April 30, 2019

Limited Environmental Review and Finding of No Significant Impact

City of Struthers – Mahoning County
Struthers Dam Removal
Loan number: WR39-0892-0010

The attached Limited Environmental Review (LER) is for a dam removal project in Struthers which the Ohio Environmental Protection Agency intends to finance through its Water Resource Restoration Sponsor Program (WRRSP). The LER describes the project, its costs, and expected environmental benefits. Making available this LER fulfills Ohio EPA's environmental review and public notice requirements for this loan program, as described in Ohio Administrative Code (OAC) 3745-150-05.

Ohio EPA analyzes environmental effects of proposed projects as part of its WRRSP program review and approval process. We have concluded that the proposed project should not result in significant adverse environmental impacts. This project's relatively narrow scope and lack of environmental impacts qualifies it for the LER rather than a more comprehensive Environmental Assessment, as described in OAC 3745-150-06. More information can be obtained by calling or writing the person named at the end of the attached LER.

Upon issuance of this Finding of No Significant Impact (FNSI) determination, award of funds may proceed without further environmental review or public comment unless new information shows that environmental conditions of the proposed project have changed significantly.

Sincerely,

 Jerry Rouch, Chief
Division of Environmental and Financial Assistance

Attachment
LIMITED ENVIRONMENTAL REVIEW

Project Identification

Project Name: Struthers Dam Removal
Project Implementer: City of Struthers
City Administration Building
6 Elm Street
Struthers, Ohio 44471

WRRSP No.: WR390892-0010

Project Sponsor: The Honorable Dan Horrigan, Mayor
City of Akron
166 South High Street
Akron, Ohio 44308

WPCLF No.: CS390095-0172

Project Summary

The City of Struthers seeks to remove a deteriorating dam and approximately 35,000 cubic yards of sediment contaminated with heavy metals and Polycyclic Aromatic Hydrocarbons (PAHs) from the Mahoning River in Struthers, Mahoning County, Ohio. The City is requesting $1,237,820 from the Water Resource Restoration Sponsorship program (WRRSP). The total cost of the project is $2,324,500. Additional funding for the balance of the project will be provided from LTV Steel bankruptcy settlement funds.

Funds for the dam removal project will be made available through Ohio EPA's WRRSP by advancing a portion of the interest to be paid by the City of Akron on its $87,581,500 Water Reclamation Facility Biological Chemically Enhanced Primary Treatment (WRF BioCEPT) project. The WRF BioCEPT project will be financed through Ohio EPA's Water Pollution Control Loan Fund (WPCLF) program over a 45-year term at a special nutrient reduction interest rate. The WPCLF program provides financial assistance to communities throughout Ohio by providing below-market interest rates for wastewater infrastructure projects. Akron will realize a total saving of $66,206,321 compared to a standard market rate loan by participating in both the WPCLF and WRRSP.

History & Existing Conditions

The Struthers Dam is located at Mahoning River Mile 15.83 within the City of Struthers, in Mahoning County, Ohio. The dam is located just upstream of Bridge Street (SR 616) and Wilson Avenue (SR 289). The dam is located approximately 1,400 feet upstream of the South Bridge Street bridge. The dam pool extends approximately 1.9 miles upstream of the dam. An access road runs adjacent to the Mahoning River on the north river bank for the entire project distance. See Figure 4 for a photograph of the dam location.
The dam was originally associated with the former Youngstown Sheet and Tube Company plant. It was first constructed between 1908 and 1915. The dam structure was first composed of a coke trestle with a small, low head concrete weir attached to the base of the piers. It now consists of six concrete piers and the low head dam. Sections of the dam are positioned between the concrete piers that first supported the trestle. The dam has a concrete abutment with attached embankment walls on each side of the river. According to an Ohio Historic Inventory, the plant was abandoned at the time of a 1942 survey of the dam and is now listed as being owned by the City of Struthers. According to the Ohio Historic Inventory, the dam is not currently listed on the national registry of historic structures, nor does it qualify for listing on the national registry.

The Struthers Dam is located within the Dry Run-Mahoning River watershed (see Figure 2). The Mahoning River within and upstream of the project area has become impaired due to its extensive historical industrial usage, including the construction of multiple dams within the river and the discharge of contaminated waste, which has resulted in toxic sediment issues, especially within dam pool areas.

Immediately downstream of the Struthers Dam at Ohio EPA Monitoring Station, the Mahoning River is free flowing and in full attainment of warmwater habitat (WWH) status.

The next upstream monitoring station is only in Partial Attainment of WWH status. The most significant impairment at this monitoring station is the low fish diversity. This lower score is due to the Struthers Dam’s effectiveness at blocking fish passage and possibly the effects from debris at the dam that extends the zone of influence of the dam. The predicted increase in the amount of riffle and run habitat associated with the dam removal will greatly improve habitat and enhance the potential for biological diversity.

Sediment contamination upstream of the dam is the result of process water discharges to the Mahoning River from numerous steel mills upstream of the Struthers dam processing coke for the production of steel. The steel plants, which are now gone, discharged pollutants to the Mahoning river above the Struthers dam for 85 years.

Ohio EPA studies in 2010 and 2013 in the lower Mahoning River determined that the river will never attain the Warmwater Habitat aquatic life use criteria unless the sediment contamination and dam are removed. An Ohio EPA’s 2000 report assigns the Mahoning River (Mill Creek to Yellow Creek and Yellow Creek to Pennsylvania) with a “High” ultimate aquatic life use restorability factor based on the river’s biological and qualitative habitat factors.

Project Description

This project will remove the deteriorating dam and approximately 35,000 cubic yards of sediment contaminated with heavy metals and Polycyclic Aromatic Hydrocarbons (PAHs).

Once the dam and sediments are removed, natural redistribution and deposition of bed material of different sizes in place of the fine-grained accumulated sediment will improve the benthic conditions and provide better habitat for macroinvertebrates and fish populations. An Environmental Covenant will be placed on those portions of the river corridor and streambank where restoration activities will occur.
Additional dam removal projects are also in various stages of planning for removal both upstream and downstream of the Struthers Dam. In fact, if the Lowellville, Struthers, and the three Youngstown dams (Center Street Dam, Mahoning Avenue Dam, and Crescent Street Dam) are removed as planned, this would result in over 25 miles of free-flowing Mahoning River. As more of these dams and their accompanying sediments are removed, the recruitment and recovery potential of the Mahoning River will be possible. See Figure 3 for dam locations.

Implementation

The City of Struthers is the current property owner and will continue to own and manage the property after project completion. With dam removal and natural channel restoration projects such as this, long-term management requirements are minimal. The City will oversee the dam removal activities and, if any repairs are required to the restored channel, the City will require that such repairs be made by the contracting entity. The City will maintain the restored area as a natural area and passive public park space with the potential to develop a future trail and/or canoe/kayak launch within the planned footprint of the Environmental Covenant. Such activities would either be conducted outside of the Environmental Covenant area or, if proposed to be inside of the area, they would not be conducted until after Ohio EPA Division of Environmental and Financial Assistance (DEFA) review and approval of the design plans for such activities in order to ensure that the ecological integrity achieved by the dam removal project is not endangered.

The City will submit annual reports to Ohio EPA DEFA on January 15 of each year following the first full year after completion of restoration activities.

Akron intends to finance its $87,581,500 Water Reclamation Facility (WRF) BioCEPT project through Ohio EPA’s WPCLF. The BioCEPT project consists of a new tank and Biological Chemically Enhanced Primary Treatment (BioCEPT) system to provide treatment of influent flows that exceed 220 million gallons per day (MGD) to the WRF located north of Akron on Akron-Peninsula Road. Akron is under a federal consent order to reduce combined sewers overflows (CSOs), which is impaired due to nutrient levels, making the project eligible for Ohio EPA’s Nutrient Reduction Discount (NRD). The NRD results in a blended rate of 0.71% Akron’s loan. By voluntarily participating in the WRRSP, Akron’s interest rate will be further reduced by 0.1% for a final rate of 0.7%. By utilizing the NRD and WRRSP discounts, Akron will save approximately $66,206,321 during the 45-year loan.

Akron’s WRF BioCEPT WPCLF loan is currently scheduled to be awarded in May 2019. The project design and sediment testing will be conducted between July and December 2019. The dam demolition will occur between January and December 2020.

Struthers and Ohio EPA will execute and record (at the Mahoning County Recorder’s Office) a WRRSP Environmental Covenant that will encumber the WRRSP project area. The Environmental Covenant will specify permitted uses and property restrictions. Immediately after the completion of dam removal and restoration activities, the Environmental Covenant area will be maintained as a nature preserve area.
The facilities planning information for the proposed project was reviewed in terms of potential direct, indirect and cumulative short- and long-term environmental impacts, with input from the following agencies:

State Historic Preservation Office
Ohio Environmental Protection Agency
Ohio Department of Natural Resources
U.S. Fish and Wildlife Service

No opposition to the project was received from any of these entities.

**Public Participation**

In order to satisfy public notification requirements of its State Environmental Review Process, Ohio EPA's Division of Environmental and Financial Assistance (DEFA) will post this Limited Environmental Review (LER) and Finding of No Significant Impact to its web page located at [http://epa.ohio.gov/defa/ofa.aspx](http://epa.ohio.gov/defa/ofa.aspx). Ohio EPA is unaware of any public opposition to this project.

Struthers is committed to providing public outreach and informational opportunities. In fact, this project has been a priority of the city for several years and is widely known and supported throughout the community. Multiple newspaper articles have already been published regarding the community's desire and efforts to remove the dam. Struthers conducts regular council meetings at which time this project is occasionally discussed, as appropriate.

Once a design-build contractor is selected for this project, Struthers will also be conducting at least one public outreach event specific for this project at which time the contractor will discuss preliminary design information and residents can provide input that can be taken into consideration during the restoration design and dam removal process.

The City will use a variety of additional measures to assure that the public is aware of the project and its benefits. These measures will include, but will not be limited to:

- An informational sign will be placed at or near to the dam site in a visible location, identifying the purpose of the project and the funding source.
- Affected landowners (owners of land along the banks of the Mahoning River in the affected pool area) will be notified of the project. Owners will be invited to a public informational meeting that will be held before the project is implemented.
- The project will be discussed during regular meetings of the Struthers City Council.
- The City of Struthers will develop a project website that will be linked to the city's existing community web site. This website will be used to update residents on project progress.
- The City of Struthers will coordinate with the Eastgate Regional Council of Governments to provide project information for publication in an agency newsletter. News releases regarding the project will be provided to local newspapers and radio stations during project planning and implementation.
Conclusion

Ohio EPA conducts environmental reviews of all projects prior to awarding WPCLF financing. The proposed project meets the project type criteria for an LER; namely, it is a water quality protection project consisting of non-structural practices. Furthermore, the project meets the other qualifying criteria for an LER; specifically, the proposed project:

- has no significant adverse environmental effect, as the planning activities for the project identified no potential adverse impacts on the quality of the human environment or on sensitive resources such as floodplains, wetlands, state or federally-designated wild, scenic or recreational rivers, riparian areas, prime or unique agricultural lands, aquifer recharge zones, archaeological or historically significant sites, or threatened or endangered species. In fact, the proposed project will have beneficial environmental results by removing impediments to the Mahoning River achieving warmwater habitat aquatic life status.

- does not require extensive specific impact mitigation, as the proposed project will improve aquatic habitat.

- has no adverse effect on high value environmental resources, as it will improve aquatic habitat.

- represents a long-term solution to an identified water quality threat (dam and contaminated sediments), the cost of which is reasonable considering monetary and non-monetary factors. The restored river stretch will be protected by an environmental covenant.

- It is not a controversial action, as it will be a voluntary action on the part of the existing landowners and no significant public opposition has been expressed.

- It is cost effective because there is no repayment of the money that will be used to remove the dam.

- It does not create a new, or relocate an existing, discharge to surface or ground waters since the proposed project does not involve a point source discharge. It will not result in substantial increases in the volume of discharge or loading of pollutants from an existing source or from new facilities to receiving waters since the proposed project does not involve a point source discharge.

- It will not provide capacity to serve a population substantially greater than the existing population since the proposed project is not a publicly-owned wastewater treatment works, designed to serve a designated area. Instead, it is stream aquatic life use restoration project.

The planning activities for the project have identified no potentially significant short- or long-term adverse impacts on the quality of the human environment or on sensitive resources. The project will benefit water quality by removing impediments to the river achieving warmwater habitat aquatic life use status.
Contact info

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Figure 3 Project Site with Respect to Other Dams on the Mahoning River
Figure 4 Photograph of existing dam structure looking upstream