
7. PLAN IMPLEMENTATION

The recommended plan described in Chapter 6 will require commitments on the part of USACE and the non-Federal sponsor (State of Maryland) for the full benefits of the plan to be realized. The major requirements of plan implementation are described below.

Section 204 of WRDA 1992, as amended by Section 207 of the WRDA of 1996 authorizes the Corps to carry out projects for the protection, restoration, and creation of aquatic and ecologically related habitats (including wetlands) in connection with dredging of authorized navigation projects. Section 537 of the WRDA of 1996, as amended by Section 318 of WRDA 2000, specifically authorized the ecosystem restoration project at Poplar Island.

7.1 EXISTING PROJECT COOPERATION AGREEMENT

The PCA for the construction of the Poplar Island, Maryland, Environmental Restoration Project using dredged material from the Baltimore Harbor and Channels Federal Navigation Project, Maryland between the Department of the Army, represented by the Assistant Secretary of the Army Civil Works (ASACW), and the State of Maryland ('the non-federal sponsor'), represented by the Secretary of MDOT was signed on April 4, 1997; and has been amended twice – on July 11, 1997 and April 9, 2002. The existing PCA will be modified to include the expansion project.

7.2 CONGRESSIONAL AUTHORIZATION

Specific authorization for modifications to the existing PIERP will likely come from Congress as part of a WRDA bill. Once the GRR/SEIS for the project is completed, USACE Headquarters will prepare a Chief of Engineer's Report, which provides the ASACW with the views, findings and recommendations on project authorization. Once the ASACW's office has reviewed the report and finds that authorization, implementation, and budgeting of the project is consistent with applicable laws and policies, it is forwarded to the Office of Management and Budget (OMB). OMB supervises and controls the administration of the budget and issues policies for the Executive Branch. After OMB has approved the project, the ASACW will forward the project to Congress for authorization. Congress refers the report to the House Committee on Transportation and Infrastructure and the Senate Committee on Environment and Public Works for inclusion in a WRDA bill.

7.3 IDENTIFICATION OF THE LOCAL SPONSOR

The State of Maryland, Department of Transportation, is the non-Federal sponsor for this project. Specifically, the MPA, through its Office of Harbor Development, was involved in all of the coordination related to this study. They are aware of the items of local cooperation described below and are aware of their responsibilities with regard to a potential project. They have participated throughout the study and have demonstrated a commitment to both the outcome of the study and project implementation.

7.4 COST-SHARING RESPONSIBILITIES

7.4.1 Cost-Share for Project Construction, Operations, and Maintenance

Beneficial use of dredged material ecosystem restoration projects are funded as navigation construction or operation and maintenance costs up to the level of the Federal Standard. For costs above this baseline, non-Federal interests must enter into a cooperative agreement in accordance with the requirements of Section 221 of the Flood Control Act of 1970, agreeing to provide assurances as indicated in Section 7.5 below. WRDA 1992 established the cost sharing for Section 204 environmental restoration projects at 75 percent Federal and 25 percent non-Federal. Section 204 of WRDA 1992 allows a placement method that is not the least cost if determined that the incremental costs are reasonable in relation to the environmental benefits for ecosystem restoration projects.

The non-Federal sponsor provides 25 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; and pays 100 percent of the operation, maintenance, replacement and rehabilitation costs associated with the project (ER 1105-2-100, E-67). As each functional component of the project is completed and determined to be functioning as intended, it will become the responsibility of MPA to operate, maintain, repair, replace, and rehabilitate each project component as needed. Such functional components include the containment dikes, internal dikes, spillways, service structures, the access channels, and each of the constructed wetland and upland habitat cells. Based on experience at the existing project, operations and maintenance costs once the project is completed are projected to be less than 2 percent of the total project costs. General maintenance activities to date at the PIERP have included only minor maintenance to the perimeter dikes. Ultimately the entire site will become the responsibility of MPA.

Section 318 of WRDA 2000 modified the authorizing language of the PIERP (Section 537 of WRDA 1996, PL 104-303) to provide that the non-Federal sponsor's share of the cost of the project may be provided in cash or in the form of in-kind services or materials. As defined in the existing PCA (Amendment 2), the term "work-in-kind" shall mean:

"...planning, engineering, design, construction, supervision and administration, and other activities associated with containment dikes, spillways, habitat development, environmental monitoring, site operations for dredged material inflow and management, and any other activities deemed necessary for project implementation performed by the non-Federal sponsor directly related to the project as determined by the Government.....work-in-kind does not include the costs associated with the study, design or construction of betterments or the provision of lands, easements, rights-of-way, relocations, or suitable borrow and dredged or excavated material disposal areas associated with the work-in-kind."

The non-Federal sponsor may receive credit, but not to exceed 25 percent of the total project costs, towards its share of the total project costs for design and construction work performed

by or for the non-Federal sponsor subsequent to or prior to execution of the Agreement. In addition, the non-Federal sponsor may receive credit for the value of work performed by a State or local agency on behalf of the non-Federal sponsor. Such credit shall be limited to the reasonable, allowable and allocable cost or value of the design or construction services and other in-kind work as determined by the District Engineer and as approved by the ASACW.

7.4.2 Cost Share for the Recreational Component

The basis for Federal participation in recreation development is found in the Flood Control Act of 1944, as amended, the Federal Water Protection Recreation Act of 1965 and the WRDA 1986, which give broad authority to include recreation as a project purpose. When there is a recreation sponsor, economically justified facilities are cost shared 50 percent Federal and 50 percent non-Federal. The Federal cost of a project including recreation may not exceed the Federal cost of the project excluding recreation by more than 10 percent.

7.5 SUMMARY OF RESPONSIBILITIES

The non-Federal sponsoring agency (MPA) understands that they will be required to provide assurance of their authority and willingness to provide 25 percent of the incremental project costs and as further specified below:

- a. Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, 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.
- b. Provide all improvements required on lands, easements, and rights-of-way to enable the proper disposal of dredged or excavated material associated with the initial construction, periodic nourishment, operation, and maintenance of the project. Such improvements may include, but are not necessarily limited to, retaining dikes, wasteweirs, bulkheads, embankments, monitoring features, stilling basins, and dewatering pumps and pipes.
- c. Provide, during construction, any additional amounts as are necessary to make its total contribution equal to 25 percent of incremental project costs.
- d. For so long as the project remains authorized, operate, maintain, repair, replace, and rehabilitate 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.
- e. 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.

- f. 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.
- g. 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 CFR Section 33.20.
- h. 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), 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 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 complete financial responsibility, as between the Federal government and the non-Federal 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 initial construction, periodic nourishment, operation, or maintenance of the project.
- j. 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.
- k. 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.

1. 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), and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled “Nondiscrimination of the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army.”
- m. Provide 25 percent of that portion of total historic preservation mitigation and data recovery costs that are in excess of one percent of the total amount authorized to be appropriated for this project.

7.6 PROJECT COST ESTIMATE

The total cost of the PIERP, including the recommended lateral and vertical expansion [a 575-acre lateral expansion component consisting nominally of 29 percent wetland habitat (165 acres), 47 percent upland habitat (270 acres), and 24 percent open water (140 acres), plus a 5-ft raising of the existing upland cells], is estimated to be \$722.2 million (fully-funded) through fiscal year (FY) 2030 (Appendix L). This total project cost includes approximately \$6.4 million in costs for project betterments, which included costs for the phasing the construction of the perimeter dikes at the sponsor's request. The non-Federal sponsor of the project assumes 100 percent of the betterment costs. Therefore, without the betterment costs, the fully-funded project cost for the PIERP is an estimated \$715.7 million. This includes costs for maintenance dredging, placement, habitat development within the PIERP, site operations, supervision and inspection, execution of the GRR, review of the plans and specifications, advertisement and award of construction contracts, and a ten percent contingency on estimated costs. It also includes the costs for study, design, construction, site operations, and oversight of the existing PIERP.

Maintenance of the Federal navigation project will require removal, transportation, and placement of approximately 68 mcy of dredged material at the PIERP over 30 years, as compared to the 40 mcy of dredged material placement projected for the existing project. The recommended plan for the lateral and vertical expansion will provide approximately 28 mcy of additional dredged material capacity to the PIERP.

The baseline construction cost estimate for the PIERP was prepared in accordance with ER 1110-2-1302 using the Corps' M-CACES program, and values are in October 2004 price levels. The complete funding schedule (fully-funded costs) for the PIERP (existing project plus the proposed expansion) is presented in Appendix L. A comparison of the baseline and fully-funded costs for the total cost and the Federal and non-Federal cost share through FY30 for the PIERP (existing project plus the proposed expansion) are included in [Table 7-1](#).

**Table 7-1. Summary of the Federal and Non-Federal Contributions to the PIERP
(Existing Project plus Expansion Project)**

	Baseline*	Fully-Funded
Total Cost	\$624,272,555	\$722,168,312
Project Betterment (100% Non-Federal)	--	\$6,436,155
Total Project Cost	--	\$715,732,157
Federal Cost (75%)	--	\$536,799,118
Non-Federal Cost (25%)	--	\$178,933,039

*baseline costs at October 1, 2004 price levels

As a credit towards the non-Federal portion of the cost-share, approximately \$69.4 million in work-in kind services have been proposed. To date, approximately \$18.2 million in work-in-kind has been credited, and an additional \$41.1 million in non-Federal funds have been received.

The total, fully-funded project cost for the PIERP is an estimated \$715.7 million (not including \$6.4 million in costs for the betterment), which is cost shared 75 percent Federal, 25 percent non-Federal. The fully-funded cost for the PIERP, as currently authorized, is \$401.5 million; and the estimated fully-funded cost for the recommended plan for the lateral and vertical expansion of the PIERP is \$314.2 million. A comparison of the Federal and non-Federal cost share for the fully-funded costs of the expansion are included in [Table 7-2](#).

Table 7-2. Summary of the Federal and Non-Federal Contributions to the Expansion Project

	Fully-Funded Cost of the Expansion*
Total Cost	\$314,256,028
Federal Cost (75%)	\$235,692,021
Non-Federal Cost (25%)	\$78,564,007

*calculated based on baseline costs at October 1, 2004 price levels

Costs for the expansion project are expected to begin in FY09, with the start of perimeter dike construction. Some of the fully funded costs included in the estimate for the expansion are \$88.7 million for perimeter dike construction, \$33.0 million for habitat development, \$23.4 million for planning, engineering, and design, \$5.4 million for environmental monitoring, and \$123.3 million for incremental dredging costs. Perimeter dike construction for the expansion project is currently scheduled to occur in FY09 and FY10.

7.7 SECTION 902 EVALUATION

Section 902 of WRDA 1986 allows for increases in project costs as a result of modifications that do not materially alter the scope or functionality of a project. Project modifications may encompass further engineering and design refinements to project features that are identified in project authorizing documents, as well as the construction of new project features that are not identified in authorizing documents (ER 1105-2-100). In most instances, additional engineering and design refinement will be necessary to construct project features that are only generally described in authorizing documents. In such cases, the maximum cost of the project can be increased by up to 20 percent to pursue the engineering and design refinements.

In cases where the cost of project modifications exceeds 20 percent, or where the authorized project dimensions or project scope have changed, reauthorization of the project is necessary. [Table 7-3](#) summarizes the cost increases of the PIERP as a result of the expansion project. Because the cost of the expansion is projected to exceed the cost of the authorized project by approximately 79 percent, and because changes to the authorized dimensions of the project are being recommended, Congressional reauthorization of the project will be necessary to implement the proposed expansion.

Table 7-3. Project Cost Increase (Section 902) Fact Sheet.

1. Name of Project:	Poplar Island Environmental Restoration Project											
2. Section and Law that Authorized or Modified the Project:	Authorized by: Section 537 of the Water Resources Development Act (WRDA) of 1996 Modified by: Section 318 of WRDA 2000											
3. Section 902 Limit on Project Cost:	<table><tr><td>a. Authorized project cost: (with price level)</td><td>\$307,000,000 (Dec 1995)</td></tr><tr><td>b. Price level increases from date of authorized cost:</td><td>\$ 94,500,000 ⁽¹⁾</td></tr><tr><td>c. Current cost of modifications required by law:</td><td>\$ 0</td></tr><tr><td>d. 20% of line 3a:</td><td>\$ 61,400,000</td></tr><tr><td>e. Maximum project cost limited by Section 902:</td><td>\$462,900,000</td></tr></table>		a. Authorized project cost: (with price level)	\$307,000,000 (Dec 1995)	b. Price level increases from date of authorized cost:	\$ 94,500,000 ⁽¹⁾	c. Current cost of modifications required by law:	\$ 0	d. 20% of line 3a:	\$ 61,400,000	e. Maximum project cost limited by Section 902:	\$462,900,000
a. Authorized project cost: (with price level)	\$307,000,000 (Dec 1995)											
b. Price level increases from date of authorized cost:	\$ 94,500,000 ⁽¹⁾											
c. Current cost of modifications required by law:	\$ 0											
d. 20% of line 3a:	\$ 61,400,000											
e. Maximum project cost limited by Section 902:	\$462,900,000											
4. Current Project Cost Including Inflation Through Construction:	\$715,700,000 (Oct 2004)											
5. Computation of Percentage Increase:	<table><tr><td>a. Current Estimate: (line 4)</td><td>\$715,700,000</td></tr><tr><td>b. Less total of lines 3a, b, and c:</td><td>- \$401,500,000</td></tr><tr><td>c. Subtotal:</td><td>\$314,200,000</td></tr><tr><td>d. Percent increase: (5c/3a)</td><td>102%</td></tr></table>		a. Current Estimate: (line 4)	\$715,700,000	b. Less total of lines 3a, b, and c:	- \$401,500,000	c. Subtotal:	\$314,200,000	d. Percent increase: (5c/3a)	102%		
a. Current Estimate: (line 4)	\$715,700,000											
b. Less total of lines 3a, b, and c:	- \$401,500,000											
c. Subtotal:	\$314,200,000											
d. Percent increase: (5c/3a)	102%											
(1) Subject to revision												

7.8 PROJECT SCHEDULE

Project implementation is expected to begin in 2006, following the approval of the GRR/SEIS and signature of the Record of Decision (ROD) ([Table 7-4](#)). Once the ROD has been signed and the project has been authorized, the design phase for the lateral expansion will begin. The PCA for the existing project will have to be revised and amended to include the expansion

project. Negotiations with MPA, the non-Federal sponsor, to amend the PCA will begin after the ROD has been signed.

Based on the availability of funding, it is anticipated that the construction contract would be awarded in FY08 or FY09, and perimeter dike construction would begin in FY09, with completion of the perimeter dike construction expected in FY10. Dredged material placement within the lateral expansion cells is anticipated to begin in FY11. The environmental monitoring plan for the existing project will be revised to include locations in and around the lateral expansion. Environmental monitoring activities (as described in Chapter 8) are planned to continue throughout the life of the project, until at least FY30.

Table 7-4. Project Schedule

FY 06	<ul style="list-style-type: none">• Record of Decision• Initiate Design Phase
FY 06-07	<ul style="list-style-type: none">• Project Authorization in WRDA 2006• Initiate Negotiations to Revise PCA• Continue Design & Initiate Plans and Specifications
FY 07	<ul style="list-style-type: none">• Approval and Execution of PCA
FY 08	<ul style="list-style-type: none">• Final Plans and Specifications Completed• Funding for Construction Received
FY 08 or 09	<ul style="list-style-type: none">• Advertise and Award Construction Contract
FY 09	<ul style="list-style-type: none">• Initiate Construction of the Perimeter Dike
FY 10	<ul style="list-style-type: none">• Complete Construction of the Perimeter Dike
FY 11	<ul style="list-style-type: none">• Initiate Dredged Material Placement within Expansion Cells
FY 11-27	<ul style="list-style-type: none">• Continue Dredged Material Placement and Site Operations
FY 27-30	<ul style="list-style-type: none">• Project Monitoring

7.9 VIEW OF THE LOCAL SPONSOR

Construction for the expansion is presently projected to begin in 2009. At that time, the local sponsor must have funding mechanisms in place to provide the local share of project costs in a timely fashion. The MPA has been a committed partner in the PIERP since its inception, having contributed approximately \$59.3 million in cash plus in-kind services to date.

The local sponsor has diligently supported, promoted, and financed studies to identify dredged material placement sites in general, and this expansion study in particular. The local sponsor supports the recommendations of this expansion study. The MPA has indicated their intent to proceed with the next phase of project implementation and to provide the non-

Federal cooperation required for project implementation. As such, a letter of intent was received from the non-Federal sponsor (dated 10 June 2005) and is included in Appendix F.