



DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
2600 ARMY PENTAGON
WASHINGTON, DC 20310-2600

DEC 14 2015

DAEN

SUBJECT: Skokomish River Basin Ecosystem Restoration, Washington

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on ecosystem restoration along the Skokomish River in Mason County, Washington. It is accompanied by the reports of the district and division engineers. These reports were completed under the authority of Section 209 of the River and Harbor Act of 1962, Public Law 87-874, which directed the Secretary to "cause surveys for flood control and allied purposes" in a number of named localities, including "Puget Sound, Washington, and adjacent waters, including tributaries, in the interest of flood control, navigation, and other water uses and related land resources." Preconstruction engineering and design activities, if funded, for the Skokomish River Basin Ecosystem Restoration Project will continue under the authority provided by the resolution cited above.

2. The reporting officers recommend authorization of a plan to restore aquatic ecosystem structure and function to the lower eleven miles of the Skokomish River. The recommended plan for ecosystem restoration includes;

- removal of a levee at the confluence of the North and South Forks of the Skokomish River near river mile 9;
- installation of large woody debris and engineered logjams on the South Fork Skokomish River, between river miles 9 and 11;
- reconnection of an historical side channel between river miles 4.5 and 5.5 of the Skokomish River;
- wetland restoration on the south bank of the Skokomish River between river miles 8.3 and 9.2 (the River Mile 9 site); and
- wetland restoration on the south bank of the Skokomish River between river miles 7.5 and 8 (the Grange site).

The recommended plan provides restoration on a total of 277 acres in the study area and provides substantial benefits to nationally significant resources. In addition, the removal of the levee at the confluence of the North and South Forks of the Skokomish River provides significant benefits for upstream fish passage to an approximate additional 40 miles of habitat in the South Fork Skokomish River that is periodically inaccessible due to the lack of water in the river channel adjacent to the confluence. The recommended plan is the National Ecosystem Restoration (NER) Plan. The recommended plan also includes a monitoring and adaptive management plan to ensure success, as described in Appendix E of the final report.

DAEN

SUBJECT: Skokomish River Basin, Mason County, Washington

3. Based on an October 2015 price level, the estimated project first cost of the recommended plan is \$19,664,000, which includes monitoring costs of \$383,000 and adaptive management costs of \$129,000. In accordance with the cost sharing provisions of Section 103(c) of the Water Resources Development Act (WRDA) of 1986, as amended (33 U.S.C. 2213(c)), ecosystem restoration features are cost-shared at a rate of 65 percent federal and 35 percent non-federal. Thus, the federal share of the total project first cost is estimated to be \$12,782,000 and the non-federal share is estimated at \$6,882,000, which includes the costs of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas estimated at \$1,711,000. The Skokomish Indian Tribe and Mason County, Washington are the non-federal cost-sharing sponsors for the recommended plan. Operation, maintenance, repair, replacement, and rehabilitation expenses are estimated to be approximately \$10,000 per year and are the responsibility of the non-federal sponsors.

4. The restoration actions would improve aquatic habitats for the fish and wildlife species found in the lower eleven miles of the Skokomish River, including four fish species listed under the Endangered Species Act (chinook salmon, chum salmon, steelhead trout and bull trout), and would also provide benefits to over 100 additional species known to utilize the habitats associated with the Skokomish River for some part of their life cycles. 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 187 average annual habitat units on 277 acres of floodplain and aquatic habitat and by allowing access to the 40 miles of the South Fork upstream of the confluence. The average annual cost of the plan is \$824,000. The average annual cost per average annual habitat unit is \$4,400, and the average annual cost per acre is \$3,000.

5. The recommended plan was developed in coordination and consultation with federal, state, and local agencies and the Skokomish Tribe. Risk and uncertainty were addressed during the study by completing a cost and schedule risk analysis and a sensitivity analysis that evaluated the potential impacts of a change in economic assumptions.

6. In accordance with Corps' guidance on the review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and rigorous review process to ensure technical quality. This includes a District Quality Control review, an Agency Technical Review (ATR), an Independent External Peer Review (IEPR) (Type 1), and a Corps Headquarters policy and legal review. All comments from the above referenced reviews have been addressed and incorporated into the final documents.

7. Washington level review indicates 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 Principal and Guidelines for Water and Land Related Resources Implementation Studies. The recommended plan complies with other administration and legislative policies and guidelines. The views of interested parties including federal, state, and local agencies have been considered.

DAEN

SUBJECT: Skokomish River Basin, Mason County, Washington

8. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the plan for ecosystem restoration in the Skokomish River Basin, Washington be authorized in accordance with the reporting officers' recommended plan at an October 2015 estimated project first cost of \$19,664,000. 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 WRDA of 1986, as amended, and in accordance with the required items of local cooperation that the non-federal sponsors shall, prior to project implementation, agree to perform:

a. Provide 35 percent of total ecosystem restoration costs as further specified below:

1. Provide the required non-federal share of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

2. Provide, during the first year of construction, any additional funds necessary to pay the full non-federal share of design costs;

3. Provide all lands, easements, and rights-of-way, including those required for relocations, the borrowing of material, and the disposal of dredged or excavated material; perform or ensure the performance of all relocations; and construct all improvements required on lands, easements, and rights-of-way to enable the disposal of dredged or excavated material all as determined by the government to be required or to be necessary for the construction, operation, and maintenance of the project, and provide relocation assistance, all in compliance with applicable provisions of the Uniform Relocation and Assistance and Real Property Acquisition Policies act of 1970, as amended (42 U.S.C. 4601-4655) and the regulations contained in 49 C.F.R. Part 24;

4. Provide, during construction, any funds necessary to make its total contributions equal to 35 percent of total project costs.

b. 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 that might reduce the outputs produced by the project, hinder operation and maintenance of the project, or interfere with the project's proper function;

c. 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;

d. For so long as the project remains authorized, operate, maintain, repair, rehabilitate, and replace the project, or functional portions of the project, including any mitigation features, at no cost to the federal government, in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the federal government;

DAEN

SUBJECT: Skokomish River Basin, Mason County, Washington

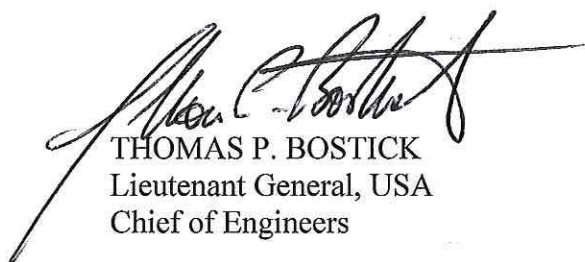
e. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, rehabilitation, and replacement of the project and any betterments, except for damages due to the fault or negligence of the United States or its contractors;

f. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 96-510, as amended (42 U.S.C. 9601-9675), that may exist in, on, or under lands, easements, or rights-of-way that the federal government determines to be required for construction, operation, and maintenance of the project. However, for lands that the federal government determines to be subject to the navigation servitude, only the federal government shall perform such investigations unless the federal government provides the non-federal sponsors with prior specific written direction, in which case the non-federal sponsors shall perform such investigations in accordance with such written direction;

g. Assume, as between the federal government and the non-federal sponsors, complete financial responsibility for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under lands, easements, or rights-of-way that the federal government determines to be required for construction, operation, and maintenance of the project; and

h. Agree, as between the federal government and the non-federal sponsors, that the non-federal sponsors shall be considered the operators of the project for the purpose of CERCLA liability, and to the maximum extent practicable, operate, maintain, repair, rehabilitate, and replace the project in a manner that will not cause liability to arise under CERCLA.

9. The recommendations contained herein reflect the information available at this time and current departmental policies governing the formulation of individual projects. They do not reflect program and budgeting priorities inherent in the formulation of the national civil works construction program or the perspective of higher levels within the executive branch. Consequently, the recommendations may be modified before they are transmitted to Congress for authorization and/or implementation funding. However, prior to transmittal to Congress, the State of Washington, interested federal agencies, and other parties will be advised of any significant modifications in the recommendations and will be afforded an opportunity to comment further.



THOMAS P. BOSTICK
Lieutenant General, USA
Chief of Engineers