review (IEPR), and a Corps Headquarters policy and legal review. All concerns of the ATR have been addressed and incorporated into the final report. An IEPR was completed by Battelle Memorial Institute in May 2013. A total of 15 comments related to plan

formulation, economic analysis, and hydrology and hydraulics were documented. All comments were addressed by report revisions, and subsequently closed.

7. Washington level review indicates that the plan recommended by the reporting officers is environmentally justified, technically sound, cost effective and socially acceptable. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies. The recommended plan complies with other administration and legislative policies and guidelines. The views of interested parties, including federal, state and local agencies, were considered. Comments received during review of the integrated draft report and environmental assessment included comments by the US Fish and Wildlife Service (USFWS), the Oregon State Historical Preservation Office (SHPO), and the National Marine Fisheries Service (NMFS). The National Environmental Policy Act (NEPA) process resulted in a finding of no significant impacts from this project. The USFWS and NMFS agreed with the use of best management practices and continued coordination during design and implementation, and SHPO concurred with the Area of Potential Effect (APE) and proposed management plan for implementation. During state and agency review of the proposed Report of the Chief of Engineers, no comments were received and agencies were supportive of the recommended plan.

8. I concur with the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan to restore the ecosystem of the Willamette River Floodplain, Lower Coast and Middle Forks near Eugene, Oregon, be authorized in accordance with the reporting officers' recommended plan at an estimated first cost of $42,155,000. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal and state laws and policies, including Public Law 99-662, the Water Resource Development Act of 1986, as amended, and in accordance with the required items of local cooperation that the non-federal sponsor shall, prior to project implementation, agree to perform:

a. Provide 35 percent of total project costs as cash or in-kind services, as further specified below:

(1) Provide the required non-federal share of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

(2) Provide, during the first year of construction, any additional funds necessary to pay the full non-federal share of design costs;

(3) Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material as determined by the government to be required or to be necessary for the construction, operation, and maintenance of the project.

(4) Provide, during construction, any additional funds necessary to make its total contributions equal to 35 percent of total project costs.

b. Provide work-in-kind during final design and construction as well as providing the post-construction monitoring. The value of LERRDs needed for the project are credited against the non-federal sponsor's cost-sharing requirement. The sponsor anticipates contributing the balance of funds from grant funding that will not include funds from federal agencies.

c. Shall not use funds from other federal programs, including any non-federal contribution required as a matching share therefore, to meet any of the non-federal obligations for the project unless the federal agency providing the federal funds verifies in writing that such funds are authorized to be used to carry out the project;

d. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the outputs produced by the project, hinder operation and maintenance of the project, or interfere with the project's proper function;

e. Shall not use the project or lands, easements, and rights-of-way required for the project as a wetlands bank or mitigation credit for any other project;

f. Comply with all applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. §§ 4601-4655), and the Uniform Regulations contained in 49 C.F.R. part 24, in acquiring lands, easements, and rights-of-way required for construction, operation, and maintenance of the project, including those necessary for relocations, the borrowing of materials, or the disposal of dredged or excavated material; and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;

g. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, at no cost to the federal government, in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the federal government;

h. Give the federal government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating, maintaining, repairing, rehabilitating, or replacing the project;

i. Hold and save the United States free from all damages arising from construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

j. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, or other evidence are required, to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management.

k. Comply with all applicable federal and state laws and regulations, including but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. § 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable federal labor standards requirements including, but not limited to, 40 U.S.C. §§ 3141-3148 and 40 U.S.C. §§ 3701-3708;

l. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. §§ 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the federal government determines to be required for construction, operation, and maintenance of the project. However, for lands that the federal government determines to be subject to the navigation servitude, only the federal government shall perform such investigations unless the federal government provides the non-federal sponsor with prior specific written direction, in which case the non-federal sponsor shall perform such investigations in accordance with such written direction;

m. Assume, as between the federal government and the non-federal sponsor, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the federal government determines to be required for construction, operation, and maintenance of the project;

n. Agree, as between the federal government and the non-federal sponsor, that the non-federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA; and,

o. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. § 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. § 2213(j)), which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until each non-federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

9. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It neither reflects

program and budgeting priorities inherent in the formulation of a national Civil Works construction program, nor the perspective of higher review levels within the Executive Branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the non-federal sponsor, the state, interested federal agencies and other parties will be advised of any significant modifications, and will be afforded an opportunity to comment further.

THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers

SEC. 7003. AUTHORIZATION OF PROJECT MODIFICATIONS RECOMMENDED BY THE SECRETARY.

House § 402, Senate § 1003.—House and Senate agree to an amendment.

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

JAN 24 2013

Honorable John Boehner
Speaker of the House
of Representatives
U.S. Capitol Building, Room H-232
Washington, D.C. 20515-0001

Dear Mr. Speaker:

The Secretary of the Army recommends increasing the authorized total project cost of the Roseau River, Minnesota Flood Damage Reduction Project. The increase is necessary because the construction cost is projected to exceed the maximum project cost established by Section 902 of the Water Resources Development Act (WRDA) of 1986. The enclosed Engineering Documentation Report, dated July 2012, sets forth the cost increase and documents that the project remains economically justified, technically sound and environmentally acceptable.

Section 1001(27) of the WRDA of 2007 authorized the project at a cost of $25,100,000, with an estimated federal cost of $13,820,000 and non-federal cost of $11,280,000. The authorized project consists of a 4.5 mile long diversion channel around the eastern side of the city of Roseau, 5.5 miles of levees with a height of 5 feet or less along the diversion channel, a flow restriction structure on the Roseau River, an inlet control structure, 2 storage areas east and west of the diversion channel and 2 highway bridge channel crossings. Recreation features of the project include 6.7 miles of multipurpose trails, 5.5 miles of off-road vehicle trails, 2 bird watching stations and a trailhead. The maximum cost for the authorized project, adjusted for allowable inflation in accordance with Section 902, is $33,149,000 (October 2012 price level).

The revised estimated project first cost is $41,864,000 (October 2012 price level). In general, the cost increase results from unanticipated site conditions and design refinements. The project cost includes $3,523,000 for separable recreation features. The federal share of the project first cost is estimated at $24,320,000 and the non-federal share is estimated at $17,544,000. The majority of lands, easements, rights-of-way, relocations and excavated material disposal areas required for the project have been acquired. The city of Roseau is the non-federal cost sharing sponsor and will be responsible for the operation, maintenance, repair, replacement and rehabilitation of the project after construction, at a cost currently estimated at $114,000 per year.

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The project continues to be economically justified based on the reduction of flood damages. At the October 2012 price level, a 4.0 percent discount rate, and a 50-year period of economic analysis, the U.S. Army Corps of Engineers estimates the total equivalent average annual costs to be $2,223,000 and total equivalent average annual benefits to be $5,324,000. Net benefits are estimated at $3,102,000 and the benefit cost ratio is 2.4 to 1.

With respect to environmental compliance, a Finding of No Significant Impact was signed for the project on August 29, 2006. The Corps has determined that the changes resulting from differing site conditions and design refinements have not resulted in any appreciable change in the environmental consequences as described in the August 2006 Environmental Assessment prepared for the project.

The Office of Management and Budget (OMB) advises that there is no objection to the submission of the report to Congress and concludes that the report recommendation is consistent with the policy and programs of the President. OMB also advises that should Congress increase the project authorization for construction, the project would need to compete with other proposed investments in future budgets. A copy of OMB's letter, dated January 11, 2013, is enclosed. I am providing a copy of this transmittal and the OMB letter to the Subcommittee on Water Resources and the Environment of the House Committee on Transportation and Infrastructure, and the Subcommittee on Energy and Water Development of the House Committee on Appropriations. I am providing an identical letter to the President of the Senate.

Very truly yours,

Jo-Ellen Darcy

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

Enclosures

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

MAY - 7 2013

Honorable John A. Boehner
Speaker of the House
of Representatives
U.S. Capitol Building, Room H-232
Washington, D.C. 20515-0001

Dear Mr. Speaker:

The Secretary of the Army recommends modifying the cost of the Wood River Levee System Reconstruction, Madison County, Illinois, project that was authorized by Section 1001(20) of the Water Resources Development Act (WRDA) of 2007. Section 1001(20) authorized reconstruction of features of the existing project, which was authorized by the Flood Control Act of 1938. The Flood Control Act of 1938 authorized a project to protect against a Mississippi River flood with a 52-foot stage on the St. Louis, Missouri gage. The river currently has less than a 0.2-percent chance of exceeding this stage in any given year, which equates to approximately a 500-year frequency interval. The recommended cost increase is necessary because the estimated project first cost exceeds the maximum project cost allowed by Section 902 of the WRDA of 1986, as amended. The enclosed report of the Director of Civil Works, Army Corps of Engineers, dated February 11, 2013, explains and supports the cost increase and includes other pertinent documents. The enclosed documents demonstrate that this flood risk management project remains economically justified and environmentally acceptable.

Section 1001(20) authorized the reconstruction or replacement of 38 gravity drains, 26 closure structures (including abandoning three railroad closure structures that are no longer used), and seven pump stations. When completed, this work would restore the existing project's ability to reduce urban flood damages in Madison County, which is across the Mississippi River from the city of St. Louis. Section 1001(20) authorized the work at a total first cost of $17,220,000, with a Federal cost share of $11,193,000 and a non-Federal cost share of $6,027,000. This total first cost equates to $19,870,000 at current (October 2012) price levels. The current maximum authorized cost, adjusted for modifications up to 20 percent and cost index changes in accordance with Section 902, as amended, is $23,414,000.

The project cost has increased primarily because many project features were more severely deteriorated than anticipated in 2007 and have required replacement rather than the planned reconstruction. Based on an October 2012 price level, the estimated project first cost is $25,672,000, which includes $4,873,000 for remaining work. In accordance with Section 103(a) of the WRDA of 1986, as amended, the Federal share of the project first cost would be $16,687,000 and the non-Federal share would be $8,895,000. The Wood River Levee and Drainage District, the non-Federal

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cost sharing sponsor, will be responsible for the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction. The cost of OMRR&R is currently estimated at $175,000 per year.

The project continues to be economically justified based on reducing urban flood damages. At the October 2012 price level, a 3.75 percent discount rate, and a 50-year period of analysis, the estimated total equivalent average annual cost would be $1,337,000 and total equivalent average annual benefits would be $5,066,000, which includes all OMRR&R costs. Net benefits are estimated at $3,729,000 and the benefit-to-cost ratio would be 3.8 to 1.

A Finding of No Significant Impact (FONSI) was signed for the authorized project on March 23, 2006 based on the Wood River Levee System, Madison County, Illinois, Final General Reevaluation Report and Environmental Assessment dated March 2006. There have been no changes to the project since the FONSI was signed that warrant additional environmental compliance actions. The authorized project does not require any compensatory mitigation. The project continues to be environmentally acceptable.

The Office of Management and Budget (OMB) advises that there is no objection to the submission of the report to Congress and concludes that the report recommendation is consistent with the policy and programs of the President. OMB also advises that should Congress increase the project authorization for construction, the project would need to compete with other proposed investments in future budgets. A copy of OMB's letter, dated May 4, 2013, is enclosed. I am providing a copy of this transmittal and the OMB letter to the Subcommittee on Water Resources and Environment of the House Committee on Transportation and Infrastructure, and the Subcommittee on Energy and Water Development of the House Committee on Appropriations. I am providing an identical letter to the President of the Senate.

Very truly yours,

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

Enclosures

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

AUG -8 2013

Honorable Joseph R. Biden, Jr.
President of the Senate
U.S. Capitol Building, Room S-212
Washington, D.C. 20510-0012

Dear Mr. President:

The Secretary of the Army recommends increasing the authorized total project cost of the Corpus Christi Ship Channel (CCSC), Texas, Deep-Draft Navigation and Ecosystem Restoration Project. The increase is necessary because the construction cost is projected to exceed the maximum project cost established by Section 902 of the Water Resources Development Act (WRDA) of 1986. The enclosed Limited Re-evaluation Report, dated December 2012, sets forth the cost increase and documents that the project remains economically justified, technically sound and environmentally acceptable.

Section 1001(40) of the Water Resources Development Act (WRDA) of 2007 originally authorized the project at a project first cost of $188,110,000. The authorized project consists of deepening and widening of the CCSC from -45 feet to -52 feet, mean lower low water (MLLW), construction of Barge Shelves adjacent to the open bay portion of the CCSC, extension of the La Quinta Channel at a depth of 39 feet and construction of two separate ecosystem restoration features. After completion the components would generate measurable savings through reductions in shipping costs. The restoration components would protect and restore productive estuarine habitat. The maximum cost for the authorized project, adjusted for inflation in accordance with Section 902 of the WRDA of 1986, is $283,544,726 (October 2012 price levels). The revised project first cost exceeds the Section 902 limit.

The revised project first cost is $344,610,000 (October 2012 prices). The revised cost is the result of increases in costs for construction materials, fuel, labor, as well as design refinements. There are no changes in project location, purpose or scope. The federal share of the project first cost is estimated to be $169,593,000 and the non-federal share is estimated at $175,016,000. The federal government would be responsible for the operation, maintenance, repair, replacement and rehabilitation (OMRR&R) of the Barge Shelves after construction, at a cost currently estimated at $16,000 per year and would also be responsible for the OMRR&R of the La Quinta Extension after construction, at a cost currently estimated at $1,256,000 per year. The federal government is responsible for 100 percent of the costs of maintaining the main channel to a depth of -45 feet; the added cost of maintaining the channel to depths deeper than -45 feet is shared at the rate of 50 percent by the federal government and

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50 percent by the non-federal sponsor in accordance with Section 101 of WRDA 1986. OMRR&R costs for the main channel are estimated at $5,705,000 per year. The non-federal sponsor will be responsible for OMRR&R of the ecosystem restoration features of the project after construction, at a cost currently estimated at $166,260 per year.

The project continues to be economically justified based principally on a reduction in shipping costs and ecosystem restoration benefits. At the October 2012 price level, a 3.75 percent discount rate, and a 50-year period of economic analysis, the estimated total equivalent annual costs for the remaining construction are $23,693,000 and total equivalent annual benefits are $52,685,000. Net benefits are estimated at $28,991,000 and the benefit cost ratio is 2.2 to 1.

There have been no significant changes in the project area or sensitive resources that would result in impacts to resources not previously considered and accounted for in the 2003 Final Environmental Impact Statement. The October 1, 2007 Record of Decision remains applicable to the recommended plan.

The Office of Management and Budget (OMB) advises that there is no objection to the submission of the report to Congress and concludes that the report recommendation is consistent with the policy and programs of the President. OMB also advises that should Congress increase the project authorization for construction, the Corps would need to update and refine its analysis of the benefits and costs before proceeding with the fourth element of the project; and that this element of the project would need to compete as a separable element with other proposed investments in future budgets. A copy of OMB's letter, dated July 31, 2013, is enclosed. I am providing a copy of this transmittal and the OMB letter to the Subcommittee on Transportation and Infrastructure of the Senate Committee on Environment and Public Works, and the Subcommittee on Energy and Water Development of the Senate Committee on Appropriations. I am also providing an identical letter to the Speaker of the House of Representatives.

Very truly yours,

Jo-Ellen Darcy

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

Enclosures

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

FEB 12 2014

Honorable John Boehner
Speaker of the House
of Representatives
U.S. Capitol Building, Room H-232
Washington, D.C. 20515-0001

Dear Mr. Speaker:

The Secretary of the Army recommends modifying the authorized total project cost of the Des Moines and Raccoon Rivers Project. The increase is necessary because the construction cost is projected to exceed the maximum allowed by Section 902 of the Water Resources Development Act (WRDA) of 1986. The enclosed Post Authorization Change Report (PACR) of the Director of Civil Works, Army Corps of Engineers (Corps), dated August 2013, explains and supports the cost increase and includes other pertinent documents. The enclosed documents demonstrate that the project remains economically justified, technically sound and environmentally acceptable.

Section 1001(27) of the Water Resources Development Act (WRDA) of 2007 authorized the project at a cost of $10,780,000. The Energy and Water Development Appropriations Act of 2010 authorized an increased total project cost to $16,500,000. The authorized project consists of approximately 7,500 feet of earthen levee and associated structures to provide the authorized level of flood risk reduction (FRR) to the Birdland Park area; an asphalt-surfaced recreational trail on a portion of the Birdland Park levee; approximately 5,700 feet of earthen levee; modifications to the Franklin Ave, Clark St, and Indiana Ave Pump Stations and associated structures which provide the authorized level of FRR to the Central Place area; elimination of 7 closures and improvements at 9 closure locations in the existing downtown FRR system; and provision of 18.2 acres of open water, riparian, and wetland habitat as environmental mitigation in the Chichaqua Wildlife Habitat Park. The maximum cost for the authorized project, adjusted for allowable inflation in accordance with Section 902, is $20,836,000 (October 2013 price levels).

Based on an October 2013 price level the updated estimated project first cost is $23,245,000, which includes sunk costs of $20,300,000 including the already constructed features, real estate costs, recreation costs and various pre-construction engineering and design costs associated with the overall Des Moines and Raccoon Rivers project. In general, the increase in the estimated project first cost is the result of increases in material costs and project quantities, and unforeseen subsurface conditions, which required more material, labor and handling. The Corps' Cost Engineering Center of Expertise completed its review of the project cost and certified the cost on 6 June 2013. The federal share of the authorized project is estimated at $14,990,300 and the non-federal share is estimated at $8,254,700. The non-federal

sponsor is responsible for the operation maintenance, repair, replacement and rehabilitation of the project after construction, at a cost currently estimated at $40,000 per year.

In accordance with certified Corps economic updating procedures, the project continues to be economically justified based principally on reduction of flood damages. At the October 2013 price level, a FY 2014 discount rate of 3.5 percent, and a 50-year period of economic analysis, the Corps estimates the total annual costs to be $1,034,000 and total equivalent annual benefits to be $2,357,000. Net benefits are estimated at $1,323,000 and the benefit cost ratio is 2.2 to 1.

A Finding of No Significant Impact (FONSI) was signed for the project on September 7, 2005. The Corps reviewed the PACR and the FONSI, and determined that the changes resulting from increases in material costs, increases in project quantities, and unforeseen subsurface conditions have not altered the project's original purpose, scope, or location; therefore, there is no change in environmental considerations for the project.

The Office of Management and Budget (OMB) advises that there is no objection to the submission of the report to Congress and concludes that the report recommendation is consistent with the policy and programs of the President. OMB also advises that should Congress increase the project authorization for construction, the project would need to compete with other proposed investments in future budgets. A copy of OMB's letter, dated February 3, 2014, is enclosed. I am providing a copy of this transmittal and the OMB letter to the Subcommittee on Water Resources and Environment of the House Committee on Transportation and Infrastructure, and the Subcommittee on Energy and Water Development of the House Committee on Appropriations. I am providing an identical letter to the President of the Senate.

Very truly yours,

Jo-Ellen Darcy

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

Enclosures

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

FEB 26 2014

Honorable John A. Boehner
Speaker of the House
of Representatives
U.S. Capitol Building, Room H-232
Washington, D.C. 20515-0001

Dear Mr. Speaker:

The Secretary of the Army recommends modifying the cost of the Poplar Island, Maryland, project that was authorized by Section 537 of the Water Resources Development Act (WRDA) of 1996, as amended, and the cost of the expansion of the same project that was authorized by Section 3087 of the WRDA of 2007. The recommended cost increases are necessary because the respective current estimated project first costs exceed the maximum project costs allowed by Section 902 of the WRDA of 1986, as amended. The enclosed report of the Director of Civil Works, Army Corps of Engineers, dated July 22, 2013, explains and supports the cost increases and includes other pertinent documents. The enclosed documents demonstrate that this aquatic ecosystem restoration project remains justified.

The authorized project and expansion consist of restoring and expanding remote island habitat to provide aquatic, wetland and terrestrial habitat for fish, shellfish, reptiles, amphibians, birds and mammals through the beneficial use of approximately 68 million cubic yards of dredged material from the approach channels of the Baltimore Harbor and Channels navigation project and the Chesapeake and Delaware (C&D) Canal navigation project. The dredged material is being used to restore 1,715 acres of remote island habitat, including 840 acres of upland habitat at an elevation of 25 feet above mean lower low water (MLLW), 735 acres of wetland habitat that will be further divided into low marsh and high marsh, approximately 138 acres of open water embayment, and 10 acres of tidal gut leading into the wetlands. This remote island habitat will eventually provide 26,300 island community units at an average cost of $100,500 per unit.

Section 537 authorized the restoration of a 1,140-acre island in Chesapeake Bay at a total first cost of $307,000,000. Section 318 of the WRDA of 2000 modified the authorization to provide that the non-Federal share of the cost of the project may be cash or in-kind services or materials, and to provide credit toward the non-Federal share of the cost of design and construction work carried out by the non-Federal interest before the date of execution of a project cooperation agreement for the project if the Secretary determines that the work is integral to the project. Section 3087 further modified the project to expand the island by 575 acres and raise the elevation five feet at a total first cost of $260,000,000.

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The maximum authorized costs, adjusted for modifications up to 20 percent and cost index changes in accordance with Section 902, as amended, are $611,798,000 for the original project and $447,173,000 for the expansion (October 2013 price levels). The total current maximum authorized cost of these two elements is $1,058,971,000. As described in the attached reports, the revised estimated total project first cost is $662,294,000 for the original project and $571,617,000 for the expansion. The total revised cost of these two elements is an estimated $1,233,911,000. The increases are attributed to three major factors: (1) 34 percent of the increase is due to dredged material transportation and placement costs; (2) 36 percent of the increase is due to site operations costs; and (3) 23 percent of the increase is due to project contingency changes. These increases are driven by extending the project's duration, increasing fuel costs, and including risk analysis in the cost engineering process.

In accordance with Section 537, the revised Federal cost share of the original project is about $496,721,000 (75 percent) and the non-Federal share is about $165,574,000 (25 percent). The revised Federal cost share of the expansion is about $371,551,000 (65 percent) and the non-Federal share is about $200,066,000 (35 percent) in accordance with Section 3087. The total revised Federal share of the project is about $868,272,000 and the total non-Federal share is about $365,639,000. At a 3.5 percent discount rate and a 37-year period of economic analysis, the estimated total equivalent annual cost of the original project and expansion is about $54,063,000, including the operation, maintenance, repair, replacement, and rehabilitation (OMRR&R). The Maryland Port Administration is the non-Federal cost sharing sponsor and will be responsible for the OMRR&R of the original project and expansion after construction, currently estimated at $3,200,000 annually.

The project and expansion remain justified based on ecosystem restoration benefits. The island habitat is a unique component of the Chesapeake Bay and will directly improve the health, richness and sustainability of aquatic and wildlife species, including the American black duck, a key species named in Executive Order 13508, *Chesapeake Bay Protection and Restoration*. The project has capacity to accept dredged material until about 2029, at which time another disposal site will be needed.

A Record of Decision (ROD) was signed for the existing island project on September 4, 1998, based on the Final Integrated Feasibility Report and Environmental Impact Statement, dated February 1996, and a second ROD was signed for the expansion on October 11, 2006, based on the Final General Reevaluation Report and Supplemental Environmental Impact Statement, dated September 2005. There have been no changes to the project since the RODs were signed that warrant additional environmental compliance actions. The project does not require any compensatory mitigation. The project continues to be environmentally acceptable.

The Office of Management and Budget (OMB) advises that there is no objection to the submission of the report to Congress and concludes that the report recommendation is consistent with the policy and programs of the President. OMB also advises that should Congress increase the project authorization for construction, the

project would need to compete with other proposed investments in future budgets. A copy of OMB's letter, dated February 12, 2014, is enclosed. I am providing a copy of this transmittal and the OMB letter to the Subcommittee on Water Resources and Environment of the House Committee on Transportation and Infrastructure, and the Subcommittee on Energy and Water Development of the House Committee on Appropriations. I am providing an identical letter to the President of the Senate.

Very truly yours,

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

Enclosures

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

MAR 18 2014

Honorable John A. Boehner
Speaker of the House
of Representatives
U.S. Capitol Building, Room H-232
Washington, D.C. 20515-0001

Dear Mr. Speaker:

The Secretary of the Army recommends modifying the cost of the Illinois Shoreline Erosion, Interim III, Wilmette, Illinois, to the Illinois-Indiana State Line (Chicago Shoreline) project that was authorized by Section 101(a)(12) of the Water Resources Development Act (WRDA) of 1996, as amended. The recommended cost increases are necessary because the respective current estimated project first cost exceeds the maximum project cost allowed by Section 902 of the WRDA of 1986, as amended. The enclosed report of the Director of Civil Works, Army Corps of Engineers, dated September 10, 2013, explains and supports the cost increases and includes other pertinent documents. The enclosed documents demonstrate that this storm damage risk reduction project remains economically justified and environmentally acceptable.

Section 101(a)(12) authorized the construction of a locally preferred plan that consisted of approximately nine miles of hurricane and storm damage reduction features, including eight miles of new revetment, and reconstruction of an offshore breakwater at a total first cost of $204,000,000, with an estimated Federal cost of $110,000,000 and an estimated non-Federal cost of $94,000,000. Section 318 of the WRDA of 1990 modified the authorization to provide credit or reimbursement for the Federal share of project costs for additional project work undertaken by the non-Federal interests, including certain work that occurred before the signing of the project cooperation agreement.

The maximum authorized cost, adjusted for modifications up to 20 percent and cost index changes in accordance with Section 902, as amended, is $327,350,000 for the project (October 2013 price levels). The revised estimated total project first cost is $540,546,000. The increases are attributed to design changes necessary to address public safety, regulatory concerns, public acceptability, and hazardous waste investigations. In accordance with Section 101(a)(12), the Federal cost share would be about $185,441,000 (34.3 percent) and the non-Federal share would be about $355,105,000 (65.7 percent). The City of Chicago and the Chicago Park District are the non-Federal cost sharing sponsors and will be responsible for the operation, maintenance, repair, replacement, and rehabilitation, currently estimated at $507,000.

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At a 3.5 percent discount rate, which is the new rate starting in October, 2013, and a 50-year period of economic analysis, the estimated total equivalent annual cost of the project is about $31,543,000 and the equivalent average annual benefit is about $229,300,000. The equivalent annual net benefits are $197,757,000 and the benefit-to-cost ratio is 7.3-to-1.

A Finding of No Significant Impact was signed for the project on July 2, 1993, based on an Environmental Assessment (EA). Since then, there have been nine supplemental EAs for the project. These National Environmental Policy Act documents adequately address the environmental impacts of the project. The project does not require any compensatory mitigation. The project continues to be environmentally acceptable.

The Office of Management and Budget (OMB) advises that there is no objection to the submission of the report to Congress and concludes that the report recommendation is consistent with the policy and programs of the President. OMB also advises that should Congress increase the project authorization for construction, the project would need to compete with other proposed investments in future budgets. A copy of OMB's letter, dated February 28, 2014, is enclosed. I am providing a copy of this transmittal and the OMB letter to the Subcommittee on Transportation and Infrastructure of the Senate Committee on Environment and Public Works, and the Subcommittee on Energy and Water Development of the Senate Committee on Appropriations. I am providing an identical letter to the Speaker of the House of Representatives.

Very truly yours,

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

Enclosures

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108 ARMY PENTAGON
WASHINGTON DC 20310-0108

MAR 20 2014

Honorable John Boehner
Speaker of the House
of Representatives
U.S. Capitol Building, Room H-232
Washington, D.C. 20515-0001

Dear Mr. Speaker:

The Secretary of the Army recommends increasing the authorized total project cost of the Western Sarpy and Clear Creek, Nebraska flood risk reduction project. The increase is necessary because the construction costs are projected to exceed the maximum total project cost established by Section 902 of the Water Resources Development Act (WRDA) of 1986, as amended. The enclosed report of the Director of Civil Works, Army Corps of Engineers, dated May 14, 2013, explains and supports the cost increases and includes other pertinent documents. The enclosed documents demonstrate that the project remains economically justified, technically sound and environmentally acceptable.

Section 101(b)(21) of WRDA 2000 contingently authorized the project at a total first cost of $15,643,000. Section 3113 of WRDA 2007 increased the authorized project cost to $21,664,000. The authorized project consists of improving 16 miles of pre-project non-federal levees along the Lower Platte River in Saunders and Sarpy Counties, Nebraska. The project increases and provides a uniform level of protection by improving the existing levees and filling in gaps in the levees. The completed project is expected to provide about $1.9 million annually in flood risk reduction benefits.

The maximum authorized cost, adjusted for modifications up to 20 percent and cost index changes in accordance with Section 902, as amended, is $29,010,000 (October 2013 price levels). Based on cost increases described in the report, the revised estimated project first cost (without inflation) is $43,275,100. In general, the increase in estimated total project cost results from low initial estimates, design changes, and unanticipated costs from lengthened design and construction timeframes.

The federal share of the project first cost is estimated to be $28,128,800 and the non-federal share is estimated at $15,146,300. The majority of lands, easements, rights-of-way, relocations, and excavated material disposal areas required for the project have been obtained since initiating construction. The acquisitions required to complete the project total 140 acres. The non-federal cost sharing sponsors of the project are the Papio-Missouri River Natural Resources District, the Lower Platte North

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Natural Resources District, and the Lower Platte South Natural Resources District. They will be responsible for the operation, maintenance, repair, replacement, and rehabilitation of the project after construction, at a cost currently estimated at $8,600 per year.

At a 3.5 percent discount rate, which is the new rate starting in October 2013, and a 50-year period of economic analysis, the estimated total equivalent annual cost of the project is about $2,007,100 and the equivalent average annual benefit is about $4,031,900. The equivalent annual net benefits are $2,024,800 and the benefit-to-cost ratio is 2.0 to 1.

With respect to environmental compliance, a Record of Decision was signed for the project in 2003. The Corps has determined that the changes resulting from differing site conditions and design refinements have not altered the project's original purpose and scope, nor have they resulted in any appreciable change in the environmental consequences as described in the December 2003 Environmental Impact Statement prepared for the project.

The Office of Management and Budget (OMB) advises that there is no objection to the submission of the report to Congress and concludes that the report recommendation is consistent with the policy and programs of the President. The project will need to compete with other proposed investments in future Budgets. A copy of OMB's letter dated February 28, 2014, is enclosed. I am providing a copy of this transmittal and the OMB letter to the House Committee on Transportation and Infrastructure Subcommittee on Water Resources and Environment and the House Committee on Appropriations Subcommittee on Energy and Water Development. I am providing an identical letter to the President of the Senate.

Very truly yours,

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

Enclosures

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

APR 14 2014

Honorable John A. Boehner
Speaker of the House
of Representatives
U.S. Capitol Building, Room H-232
Washington, D.C. 20515-0001

Dear Mr. Speaker:

The Secretary of the Army recommends modifying the cost of the Cape Girardeau, Missouri, Reconstruction project that was authorized by Title I of the Energy and Water Development Appropriations Act of 2004. The recommended cost increases are necessary because the respective current estimated project first costs exceed the maximum project costs allowed by Section 902 of the Water Resources Development Act of 1986, as amended. The enclosed report of the Director of Civil Works, Army Corps of Engineers, dated November 21, 2013, explains and supports the cost increases and includes other pertinent documents. The enclosed documents demonstrate that this flood risk management project remains economically justified and environmentally acceptable.

The Cape Girardeau project was originally authorized by Section 204 of the Flood Control Act of 1950 (P.L. 81-516) at a cost of $4,756,000 with construction a 100 percent Federal responsibility and lands, easements, and rights-of-way a non-Federal responsibility. Title I of the Energy and Water Development Appropriations Act of 2004 (P.L. 108-137) authorized reconstruction at a total cost of $9,000,000 with cost sharing as originally authorized and subject to a Secretary determination that the reconstruction is technically sound and environmentally acceptable. On December 19, 2007, the Assistant Secretary of the Army (Civil Works) determined that the reconstruction is technically sound and environmentally acceptable based on an Engineering Documentation Report prepared by the Corps of Engineers. The project consists of an approximately 1.2-mile-long floodwall system that protects the City of Cape Girardeau against Mississippi River floods with less than a 0.2 percent chance of exceedance (500-year frequency).

The maximum authorized cost, adjusted for modifications up to 20 percent and cost index changes in accordance with Section 902, as amended, is $14,194,000 for the project (October 2013 price levels). The revised estimated total project first cost is $18,433,000. The increase is attributed to design changes necessary to address differing site conditions and to incorporate design refinements resulting from lessons learned on similar projects. As authorized, the Federal cost share would be about $17,687,000 (96 percent) and the non-Federal share would be about $746,000

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(four percent). The City of Cape Girardeau is the non-Federal cost sharing sponsor and will be responsible for the operation, maintenance, repair, replacement, and rehabilitation, currently estimated at $193,000.

Based on a 3.5 percent discount rate, which is the new rate starting in October, 2013, and a 50-year period of economic analysis, the estimated total equivalent average annual cost of the project is about $947,000 and the equivalent average annual benefit is about $1,863,000. The equivalent annual net benefits are $916,000 and the benefit-to-cost ratio is 2.0-to-1.

A Finding of No Significant Impact was signed for the reconstruction project on June 16, 2005, based on an Environmental Assessment. The subsequent design changes would not alter the environmental effects of the project. The existing National Environmental Policy Act documents adequately address the environmental impacts of the project. The project does not require any compensatory mitigation and it continues to be environmentally acceptable.

The Office of Management and Budget (OMB) advises that there is no objection to the submission of the report to Congress and concludes that the report recommendation is consistent with the policy and programs of the President with the exception of the level of non-Federal cost sharing. As noted above and in the report, the reconstruction of this project is authorized with construction a 100 percent Federal responsibility and the cost to acquire land, easements, rights of way, relocations, and disposal a non-Federal responsibility. Administration policy requires 65 percent Federal and 35 percent non-Federal cost sharing for flood risk management projects, including this project. OMB advises that should Congress authorize a cost increase, the project would need to compete with other proposed investments for funding in future budgets. A copy of OMB's letter, dated April 9, 2014, is enclosed. I am providing a copy of this transmittal and the OMB letter to the Subcommittee on Water Resources and Environment of the House Committee on Transportation and Infrastructure, and the Subcommittee on Energy and Water Development of the House Committee on Appropriations. I am providing an identical letter to the President of the Senate.

Very truly yours,

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

Enclosures

SEC. 7004. EXPEDITED CONSIDERATION IN THE HOUSE AND SENATE.

Senate § 1004. No comparable House section.—House recedes, with an amendment.

ADVISORY OF EARMARKS

"H.R. 3080 does not contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9 of rule XXI of the United States House of Representatives."

H.R. 3080

Managers on the part of the **HOUSE**	*Managers on the part of the* **SENATE**
From the Committee on Transportation and Infrastructure, for consideration of the House bill and the Senate amendment, and modifications committed to conference:	
Mr. SHUSTER	
Mr. DUNCAN OF TENNESSEE	
Mr. LOBIONDO	
Mr. GRAVES OF MISSOURI	
Shelley Moore Capito Mrs. CAPITO	
Candice S. Miller Mrs. MILLER OF MICHIGAN	
Mr. HUNTER	

H.R. 3080—Continued

Managers on the part of the **HOUSE**	*Managers on the part of the* **SENATE**
Mr. BUCSHON	
Mr. GIBBS	
Mr. HANNA	
Mr. WEBSTER OF FLORIDA	
Mr. RICE OF SOUTH CAROLINA	
Mr. MULLIN	
Mr. DAVIS, RODNEY, OF ILLINOIS	
Mr. RAHALL	

H.R. 3080—Continued

Managers on the part of the **HOUSE**	*Managers on the part of the* **SENATE**
Mr. DEFAZIO	
Ms. BROWN OF FLORIDA	
Ms. JOHNSON, EDDIE BERNICE, OF TEXAS	
Mr. BISHOP OF NEW YORK	
Ms. EDWARDS	
Mr. GARAMENDI	
Ms. HAHN	
[redacted]	

H.R. 3080—Continued

Managers on the part of the **HOUSE**	*Managers on the part of the* **SENATE**
Ms. FRANKEL OF FLORIDA	
Mrs. BUSTOS	

H.R. 3080—Continued

Managers on the part of the **HOUSE**	*Managers on the part of the* **SENATE**
From the Committee on Natural Resources, for consideration of secs. 103, 115, 144, 146, and 220 of the House bill, and secs. 2017, 2027, 2028, 2033, 2051, 3005, 5002, 5003, 5005, 5007, 5012, 5018, 5020, title XII, and sec. 13002 of the Senate amendment, and modifications committed to conference:	
Mr. HASTINGS OF WASHINGTON	
Mr. BISHOP OF UTAH	
Grace F. Napolitano Mrs. NAPOLITANO	

H.R. 3080—Continued

Managers on the part of the HOUSE	*Managers on the part of the* SENATE
	Mrs. BOXER
	Mr. CARPER
	Mr. CARDIN
	Mr. WHITEHOUSE
	Mr. SANDERS
	Mr. VITTER
	Mr. INHOFE
	Mr. BARRASSO