



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

**December 15, 2022**

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

**City of Steubenville – Jefferson County  
West End Water Project  
Loan Number: FS390883-0033**

The attached Environmental Assessment (EA) is for a drinking water storage and distribution project in Steubenville 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 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 WSRLA program 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 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 this project 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 Steubenville can then proceed with its application for the WSRLA loan.

Sincerely,

A handwritten signature in cursive script that reads "Kathleen Courtright".

Kathleen Courtright, Assistant Chief  
Division of Environmental & Financial Assistance

Attachment

## ENVIRONMENTAL ASSESSMENT

### **Project Identification**

Project: West End Water Project

Applicant: City of Steubenville  
115 South Third Street  
Steubenville, Ohio 43952

Loan Numbers: FS390883-0033

### **Project Summary**

The City of Steubenville has applied for financing from the Ohio Water Supply Revolving Loan Account (WSRLA) to fund the West End Water Project. This project is necessary to improve the aged and deteriorated water distribution system in Steubenville and will include the installation of an elevated water tank, water pumping station, and approximately 10,000 linear feet (LF) of water lines. The estimated loan amount for this project is \$3,040,500, with construction scheduled to begin spring 2023 and last approximately 20 months.

### **History & Existing Conditions**

The City of Steubenville (see Figure 1) is located in Jefferson County along the Ohio River. Steubenville's water treatment plant (WTP), located at 1565 University Boulevard, utilizes the Ohio River as its source water, which is then treated by coagulation, flocculation, clarification, filtration, and disinfection prior to distribution. The WTP has an average daily flow rate of 3.8 million gallons per day (MGD). Steubenville's distribution system has recently experienced a disproportionately large number of water line breaks. These breaks are believed to be primarily due to leaky pipes which have exceeded their useful life. Despite having an ongoing water pipe replacement program that prioritizes replacement based on areas with the highest number of pipe breaks, Steubenville has an annual calculated water loss in excess of 65%. Over the last twelve years Steubenville has experienced approximately 80 water line breaks per 100 miles of pipe per year, while the average in the region is approximately 26 breaks per 100 miles of pipe. Water line leaks and breaks create added expense for Steubenville related to routine and emergency repairs, cause boil alerts and necessitate energy and resources for the treatment of a greater volume of water than the customer demand.

On January 12, 2018, in Steubenville's downtown water district, an emergency water system event occurred, resulting from one significant water line break and one non-functioning isolation valve, that was not resolved until January 24, 2018. The event resulted in that service area being without water for a substantial period of time. As a result of this event and city-wide leaks, Ohio EPA issued a deficiency violation to Steubenville on February 7, 2018.

On September 26, 2019, Steubenville received Ohio EPA Director's Final Findings and Orders. The orders require Steubenville to submit quarterly reports showing progress towards improving the resiliency of the water system, including reducing real water loss. To that end, Steubenville has initiated a series of water system studies and projects to improve its system.

The city has three distribution districts due to the range of topography within the city's water service area. The West End Distribution District serves the area of Steubenville from the Hollywood Shopping Center to the Steubenville Country Club. The West End Distribution District is served by the one-million-gallon West End Water Tank, constructed in 2003 and located near Jefferson Community College. The West End Water Tank is supplied with water from the West End High Service Pumps, located at the city's water filtration plant. The West End High Service Pumps operate approximately twice per day to supply the tank with water. When the West End High Service Pump are not operating, the West End Water Tank provides all of the water supply and maintains pressure to the West End Distribution District.

The most recent annual inspections of the West End Water Tank have indicated that the elevated steel tank's cathodic corrosion protection system and the interior coating system are both near the end of the 15-year life expectancy. The tank's interior also has a layer of settled organic matter that may be the source of increasing trihalomethane levels in the West End Water District. Repairs to and replacement of the corrosion protection and coating systems, and removal of organic material are priorities of the city's infrastructure improvement plans. However, this work cannot be performed without significant disruptions to water service in this district for multiple months without an alternative source of water storage or supply.

Primary needs for the water system include continued improvements in the aged distribution system. This includes distribution line improvements to aged and leaking lines and elevated water tank improvements.

### **Population and Flow Projections**

Steubenville's population has decreased by approximately 2,000 residents since 2000. During that same period, three major water customers, Wintersville, Jefferson County and RG Steel Mill were lost. Population trends show a likely continued decline in the water system's customer base.

In order to maintain good water quality, flow, and pressure, a well-designed storage and distribution system is critical. 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, Steubenville 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 and improvements to existing infrastructure to allow Steubenville to provide appropriate water storage and pressure to the surrounding community, and therefore was eliminated from consideration.

#### **West End Water Tank Improvements**

Improvements to the West End Water Tank currently cannot be performed without significant disruptions to water service in the West End Distribution District. Without an alternative source of

stored water, many residents and businesses would be left without regular water service for multiple months, and therefore this alternative was eliminated from consideration.

### West End Water Project

This alternative will include the construction of a new elevated water tank, new water booster pumping station, new water service lines, and replacement pump.

### Selected Alternative

The proposed West End Water Project (see Figure 2) will construct a new 400,000-gallon elevated water tank near the intersection of Lovers Lane and Coal Hill Road, and a 1,600-gallon per minute (GPM) water booster pumping station near the intersection of Tweed Avenue and Lincoln Avenue. Additionally, the construction will include replacement of pump number 2 at the existing West End High Speed Pump Station, and installation of approximately 10,000 LF of water lines along Coal Hill Road and Lincoln Avenue, as well as access roads, fencing, valves, hydrants, and restoration activities. This alternative will provide adequate water storage and pressure for fire prevention and existing customers, creates a water line loop that connects the Downtown High-Pressure Zone to the West End Pressure Zone, provides looping of two dead end water lines, and will allow for the eventual repair and maintenance of the existing West End Water Tank.

### Implementation

Steubenville expects to receive grants and funding from U.S. Army Corps of Engineers and the Appalachian Regional Commission (ARC), totaling approximately \$1,250,000, and plans to utilize a portion of its American Rescue Plan grant to fund this project. The remaining estimated project amount is \$3,040,500, which Steubenville proposes to borrow this balance from the WSRLA, and qualifies for a 20-year, zero-percent WPCLF hardship interest rate. Borrowing \$3,040,500 at zero percent will save Steubenville approximately \$1,500,000 for the 20-year loan period compared to borrowing the same amount at the current market rate of 4.26 percent. Interest rates are set monthly and might change for the month of loan award.

Construction of the proposed project is estimated to begin spring 2023 and last approximately 20 months.

### Public Participation

The City of Steubenville 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 Steubenville 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 this project:

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 project has 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:** Construction will not have significant adverse long-term impacts on surface water resources as there will be no in-water work, no wetlands are present in the project area, and work will primarily be performed in areas in which the predominant cover is paved roads, gravel and lawn grass. Minor, short-term impacts from open-cut construction could occur. Excavation of the project area could be prone to erosion and deposition if construction mitigation is not followed. 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. Dewatering of ground water to enable work below grade may be necessary, but engineering controls are part of the specifications to minimize the impacts of discharging pumped ground water to a river or stream. No impacts to ground water resources are expected as all properties are connected to public water. The project areas are predominately located outside of the 100-year Ohio River floodplain and will add no new above-ground structures in the 100-year floodplain.

Based on the above, the proposed project will not result in significant adverse impacts to surface waters or ground water.

**Terrestrial Habitat, Wildlife, and Endangered Species:** The U.S. Fish and Wildlife Service (USFWS) indicates that the project is within the range of the endangered Indiana bat and threatened northern long-eared bat. Trees within the project areas range from scrubby brush and small street trees to larger, mature trees. 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 project (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 species of concern eastern hellbender salamander can be found in Jefferson County. However, the project does not include any in-water work, and the project will include adherence to a SWPPP. Therefore, no impacts to this species are anticipated.

The species of concern bald eagle can be found in Jefferson County. However, they are not believed to be present in the project area. This is due to the project area’s habitat (busy urban roads, maintained lots, residential and commercial lots) not being conducive to the species as described on USFWS webpages. Therefore, we have determined that the project may affect, but is not likely to adversely affect, the bald eagle.

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

Air Quality, Dust, Noise, and Odors: Jefferson County meets standards for five of the six regulated air pollutants (carbon monoxide, nitrogen oxide, lead, particulate matter and ozone). The area is currently in nonattainment for sulfur dioxide; however, air quality will be unaffected by this project. The project will add no permanent sources of air pollution, although short-term, insignificant increases in dust and local air pollution from construction vehicle exhaust are expected during construction and will be controlled by standard construction best management practices. For these reasons, the project should have no significant adverse short-term or long-term impacts on local air quality.

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 project is complete, the drinking water distribution system will operate with no excessive noise, dust or odors beyond that of a typical water distribution system.

Therefore, the project will neither have significant adverse short-term or long-term impacts to air quality, nor will there be 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 project is unlikely to create significant traffic disturbance or threats to public safety. The project will not permanently alter traffic patterns. Therefore, the project will have no long-term change or adverse impacts on safety and traffic.

Land Use: The installation and operation of this water storage and distribution project will have limited indirect, development-related impacts. This is because the current and expected levels of population growth are low in the project areas as a whole.

Archaeological and Historical Resources: Based on the extensive pre-design review, historic structure avoidance that went into the design of the project, and the results of a limited Phase I Cultural Resource Management survey, Ohio EPA and Steubenville have concluded that no features listed on, or eligible for listing on, the National Register of Historic Places will be adversely impacted by the proposed project. The Ohio State Historic Preservation Office has agreed with this conclusion.

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: Debt for this project will be repaid from monthly water rates and a Water Infrastructure Improvement Fund fee. Water rates were raised significantly beginning in 2018 and were scheduled to increase annually in anticipation of the various water infrastructure improvements. Likewise, the Water Infrastructure Improvement Fund fee that was instituted has increased annually. The current residential water bill in Steubenville, based on rates set in October 2022 and with average water usage of 4,000 gallons per month, is \$65.18, plus a \$10.00 Water Infrastructure Improvement Fund fee, for a total of \$75.18 per month, or \$902.16 per year. This is 2.41 percent of the median household income of \$37,457, which is considered high. However, based

on the extensive deficiencies within the drinking water infrastructure and various proposed projects, this rate represents the minimum amount necessary to fund the water infrastructure improvements going forward.

Unaffected Environmental Features: The project is not located in the Lake Erie coastal zone. No sole source aquifers are present under the project. Farmland will not be developed or impacted by this project.

### **Conclusion**

Based on the planning documentation, associated correspondence, public participation and the comments from interested agencies, the proposed project 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



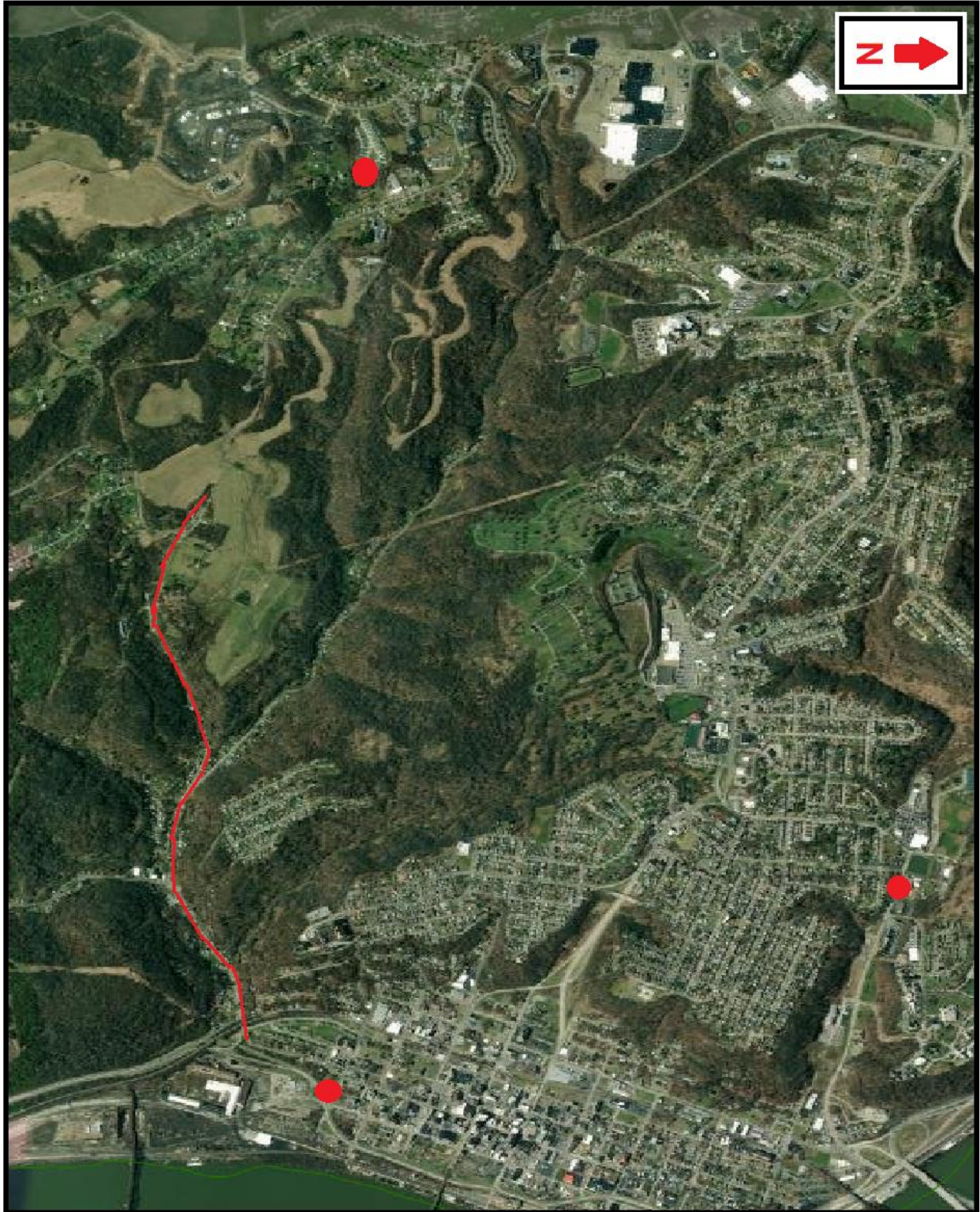


Figure 2: Specific project areas, in red