

# 7/6/2018 Preliminary Finding of No Significant Impact Twin City Water and Sewer District Uhrichsville Lowhead Dam Removal Tuscarawas County WRRSP WR391442-0013

The attached Environmental Assessment (EA) is for a lowhead dam removal project in your area which the Ohio Environmental Protection Agency intends to finance through its Water Resource Restoration Sponsorship Program (WRRSP). The EA describes the project, its costs, and expected environmental benefits. We would appreciate receiving any comments you may have on the project. Making available this EA and seeking your comments fulfills Ohio EPA's environmental review and public notice requirements for this loan program.

Ohio EPA analyzes environmental effects of proposed projects as part of its WRRSP review and approval process. We have concluded that the proposed project should not result in significant adverse environmental impacts. More information can be obtained by contacting the person named at the end of the EA.

Any comments on our preliminary determination should be sent to me at the letterhead address. We will not act on this project for 30 calendar days from the date of this notice in order to receive and consider comments. In the absence of substantive comments during this period, our preliminary decision will become final. After that, Twin City Water and Sewer District can then proceed with its application for the WRRSP funding.

Sincerely,

Jerry Rouch, Assistant Chief

Division of Environmental & Financial Assistance

Office of Financial Assistance

JR/DH

attachment

#### **ENVIRONMENTAL ASSESSMENT**

# A. Project Identification

Name: Uhrichsville Lowhead Dam Removal Entity: Twin City Water and Sewer District

Sponsor: City of Akron, Sanitary Sewer Reconstruction 2017, CS390095-0147

Address: Donnie Fawcett, Wastewater Superintendent

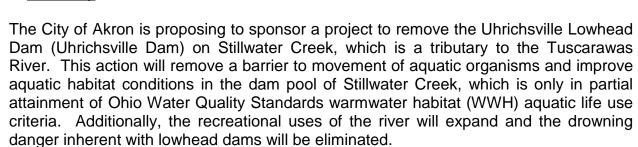
Twin City Water and Sewer District

308 Grant Street Dennison, Ohio 44621

WRRSP #: WR391442-0013

# B. Proposed Project

# 1. Summary



The cost of the project is \$719,695, of which \$714,695 will be funded by Ohio Environmental Protection Agency (EPA) Water Resource Restoration Sponsor Program (WRRSP).

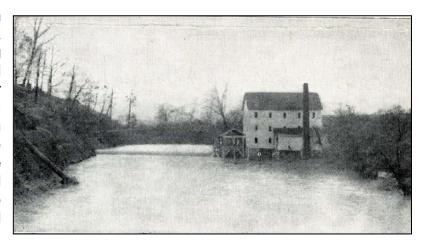
Akron has requested \$7,025,000 from the Ohio Water Pollution Control Loan Fund (WPCLF) to finance its proposed Sanitary Sewer Reconstruction 2017 project. The WPCLF is a loan program operated by the Ohio EPA that provides below-market interest rate loans for improvements to publicly-owned wastewater treatment works. The WRRSP is a program within the WPCLF that allows Ohio EPA to advance a portion of the interest it would otherwise receive on loans to parties known as Implementers for the restoration or preservation of high quality aquatic resources such as wetlands, streams, etc. Borrowers who participate in the WRRSP (known as Sponsors) receive an interest rate discount of us to 0.1 percent. In the case of the Uhrichsville Lowhead Dam project, Akron is the sponsor and Twin City Water and Sewer District (Twin City) is the Implementer. This environmental review covers only the Uhrichsville Lowhead Dam

Removal project. The Akron Sanitary Sewer Reconstruction 2017 project is covered in a separate environmental review.

# 2. Project Background

# a. History and Existing Conditions

Uhrichsville Lowhead Dam was built in 1806 to operate a mill on the left descending bank of Stillwater Creek and later it provided a water supply for Twin City. Twin City now draws water from groundwater wells near the Tuscarawas River. The former raceway that directed water from the creek to the former mill wheel is located on the west side of the river.



The Federal Emergency Management Agency (FEMA) flood profile indicates that the stream gradient for the 100-year flow is very low; due to this, the dam impounds water over an estimated 4.5 miles upstream from the dam. Thus, removing the dam will restore natural stream morphology conditions and processes to an extensive free-flowing reach of stream and allow fish passage upstream from the Tuscarawas River.

#### c. Water Quality

Past water quality improvement efforts within the Stillwater Creek watershed appear to be primarily limited to Ohio Department of Natural Resources (ODNR) coal mining and gob pile remediation efforts, which are believed to have had significant impacts on water quality improvement.

In the project area, Stillwater Creek ranges from full to partial attainment of WWH status. Stillwater Creek is in full attainment of WWH status below the dam; however, the dam pool achieves only partial attainment up to 4.5 miles above the dam. The Index of Biological Integrity (IBI) score immediately downstream of the dam is "Exceptional," suggesting that fish from the Tuscarawas River are being blocked by this lowhead dam.

A mussel bed is located in the riffle area downstream of the dam. The mussel bed will require additional analysis and care with dam pool sediment post-construction.

#### 3. Discussion of Feasible Alternatives

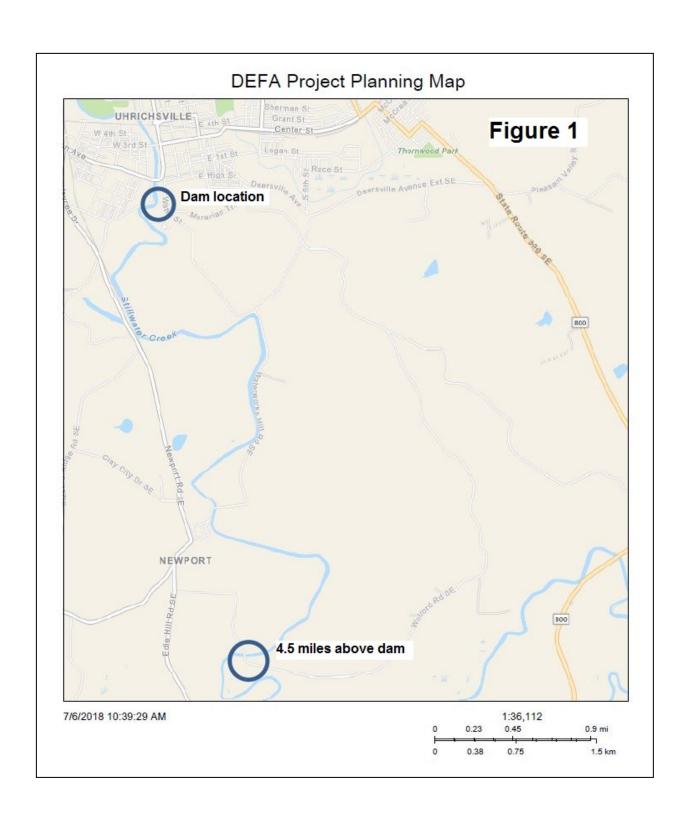
Due to the impediments to water quality and the danger to public safety, removal of the lowhead dam is the only viable alternative for the project. Doing nothing, the "no-action" alternative, would maintain a fish barrier and hazard to public safety. Partial dam removal was not analyzed. In similar projects, a small portion of the lowhead dam has been left in place in order to act as a grade control structure in conjunction with the restoration. The feasibility of this will not be known until the engineering and design work has been initiated.

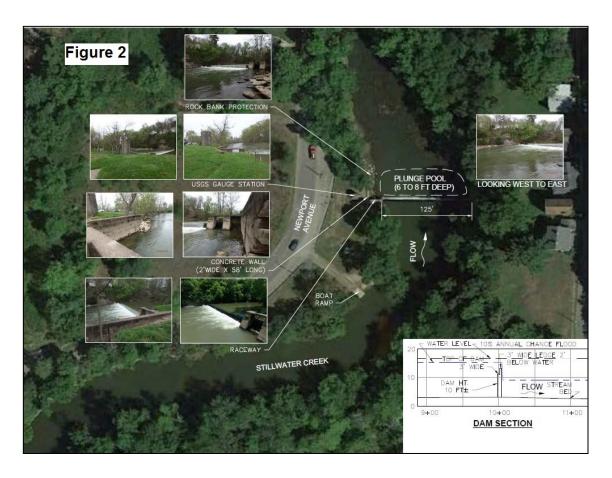
# 4. Selected Alternative

The proposed project involves removal of the Uhrichsville lowhead dam on Stillwater Creek, restoring the natural stream morphology and removing a drowning risk. The demolition of the 10 to 12 feet high dam will remove the existing flow impediment, allowing for the development of a more natural riffle/run/pool morphology stretching miles upstream and also for passage of fish species. Included in the restoration of the area following dam removal is enhancement of the vegetative buffer along the stream. Twin City will oversee the dam removal and natural channel restoration projects. Twin City will also maintain the buffer area as natural space in perpetuity.

The project will result in significant ecological improvements and increase in the attainment of aquatic life use designation in over six contiguous river miles of Stillwater Creek. Removal of the lowhead dam will allow for the natural re-creation of the exact type of riffle areas conducive to mussel beds like those upstream of the dam.

Figure 1 shows the 4.5 miles above the dam that will be improved by the dam removal. Figures 2 and 3 show the project site.







# 5. Project Implementation

The total estimated project cost is \$719,695, of which \$714,695 will be financed by WRRSP funding. In exchange for sponsoring the Uhrichsville Lowhead Dam Removal WRRSP project, Akron will receive an interest rate reduction of 0.1% on the standard rate (currently 2.37%; rate is set monthly and may differ for this loan), giving it a blended rate of 2.27%. During the 45-year loan period, Akron will save approximately \$2,723,687 by using WPCLF dollars at this rate, compared to the market rate of 3.52%. The WRRSP discount portion of this savings is approximately \$217,895.

Design will begin in October 2018 and construction will be completed by May 2020.

# C. Environmental Impacts of the Proposed Project

The following features will not be affected by the project because they are not present in the project area or, if present, will not be impacted due to the nature of the project: coastal zones, wild and scenic rivers, wetlands, wildlife areas, sole source aquifers, and major land forms (for example, hilltop removal or filling of valleys).

Because of the predominantly urban setting for this project and its generally well-defined scope, Ohio EPA expects that the proposed project will not directly result in significant adverse impacts to the natural or human environment, for the reasons cited below.

<u>Surface water resources</u> and <u>aquatic habitat</u> will not experience any significant adverse impacts because disturbance will be minimized by best management practices and inwater work will be coordinated with U.S. Army Corps of Engineers (USACE) permitting requirements. The lowhead dam removal will instead benefit freshwater species and improve the aquatic habitat.

The project will have no adverse impact on ground water resources.

The land in the immediate area of the Uhrichsville lowhead dam and its impoundment lacks significant terrestrial habitat value. Four federally listed species occur in Tuscarawas County: the threatened northern long-eared bat, the endangered Indiana bat, and the species of concern eastern hellbender and bald eagle. There are no trees large enough to support a bald eagle nest. The dam removal will benefit freshwater mussel, fish and amphibian species, including the eastern hellbender. Necessary mussel relocation, similar to that used in comparable projects, will minimize adverse impacts to native mussels. USACE permit requirements include coordinating with U.S. Fish and Wildlife Service to ensure mussel relocation best management practices.

The Indiana and northern long-eared bats have similar summer maternity and roosting habitat preferences (trees with large crevices or loose, sloughing bark greater than ten

feet above the ground). Although the project area has a few trees with these characteristics, any tree and vegetation removal will occur from October 1 through March 31 when bats are presumed absent from the area, so no adverse impacts to any of these threatened or endangered species is expected.

<u>Agriculture</u> will be unaffected by the dam removal, which is located in an urban area lacking farm land. Construction will be entirely in the stream and no significant <u>land use</u> change should result from the restoration of the stream.

This project adds no permanent sources of air pollution. During the relatively short-term estimated dam removal period, operation of heavy equipment will result in minor increases in air pollution in the immediate project area. This minor increase is an unavoidable result of the proposed project, but routine use of dust control measures (such as water) and proper engine maintenance should help limit the amount of air pollutants that will be generated. For these reasons, <u>air quality</u> will be unaffected by this project.

Overall, this proposed project and its location suggest that impacts on ambient noise levels and traffic patterns will be limited in magnitude and extent during the dam removal period. Best management practices will ensure construction site security. For these reasons, the project will not adversely affect noise, traffic, public safety. Upon completion, the free-flowing stream be similar to that currently downstream of the dam with similar aesthetics.

The project will not create a significant long-term draw on local sources and the region's energy supply.

Coordination with the State Historic Preservation Office (SHPO) will be arranged during the USACE review for a nationwide permit to determine if any mitigation is required to ensure this project will not cause a significant adverse effect to properties listed or eligible for listing in the National Register of Historic Places (<u>archaeological or historical resources</u>).

In the event of archaeological finds during construction, Ohio Revised Code Section 149.53 requires contractors and subcontractors to notify the Ohio Historic Preservation Office of any archaeological discoveries in the project area, and to cooperate with the Office in archaeological and historic surveys and salvage efforts when appropriate. Work will not resume until a survey of the find and a determination of its value and effect has been made and Ohio EPA authorizes work to continue.

Given the proposed amount of "free money" available for this proposed project, Ohio EPA anticipates that the removal of the Uhrichsville dam will have no adverse impact on the local economy.

#### D. Public Participation

The following agencies have reviewed or will review the proposed project:

U.S. Army Corps of Engineers
Ohio Department of Natural Resources
Ohio EPA
Ohio State Historic Preservation Office
U.S. Fish and Wildlife Service

The project site is utilized as a type of park amenity by many in the community, especially for fishing access. Members of the public have expressed concern about the potential loss of fishing access. Other members of the community have shown support for the dam removal, especially as it pertains to public safety. Twin City conducts a board meeting each month at which time residents can voice their concerns. Once a contractor is selected for this project, Twin City will also be conducting a public outreach event specific for this project, at which time residents can provide input that can be taken into consideration by the contractor and Twin City during the restoration design process.

Ohio EPA, Southeast District Office, Division of Surface Water has expressed support for removal of the lowhead dam in the 2012 "Biological and Water Quality Study of the Stillwater Creek Basin", saying:

"The dam has caused drownings and remains a hazard for boating and recreational opportunities. Ohio EPA evaluated sites within the dam pool in 2003 and found poor habitat and non-attainment in the impoundment and full attainment in the free flowing section downstream from the dam (OEPA 2003). Restoring Stillwater Creek to free-flowing will improve the habitat and restore several miles of the mainstem upstream from Uhrichsville."

During the environmental reviews of this project Ohio EPA will make a copy of this document available to the public on its web page <a href="http://epa.ohio.gov/defa/ofa.aspx">http://epa.ohio.gov/defa/ofa.aspx</a> under the "What's New" tab in the "WPCLF Documents Available for Review and Comment" list. The public notice for the Environmental Assessment will be open for a 30-day public comment period.

# E. Reasons for a Preliminary Finding of No Significant Impact

Based on its review of the general plans and other information collected about this project, Ohio EPA concludes that no significant short-term or long-term adverse direct environmental impacts will result from the project as related to the environmental features discussed in this Environmental Assessment. This is because either these features do not exist in the project area, the features exist but will not be adversely

affected, or the impacts of construction will be temporary and mitigated.

This project equally serves the entire Uhrichsville community, so no particular segment of the community will be faced with additional adverse impacts or be deprived of environmental benefits, compared to any other segment. Instead, the community will benefit from the improved safety and ecological improvements to the stream due to the lowhead dam removal.

For these reasons, this project, alone or in combination with other projects, is not expected to lead to new development or result in any significant indirect or cumulative short-term or long-term adverse environmental impacts.

For more information, please contact:

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