

**Draft**  
**Finding of No Significant Impact**

**Wiswall Dam Aquatic Ecosystem Restoration Project**  
**Durham, New Hampshire**

The proposed Federal action involves the construction of a nature-like bypass channel around Wiswall Dam on the Lamprey River in Durham, New Hampshire to restore anadromous fish passage around the 11-foot high, 200-foot wide concrete dam. The bypass channel will allow anadromous fish access to an additional 43 miles of river habitat on the Lamprey River watershed upstream of Wiswall Dam. The bypass channel also is intended to reconnect riverine habitat upstream and downstream of the dam by providing continuous riverine habitat with the constructed channel. The work is authorized under Section 206 of the Water Resources Development Act of 1996 (WRDA).

The bypass channel will be approximately 1,100 feet long and 15 to 30 feet wide. Approximately 800 feet of channel will be excavated 5 to 10 feet into a bench on the east side of the river and 300 feet will be constructed using a dike along the east bank of the river immediately downstream of the dam. The channel gradient is approximately 1% dropping a total of approximately 11 feet, the height of Wiswall Dam. Flows down the constructed channel are expected to average approximately 100 cubic feet per second (cfs), with extremes ranging from 2 cfs during drought conditions to 1,000 cfs during major flood events. The channel substrate will be sand and gravel with a variety of boulders and outcrops to mimic the geomorphology of the natural river.

Approximately 3,900 cubic yards of soil and rock will be excavated to construct the channel, and this material will be used to construct the dike and channel substrate. Channel banks and side slopes will be revegetated with a variety of native vegetation, including wetland and riparian species. An area of approximately 1 acre will be cleared of young pine plantation and mixed deciduous forest. Approximately 0.1 acre of shrub wetland will be deepened and replaced with perennial riverine habitat and additional shrub wetland along the channel banks and side slopes. Work is expected to occur on or after 2006, at a time that would have the least affect on existing fisheries and wildlife resources. It is anticipated that the project will be completed in one season. Monitoring of the project will occur over the next 5 years, and small-scale modifications may be needed to optimize the channel function at passing anadromous fish. No significant long term or short-term adverse impacts to the environment are anticipated.

My determination of a Finding of No significant Impact is based on the Environmental Assessment and the following considerations:

- a. The project will restore anadromous fish habitat in 43 miles of the Lamprey River, as well as reconnecting riverine habitat above and below the Wiswall Dam.

- b. The project will have no known negative impacts on any State or Federal rare or endangered species.
- c. Impacts to the National Register-listed Wiswall Falls Historic Site and to as yet unidentified pre-Contact and/or historic archaeological resources, if unavoidable, will be properly minimized and/or mitigated in coordination with the New Hampshire State Historic Preservation Officer (NH SHPO) and interested parties in accordance with the National Historic Preservation Act of 1966, as amended, and 36 CFR 800. This will include the preparation of a Memorandum of Agreement (MOA) in consultation with NH SHPO with specific stipulations to be completed as mitigation for any adverse impacts. These stipulations may include additional historic documentation, archaeological investigations, and other measures to be determined during further coordination with the NH SHPO. These measures will be completed prior to construction. A draft MOA, when complete, will be included as an appendix in the EA. This FONSI is conditional upon approval of said MOA.
- d. Sediment loading would be minimized by employing erosion control plans and by scheduling in-river construction during the seasonal low flow/low water periods. Detailed erosion control measures will be in place prior to construction activities, including those in the water to minimize turbidity.
- e. The 0.1-acre of shrub wetland that will be deepened by the construction will be replaced by at least 0.1 acre of shrub wetland and perennial riverine habitat.
- f. The project will not adversely affect the existing fisheries, waterfowl, and adjacent wetland habitat.
- g. This project will have no long-term impacts on air quality and conforms to the Federal requirements for activities under the Clean Air Act within the New Hampshire State Implementation Plan.

Based on my review and evaluation of the environmental effects as presented in the Environmental Assessment, I have determined that the Wiswall Dam Aquatic Ecosystem Restoration Project is not a major Federal action significantly affecting the quality of the human environment. Therefore, I have determined that this project is exempt from requirements to prepare an Environmental Impact Statement.

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Date

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Curtis L. Thalken  
Colonel, Corps of Engineers  
District Engineer