Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Anne M. Vogel, Director

April 14, 2023

Limited Environmental Review and Finding of No Significant Impact

City of Willard – Huron County
Water System Improvements – WTP
Loan number: FS390996-0011

The attached Limited Environmental Review (LER) is for a drinking water project in Willard which the Ohio Environmental Protection Agency intends to finance through its Water Supply Revolving Loan Account (WSRLA) below-market interest rate revolving loan program. 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.

Ohio EPA analyzes environmental effects of proposed projects as part of its WSRLA 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. 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,

Kathleen Courtright

Kathleen Courtright, Assistant Chief
Division of Environmental and Financial Assistance

Attachment

LIMITED ENVIRONMENTAL REVIEW

Project Identification

Project: Water System Improvements - WTP

Applicant: City of Willard
631 South Myrtle Avenue
P.O. Box 367
Willard, Ohio 44890

Loan Number: FS390996-0011

Figure 1. Huron County

Project Summary

The City of Willard, in Huron County (Figure 1), has requested $6.91 million from the Ohio Water Supply Revolving Loan Account (WSRLA) to fund the Water System Improvements - Water Treatment Plant project. This project involves various facility and equipment improvements to Willard's river intake building, reservoir intake building, and water treatment plant (WTP).

History & Existing Conditions

Willard owns and operates a public water system (PWS) that consist of a 215-acre, 2.3-billion-gallon upground reservoir, a water treatment plant with a design capacity of 3.2 million gallons daily (mgd), a distribution system of approximately 55 miles of water mains, and two elevated storage tanks with a combined storage capacity of 1.3 million gallons. Both the WTP and reservoir were constructed in 1970, with the WTP receiving upgrades in 2004. Willard provides an average of 1.3 mgd to over 8,300 residents across Willard, the Village of Plymouth, and to Northern Ohio Rural Water.

Figure 2. Reservoir intake building

Willard's water source is the West Branch of the Huron River. Three pumps and associated equipment within the river intake building screen and pump raw water into the reservoir during low algal bloom seasons. Raw water is then pumped from the reservoir to the WTP by three pumps housed within the reservoir intake building (Figure 2). The plant's treatment process consists of rapid mixing, solids contact clarification, secondary settling, filtration, and disinfection prior to storage in two 750,000-gallon clearwells. Willard uses several chemicals in their treatment process. Sodium permanganate is added as water is pumped from the reservoir to aid in the removal of taste and odor causing compounds and to keep zebra mussels from entering the water line that transports water from the reservoir to the WTP. Phosphate is added for corrosion

control, fluoride is added to help prevent tooth decay, chlorine is used for disinfection, and sodium hydroxide is used to adjust water pH. Following treatment, finished water is collected in the clearwells prior to being pumped to the distribution system and elevated storage tanks.

Much of the river intake building, reservoir intake building, and WTP equipment is original and over 50 years old. Willard is interested in upgrading these facilities to ensure their continued ability to provide safe and reliable water treatment to area customers. Willard's water treatment facilities were assessed in 2019, including an electrical evaluation, architectural and structural inspection, and condition assessment of each building. The resulting water treatment evaluation report identifies recommended improvements, repairs, and upgrades necessary for ensuring continued safe and reliable water treatment for Willard.

Project Description

This project includes improvements to Willard's water treatment facilities including the river intake building, reservoir intake building, and WTP, as described below. See Figure 3 for the locations of Willard's drinking water facilities.

River Intake Building

- Installation of new 7,000-gallon-per-minute (gpm) pump to replace and downsize the out-of-service 14,000-gpm pump
- Replacement of all check and isolation valves
- Replacement of the motor control center (MCC) with a new MCC with soft-start motor starters, along with various electrical upgrades
- Various lighting, HVAC, and other ancillary upgrades, as well as architectural and structural improvements

Reservoir Intake Building

- Replacement of existing pump no. 3 with a higher capacity, 1,750-gpm pump with a variable frequency drive
- Construction of building addition and installation of a new bulk sodium potassium permanganate feed system
- Replacement of the MCC with new MCC with soft-start motor starters, along with various electrical upgrades
- Addition of a permanent, external backup generator
- Various lighting, HVAC, and other ancillary upgrades, as well as architectural and structural improvements

Water Treatment Plant – Improvements generally fall within the following four categories.

- WTP Building
    - Relocation and upgrades to the laboratory
    - Removal of the silos on the roof and numerous other architectural and structural improvements
    - Reconfiguration of electrical equipment
- Chemical System
    - Conversion of current chemical storage operations to bulk storage including construction of a new chemical building addition to house bulk and day storage tanks and transfer pumps
- Filters

    - Upgrade of filters to use an air scour backwash system
    - Replacement of filter media, valves, and filter controls
    - Fitting of filter gallery piping with filter-to-waste piping
- Clarifiers
    - Demolition of the north and south clarifiers and construction of a single, larger clarifier similar to the east clarifier

Implementation

Willard proposes to borrow $6.91 million from the Ohio WSRLA at the small-community rate of 2.08 percent (interest rates are set monthly and may change for the requested July award date) to cover the construction cost of this project. Borrowing WSRLA funds at this rate could save Willard roughly $1,472,000 over the 20-year loan term compared to the current market rate of 3.83 percent.

The debt associated with this construction project will be recovered from user charges. Willard conducts annual reviews of their water rates and capital charges to determine if adjustments are needed. Water rates and capital charges were both increased in 2021, and capital charges only were increased in 2022. Willard intends to increase capital charges by 15 to 17 percent in 2023 and 2024 but does not currently anticipate raising rates. The average annual water bill for residents served by Willard is $239. This is 0.49 percent of the median household income for Willard (MHI; $48,558) and compares favorably to the Ohio average annual water bill of $697.

Construction is expected to begin following loan award and be completed in mid-2026.

Public Participation

Willard has discussed this project, along with their other water, wastewater, and stormwater projects, at public city council meetings. Willard holds council meetings the first and third Mondays of each month. Information regarding these meetings, meeting minutes, and recent legislation is available on Willard's webpage: https://www.willardohio.gov/legislation.html.

Ohio EPA is unaware of controversy about or opposition to this project. Ohio EPA will make a copy of this document available to the public on the following webpage and will provide it upon request: https://epa.ohio.gov/divisions-and-offices/environmental-financial-assistance/announcements.

Conclusion

The proposed project meets the criteria for a Limited Environmental Review (LER); namely, it is an action within an existing PWS which involves the functional replacement of and improvements to existing treatment system equipment. Furthermore, the project meets the other qualifying criteria for an LER; specifically, the proposed project:

Will have no significant environmental effect, will have no effect on high-value environmental resources, and will require no specific impact mitigation. Activities included in this project will be limited to the confines of the WTP property, reservoir intake building and area adjacent the reservoir, and river intake building where there are no sensitive environmental resources. No adverse environmental impacts are expected due to the nature and location of the proposed work.

Project activities taking place at the river intake building and reservoir intake building fall within Willard's source water protection and assessment area. It will be the contractor's responsibility to

develop, submit to Willard, and implement during construction a plan for maintaining the protection of Willard's drinking water facilities and source throughout construction. Otherwise, there are no specific protection measures beyond standard construction best management practices anticipated necessary for this project.

Is cost effective. The improvements included as part of this project were evaluated based on condition of Willard's water treatment facilities and subsequent analysis of potential alternatives, including comparisons of capital costs and operation and maintenance costs, as well as feasibility of each alternative. Based on the results of this analysis, the alternatives as described in this environmental review were determined by Willard to be the most cost effective.

Is not a controversial action.
Willard has informed residents of the need for this project, as previously discussed, and have reported no opposition to the project. Willard's water rates and capital charges increases are based on Willard's overall capital costs and operation and maintenance costs and represent the amount necessary to ensure adequate financing of their system. Annual residential water bills remain favorable despite intended increases in Willard's water capital charges.

Does not create a new or relocate an existing discharge to surface or ground waters, does not create a new source of water withdrawals from either surface or ground waters, does not significantly increase the amount of water withdrawn from an existing water source or substantially increase the volume of discharge or loading of pollutants from an existing source or from new facilities to receiving waters, and will not provide capacity to serve a population substantially greater than the existing population. The 20-year projections used for this project estimate a potential increase in the average daily demand of the Willard WTP from 1.3 mgd to 1.5 mgd and have a peak daily demand of 2.7 mgd. Based on this projection, the existing WTP capacity of 3.2 mgd is sufficient to meet anticipated future peak demands; thus, design of the improvements previously described were based on the existing WTP capacity. For these reasons, completion of this project will not affect Willard's PWS as it pertains to withdrawal, treatment, storage, distribution, usage, etc.

To conclude, Willard's proposed project is sufficiently limited in scope and meets all applicable criteria to warrant an LER. Based upon Ohio EPA's review of the planning information and the materials presented in this LER, we have concluded that there will be no significant adverse impacts from the proposed project as it relates to the quality of the human environment and on sensitive resources (e.g., surface waters, coastal zones, floodplains, wetlands, state-designated scenic and recreational rivers, prime and unique agriculture lands, aquifer recharge zones, archaeological and historically significant resources, endangered and threatened species, and state and federal wildlife areas). Rather, completion of the improvements included in the project will provide a greater level of system resiliency and reliability, ensuring Willard's ability to continue to provide safe and reliable water service to area residents.

Contact Information

Brody Betsch
Ohio EPA-DEFA
P.O. Box 1049
Columbus, Ohio 43216-1049

Email: brody.betsch@epa.ohio.gov

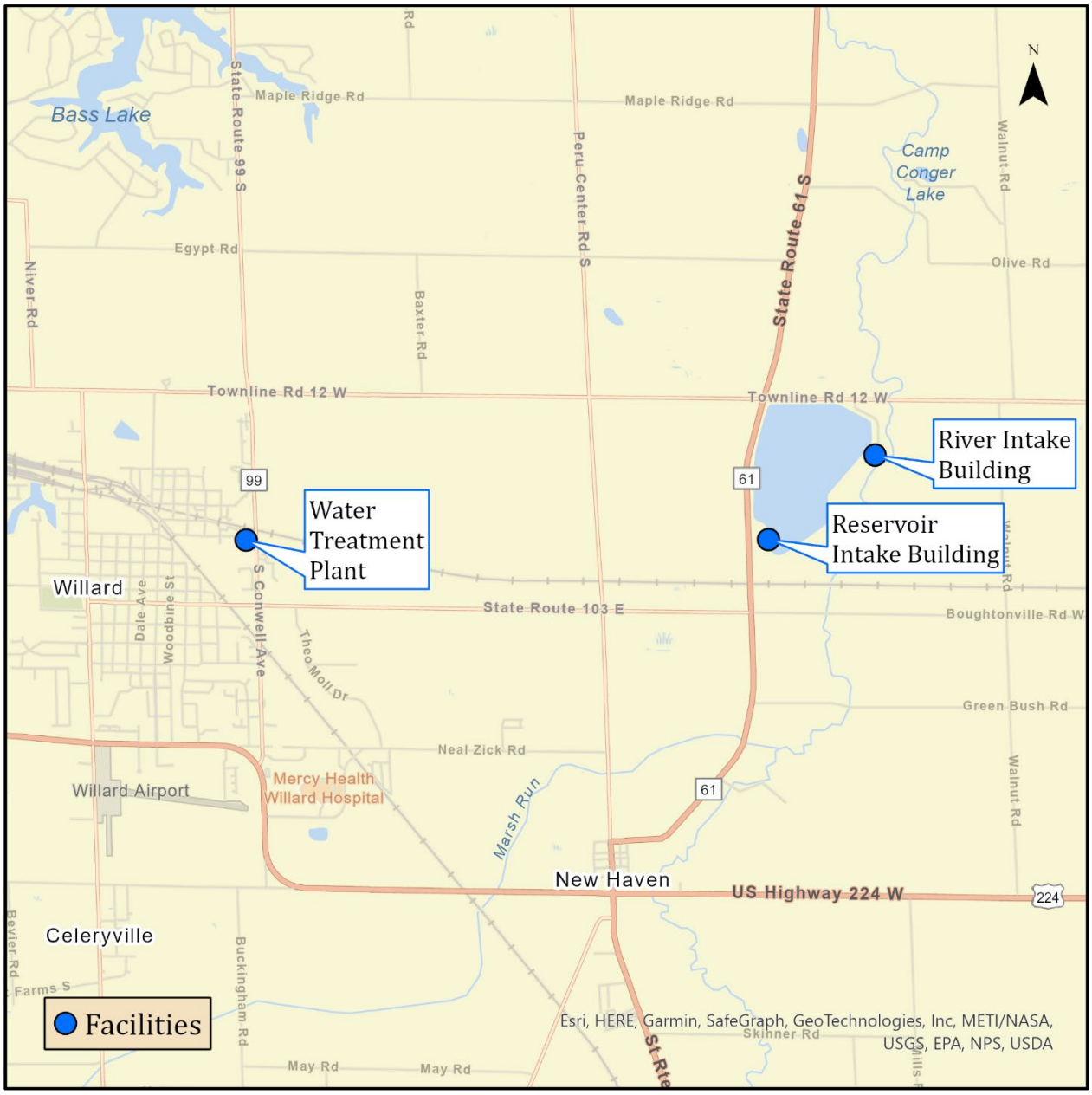

Figure 3. Location of Willard's water treatment facilities to be upgraded