EXECUTIVE SUMMARY

This report and environmental assessment present the findings of a study to determine the feasibility of enhancing instream aquatic habitat downstream of Whitney Point Lake and enhancing habitat within the lake itself. Downstream habitat benefits will be realized through the release of water from the lake during low flow conditions in the Otselic, Tioughnioga, Chenango, and Susquehanna Rivers. In-lake habitat will benefit since the recommended plan eliminates the current 7-foot winter drawdown. The report provides the findings of economic, social, environmental, and engineering analyses that were used to select a recommended plan of action for ecosystem protection and restoration. The potential impacts to cultural and environmental resources are evaluated herein in accordance with National Environmental Policy Act (NEPA), Section 106 of the National Historical Preservation Act of 1966, and other applicable environmental regulations.

The study proposes to modify the Whitney Point Lake project such that 8,500 acre-feet of conservation storage in the lake is available for the purpose of making flow augmentation releases during low flow conditions to enhance instream aquatic resources downstream of the lake. The currently proposed action works within the limits of the conservation storage to provide low flow augmentation; therefore, the dam's primary mission of flood control and its related storage capacity will not be impacted.

The augmentation plan would begin to release water from the top 7,500 acre-feet of the lake when the river discharge at the U.S. Geological Survey's Waverly gage falls below 700 cubic feet per second (cfs). The initial amount of water released will range between 50 cfs and 100 cfs, depending upon when the releases begin and how much of the 7,500 acre-feet of low flow augmentation storage remains. As the low flow conditions continue, the amount of water released will be modified based on the amount of low flow augmentation storage remaining and the remaining time of the defined low flow season. If at any time during the low flow the augmentation were unable to maintain at least 150 cfs at Chenango Forks, an additional 1,000 acre-feet of storage would be made available for this purpose. Four river systems, totaling approximately 60 miles downstream of Whitney Point Lake, will benefit from the low flow releases: (1) Otselic River, 1 mile, (2) Tioughnioga River, 10 miles, (3) Chenango River, 12 miles, and (4) Susquehanna River, 37 miles. The first three rivers will have the most noticeable increase in benefits; however, the aquatic ecosystem within the entire study area will benefit from the project. Under the proposed project modification, the aquatic ecosystem is expected to be less stressed and better able to endure and recover from low flow events. Additionally, species richness, diversity, and overall biomass are expected to increase over time as the project is implemented.

Overall, the lake resources will benefit from the proposed project modification, particularly given the elimination of the current 7-foot winter drawdown. However, there will be temporary impacts to the lake during the more severe, less frequent low flow events. Environmental enhancement within the lake is proposed and will include wetland vegetation planting in shallow areas of the lake, creation of wetlands and aquatic species habitat in a 15-acre cove, installation of deep and shallow-water habitat structures for

fish, and the creation of nesting and rearing habitat for waterfowl. Also, recreation adjustments have been developed to avoid the loss of recreation at the lake during severe low flows. The recreation adjustments include upgrading two boat launches, the boat rental area, a restroom, and a beach and swim area; repaving parking lots and roadways; providing a new beach house restroom and changing rooms; and stabilizing an eroding streambank. This recreation plan accounts for minimizing direct impacts of major low flow events, but also to ensure the recreation experience is not adversely impacted.

This report recommends a project that consists of modifications to an existing Corps reservoir for the purpose of enhancing the downstream environment and improving the in-lake resources. As such, implementation of this project falls under the continuing authority provided by Section 1135 of the Water Resources Development Act (WRDA) of 1986, Public Law 99-662, as amended by WRDA 1996, Public Law 104-303. The proposed project modification is consistent with the existing project purposes at Whitney Point Lake. Through the study's hydrologic and hydraulic analyses, it has been demonstrated that there will be negligible impact to the flood control operations of the reservoir, which is the primary purpose of Whitney Point Lake. As for the project's secondary purpose of general recreation, the project modification includes elements that will assure that recreation at the lake will continue as authorized. In addition, by eliminating the seasonal pool drawdown and providing additional wetland and fish enhancement opportunities in the reservoir, the project modification will increase the in-lake environmental resources, as well as benefit the downstream environmental resources with the low flow releases. Subsequently, the proposed project modification will improve the quality of the environment in the public interest. Hence, the proposed project is implementable under Section 1135 of WRDA 1986.

The total cost of the environmental enhancements is estimated to be $1,058,000 (October 2000 price levels). Similarly, the recreational adjustments are estimated to cost $1,746,000. Including preparation of plans and specifications and construction management costs, the total project implementation cost is currently estimated at $3,661,000, to be shared between the Federal government, $2,415,000, and the non-Federal sponsor, $1,246,000. The non-Federal sponsor for this project is the Susquehanna River Basin Commission. The cost of project implementation includes a monitoring program to assess the performance of the environmental enhancements and the flow augmentation. Implementing this modification to the water release procedures is not expected to increase the current operations and maintenance costs at the project.

The plans and specifications phase will begin once the Baltimore District receives appropriate funding from higher authority through the Continuing Authorities Program. Currently, the plans and specifications phase is scheduled for September 2001 through August 2002. The plans and specifications are expected to be finalized by August 2002, with a project cooperation agreement with the non-Federal sponsor for project construction to be fully negotiated by September 2002. Subsequently, execution of the project cooperation agreement is expected in February 2003, with construction funding provided in March 2003. The construction contract is currently scheduled to be awarded in May 2003, with completion of the physical construction expected in July 2004. Monitoring activities are planned to continue through 2009.

FINDING OF NO SIGNIFICANT IMPACT
SUSQUEHANNA WATER MANAGEMENT STUDY
WHITNEY POINT LAKE
SECTION 1135 PROJECT MODIFICATION

In compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, the U.S. Army Corps of Engineers, Baltimore District has prepared an environmental assessment (EA) that evaluates and documents the potential environmental effects associated with the proposed project modification and its effects on the human environment. At the start of this study, a notice of intent (NOI) to prepare an environmental impact statement (EIS) was filed in the *Federal Register* on February 18, 1998. However, during the evaluation of the environmental and socioeconomic resources, it was determined that significant adverse impacts were not anticipated; therefore, an EA was determined to be the proper NEPA documentation. A notice of withdrawal of the NOI was filed in the *Federal Register* on October 6, 2000.

The project modifications are being proposed to enhance the overall aquatic environment upstream and downstream of Whitney Point Lake, as well as in the reservoir proper, under the authority of Section 1135 of the Water Resources Development Act of 1986. The project will involve emergent wetland creation and enhancement, enhancement of in-lake fishery resources, recreational modifications, and the protection of downstream fishery resources during certain low flow years. The proposed action works within the limits of the conservation storage to provide low flow augmentation; therefore, the dam's primary mission of flood control and its related storage capacity will not be impacted.

Potential impacts from the proposed action were assessed regarding aesthetics; wetlands; fish and wildlife resources; cultural resources; land use; water and air quality; hazardous, toxic, and radioactive substances; threatened and endangered species; regional geology; environmental justice; and the general needs and welfare of the public.

The EA for the project modifications indicates that there will be no adverse permanent impacts resulting from the project and that there will be benefits to the aquatic environment from these modifications. There will be minor temporary impacts during construction such as sediment runoff, noise and dust. The impacts from any potential lake drawdowns during the recreational season have been minimized by placing volumetric and timing constraints on the releases. Directly and indirectly impacted recreational facilities are proposed for modifications. Environmental impacts from the proposed drawdowns will be minimal. The rate of drawdown will be on the scale of 1 inch or less per day over the release season. This slow rate of drawdown will allow fish and wildlife in the lake to move to other areas should drawdowns affect their normal habitat pockets. The plant life and any wetlands around the lake will not be adversely affected by drawdowns and may actually benefit due to the more stable pool. The needs of the downstream aquatic habitat have been balanced with the need to minimize impacts to the current and future in-lake ecosystem. The project modification will not impact the flood protection that this facility affords the downstream communities, nor will the releases for low-flow augmentation damage the river channels.

The proposed releases during low flow years will enhance the downstream fishery by alleviating some of the stress that low flow events normally cause in an aquatic ecosystem. These releases will result in slightly higher velocities of water and slightly more depth of water in the river channels. Increases in these parameters of aquatic habitat will benefit both the study's target fish species, the fantail darter, and the general macroinvertebrate communities along at least a 60-mile reach of river segments, from Whitney Point Dam to Waverly, NY. Furthermore, the change in the management of the water surface elevation of the lake from an annual 7-foot drawdown to a year-round stable pool will result in benefits to the lake ecosystem. Primarily fisheries and wetlands will be enhanced, resulting in better wildlife habitat and recreational opportunities at Whitney Point Lake.

Upon reviewing the EA, I find that there would be no significant impacts to the resources considered and that an EIS is not required for the proposed actions. This statement has been prepared in accordance with the National Environmental Policy Act of 1969, as amended.

Charles J. Fiala, Jr.
Colonel, Corps of Engineers
District Engineer

Date: 13 July 01