



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

April 29, 2022

**Preliminary Finding of No Significant Impact  
To All Interested Citizens, Organizations, and Government Agencies**

**City of Cleveland – Summit County (project area)**

**Boosted 3<sup>rd</sup> High System – Tower**

**Loan Number: FS390262-0026**

**Boosted 3<sup>rd</sup> High System – Pump Station**

**Loan Number: FS390262-0029**

The attached Environmental Assessment (EA) is for two water distribution improvement projects in Summit County 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 EA describes the projects, their costs, and expected environmental benefits. We would appreciate receiving any comments you may have on the projects. 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 WSRLA program review and approval process. We have concluded that the proposed projects should not result in significant adverse environmental impacts. More information can be obtained by contacting the person named at the end of the attached EA.

Any comments on our preliminary determination should be sent to the email address of the contact named at the end of the EA. We will not act on these projects for 30 calendar days from the date of this notice. In the absence of substantive comments during this period, our preliminary decision will become final. After that, the City of Cleveland can then proceed with its application for the WSRLA loan.

Sincerely,

*Kathleen Courtright*

Kathleen Courtright, Assistant Chief  
Division of Environmental & Financial Assistance

Attachment

## ENVIRONMENTAL ASSESSMENT

### **Project Identification**

Projects: Boosted 3<sup>rd</sup> High System – Tower  
Boosted 3<sup>rd</sup> High System – Pump Station

Applicant: City of Cleveland  
1201 Lakeside Avenue  
Cleveland, OH 44114

Loan Numbers: FS390262-0026  
FS390262-0029

### **Project Summary**

The City of Cleveland has applied for financing from the Ohio Water Supply Revolving Loan Account (WSRLA) to fund the Boosted 3<sup>rd</sup> High System Tower and Boosted 3<sup>rd</sup> High System Pump Station projects. These projects are necessary to improve drinking water infrastructure in a service area that has struggled to supply adequate storage and pressure for water service and fire suppression.

The estimated loan amount for the tower project is \$12,000,000, with construction scheduled to begin in summer 2022 and last approximately 24 months. The estimated loan amount for the pump station project is \$5,500,000, with construction scheduled to begin in summer 2022 and last approximately 12 months.

### **History & Existing Conditions**

Cleveland's water system dates back to 1856, when the original water treatment system was put into operation. Since that time, the system and been expanded and renovated many times to meet the needs of its growing population and industry. The City of Cleveland Division of Water (CWD) is the largest drinking water provider in Northeast Ohio, serving over one million people in 70 communities over a service area covering more than 640 square miles. CWD drinking water is sourced from Lake Erie and distributed through more than 5,300 miles of water mains. The CWD system includes four water treatment plants (WTP), as well as various reservoirs, elevated and ground level storage tanks, pumping stations, valves, and hydrants.

The proposed projects, which are part of CWD's capital improvement plan, are located in the southern part of the CWD service area, in the Village of Richfield (see Figure 1). This area has higher elevations than the majority of CWD service areas and has struggled to supply adequate pressure for water service and fire suppression. This service area currently has no storage towers and is served by a dead end water main. CWD currently has nine pumping districts in its service area, and the proposed projects would create CWD's tenth pumping district, the Boosted Third High Pleasant Valley Pumping District.

## **Population and Flow Projections**

The general project area, located in the Village of Richfield, is a mixture of residential, commercial, industrial, and institutional properties. New developments and changes to existing developments occur on a regular basis and require flexibility in the water system. In order to maintain good water quality, flow, and pressure, a well-designed storage and distribution system is critical. CWD is not aware of any large developer projects in the project area, and the 20-year projected average and peak growth is anticipated to be relatively low as growth in this service area is less than 1 percent annually. Therefore, the proposed water storage and distribution improvements are not expected to have impacts on the existing water demands. Given the low projected growth in demand and the large water supply, CWD can provide water to the expected 20-year service population without expanding the infrastructure.

## **Alternatives**

### **No-Action**

The No-Action alternative does not address the need for new infrastructure to allow CWD to provide appropriate water storage and pressure to the surrounding community, and therefore was eliminated from consideration.

### **Tower, Pump Station, and Water Mains**

CWD performed planning and engineering studies for improving pressure in this area and determined that a combination of a new elevated water tower, pump station, and water mains to be the best alternative. The proposed projects, to be located on Village of Richfield owned properties, is in accordance with existing CWD facilities in operation, and will integrate with CWD's control, monitoring, and maintenance systems with minimum cost. Alternatives for project locations within the proposed pumping district were considered to achieve the necessary infrastructure improvements. However, many of these locations were eliminated from consideration for inadequate site elevations, resident opposition, pre-existing property contracts, potential cultural and environmental impacts, and excessive length of water mains needed.

## **Selected Alternative**

The proposed Boosted 3<sup>rd</sup> High System projects (see Figure 2) will create a new pumping district in the southern portion of CWD's service area, which has higher elevations and poorer water pressure than the majority CWD's district. These projects, and resulting Boosted Third High Pleasant Valley Pumping District, will enable CWD to provide adequate water storage and pressure for fire prevention and existing customers. The projects will also provide opportunities for residents, the Village of Richfield, or developers to expand the local water network to areas that are currently served by wells or would be served by wells.

Specifically, the projects include construction of the following:

### **Boosted 3<sup>rd</sup> High System – Tower**

- 1,000,000-gallon steel elevated spheroid water tank, measuring 233 feet tall by 75 feet in diameter
- Water mixing unit
- Disinfection tank and chlorine room
- Water softening

- Chemical storage
- Diesel generator
- Control room
- Valves
- Security gates and fencing
- Access road
- 490 linear feet (LF) of 16-inch water line and hydrants

#### **Boosted 3<sup>rd</sup> High System – Pump Station**

- Booster station building with concrete foundation, steel frame, and masonry exterior
- Control room
- Four booster pumps
- 4,000-pound crane system
- Electrical substation
- Diesel generator
- Pressure-reducing valves and vaults
- Security gates and fencing
- Access road
- 1,480 (LF) of 16-inch water line and hydrants

#### **Implementation**

The engineer’s estimate for the Boosted 3<sup>rd</sup> High System Tower project is \$12,000,000. Cleveland proposes to borrow the entire project amount from the Ohio Water Supply Revolving Loan Account (WSRLA) and will recover debt associated with the project with revenue generated by monthly user charges. Cleveland qualifies for the standard long-term WSRLA below-market interest rate on 20-year loans, which in April is 1.16 percent. The standard rate is changed monthly to reflect bond rates and may be slightly different in June 2022, the anticipated month of loan award. Borrowing at 1.16 percent will save Cleveland approximately \$1,714,000 over the life of the loan compared to the current market rate of 2.41 percent.

The engineer’s estimate for the Boosted 3<sup>rd</sup> High System Pump Station project is \$5,500,000. Cleveland proposes to borrow the entire project amount from the Ohio Water Supply Revolving Loan Account (WSRLA) and will recover debt associated with the project with revenue generated by monthly user charges. Cleveland qualifies for the standard long-term WSRLA below-market interest rate on 20-year loans, which in April is 1.16 percent. Borrowing at 1.16 percent will save Cleveland approximately \$786,000 over the life of the loan compared to the current market rate of 2.41 percent.

Construction of the proposed projects is estimated to begin in summer 2022, with the tower project expected to be completed in 24 months, and the pump station project expected to be completed in 12 months. The new elevated tank, pump station, water lines and associated infrastructure will be owned and maintained by Cleveland and CWD.

#### **Public Participation**

The City of Cleveland has held public meetings to notify residents and businesses about the project, and additional meetings and public notifications will take place shortly after issuance of a construction Notice to Proceed. A public notice announcing the availability of this Environmental

Assessment will be posted on City of Cleveland, CWD, and Ohio EPA – Division of Environmental and Financial Assistance websites. The public notice for the Environmental Assessment will be open for a 30-day public comment period.

The following agencies reviewed the planning information for these projects:

Ohio Environmental Protection Agency  
Ohio Department of Natural Resources  
Ohio History Connection  
U.S. Army Corps of Engineers  
U.S. Fish and Wildlife Service

Thus, there have been adequate opportunities for information dissemination and public participation.

### **Environmental Impacts**

The projects have the potential to affect the following features, but the effects will be reduced or mitigated to acceptable levels as explained below.

**Surface Water and Ground Water:** The tower project area is within an industrial park, primarily consisting of commercial buildings, lawn grass, paved areas, and extensive prior excavation. However, the industrial park, and alternative project locations within the park, also include three Category 1 wetlands, one historic wetland that has been previously filled, and a crossing of an unnamed ephemeral tributary to Yellow Creek. The project design and alignment were adjusted as much as feasible to minimize impacts to these streams and wetlands. These design adjustments resulted in impacts that were minimized by approximately 0.39 acres of wetlands, as compared to earlier project design. Overall, the project will result in a cumulative total of 1.05 acres of unavoidable Category 1 wetland impact and 110 LF of ephemeral stream impact. This review included an Ohio Rapid Assessment Method for wetlands, Water Resources Delineation, and coordination with and permitting by U.S. Army Corps of Engineers.

Since permanent impacts are greater than 0.1 acre, a compensatory mitigation plan is required for the project. CWD evaluated several options for stream and wetland mitigation within the Cuyahoga River watershed. However, no wetland credits were available within the watershed. Evaluation of potential permittee responsible mitigation avenues were conducted by reaching out to various non-profit organizations that work within the Cuyahoga River watershed. The West Creek Conservancy and Cuyahoga River Restoration were each individually contacted in an effort to potentially fund wetland or stream restoration, preservation, or enhancement projects in the near future. Currently no wetland or stream mitigation projects are available for funding within the Cuyahoga River watershed.

Compensatory mitigation credits for the onsite wetland impacts will be purchased from the Stream and Wetland Foundation, owner of the U.S. Army Corps of Engineers approved Pine Brook Mitigation Bank which is located in the adjacent Grand River watershed. Compensatory credits for the onsite stream impacts will be purchased from the Ohio Stream and Wetland In-Lieu fee Mitigation Program run by the Nature Conservancy. CWD has reserved the purchase of 110 LF of stream credits.

A Stormwater Pollution Prevention Plan (SWPPP), which describes the measures that will be taken to prevent pollution caused by runoff into surface waters, is required, as is a frac-out contingency

plan for horizontal drilling, which describes how inadvertent escapes of drilling slurry to the surface (known as “frac-outs”) will be managed.

Based on the above, the proposed projects will not result in significant adverse impacts to surface waters.

Terrestrial Habitat, Wildlife, and Endangered Species: The U.S. Fish and Wildlife Service (USFWS) indicates that the projects are within the range of the endangered Indiana bat and threatened northern long-eared bat. Trees within the project areas are primarily small to large-sized street trees and scrubby brush. Tree clearing and trimming will be limited to those that are necessary for the projects. Other mature trees are located outside of the work area and would provide alternative habitat. Tree removal will only be permitted to occur October 1 to March 31 or in coordination with USFWS, and tree removal is limited to only those trees necessary for completion of the projects (e.g., trees within the excavation location or within the path of heavy equipment, etc.). These tree clearing restrictions will further ensure that any potential impacts to Indiana bats or northern long-eared bats are avoided.

The projects are within the range of the northern monkshood and eastern massasauga, both federally threatened species, and the bald eagle, a federal species of concern. However, due to the location of the projects and the lack of appropriate habitat present, these species are not likely to be impacted.

Based on this information, the projects will have no significant short-term or long-term adverse effect on terrestrial habitat, wildlife, or endangered species.

Air Quality, Dust, Noise, and Odors: The project area’s air quality meets standards for the six regulated air pollutants (carbon monoxide, sulfur dioxide, nitrogen oxide, lead, particulate matter, and ozone). The proposed projects will result in a temporary increase of dust and fumes from construction activities. This will be mitigated using standard construction best management practices, such as emissions controls on motorized equipment. With these mitigation measures, any effects on air quality will be short-term, ending when construction is complete.

Effects from dust, noise, and odors will be unavoidable but temporary. Construction noise and vibrations will be controlled using strict specifications included in the construction documents to manage these effects. Work will be restricted to daytime Monday through Saturday unless special approval is granted. Work areas will be cleaned to minimize airborne dust and dust suppressant will be used as needed. Emissions controls on motorized construction equipment will reduce diesel odors. Once the projects are complete, the sewer system will operate with no excessive noise, dust or odors beyond that of a typical sewer system.

Therefore, the projects will neither have significant adverse short-term or long-term impacts to air quality, nor will there be short-term or long-term significant adverse long-term impacts from noise, dust, and odors.

Safety and Traffic: Construction in road rights-of-way will cause temporary traffic disruption and potential threats to public safety. Contract documents require contractors to implement standard traffic controls to minimize traffic disruption and public safety risks. With these precautions, the projects are unlikely to create significant traffic disturbance or threats to public safety. The projects will not permanently alter traffic patterns. Therefore, the projects will have no long-term change or adverse impacts on safety and traffic.

Land Use: The installation and operation of these CWD projects will have limited indirect, development-related impacts. This is because the current and expected levels of population growth are moderate in the project areas as a whole.

Archaeological and Historical Resources: Ohio EPA has concluded, based on the extensive pre-design review and the results of a limited Phase I Cultural Resource Management survey, that no features listed on, or eligible for listing on, the National Register of Historic Places will be adversely impacted by the proposed projects.

Based on this information, CWD and Ohio EPA believe that due to the extent of disturbance in the project areas, unrecorded archaeological sites or properties eligible for or listed on the National Register of Historic Places are not likely to be present.

In the event that archaeological properties are found during construction, contractors and subcontractors are required under Ohio Revised Code Section 149.53 to notify the Ohio State Historic Preservation Office and Ohio EPA and to cooperate with those entities in archaeological and historic surveys and salvage efforts when appropriate.

Local Economy: The City of Cleveland and CWD will recover debt associated with these capital improvement projects from monthly service fees. The median household income (MHI) of the project areas is \$92,243. Under the water rates that are effective in 2022, the average residential water bill is expected to be \$28.43 per month, or \$341 per year, based on average water usage. This annual water bill represents 0.37% of the MHI, which is quite low as opposed to the state average of 1.2% of the MHI.

Unaffected Environmental Features: The projects are not located in the Lake Erie coastal zone. No sole source aquifers are present under the projects.

## **Conclusion**

Based on the planning documentation, associated correspondence, public participation and the comments from interested agencies, the proposed projects as designed will have no adverse long-term effect on farmland, coastal zones, surface water, ground water, floodplains, wetlands, aquatic or terrestrial habitat, endangered species, state or federal wildlife areas, state-designated scenic or recreational rivers, cultural properties, air quality, or the local economy. It will have no long-term adverse effects with respect to noise, dust and odors. It will have long-term benefits associated with the provision of a safe and adequate supply of potable water that is maintained according to the standards of the Safe Drinking Water Act and is capable of providing adequate and reliable water pressure to support the needs of residential customers and businesses throughout the project areas.

## **Contact information**

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Figure 1: General Project Area

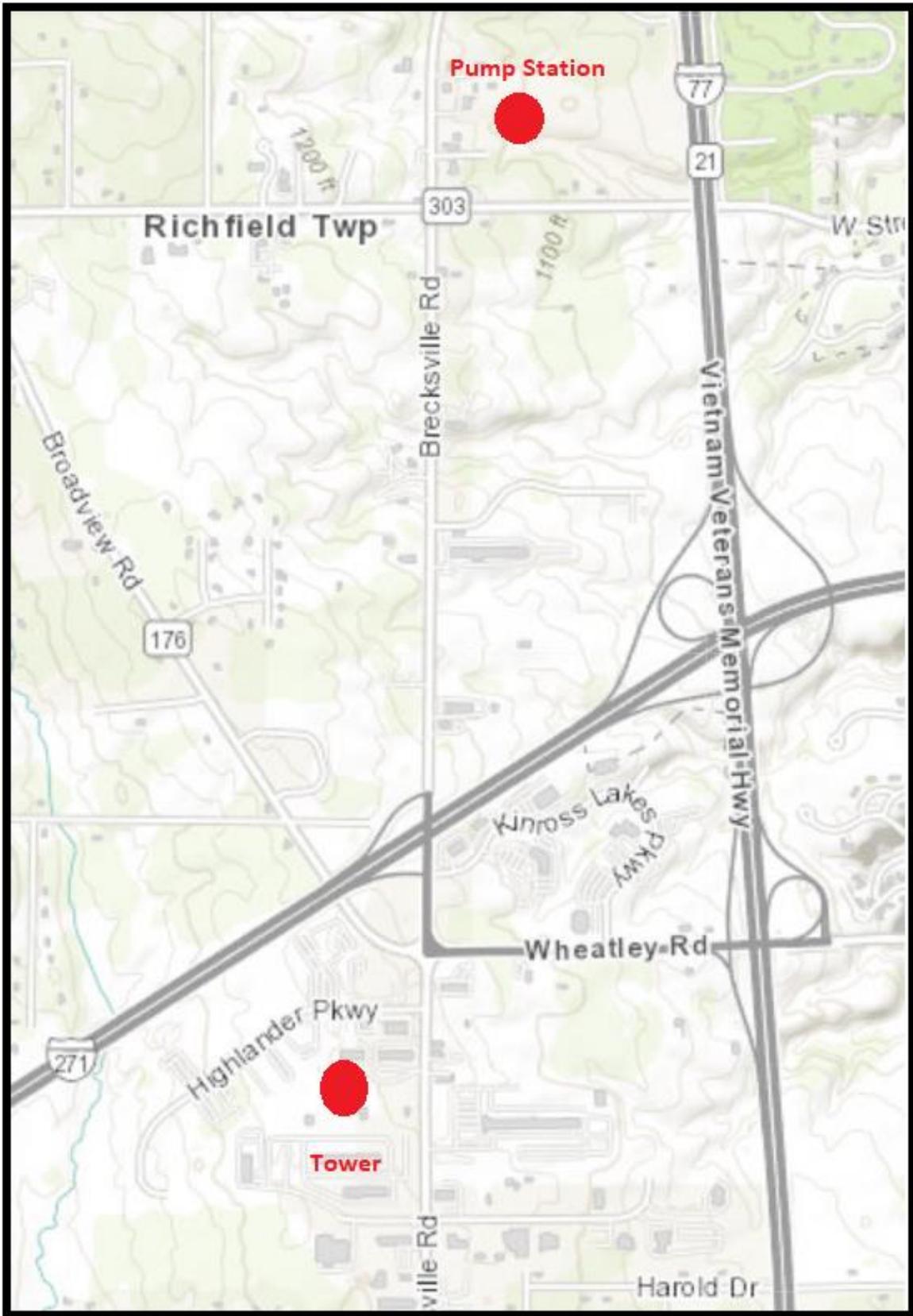


Figure 2: Proposed project areas, in red