



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

DAEN

SUBJECT: Willamette River Floodplain Restoration Project, Oregon

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

DAEN

SUBJECT: Willamette River Floodplain Restoration Project, Oregon

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.

DAEN

SUBJECT: Willamette River Floodplain Restoration Project, Oregon

(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;

DAEN

SUBJECT: Willamette River Floodplain Restoration Project, Oregon

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,

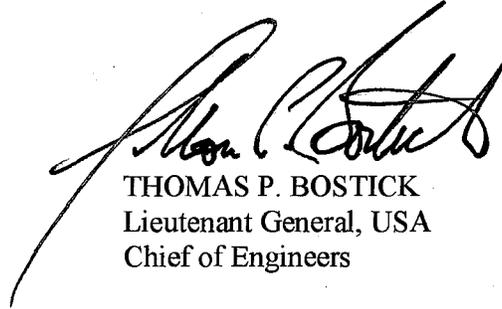
o. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 U.S.C. § 1962d-5b), and Section 103(j) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. § 2213(j)), which provides that the Secretary of the Army shall not commence the construction 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

DAEN

SUBJECT: Willamette River Floodplain Restoration Project, Oregon

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