



Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

May 17, 2022

Limited Environmental Review and Finding of No Significant Impact

**City of Canton – Stark County
Sugar Creek WTP and Wellfield Improvements
Loan number: FS390224-0037**

The attached Limited Environmental Review (LER) is for a drinking water system project in Canton 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: Sugar Creek WTP and Wellfield Improvements

Applicant: City of Canton
218 Cleveland Ave SW
8th Floor
Canton, OH 44702

Loan Number: FS390224-0037



Figure 1. Stark County

Project Summary

The City of Canton, in Stark County (Figure 1), has requested \$32,934,696 from the Ohio Water Supply Revolving Loan Account (WSRLA) to make needed improvements to the Sugar Creek Water Treatment Plant (WTP), wellfield, and other critical system components. Completion of this project will improve system reliability and operation, allowing the Sugar Creek WTP to continue to provide sustainable water treatment service to customers.

History & Existing Conditions

The Sugar Creek WTP is located southwest of Canton (Figure 2) and is one of three WTPs the city owns and operates. Like Canton's other two WTPs, the Sugar Creek WTP is supplied by an adjacent wellfield that sources water from a deep sand and gravel aquifer. The WTP was constructed in 1960 and later expanded in 1995. Improvements since its construction include the addition of chlorination facilities in 1978 and upgrading the supervisory control and data acquisition (SCADA) system in 2006. The WTP currently has a design capacity of 20 million gallons per day (mgd) and a maximum capacity of 25 mgd. The WTP's wellfield, which is composed of ten wells of varying capacities, has a total rated capacity of 25 mgd with the largest well out of service.

Once treated, water leaves the WTP and is pumped by high service pumps through two 42-inch water mains to the city's distribution system. The high service pumps and transmission mains have a transmission capacity of approximately 25 mgd and supply over 50% of the city's water, including the supply to fill the 12.8-million-gallon Cromer Reservoir and two 5-million-gallon reservoir tanks. Two surge tanks prevent damage to the water mains in the event of an area-wide power outage or sudden shutdown of the high service pumps. During such an event, each tank is designed to allow water stored in the tanks to be fed back into the transmission mains, acting as a pressure neutralizer to resist excess pressure increases and decreases.

The Cromer Reservoir was constructed in 1935 and is Canton's largest reservoir. The reservoir is located on the west side of Cromer Avenue and was built partially above grade with 18 inches of earthen cover. It is composed of two 6.4-million-gallon basins, which together total the reservoir's overall capacity of 12.8 million gallons. The site has limited space to construct a new reservoir.

Due to the age and condition of the water treatment and distribution system components previously described, major improvements are necessary to provide sustainable water treatment and distribution services to Canton's water customers. These system components are critical assets, and an issue with any component would have a significant impact on the city's overall water system. In 2020, the Canton water department conducted the *Sugar Creek Water Treatment Plant Capital Improvements Plan*. This plan identifies system deficiencies and includes recommended rehabilitations, replacements, and upgrades to system components to ensure sustainable water treatment and distribution service. The alternatives selected for this project are based on these recommendations.

Project Description

This project includes major improvements to the WTP, wellfield, the two surge tanks on the 42-inch water main, and the Cromer Reservoir.

Sugar Creek WTP: Renovate, rehabilitate, repair, replace, and upgrade the WTP's process equipment (aerators, filters, chlorine contact tanks, clear well, chemical feed systems, pumps, gates, piping, valves, controls, etc.); building interiors and exteriors (process areas, restroom facilities, doors and windows, accessibility, etc.); mechanical and plumbing systems (ventilation, HVAC, dehumidification, plumbing, etc.); and site work (roadways, parking, drainage, road entrance, etc.).

Sugar Creek Wellfield: Eliminate overhead power lines and install an underground looped power supply to each well; install a new parallel raw water main for wells one to six; lower well casings; install new variable frequency drives at wells three, six, and nine; replace raw water main valves and associated components; install new flowmeters and instrumentation at each well; replace the radio communications system with fiber optic cable to the plant's SCADA system; and regrade the gravel service drive.

42-inch Water Main (surge tanks): Replace the check valves and isolation valves, upgrade the altitude valves, and upgrade the tank's access hatches, vents, and screens.

Cromer Reservoir: A three-phase approach was selected to evaluate the current condition and extent of damages to the reservoir, and then to determine necessary repairs.

- Phase One: Remove earthen cover, use ground-penetrating radar and sonic to determine the extent of damages to the reservoir roof, install sluice gates to allow each half of the basin to be taken out of service individually, remove built up sediment and clean the basin interiors, inspect each basin, inject cracks with an epoxy-grout and apply sealant to the roof.
- Phase Two: Conduct a detailed inspection of the interior of the tank, identify necessary repairs and determine cost estimates for repairs, and compare cost estimates with the cost to replace the reservoir with two new 5-million-gallon tanks.
- Phase Three: Design and construct recommended improvements.

Implementation

The total cost for this project is \$35,108,361. Canton proposes to borrow \$32,934,696 from the Ohio WSRLA at the standard rate of 1.66% (interest rates are set monthly and may change for the requested July award) to cover engineering services and construction costs for this project. Additionally, Canton will use a \$2,612,361 design loan from the Ohio Water Development Authority

to cover design costs. Using this amount in WSRLA dollars towards this project could save Canton approximately \$6.5 million over a 25-year loan term compared to the current market rate of 2.96%.

The debt associated with this construction project will be recovered from monthly user charges. Rates for Canton water users were last increased by 7% in 2021, and rates are expected to increase 7% in 2022 and 5% in 2023. These rate increases are not a result of one specific project; rather, these increases are being used to cover a portion of the capital costs for this project and other projects, as well as annual increases in the operating budget. The annual residential water bill for customers served by Canton is expected to be \$231 in 2023 upon completion of this project. This is 0.73% of the median household income (MHI; \$31,735) and compares favorably to the Ohio average annual water bill of \$697.

Public Participation

Canton uses newspapers, radio, social media, and public city council meetings to inform customers of the city's water department activities, including current and planned projects, public announcements, and water quality reports. Each phase of planning, design, and construction for new projects are announced in advance of regularly scheduled city council meetings. Each new project has several readings before the authorization to proceed is given by city council. The board of control reviews and approves all new contracts, and the city auditor confirms that financing is in place before proceeding with any new project.

The Sugar Creek WTP and Wellfield Improvements project has been ongoing for the past three years, and the city water department has taken steps to inform and include the public on this project. Public city council meetings held regarding this project include the following public notices and hearings: Sugar Creek Capital Improvement Project Study on 3/25/2019, Sugar Creek planning loan on 7/27/2020, and Sugar Creek construction on 1/10/2022. Information regarding this project has also been made available for public viewing on the city's website.

City council and public opinion received for this project has been favorable, and no opposition to the project has been reported.

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/wps/portal/gov/epa/divisions-and-offices/environmental-financial-assistance/announcements>.

Conclusion

The proposed project meets the project type criteria for a Limited Environmental Review (LER); namely, it is an action within an existing public water treatment and distribution system, which involves the replacement, rehabilitation, and improvements to existing system components. Furthermore, the project meets the other qualifying criteria for an LER; specifically, the proposed project:

Will have no significant environmental effect and will require no specific impact mitigation.

Construction activities for improvements to the WTP, wellfield, and reservoir will take place on city property in areas with maintained lawns and no unique habitat or typical habitat for state and federally listed endangered and threatened species. Areas where construction will take place have previously been cleared; however, if tree removal is determined necessary, trees will only be

removed during the regular clearing dates between October 1st to March 31st to protect listed endangered and threatened bat species. The surge tanks are located on small, cleared plots that are fenced and have maintained lawns. Improvements to the tanks do not include activities that will impact environmental resources. The contractor will implement standard construction best management practices to minimize temporary short-term erosion and sediment, noise, dust, and traffic disruptions.

The Ohio Department of Natural Resources and United States Fish and Wildlife Service concurred with Ohio EPA's conclusion that the proposed construction is unlikely to impact state and federally listed endangered and threatened species and critical habitat.

The WTP and associated structures are not eligible for listing in the National Register of Historical Places, and there are no listed historical properties or structures in the project area. All construction activities are occurring in areas that have previously undergone ground disturbances or will be occurring on existing structures. The Ohio State Historic Preservation Office concurred with Ohio EPA's determination that the proposed construction is unlikely to impact important historical and archaeological resources.

Will have no effect on high-value environmental resources. A portion of the wellfield occurs within a designated 100-year floodplain zone. Canton has coordinated this project with the local floodplain coordinator and submitted a special flood hazard development permit application for construction in this area. Construction in this area is taking place where development has previously taken place. There is no wetland or otherwise unique habitat that will be disturbed by this project, as the entire area of the wellfield is maintained lawn. The contractor shall conduct earth work during warm, dry periods and will be responsible for implementing erosion and sediment control, seeding, stormwater and non-sediment pollution prevention, and demolition and disposal best management practices during construction to prevent environmental impacts. Disturbed areas will be returned to preconstruction conditions. There will be no adverse short-term or long-term impacts to the floodplain or habitat outside of the wellfield.

Is cost effective. The recommended rehabilitations, replacements, and upgrades included in this project are identified in the *Sugar Creek Water Treatment Plant Capital Improvements Plan*. This plan is the result of numerous meetings, discussions, and workshops. The capital improvements plan was conducted with the following goals:

- Evaluate equipment and facility repair and replacement options to select cost-effective and maintainable solutions to last for the next 20 plus years.
- Meet current and projected permit requirements established and enforced by the U.S. and Ohio Environmental Protection Agencies.
- Improve operator control and monitoring of processes, equipment, and treatment systems.
- Improve accessibility to equipment and systems to perform operation and maintenance tasks safely and efficiently.
- Conserve energy and chemicals and reduce operation and maintenance costs.

By following these goals, the recommended and ultimately selected alternatives were determined to be the most cost effective.

Is not a controversial action. Public opinion received for this project and the reinvestment in this critical city infrastructure has been favorable, and opposition to this project has not been reported. While water rate increases are expected, they are not the result of this project or any other one

specific project, and water rates will still compare favorably to the Ohio average annual bill upon completion of this project.

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 or significantly increase the amount of water withdrawn from an existing water source, and does not substantially increase the volume of discharge or loading of pollutants from an existing source or from new facilities to receiving waters. The improvements included in this project are primarily meant to address issues related to the age and condition of the WTP, wellfield, and related system components and will not otherwise alter Canton's water system (withdrawal, treatment, distribution, usage, etc.).

Will not provide capacity to serve a population substantially greater than the existing population. The Sugar Creek WTP and wellfield have adequate supply and treatment capacities. The improvements included in this project are primarily meant to address issues related to the age and condition of the WTP, wellfield, and associated system components and other concerns not related to deficiencies or issues related to treatment capacity.

To conclude, Canton's proposed project is sufficiently limited in scope and meets all applicable criteria to warrant an LER. The planning review of this project identified no potentially short-term or long-term adverse impacts on the quality of the human environment or on sensitive resources (surface waters, coastal zones, floodplains, wetlands, state-designated scenic and recreational rivers, prime and unique agriculture lands, aquifer recharge zones, archaeological and historically significant sites, threatened and endangered species, and state and federal wildlife areas). Rather, completion of this project will improve the overall reliability, provide redundancy for, and add flexibility to the wellfield's ability to supply the Sugar Creek WTP with groundwater and extend the useful life of the Cromer Reservoir to safely store drinking water into the future.

Contact information

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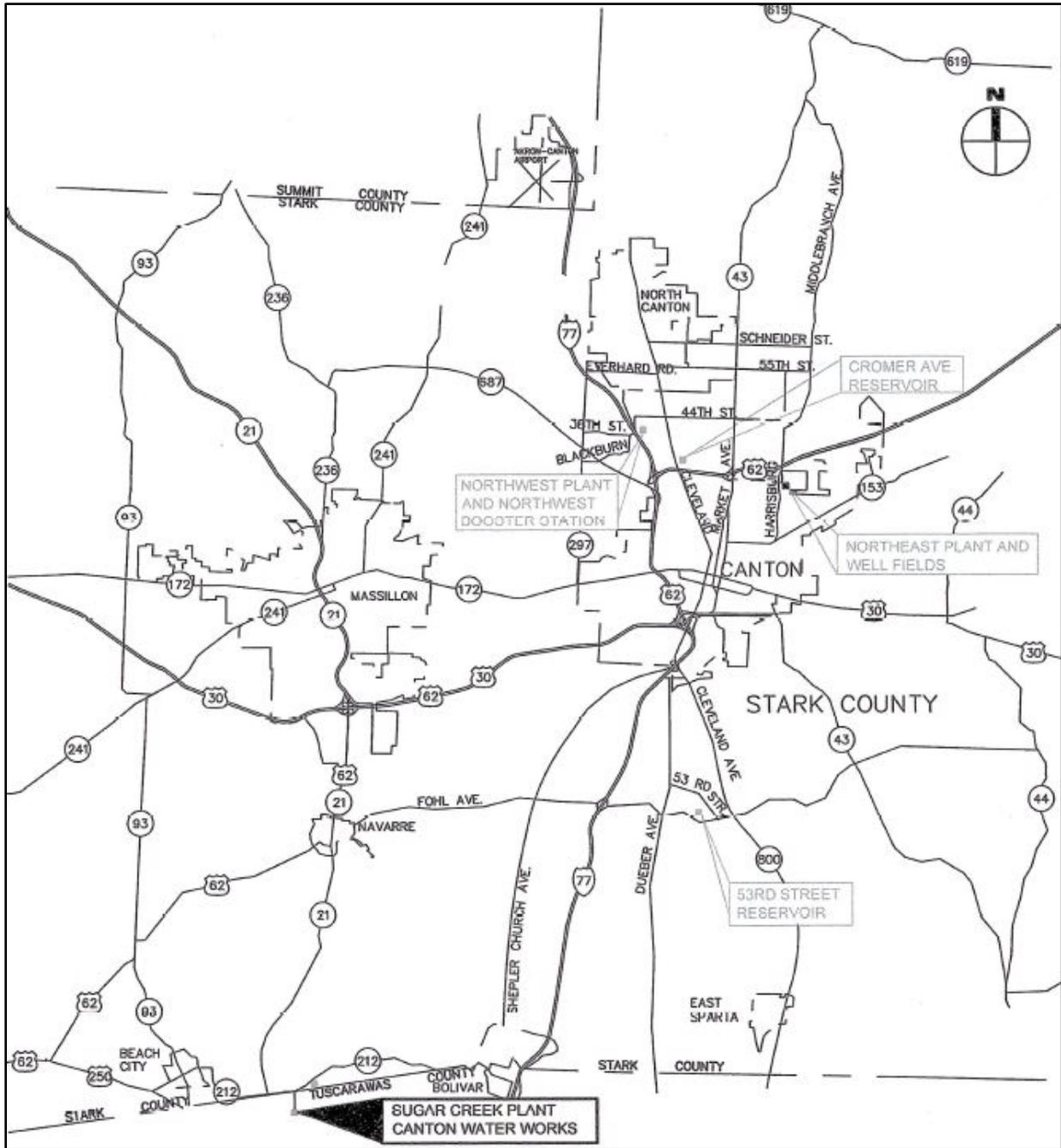


Figure 2. City of Canton WTP and reservoir locations