

## WHITNEY POINT LAKE, NEW YORK SECTION 1135 PROJECT MODIFICATION



#### Project Background:

Whitney Point Lake is one of 13 Corps of Engineers resevoir projects in the Susquehanna River watershed. The reservoir is located on the Otselic River in Broome County, New York, and controls a drainage area of 255 square miles. It is primarily operated for flood control, but is also used for recreation and upland wildlife management. The project has a total storage capacity of 86,500 acre-feet, of which 74,000 acre-feet are currently dedicated to flood control and 12,500 acre-feet to conservation storage. The project provides flood control for the valley along the lower Tioughnioga River, the lower Chenango River, and the Susquehanna River downstream of Binghamton.



Whitney Point Lake was authorized by the Flood Control Act of June 22, 1936 as a unit of the comprehensive flood control plan for the southern New York and eastern Pennsylvania communities in the Susquehanna River basin. The Whitney Point dam consists of a rolled earthfill embankment, approximately 4,900 feet long with a top width of 30 feet. The dam rises 95 feet above the natural streambed to an elevation of 1,039.5 feet NGVD. Project construction on the Whitney Point dam began in September 1938 and was completed in June 1942. When Whitney Point Lake was authorized, no recreation facilities were included in the project. However, in the early 1960's, at the urging of the State of New York, recreation was added as a project purpose. To that end, the normal summer pool was raised from 960 to 973 feet NGVD to provide a larger lake. During the winter, the lake is drawn down to 966 feet NGVD to allow for additional seasonal flood control storage.



Recreational facilities at Whitney Point were constructed beginning in the late 1960's. At the summer pool elevation, the lake has a surface area of approximately 1,200 acres and 10.5 miles of shoreline. Broome County Department of Parks and Recreation operates the project's recreational facilities which are located at Dorchester Park in the southern portion of the lake near the dam and Upper Lisle Park which is at the upstream end of the lake.

These areas provide swimming, picnicking, boating, fishing, and camping opportunities. In addition, an overlook area along New York Route 26 affords a scenic vista of the dam and spillway area. In the Upper Lisle area, the New York State Department of Environmental Conservation maintains a wildlife management area that is used by hunters, wildlife observeers, and other outdoor enthusiasts.

*For more information* regarding the Whitney Point Lake Section 1135 Project, please contact the project manager, Ms. Claire D. O'Neill, CENAB-PP-C, at (410) 962-0876, or e-mail claire.d.o'neill@usace.army.mil.



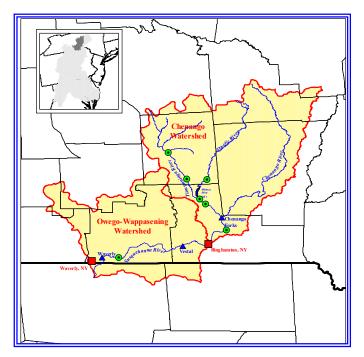


## Project History:

The Whitney Point Lake Section 1135 Project began in April 1995 as a reconnaissance study under the Section 721(a) authority of the Water Resources Development Act of 1986. This section reads as follows:

"The Secretary shall study and develop a plan for drought management and low fresh-water inflow maintenance on the major tributaries entering the Chesapeake Bay, including, but not limited to, water conservation, water storage, emergency restrictions, and groundwater recharge."

The project's reconnaissance study focused on water resources problem in the entire Susquehanna River watershed. The September 1996 reconnaissance report laid out a water management plan that identified three sub-basins in the Susquehanna watershed as highest priority for further study. Of these sub-basins, there was both a Federal and non-Federal interest in performing environmental restoration in the eastern New York sub-basin, specifically through the development of water management plan for Whitney Point Lake. Subsequently, the Susquehanna River Basin Commission (SRBC) agreed to be the non-Federal sponsor and share the costs 50-50 for the second phase of study, the feasibility phase.



The \$1.5-million feasibility study commenced in July 1997. During this detailed engineering. phase. environmental, and economic analyses were undertaken to firmly establish the Federal interest in project implementation. In particular, an aquatic habitat simulation model was developed to assess the benefits of various ecosystem environmental release scenarios. The ultimate product of the feasibility phase was a feasibility report with an integrated environmental assessment (EA). The draft feasibility report/EA was prepared in summer 2000 and then distributed for public review in October 2000. This report was then revised and finalized in August 2001.

The August 2001 feasibility report recommended a \$4.1-million project (October 2000 price levels) at Whitney Point Lake, with implementation under the Section 1135 programmatic authority of the Water Resources Development Act of 1986. This authority allows the Corps of Engineers to modify existing Corps of Engineers projects to restore and enhance environmental quality.

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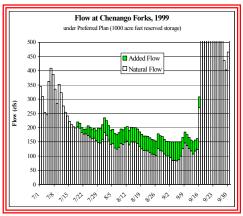
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# The Project:

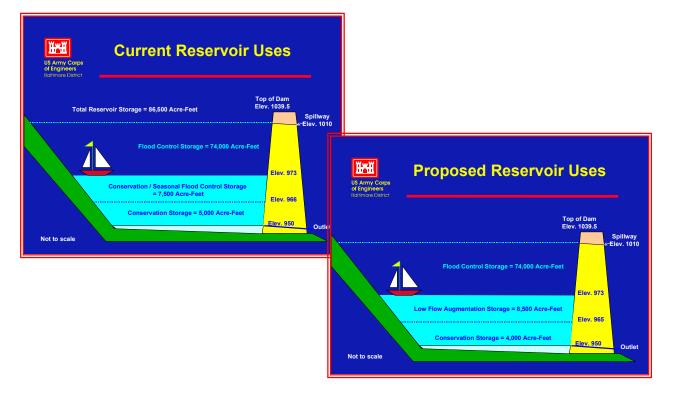
The recommended plan for the Whitney Point Lake Section 1135 Project has two major components: (1) a new reservoir operating plan with environmental releases, and (2) several physical modifications to accommodate environmental releases.

The environmental releases of the new operating plan are designed to periodically augment low flow conditions downstream. As such, the supplemental flows will reduce stress on the ecosystem, benefit more susceptible species, increase macroinvertebrate production and richness, and increase numbers of trophic level organisms (fish, mammals, amphibians, etc.). In addition, the in-lake environmental resources will benefit from a more constant pool.



Specific elements of the new reservoir operating plan include:

- **D** Elimination of the 7-foot winter drawdown.
- □ 8,500 acre-feet total conservation storage; environmental releases to be made during low flows (up to 100 cfs).
- □ 7,500 acre-feet for releases when flow at Waverly gage drops below 700 cfs.
- □ 1,000 acre-feet to ensure a minimum flow at Chenango Forks gage of 150 cfs.



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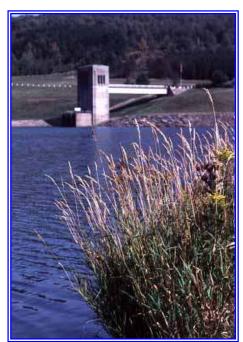
The planned physical modifications for the project include:

- □ Wetland enhancement for an existing 20-acre mudflat area in the north end of the lake, including escape channels and deep pools for fish, planting of wetland vegetation, waterfowl nesting islands, and fish habitat structures.
- □ The beach/swim area, boat ramps, and boat piers will be modified to accommodate a 4-foot drawdown.
- **u** The park's restroom facilities will be modified to provide flush toilets and handicap access.
- □ The bathhouse facilities will be modified to provide changing rooms, flush toilets, handicap access, and a lifeguard office.
- □ The parking lots will be repaved and expanded.
- □ Walkways will be added for access to new restroom and between new restroom and boat launching area.
- □ Electrical, water, and septic system upgrades will be required to meet current New York State standards.
- □ An ecosystem monitoring plan (downstream and in-lake) to monitor the physical and chemical quality of the aquatic ecosystem as a result of the modifications will be put in place.
- □ Adaptive management plan, based on results of the monitoring and any negative unforeseen impacts, will recommend changes, if appropriate, to the project.

## **Current Project Activities:**

Development of the plans and specifications for the project was initiated in February 2002 and completed in June 2007. Following execution of the project cooperation agreement with SRBC on 19 June 2007, the construction contract was advertised to bidders. The construction contract was awarded on 5 September 2007 to Kalimex, Inc. of Ocean View, New Jersey. Construction activities are expected to start in fall 2007 and wrap up in late spring 2009. The current estimate for the total project is \$7.1 million, of which \$5 million would be Federal and \$2.1 million would be non-Federal.





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