

FINDING OF NO SIGNIFICANT IMPACT

HYDROLOGIC DEFICIENCY PROJECT PROMPTON DAM AND LAKE WAYNE COUNTY, PENNSYLVANIA

Prompton Dam and Lake, which is operated by the U.S. Army Corps of Engineers (USACE), Philadelphia District, is located in the Lackawaxen River Basin, Wayne County in Northeastern Pennsylvania. Prompton Dam is one-half mile upstream of the village of Prompton on the West Branch of the Lackawaxen River. The project is 31 miles upstream of the Lackawaxen River's confluence with the Delaware River. The dam is a zoned earth and rock fill embankment, 1230 ft long, and 140 ft high.

Prompton Dam was authorized in House Document 113, 80th Congress, 1st Session, and was completed in 1960 with flood control as its sole purpose. Prompton Dam is part of an integrated reservoir flood control system for the Lackawaxen River. In conjunction with the General Edgar Jadwin Reservoir, the system provides flood protection, in varying degrees, to the boroughs of Prompton, Honesdale, and Hawley and to smaller communities along the Lackawaxen River.

In the late 1980's, Prompton Dam was analyzed for a modification to convert a portion of its flood control storage volume to water supply storage. The proposed modification never materialized and the study ended. However, as part of the study a new estimate of the Probable Maximum Flood (PMF) was prepared and Prompton Dam was determined to be hydrologically deficient according to current USACE guidelines. In the current PMF scenario the dam embankment would be overtopped by 5.5 ft. Any over topping of the embankment would place the dam at high risk of catastrophic failure. This risk means that the dam needs to be re-designed in order to pass the PMF safely and protect the structural integrity of the dam during these large flood events.

The Hydrologic Deficiency Report, Prompton Dam, West Branch Lackawaxen River, PA, Philadelphia District, U.S. Army Corps of Engineers, Revised December 1993 presented the results of investigations into the potential impacts that a range of floods would have on the hydrologic/ hydraulic capability of the project, evaluated both structural and non-structural solutions to correct the hydrologic deficiency, and presented a selected alternative. The recommend plan in the 1993 report proposed widening the spillway from 50 ft to 130 ft; constructing a spillway retaining wall to prevent erosion of the western abutment of the dam; raising the dam 7 ft with a flood wall on top of the existing dam embankment; and lowering the spillway by 5 ft in combination with a 5-ft. high erodible spillway embankment (fuse plug).

The selected plan presented in the 1993 Hydrologic Deficiency Report was further refined and analyzed in the Hydrologic Deficiency Final Design Documentation Report, Prompton Dam, West Branch Lackawaxen River, PA Philadelphia District, U.S. Army Corps of Engineers, June 2003. In order to gain a better understanding of the hydraulic impacts to the project from the proposed modification, a physical model was constructed and project

performance was evaluated by the Hydraulic Laboratory of the Waterways Experiment Station (WES) from 1999 to 2003. Additions to the 1993 plan from the WES study were a training structure at the upstream entrance to the spillway and the improvement of riprap protection at the outlet works. Other major changes from the 1993 plan were the replacement of the spillway retaining wall with a soil nail wall. The soil nail wall technology eliminates the large excavation needed for the retaining wall. The training structure, which originally was a rock dike in the WES model study, is being replaced with a mechanically stabilized earth (MSE) geogrid-reinforced wall. The MSE wall will provide a smoother transition for flow into the spillway.

An Environmental Assessment (EA) was prepared in accordance with the provisions of the National Environmental Policy Act of 1969, as amended. This EA assessed conditions at the project site and evaluated the potential impacts of the project on existing resources in the immediate and surrounding areas to include: physical, chemical, and biological characteristics of the aquatic and terrestrial ecosystem; endangered and threatened species; hazardous and toxic materials; aesthetics and recreation; cultural resources; and the general needs and welfare of the public.

All practicable means to avoid or minimize adverse environmental effects have been incorporated into the project plan. The project and environmental assessment is being coordinated with the Delaware River Basin Commission, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency Region 3, Pennsylvania Department of Environmental Protection, Pennsylvania Historical and Museum Commission, Pennsylvania Fish and Boat Commission, Pennsylvania Game Commission, Pennsylvania Department of Conservation and Natural Resources and all other known interested parties. All comments received on this proposal will be given appropriate consideration.

The Environmental Assessment has shown that the proposed activity is not likely to jeopardize the continued existence of any species or the critical habitat of any fish, wildlife or plant, which is designated as endangered or threatened pursuant to Section 7 of the Endangered Species Act, as amended.

Work in waters of the United States, including wetlands, must be in compliance with Section 404 of the Clean Water Act. Instream work within the stilling basin of the dam will be performed within the waters of the United States. A review of impacts associated with the potential discharge of fill material has been performed as per Section 404 (b)(1) of the Clean Water Act. No long-term or significant negative impacts are anticipated to the aquatic environments. The requirements of Executive Order 11990, Protection of Wetlands, are therefore met.

The Commonwealth of Pennsylvania requires a 401 State water quality certification for any work, which may affect water or waterways in the state. As a result, a water quality certificate will be secured from the Commonwealth as required for the work planned in the West Branch Lackawaxen River.

In accordance with guidelines established under Section 106 of the National Historic Preservation Act of 1966, as amended, coordination with the Pennsylvania Historical and Museum Commission is ongoing to identify archaeological sites or historic structures in the project area.

All potential negative and positive impacts associated with the Prompton Dam project have been considered in the development of the EA. The potential negative impacts of the project may include minor and temporary changes in water quality, land-use recreation being impeded, and loss of downstream aquatic habitats and terrestrial habitat within the project limits. It is anticipated that any environmental impacts seen as a result of the project will be short-term. Recreational impacts as a result of the construction of the project will also be short-term. Following completion of the project, recreational activities will be similar to pre-project conditions. It has been determined that there will be no long-term negative cumulative impacts as a result of the project. A long-term positive cumulative impact is expected. The project will ensure the dam and lake can safely meet flood control objectives associated with the maximum probable flood. As a result, maximum flood control protection will be realized by downstream communities.

Upon reviewing the Environmental Assessment, I find that potential negative environmental impacts associated with this project will not be significant. Any adverse impacts will be short-term and minor in nature. Based upon this finding, preparation of an Environmental Impact Statement is not required.

Date _____

Robert J. Ruch
Lieutenant Colonel, Corps of Engineers
District Engineer