

Water Beyond 2000

Upground Reservoir Project

Removal of Prospect Dam Proposed as Mitigation Project

The Prospect Dam was recommended for removal as part of the environmental mitigation package for this project based on coordination with and comments received from various regulatory agencies.

Ownership, Past & Current Beneficial Use

Between 1920 and 1923, the Columbus, Delaware & Marion (CD&M) Electric Railroad built the Scioto Power Station located on SR 203 in Marion County. This facility provided electricity for the Delaware to Marion stretch of the CD&M Railroad between 1920 and 1933, as well as power for streetlights and residential customers in the cities of Marion & Delaware until the power plant was closed in 1969. The Prospect Dam, located on the Scioto River at the Marion County/Delaware County line south of the village of Prospect, was also constructed at that time and served to impound river water for use in boilers and condensers at the Scioto Power Station. There is no evidence indicating the dam was used for hydropower.

Since 1969 when the Scioto Power Station was closed, the property has been sold several times; however no party claims ownership or maintenance responsibility of the Prospect Dam. There is no other known current beneficial use other than limited recreational activities created by the impoundment pool including the use of personal watercraft and fishing including an annual fishing derby held in the impoundment pool.

Reasons for Removing this Low Head Dam

In general, state and federal regulatory agencies recommend removal of non-essential low head dams from streams. From a recreational standpoint, the U.S. Fish & Wildlife Service and the Ohio Department of Natural Resources consider low head dams to be in-stream navigational obstructions to personal watercraft and canoeists and a drowning hazard to both boaters and fishermen.

Water quality behind a low head dam has lower dissolved oxygen levels and higher temperatures than a free-flowing stream. This impaired water quality affects fish species and other aquatic life that are present in the dam pool. Additionally, the dam itself is a physical barrier to migratory fish. Consequently, the U.S. Fish & Wildlife Service and Ohio Environmental Protection Agency cite the benefits of improved water quality by restoring a stream to a free-flowing condition as a result of dam removal projects. The removal of the impoundment will improve the water quality and allow for the migration of different species of fish and aquatic life in the Scioto River and its tributaries up to the existing Greencamp Dam.

Local political jurisdictions including the village of Prospect and Prospect Township are also of the opinion that the dam is a safety hazard and that the dam will continue to deteriorate due to the lack of maintenance. Concerns about potential liability have been raised should the structure fail and allow debris and sediments currently behind the dam to be carried downstream. Although detailed study is needed for confirmation, it is believed that removal of the dam would not have a significant positive effect or on historic flooding around the Village of Prospect.

Architectural/Historical Significance of the Structure

A survey of the Prospect Dam and Scioto Power Station was completed in July 2007 and found that these two facilities are potentially eligible for the National Register of Historic Places (NRHP) as a multiple property grouping, and the Ohio Historic Preservation Office (OHPO) may require additional work prior to demolition of the dam structure.

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Anticipated Water Levels and Aesthetics after Removal

Removal of the Prospect Dam will allow the Scioto River downstream of Greencamp to be returned to the natural, free-flowing condition that existed prior to 1920. The stream conditions that can currently be observed downstream of the Prospect Dam for several miles are indicative of what the Scioto River would look like with the Prospect Dam removed.

Water levels in the Scioto River vary dramatically with seasonal rainfall in the river basin. Shallow water depths will be observed in extended dry weather periods that usually occur in the late summer and early fall months. Much of the riparian corridor has tree-lined banks. It is anticipated that native vegetation that was present prior to the construction of the dam will slowly re-establish itself along the streambanks. Any significant mudflats or sandbars currently submerged by the dam pool may be exposed during low stream flow conditions; however, natural channel forming tendencies of the stream will re-mold them to optimize flow conveyance and provide habitat for aquatic life.

When the City of Columbus must periodically pump water from the Scioto River to be stored in the upground reservoirs, the proposed inflatable weir will temporarily impound water and create stream conditions similar to those observed behind the Prospect dam, but at reduced water depths.

Sediments behind the Existing Dam

In order to determine the potential for contaminated sediments from industrial activities along Little Scioto being held behind the Prospect Dam, the city obtained three samples immediately behind the dam. Results found no contaminants above regulatory levels. Additional water quality and sediment sampling in the area was performed by Ohio EPA in fall 2006 and found no contaminated sediments in the Scioto River mainstem behind the Prospect Dam.

Who will Pay Costs Associated with Dam Removal?

The City of Columbus will pay costs for the removal of debris immediately behind the existing structure, the structure's demolition and restoration of banks in the immediate vicinity of the structure. No additional stream restoration/enhancement work, such as new plantings along the banks or removal of mudflats/sandbars in the Scioto River and tributaries between Prospect and Greencamp is planned and is not a mitigation requirement at this time.

The Scioto Conservancy District, as part of its five-year plan, is planning to remove debris within the Scioto River in Marion County. Removal of debris on tributaries, specifically Battle Run, is desired/planned by Village/Township/County to improve stream channel conveyance



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