MEMORANDUM FOR SEE DISTRIBUTION


1. The Assistant Secretary of the Army (Civil Works) approved on 8 March 2019 Section 1162 of WRDA 2016. This section amends Section 906 of WRDA 1986 which was previously amended by Section 1040 of WRRDA 2014. The attached guidance is also posted for internal and external use on the Corps’ official WRDA website: http://www.usace.army.mil/Missions/Civil-Works/Project-Planning/Legislative-Links/.

2. Please ensure wide dissemination and immediate adherence to this guidance. Please note this guidance supersedes prior Implementation Guidance, including Reference 1(i) dated 1 February 2018, and Engineer Regulations to the extent regulations differ from this guidance. The headquarters POC for this guidance is Mark Matusiak, Planning and Policy Division, at (202)761-4700 or Mark.Matusiak@usace.army.mil.

JAMES C. DALTON, P.E.
Director of Civil Works

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MEMORANDUM FOR COMMANDING GENERAL, U.S. ARMY CORPS OF ENGINEERS


1. References.


   d. Section 2036(c) of WRDA 2007, as amended by Section 1163 of the WRDA 2016 (33 U.S.C. 2317b).

   e. Revised Implementation Guidance for Section 1163 of WRDA 2016, dated 8 March 2019


   g. Compensatory Mitigation for Losses of Aquatic Resources, Final Rule, Federal Register, Volume 73, No. 70, Pages 19594-61065, April 10, 2008 (33 C.F.R. Part 332).


2. Section 1040 of WRRDA 2014 modifies Section 906(d) (Mitigation Plans as Part of Project Proposals) of WRDA 1986 and establishes new subsections (h) Programmatic Mitigation Plans and (i) Third-Party Arrangements. See reference 1.e for information on these third-party mitigation arrangements. Section 1162 of WRDA 2016 amends Section 906 of WRDA 1986 by modifying subsection (h) and establishing new subsections (j) Use of Funds and (k) Measures. A copy of Section 906, as amended by Section 1040 of WRRDA 2014 and Section 1162 of WRDA 2016 is enclosed. Copies of Section 1040 of WRRDA 2014 and Section 1162 of WRDA 2016 are also enclosed.

3. Section 1040 of WRRDA 2014 modifies Section 906(d) of WRDA 1986. Specifically, Section 1040 provides clarification that mitigation for losses of fish and wildlife habitat includes damages to ecological resources, including terrestrial and aquatic resources. Section 1040 clarifies that the Secretary need not include a mitigation plan in a report for Congressional authorization if it is determined that a water resources development project will have negligible adverse impacts on ecological resources without the implementation of mitigation measures. This determination shall be included in the report for Congress. Section 1040 requires that the basis for the determination of those instances where providing in-kind mitigation is not practicable (the word “possible” is interchangeable with the word “practicable” in this implementation guidance) must be provided in the Secretary’s report for the water resources development project and include the mitigation measures that will be implemented if the project is constructed. Under Section 1040, the recommended mitigation plan shall include a determination that the proposed interest sought does not exceed the minimum interest in land necessary to meet the mitigation requirements for the project. For projects where third-party mitigation such as mitigation banks or in-lieu-fee arrangements are used, a description of the mitigation instrument and the basis for determining that the third-party mitigation has the capability to meet the project’s mitigation needs shall be provided. See WRDA 2016, Section 1163 implementation guidance for additional information on the consideration and use of mitigation banks or in-lieu fee programs.

4. This guidance applies to water resource development projects that require specific authorization and supplements the existing guidance on mitigation planning in ER 1105-2-100 to include Appendix C (Appendix C). This guidance does not apply to U.S. Army Corps of Engineers (Corps) Continuing Authorities Program (CAP) projects or the Corps Regulatory Program. Mitigation planning for CAP projects will follow the existing guidance found in Appendix C, Paragraph C-3.d. and C-3.e. of ER 1105-2-100, and applicable guidance in Appendix F of ER 1105-2-100.
5. It is the policy of the Corps Civil Works program to demonstrate that impacts to all ecological resources, both terrestrial and aquatic, have been avoided and minimized to the extent practicable, and that any remaining non-negligible unavoidable impacts have been compensated for to the extent practicable, as discussed in Appendix C. The Corps will continue to utilize the mitigation planning process described in ER 1105-2-100 to determine compensation for non-negligible impacts to aquatic, terrestrial and human resources to the extent practicable and to ensure that the recommended project will not have more than negligible impacts on ecological resources. Appendix C should be consulted for details on analyzing in-kind and in-watershed mitigation, including cases where out-of-kind or out-of-watershed alternatives may be merited.

6. Section 906(d) of WRDA 1986 is amended by Section 1040 of WRRDA 2014 to include ecological resources – including terrestrial and aquatic resources – when considering mitigation for impacts of fish and wildlife caused by a water resource development project. The consideration of mitigation for impacts of fish and wildlife shall not include ecological services. The mitigation for impacts of ecological resources is understood to refer to the non-negligible losses of significant terrestrial and aquatic habitats, and shall also encompass any mitigation measures required under Federal laws to include, but not limited to the Clean Air Act and Clean Water Act. Should the determination be made that a water resources development project does not require any compensatory mitigation, the project report must explicitly state that no mitigation is required because the adverse effects of the project on terrestrial and aquatic resources are negligible and the report must provide a succinct rationale for this determination.

7. When land or interest acquisition is proposed as part of a mitigation plan, the plan shall describe the required lands or interests in land and the basis for determining that the land or interests are available for acquisition. The plan must identify the quantity and type of lands needed, and demonstrate that lands of such quantity and type are available for acquisition. Acquisition shall not be by condemnation in the case of projects completed, or on which at least 10 percent of the physical construction on the project has been completed, as of November 17, 1986. For all other projects, unless otherwise limited by Federal law, condemnation is an available reasonable acquisition method and will be considered during the evaluation of reasonable alternatives. However, in accordance with Section 906(b), acquisition of water, or interests therein, shall not be by condemnation. The plan shall include a determination that the proposed interest sought does not exceed the minimum interest in land necessary to meet the mitigation requirements for the project. In accordance with Section 906(a), any land or interest acquisition necessary to mitigate for fish and wildlife losses shall be acquired before the physical construction that causes the impacts which must be mitigated. To the extent practicable, project lands and lands to mitigate for impacts of the construction of that phase of the project will be acquired concurrently. The minimum interest in lands needed to carry out implementation of mitigation actions will vary depending on the
specifics of the mitigation plan. In general, fee simple is required for mitigation lands, but the sufficiency of a lesser interest or estate may be evaluated and justified to the Assistant Secretary of the Army for Civil Works (ASA(CW)) on a case-by-case basis in accordance with paragraph 12-9 of chapter 12 of ER 405-1-12 (reference 1.j., above).

8. Section 1040 of WRRDA 2014 amends Section 906 of WRDA 1986 to include subsection (h), which provides additional information on Programmatic Mitigation Plans. Specifically, subsection (h)(1) allows the Secretary to develop programmatic mitigation plans. The development of such programmatic plans should generally be associated with a Corps watershed study conducted in accordance with EC 1105-2-411. Stand-alone studies to develop programmatic mitigation plans are allowed, but are subject to availability of appropriated funds. Subsection (h)(2) directs the Secretary, to the maximum extent practicable, to use programmatic environmental plans and programmatic mitigation plans developed in accordance with this subsection to guide the development of a mitigation plan under Section 906(d). Programmatic mitigation plans may not be used in place of a project specific mitigation plan unless the programmatic plan also meets the detailed plan and other requirements established by Section 906(d). For the purposes of this guidance, the phrase "to the maximum extent practicable" means that programmatic environmental plans and programmatic mitigation plans should be used wherever practicable to meet the mitigation needs of a project, subject to the following criteria:

a. The programmatic plans must be capable of providing the habitat outputs that will result in appropriate and practicable compensation;

b. The cost of using the programmatic plan is lower than, or comparable to, the lowest-cost acceptable project-specific mitigation alternative formulated as part of the Corps study, as evaluated by the CE/ICA process of the IWR Planning Suite. In some cases, cost estimates and ecological modeling outputs for the resources addressed in the third-party mitigation arrangement may need to be developed to enable the CE/ICA process;

c. The non-Federal sponsor must be capable and willing to acquire all necessary real estate interests to implement the required project mitigation at the locations described in the programmatic plan. In accordance with policy, all project lands, to include mitigation lands, must be acquired before the physical construction that causes the impacts which must be mitigated;

d. The programmatic plan must be scalable to the mitigation needs of the existing or future water resource development projects, i.e., must be capable of being carried out in complete and efficient increments sufficient to compensate for the adverse effects of the project(s), without providing compensatory mitigation beyond that needed to

compensate for said adverse effects, or incurring costs beyond the minimum needed to provide adequate project mitigation; and

e. The programmatic plans and increments thereof must be capable of being implemented in a timely fashion, i.e., prior to or concurrent with the adverse construction impacts as defined in C-3(e)(9) of ER 1105-2-100.

9. Section 1040 of WRRDA 2014 Subsection (h)(4) describes the requirements pertaining to the scope of programmatic plans developed by the Secretary or an entity of state and local government, and says that a programmatic mitigation plan 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) include measures to protect or restore habitat connectivity; (E) encompass multiple environmental resources within a defined geographical area or focus on a specific resource, such as aquatic resources or wildlife habitat; and (F) address impacts from all projects in a defined geographical area or focus on a specific type of project.

10. Section 1040 of WRRDA 2014 Subsection (h)(5) establishes a requirement to consult with the agencies that have jurisdiction over the resources to be addressed on the scope of all programmatic environmental mitigation plans developed by the Corps, or a state or local government. For plans developed by the Corps, coordination on the scope of the programmatic mitigation plan shall be carried out through the procedures of the Corps planning process as outlined in ER 1105-2-100 and EC 1105-2-411.

11. Section 1040 of WRRDA 2014 Subsection (h)(6) discusses topics (contents) that may be addressed in the development of programmatic mitigation plans. The topics found in this section are generally consistent with the Corps of Engineers planning process, reference 2.f. above, and the implementation guidance for Section 2036 of WRDA 2007, reference 2.h., above, except that mitigation ratios shall not be used in plans developed by the Corps, pursuant to Appendix C, Paragraph C-3(d)(5) of ER 1105-2-100 which states that habitat-based methodologies should be used to the extent practicable in evaluating environmental resources and impacts.

12. Section 1040 of WRRDA 2014 Subsection (h)(7) requires that for programmatic plans developed by the Secretary, the plan must be available for agency and public

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1 A “state or local government” is defined in the statute as “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.”

comment, and that comments received be considered in making a determination on the plan. These comments will be considered and addressed, as appropriate, in an 90 days or less. For plans developed by the Corps, the planning and public and agency comment requirements shall be carried out through the procedures of the Corps planning process as outlined in ER 1105-2-100 and EC 1105-2-411. Subsection (h)(7) requires that for programmatic plans developed by a state or local government, the Secretary must determine within 180 days of receiving the plan whether the plan meets the requirements of Subsection (h) related to scope, consultation, and contents, and whether it was made available for public comment.

13. Section 1162 of WRDA 2016 adds a new paragraph (h)(11) "Effect", that states that nothing in subsection (h) requires the Secretary to undertake additional mitigation for existing projects where the mitigation has already been initiated, and that nothing in subsection (h) affects the Secretary's mitigation responsibilities under any other provision of law.

14. Under an approved In-Lieu Fee program, Section 906 (i)(1)(B) allows the Secretary to make contributions to statewide and regional efforts to conserve, restore, enhance and create natural habitats and wetlands as mitigation for the adverse impacts of projects. For the purposes of this guidance, the term "contributions" is interpreted to mean payment of funds to a federal, state, local agency, or third party that is the sponsor of the approved in-lieu fee program. The Corps will make such contributions to another agency only 1) as specifically authorized by Congress; and 2) subject to availability of appropriated funds. In the event that both of these conditions have been met, the in-lieu fee program sponsor that accepts such contributions must accept all responsibility for the implementation of the mitigation effort, as well as any required operation, maintenance, monitoring, adaptive management and demonstration of ecological success associated with the mitigation effort.

15. Section 906 Subsection (i)(4) states that at the request of the non-federal sponsor, preference may be given, to the maximum extent practicable, to the use of mitigation banks, in-lieu-fee programs and other third-party mitigation arrangements. If the cost of adopting the request of the non-Federal Sponsor is more than the total project cost of the government's proposed action, then the alternative may be treated as a Locally Preferred Alternative. For the purposes of this guidance, practicability will be determined through consideration of the following criteria:

a. The bank, in-lieu-fee program or other third-party arrangement must be (1) located in the watershed in which the impacts of the water resources development project occur; or (2) the service area of the mitigation bank or the approved in-lieu fee program area must include the watershed in which the impacts of the water resources development project occur.
b. A bank, in-lieu-fee or other third-party arrangement must be capable of providing the habitat outputs that fulfill the compensation requirement at the time the Corps requires the mitigation. The acquiring of mitigation cannot be completed over time as habitat outputs become available;

c. The cost of using the bank, in-lieu-fee or other third-party arrangement is lower than, or comparable to, the lowest-cost project-specific acceptable mitigation alternative formulated as part of the Corps study, as evaluated by the CE/ICA process required in ER 1105-2-100 (Reference 2.f.);

d. The appropriate Corps approved model is used for this analysis. Cost estimates and ecological modeling outputs for the resources addressed in the third-party mitigation arrangement will need to be developed to enable the CE/ICA process;

e. The bank, in-lieu-fee or other third-party arrangement must be scalable to the mitigation needs of the water resources development project, i.e., must be capable of being carried out in complete and effective increments sufficient to compensate for the adverse effects of the project, without providing compensatory mitigation beyond that needed to compensate for adverse effects, or incurring costs beyond the minimum needed to provide adequate project mitigation;

f. The mitigation effort associated with the use of the bank, in-lieu-fee or other third-party arrangement must be capable of being implemented in a timely fashion, i.e., prior to, or concurrent with, the occurrence of adverse impacts of the project;

g. All of the above criteria must be satisfied in order for the use of the third-party mitigation arrangements to be deemed practicable; and

h. The purchase of mitigation credits from a mitigation bank, in-lieu-fee or other third-party arrangement must comply with any applicable Federal procurement laws and regulations such as the Federal Acquisition Regulation (FAR) codified at 48 CFR.

16. Projects proposing to use a mitigation bank, in-lieu-fee program or any other third-party arrangement as described in subsection (i) of Section 906 must comply with reference 1.e., except that mitigation for fish and wildlife losses shall occur before the physical construction that causes the impacts for which mitigation is required. The project report must include a description of the mitigation instrument to be used and the rationale supporting the determination that the mitigation bank, in-lieu fee program, or third-party arrangement is capable of fulfilling the mitigation needs of the project.

17. In accordance with subsection 1040 (b), the Section 1040 amendments to subsections (d), (h) and (i) of WRDA 1986 shall not apply to a project for which a
mitigation plan has been completed as of the date of enactment of WRRDA 2014 (January 3, 2014).

18. Subsection 1040 (c) states that the Secretary may provide technical assistance to state 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. In the event that the Corps is requested by a state or local government to provide such technical assistance, the work may be carried out on a cost-reimbursable basis, or subject to availability of appropriated funds.

19. Section 1162 of WRDA 2016 further amends Section 906 of WRDA 1986 to include subsections (j) and (k). Under subsection (j), the Secretary, with the consent of the applicable non-federal interest, may use funds made available for preconstruction engineering and design after authorization of project construction to satisfy mitigation requirements through third-party arrangements or to acquire interests in land necessary for meeting mitigation requirements. Prior to the expenditure of these funds, the Secretary must notify the Committee on Appropriations and the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Appropriations and the Committee on Environment and Public Works of the Senate.

20. Section 1162 introduces language about “habitat connectivity.” See Section 906(h)(4)(D) (“include measures to protect or restore habitat connectivity”), Section 906(h)(6)(C) (“standard measures for mitigating certain types of impacts, including impacts to habitat connectivity”), and subsection (k). For purposes of this guidance, the term “habitat connectivity” is interpreted to mean a network of natural habitat that is interconnected over a long distance that provides animal communities with the opportunity to migrate, breed, feed and shelter. Habitat connectivity is an essential element in preserving species diversity, especially as habitat becomes more fragmented as a result of land development activities. Programmatic mitigation plans may, to the extent practicable, include measures to protect or restore habitat connectivity.

21. Subsection (k) requires the Secretary or designee to consult with interested members of the public, the Director of the United States Fish and Wildlife Service, the Assistant Administrator for Fisheries of the National Oceanic and Atmospheric Administration, states, and interested local governments to identify standard measures that reflect the best available scientific information for evaluating habitat connectivity. The (ASA(CW)) or designee will lead discussions with the Director of the United States Fish and Wildlife Service and the Assistant Administrator for Fisheries of the National Oceanic and Atmospheric Administration regarding identification of standard measures that reflect the best available science information for evaluating habitat connectivity, to include any possible advantages of intermittent habitat connectivity.

22. This guidance shall be transmitted to the appropriate Corps Division and District Commanders and posted to the Corps WRDA website within two days of receipt (written or electronic) from this office. Guidance shall be transmitted as is and without additional guidance attached.

23. Questions regarding this implementation guidance should be directed to Gib Owen, Office of the Assistant Secretary of the Army for Civil Works at 703-695-4641 or gib.a.owen.civ@mail.mil.

24. This guidance supersedes existing guidance, including Engineer Regulations (ER), to the extent it differs. Applicable ERs shall be updated to reflect this guidance.

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R.D. James
Assistant Secretary of the Army
(Civil Works)

cf: MG Scott Spellmon, Deputy Commanding General, Civil and Emergency Operations
James Dalton, Director of Civil Works
Water Resources Development Act of 1986, Section 906, as amended (33 USC 2283)

(a) STEPS TO BE TAKEN PRIOR TO OR CONCURRENTLY WITH CONSTRUCTION.

(1) In the case of any water resources project which is authorized to be constructed by the Secretary before, on, or after November 17, 1986, construction of which has not commenced as of November 17, 1986, and which necessitates the mitigation of fish and wildlife losses, including the acquisition of lands or interests in lands to mitigate losses to fish and wildlife, as a result of such project, such mitigation, including acquisition of the lands or interests

(A) shall be undertaken or acquired before any construction of the project (other than such acquisition) commences, or

(B) shall be undertaken or acquired concurrently with lands and interests in lands for project purposes (other than mitigation of fish and wildlife losses), whichever the Secretary determines is appropriate, except that any physical construction required for the purposes of mitigation may be undertaken concurrently with the physical construction of such project.

(2) For the purposes of this subsection, any project authorized before November 17, 1986, on which more than 50 percent of the land needed for the project, exclusive of mitigation lands, has been acquired shall be deemed to have commenced construction under this subsection.

(b) ACQUISITION OF LANDS OR INTERESTS IN LANDS FOR MITIGATION.

(1) After consultation with appropriate Federal and non-Federal agencies, the Secretary is authorized to mitigate damages to fish and wildlife resulting from any water resources project under his jurisdiction, whether completed, under construction, or to be constructed. Such mitigation may include the acquisition of lands, or interests therein, except that

(A) acquisition under this paragraph shall not be by condemnation in the case of projects completed as of November 17, 1986, or on which at least 10 percent of the physical construction on the project has been completed as of November 17, 1986; and

(B) acquisition of water, or interests therein, under this paragraph, shall not be by condemnation.

The Secretary, shall, under the terms of this paragraph, obligate no more than $30,000,000 in any fiscal year. With respect to any water resources project, the authority under this subsection shall not apply to measures that cost more than $7,500,000 or 10 percent of the cost of the project, whichever is greater.

(2) Whenever, after his review, the Secretary determines that such mitigation features under this subsection are likely to require condemnation under subparagraph (A) or (B) of paragraph (1) of this subsection, the Secretary shall transmit to Congress a report on such proposed modification, together with his recommendations.
(c) OF MITIGATION COSTS. Costs incurred after November 17, 1986, including lands, easements, rights-of-way, and relocations, for implementation and operation, maintenance, and rehabilitation to mitigate damages to fish and wildlife shall be allocated among authorized project purposes in accordance with applicable cost allocation procedures, and shall be subject to cost sharing or reimbursement to the same extent as such other project costs are shared or reimbursed, except that when such costs are covered by contracts entered into prior to November 17, 1986, such costs shall not be recovered without the consent of the non-Federal interests or until such contracts are complied with or renegotiated.

(d) MITIGATION PLANS AS PART OF PROJECT PROPOSALS.
   (1) IN GENERAL. After November 17, 1986, the Secretary shall not submit any proposal for the authorization of any water resources project to Congress in any report, and shall not select a project alternative in any report, unless such report contains
      (A) a recommendation with a specific plan to mitigate for damages to ecological resources, including terrestrial and aquatic resources, and fish and wildlife losses created by such project, or
      (B) a determination by the Secretary that such project will have negligible adverse impact on ecological resources and fish and wildlife without the implementation of mitigation measures. Specific mitigation plans shall ensure that impacts to bottomland hardwood forests are mitigated in-kind, and other habitat types are mitigated to not less than in-kind conditions, to the extent possible. 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 2317(a)(1) of this title. In carrying out this subsection, the Secretary shall consult with appropriate Federal and non-Federal agencies.

   (2) SELECTION AND DESIGN OF MITIGATION PROJECTS. The Secretary shall select and design mitigation projects using a watershed approach to reflect contemporary understanding of the science of mitigating the adverse environmental impacts of water resources projects.

   (3) MITIGATION REQUIREMENTS.
      (A) IN GENERAL. To mitigate losses to flood damage reduction capabilities and fish and wildlife resulting from a water resources project, the Secretary shall ensure that the mitigation plan for each water resources project complies with, at a minimum, the mitigation standards and policies established pursuant to the regulatory programs administered by the Secretary.

      (B) INCLUSIONS. A specific mitigation plan for a water resources project under paragraph (1) shall include, at a minimum

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(i) a plan for monitoring the implementation and ecological success of each mitigation measure, including the cost and duration of any monitoring, and, to the extent practicable, a designation of the entities that will be responsible for the monitoring;

(ii) the criteria for ecological success by which the mitigation will be evaluated and determined to be successful based on replacement of lost functions and values of the habitat, including hydrologic and vegetative characteristics;

(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;

(v) a description of
   (I) the types and amount of restoration activities to be conducted;
   (II) the physical action to be undertaken to achieve the mitigation objectives within the watershed in which such losses occur and, in any case in which the mitigation will occur outside the watershed, a detailed explanation for undertaking the mitigation outside the watershed; and
   (III) the functions and values that will result from the mitigation plan; and

(vi) a contingency plan for taking corrective actions in cases in which monitoring demonstrates that mitigation measures are not achieving ecological success in accordance with criteria under clause (ii).

(C) RESPONSIBILITY FOR MONITORING. In any case in which it is not practicable to identify in a mitigation plan for a water resources project the entity responsible for monitoring at the time of a final report of the Chief of Engineers or other final decision document for the project, such entity shall be identified in the partnership agreement entered into with the non-Federal interest under section 1962d–5b of title 42.

(4) Determination of success.

(A) IN GENERAL. A mitigation plan under this subsection shall be considered to be successful at the time at which the criteria under paragraph (3)(B)(ii) are achieved under the plan, as determined by monitoring under paragraph (3)(B)(i).

(B) CONSULTATION. In determining whether a mitigation plan is successful under subparagraph (A), the Secretary shall consult annually with appropriate Federal agencies and each State in which the applicable project is located on at least the following:
   (i) the ecological success of the mitigation as of the date on which the report is submitted.
(ii) the likelihood that the mitigation will achieve ecological success, as defined in the mitigation plan.
(iii) the projected timeline for achieving that success.
(iv) any recommendations for improving the likelihood of success.

(5) MONITORING. Mitigation monitoring shall continue until it has been demonstrated that the mitigation has met the ecological success criteria.

(e) FIRST ENHANCEMENT COSTS AS FEDERAL COSTS. In those cases when the Secretary, as part of any report to Congress, recommends activities to enhance fish and wildlife resources, the first costs of such enhancement shall be a Federal cost when

(1) such enhancement provides benefits that are determined to be national, including benefits to species that are identified by the National Marine Fisheries Service as of national economic importance, species that are subject to treaties or international convention to which the United States is a party, and anadromous fish;

(2) such enhancement is designed to benefit species that have been listed as threatened or endangered by the Secretary of the Interior under the terms of the Endangered Species Act, as amended (16 U.S.C. 1531, et seq.), or

(3) such activities are located on lands managed as a national wildlife refuge. When benefits of enhancement do not qualify under the preceding sentence, 25 percent of such first costs of enhancement shall be provided by non-Federal interests under a schedule of reimbursement determined by the Secretary. Not more than 80 percent of the non-Federal share of such first costs may be satisfied through in-kind contributions, including facilities, supplies, and services that are necessary to carry out the enhancement project. The non-Federal share of operation, maintenance, and rehabilitation of activities to enhance fish and wildlife resources shall be 25 percent.

(f) NATIONAL BENEFITS FROM ENHANCEMENT MEASURES FOR ATCHAFALAYA FLOODWAY SYSTEM AND MISSISSIPPI DELTA REGION PROJECTS. Fish and wildlife enhancement measures carried out as part of the project for Atchafalaya Floodway System, Louisiana, authorized by Public Law 99-88, and the project for Mississippi Delta Region, Louisiana, authorized by the Flood Control Act of 1965, shall be considered to provide benefits that are national for purposes of this section.

(g) FISH AND WILDLIFE COORDINATION ACT SUPPLEMENTATION. The provisions of subsections (a), (b), and (d) shall be deemed to supplement the responsibility and authority of the Secretary pursuant to the Fish and Wildlife Coordination Act [16 U.S.C. 661 et seq.], and nothing in this section is intended to affect that Act.

(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) include measures to protect or restore habitat connectivity;

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

(F) 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, including impacts to habitat connectivity;

(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

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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) EFFECT. Nothing in this subsection
(A) requires the Secretary to undertake additional mitigation for existing projects for which mitigation has already been initiated, including the addition of fish passage to an existing water resources development project; or
(B) affects the mitigation responsibilities of the Secretary under any other provision of law.

(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 2317(a)(1) of this title 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
\( \text{(A) take place concurrent with, or in advance of, the commitment of funding to a project; and} \)
\( \text{(B) occur in advance of project construction only if the efforts are consistent with all applicable requirements of Federal law (including regulations) and water resources development planning processes.} \)

(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.

(j) USE OF FUNDS.
\( \text{(1) IN GENERAL. The Secretary, with the consent of the applicable non-Federal interest, may use funds made available for preconstruction engineering and design after authorization of project construction to satisfy mitigation requirements through third-party arrangements or to acquire interests in land necessary for meeting mitigation requirements under this section.} \)

\( \text{(2) NOTIFICATION. Prior to the expenditure of any funds for a project pursuant to paragraph (1), the Secretary shall notify the Committee on Appropriations and the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Appropriations and the Committee on Environment and Public Works of the Senate.} \)

(k) MEASURES. The Secretary shall consult with interested members of the public, the Director of the United States Fish and Wildlife Service, the Assistant Administrator for Fisheries of the National Oceanic and Atmospheric Administration, States, including State fish and game departments, and interested local governments to identify standard measures under subsection (h)(6)(C) that reflect the best available scientific information for evaluating habitat connectivity.
Water Resources, Reform, and Development Act of 2014, Section 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 [33 U.S.C. 2283 (d), (h), and (i), as amended, below]

(d) MITIGATION PLANS AS PART OF PROJECT PROPOSALS.

(1) IN GENERAL. After November 17, 1986, the Secretary shall not submit any proposal for the authorization of any water resources project to Congress in any report, and shall not select a project alternative in any report, unless such report contains (A) a recommendation with a specific plan to mitigate for damages to ecological resources, including terrestrial and aquatic resources, and fish and wildlife losses created by such project, or (B) a determination by the Secretary that such project will have negligible adverse impact on ecological resources and fish and wildlife without the implementation of mitigation measures. Specific mitigation plans shall ensure that impacts to bottomland hardwood forests are mitigated in-kind, and other habitat types are mitigated to not less than in-kind conditions, to the extent possible. 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 2317(a)(1) of this title. In carrying out this subsection, the Secretary shall consult with appropriate Federal and non-Federal agencies.

(2) SELECTION AND DESIGN OF MITIGATION PROJECTS. The Secretary shall select and design mitigation projects using a watershed approach to reflect contemporary understanding of the science of mitigating the adverse environmental impacts of water resources projects.

(3) MITIGATION REQUIREMENTS.

(A) In general. To mitigate losses to flood damage reduction capabilities and fish and wildlife resulting from a water resources project, the Secretary shall ensure that the mitigation plan for each water resources project complies with, at a minimum, the mitigation standards and policies established pursuant to the regulatory programs administered by the Secretary.

(B) INCLUSIONS. A specific mitigation plan for a water resources project under paragraph (1) shall include, at a minimum

(i) a plan for monitoring the implementation and ecological success of each mitigation measure, including the cost and duration of any monitoring, and, to the extent practicable, a designation of the entities that will be responsible for the monitoring;

(ii) the criteria for ecological success by which the mitigation will be evaluated and determined to be successful based on replacement of lost functions and values of the habitat, including hydrologic and vegetative characteristics;

(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;
(v) a description of
   (I) the types and amount of restoration activities to be conducted;
   (II) the physical action to be undertaken to achieve the mitigation objectives within the watershed in which such losses occur and, in any case in which the mitigation will occur outside the watershed, a detailed explanation for undertaking the mitigation outside the watershed; and
   (III) the functions and values that will result from the mitigation plan; and
(vi) a contingency plan for taking corrective actions in cases in which monitoring demonstrates that mitigation measures are not achieving ecological success in accordance with criteria under clause (ii).

(C) RESPONSIBILITY FOR MONITORING. In any case in which it is not practicable to identify in a mitigation plan for a water resources project the entity responsible for monitoring at the time of a final report of the Chief of Engineers or other final decision document for the project, such entity shall be identified in the partnership agreement entered into with the non-Federal interest under section 1962d–5b of title 42.

(4) DETERMINATION OF SUCCESS.
(A) IN GENERAL. A mitigation plan under this subsection shall be considered to be successful at the time at which the criteria under paragraph (3)(B)(ii) are achieved under the plan, as determined by monitoring under paragraph (3)(B)(i).
(B) CONSULTATION. In determining whether a mitigation plan is successful under subparagraph (A), the Secretary shall consult annually with appropriate Federal agencies and each State in which the applicable project is located on at least the following:
   (i) The ecological success of the mitigation as of the date on which the report is submitted.
   (ii) The likelihood that the mitigation will achieve ecological success, as defined in the mitigation plan.
   (iii) The projected timeline for achieving that success.
   (iv) Any recommendations for improving the likelihood of success.
(5) Mitigation monitoring shall continue until it has been demonstrated that the mitigation has met the ecological success criteria.

(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.

Enclosure
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).
Water Resources Development Act of 2016, Section 1162  Fish and Wildlife Mitigation.

Section 906 of the Water Resources Development Act of 1986 (33 U.S.C. 2283) is amended
(1) in subsection (h)
   (A) in paragraph (4)
      (i) by redesignating subparagraphs (D) and (E) as subparagraphs (E) and (F), respectively; and
      (ii) by inserting after subparagraph (C) the following:
         (D) include measures to protect or restore habitat connectivity;
   (B) in paragraph (6)(C) by striking “impacts” and inserting “impacts, including impacts to habitat connectivity”;
   (C) by striking paragraph (11) and inserting the following:
      (11) EFFECT. Nothing in this subsection
         (A) requires the Secretary to undertake additional mitigation for existing projects for which mitigation has already been initiated, including the addition of fish passage to an existing water resources development project; or
         (B) affects the mitigation responsibilities of the Secretary under any other provision of law; and
(2) by adding at the end the following:
   (j) Use of funds
      (1) IN GENERAL. The Secretary, with the consent of the applicable non-Federal interest, may use funds made available for preconstruction engineering and design after authorization of project construction to satisfy mitigation requirements through third-party arrangements or to acquire interests in land necessary for meeting mitigation requirements under this section.

(2) NOTIFICATION. Prior to the expenditure of any funds for a project pursuant to paragraph (1), the Secretary shall notify the Committee on Appropriations and the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Appropriations and the Committee on Environment and Public Works of the Senate.

(k) Measures. The Secretary shall consult with interested members of the public, the Director of the United States Fish and Wildlife Service, the Assistant Administrator for Fisheries of the National Oceanic and Atmospheric Administration, States, including State fish and game departments, and interested local governments to identify standard measures under subsection (h)(6)(C) that reflect the best available scientific information for evaluating habitat connectivity."