



**December 3, 2024**

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

**City of Columbus – Franklin County  
Fourth Water Treatment Plant – Site Preparation & Electrical Substation  
Loan Number: FS390274-0516**

The attached Environmental Assessment (EA) is for the site preparation for the future location of a new water treatment plant in Columbus 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 Columbus can then proceed with its application for the WPCLF loan.

Sincerely,

A handwritten signature in black ink that reads "Kathleen Courtright".

Kathleen Courtright, Assistant Chief  
Division of Environmental & Financial Assistance

Attachment

## ENVIRONMENTAL ASSESSMENT

### **Project Identification**

Project: Fourth Water Treatment Plant – Site Preparation & Electrical Substation

Applicant: City of Columbus  
910 Dublin Road  
Columbus, Ohio 43215

Loan Number: FS390274-0516



**Figure 1. Delaware County**

### **Project Summary**

The City of Columbus in Franklin County has requested \$182,430,000 from the Ohio Water Supply Revolving Loan Account (WSRLA) for site preparation at the location of the city’s fourth water treatment plant in Delaware County (Figure 1). The city has made an effort to minimize environmental disturbance for necessary tree clearing and site grading involving the fill of two unnamed tributaries to the O’Shaughnessy Reservoir and adjacent wetlands.

### **History & Existing Conditions**

The City of Columbus currently owns and operates three water plants: Dublin Road Water Plant (DRWP), Hap Cremean Water Plant (HCWP), and Parsons Avenue Water Plant (PAWP), collectively supplying an average of 145 million gallons per day (MGD) of drinking water to Columbus and surrounding communities. Continued growth of population and industry in central Ohio, along with the need to increase reliability and resiliency across the water supply system, has driven the need for additional water treatment capacity. Columbus has initiated the planning and design process for the Fourth Water Plant (FWP), with the goal of bringing the new facility online by the end of 2030.

The FWP will be constructed on city-owned property along the Scioto River in Delaware County at the southeast corner of Home Road and State Route 745, immediately west of the Scioto River/O’Shaughnessy Reservoir. Historically, the approximately 69-acre northern portion of the property was once a resort and spa in the 1840s and then redeveloped as reform school for girls in the 1860s. Many new buildings and improvements were made over the years including in the 1950s, 1970s, and the eventual 1992 expansion, opening and renaming of the institution to the Scioto Juvenile Correctional Facility which ultimately closed in 2014. Columbus purchased the property in 2015, demolished the majority of the existing structures, and restored the property to a natural state by March 2020. Several components on the property were preserved, including the small Ohio Home Cemetery that dates back to the late 1800s, and the gazebo located along the bank of O’Shaughnessy Reservoir. The northern portion of the property generally consists of maintained grass and scattered shrubs and trees. A narrow wooded riparian corridor, ranging between 10 to 30 feet wide, occurs along O’Shaughnessy Reservoir. A wider wooded riparian corridor is present along O’Shaughnessy

Reservoir in the southern portion of the property. The 161-acre area to the south was historically operated as a stone quarry. By 2006, two quarry pits, roughly 33 acres each, had filled with water.

### **Population and Flow Projections**

The current population of Columbus is approximately 900,000 and based on previous studies, the projected population for 2050 (including employment) in the Columbus service area is 1.7 million. Based on maximum day demands of potable water, there will be a 35 MGD deficit of treated water by 2050. Based on peak seasonal demands, there will be a 38 MGD deficit. A fourth water treatment plant with a proposed capacity of 48 MGD will meet both maximum daily demands and peak seasonal demands through 2050.

There will be no new service areas served by the FWP, since it will supply existing demand on the west side of the Columbus distribution system, allowing new demands on the east side of the system to be supplied by other Columbus treatment plants.

The Scioto River currently provides source water for the DRWP, located downstream to the south of the FWP site, and will supply both water plants upon completion of the FWP. The Scioto River supply system includes two in-stream surface water impoundments, the O'Shaughnessy Reservoir and the Griggs Reservoir, and is augmented during dry periods with water released from the off-stream John R. Doutt Upground Reservoir to the Scioto River.

### **Alternatives**

Several alternatives were considered for addressing the project increases in demand and for provided the desired level of reliability/resiliency for Columbus' drinking water system through 2050, including:

- *No action*: Doing nothing, the “no-action” alternative, would leave the city with a drinking water deficit with the predicted population increases by 2050. Due to this public health and safety concern, this is not a feasible alternative.
- *Expansion of HCWP*: This alternative is not feasible due to space limitations on the water plant site.
- *Expansion of DRWP*: This alternative is not feasible due to space limitations on the water plant site.
- *Expansion or increased utilization of PAWP*: While physical expansion is feasible, sufficient reliable source water is not currently available to support expansion of the treatment capacity enough to satisfy the desired level of reliability and future demands.
- *Construction of a new, fourth water plant*: The availability of city-owned land and availability of source water to support the required treatment capacity can allow for the construction of a new, separate water plant to provide additional support and service to Columbus' existing system.

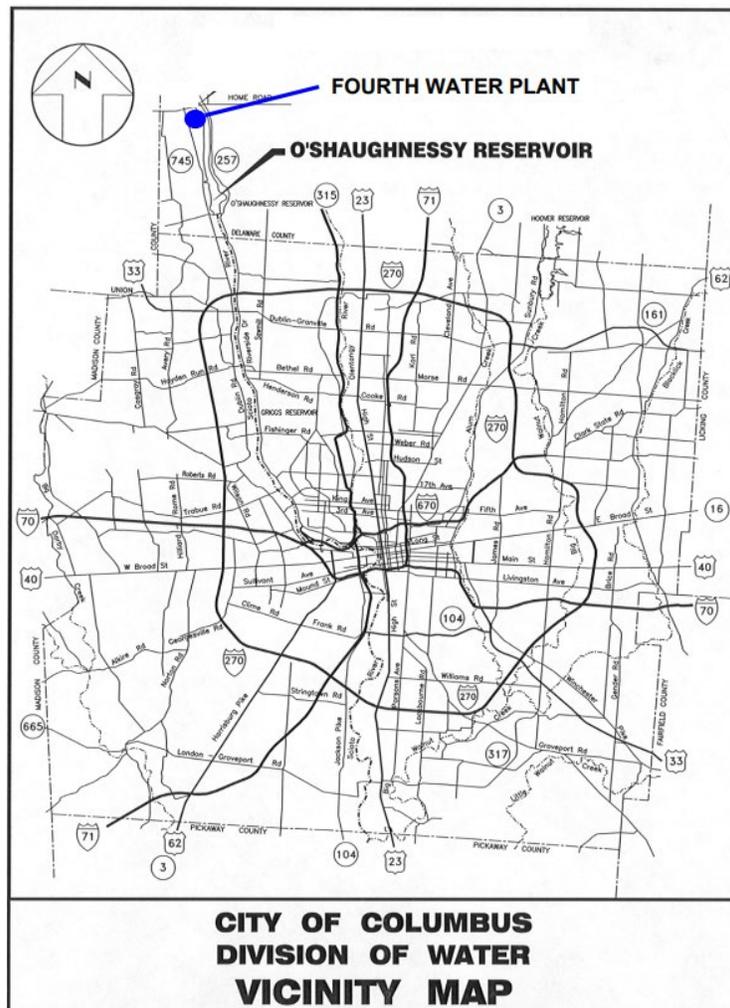
### **Selected Alternative**

Construction of a new Fourth Water Plant was the recommended alternative to meet the desired level of reliability and future demands. The FWP will be integrated into the system and will operate in a

similar manner to the existing three plants. Associated facilities and infrastructure will be located on the former girls' school property, including treatment facilities for raw water clarification, softening, filtration, and disinfection; a residuals handling facility, chemical storage, an administrative building with associated parking, and an electrical substation. A surface water intake structure will be constructed within O'Shaughnessy Reservoir. The city will utilize the two quarry cells located directly south of the FWP site; the south cell will be utilized for disposal of residuals and the north cell used for off-line storage of raw water.

The initial phase of work includes site preparation and construction of a new electrical substation. Construction of the FWP will require substantial ground disturbance to most of the 69-acre northern portion of the property and to portions of the 161-acre former quarry property to the south. Site preparation efforts will involve the discharge of fill material within two unnamed tributaries to O'Shaughnessy Reservoir and their adjacent wetlands located in the northern portion of the site, and along small areas of the bank of O'Shaughnessy Reservoir, in advance of facility construction. The Ohio Home Cemetery will be protected during construction and preserved, in addition to the gazebo remaining on site.

See Figures 2 and 3 below for maps of the project area.



**Figure 2. Location of planned Fourth Water Treatment Plant**



**Figure 3. Site of planned Fourth Water Treatment Plant**

**Implementation**

Columbus plans to borrow \$182,430,000 from the WSRLA. For a 20-year loan period at the standard rate of 2.9%, Columbus will save \$28,132,902 when compared to the market rate of 3.84%. Interest rates are set monthly and may change for a later loan award.

Columbus has minimized project costs by obtaining a low interest loan from the WSRLA, which allows a lower annual water bill for customers than otherwise would be possible. The project annual water bills with the implementation of this and other associated water projects will be approximately \$748. This is approximately 1.2% of the median household income (MHI) of Columbus, which is \$62,994.

The anticipated loan award will occur in January 2025. Construction for site preparation will begin following loan award and is expected to be completed in 2025, when facility construction will commence. Final project completion of the FWP is expected by 2030.

### **Public Participation**

A website for this project is available at <https://cbuswater.com/>. The Columbus Public Utilities webpage details proposed Capital Improvement Projects within the Division of Water. Contact information is provided for any public questions or concerns.

An advisory group of stakeholders and local jurisdiction representatives along the alignments of the transmission mains and the Fourth Water Plant location meet regularly (usually twice monthly) to provide a platform for input and to share useful information.

Public meetings for the future FWP were held June 18, 2024, and December 3, 2024. Information for these meetings was shared with local jurisdictions through flyers and social media posts. Postcards were dropped off at local libraries and the Dublin Recreation Center. Postcards were mailed to adjacent property owners along the transmission main corridors and properties next to the water plant site. Stakeholder groups were met with individually. Pop-up engagement activities, including tabling events, occurred to notify the public about the public meetings.

Ohio EPA will make a copy of this document available to the public on its web page: <https://epa.ohio.gov/divisions-and-offices/environmental-financial-assistance/announcements> and will provide it upon request to interested parties. Information supporting this Environmental Assessment (EA) is available from the project contact named below.

### **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.

#### **Air Quality**

Franklin County is in attainment for all regulated criteria air pollutants applicable to this project. The contractor will prevent unnecessary dust from construction activities from entering the atmosphere. Dust on unsurfaced streets or parking areas and any remaining dust on surfaced streets shall be controlled with water as needed. Because of this approach, there will be no significant adverse short-term or long-term impacts on local air quality.

#### **Archaeological and Historical Resources**

A Phase I Cultural Resources Management Investigation was performed for the project area to identify any potential cultural resources that may be affected by the project. These investigations involved visual inspection, cartographic resource inspection, and subsurface testing methods. The direct area of potential effect is composed of a mixture of open grass field, secondary growth timber/scrub, two large gravel quarry ponds and associated dikes, the Ohio Home Cemetery, and structural remnants of the demolished Girls Industrial Home/Reformatory. The archaeological investigations identified four previously unrecorded historic period archaeological sites. These sites are not considered to be significant cultural resources. The demolished remnants of previous structures are not regarded as eligible for the National Register of Historic Places.

Coordination was completed with the Ohio State Historic Preservation Office (SHPO). It was recommended that the cemetery be avoided, fenced off, and access provided for visitation. An evaluation and management plan for the cemetery was completed. Impacts will be avoided during construction and access by appointment will be available. A separate access road will be constructed upon final site completion. Additionally, a gazebo dating back to the original resort will remain on site and be protected from construction.

In the event of archaeological finds during construction, Ohio Revised Code Section 149.53 requires contractors and subcontractors to notify SHPO 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.

#### Terrestrial Habitat and Endangered Species

Coordination was completed with the US Fish & Wildlife Service (USFWS). According to the USFWS Information for Planning and Consultation (IPaC) system, the project occurs within the range of four federally listed species: Indiana bat, northern long-eared bat, tricolored bat, and salamander mussel.

No habitat suited to the salamander mussel is in the project area for site preparation work. A mussel survey is planned for 2025 prior to later construction of the facility which involves work within O'Shaughnessy Reservoir to construct a surface water intake structure. The Indiana, northern long-eared, and tricolor bats have similar summer maternity and roosting habitat preferences (trees with large crevices or loose, sloughing bark higher than ten feet above the ground). Tree removal will occur throughout the site for preparation of the construction of the water plant and will occur between October 1<sup>st</sup> and March 31<sup>st</sup> to avoid disturbing potential roosting habitat for endangered bat species. Trees will be replaced in alternate locations as a part of this mitigation process. Wooded riparian corridors along the O'Shaughnessy Reservoir will be avoided to the maximum extent practicable. Based on this information, the project will have no significant adverse short-term or long-term effect on terrestrial habitat or endangered species.

#### Floodplains

The proposed project will require work within the 100-year floodplain. Under Delaware County's Flood Damage Prevention Regulations, projects involving development within any identified flood hazard require a Flood Hazard Area Development Permit from Delaware County. This will be obtained prior to any construction.

### Safety, Noise, Traffic, and Aesthetics

A traffic plan shall be developed by the contractor prior to commencing construction which includes all proper warning signs and lane closures. The contractor commits to minimize both the extent and duration of the disruption of traffic and disturbance to the neighborhood during construction. Construction traffic will be routed through less developed areas to minimize the use of local roadways. There will be controlled access at all entrances. Light and noise will be limited during construction and maintained through plant operation to minimize changes to local aesthetics. For these reasons, the project will not adversely affect noise, traffic, public safety, or aesthetics.

### Surface Water Resources and Wetlands

Coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water during Construction Activity will be required to complete the proposed work. In order to obtain coverage under this permit, a Storm Water Pollution Prevention Plan (SWPPP) will be developed for the construction site and a Notice of Intent (NOI) will be submitted to Ohio EPA.

Standard construction best management practices for erosion and sediment control, dewatering, storm water management, hazardous waste handling, and like factors will be utilized during construction.

A surface water delineation of the approximately 225-acre study area was completed. O'Shaughnessy Reservoir, two streams, six adjacent wetlands, one non-adjacent wetland, and two excavated quarry cells were identified within the study area. All but the non-adjacent wetland and quarry cells were considered jurisdictional waters of the United States. Site preparation efforts proposed to be conducted in advance of construction of the FWP will involve the discharge of fill material within the unnamed tributaries to O'Shaughnessy Reservoir and their adjacent wetlands, therefore the project requires authorization from the US Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act. An Isolated Wetland Permit will be obtained from Ohio EPA prior to any discharge of fill material into the non-adjacent wetland.

Later construction of the facility will involve the discharge of fill material and work within O'Shaughnessy Reservoir to construct a surface water intake structure. Therefore, the proposed project will require authorization from USACE under Section 10 of the River and Harbors Act.

Coordination was completed with USACE under Nationwide Permit 39 – Commercial and Institutional Developments, in accordance with Section 10 and 404 for the discharge of dredged and/or fill material into two streams of the O'Shaughnessy Reservoir and two wetlands in conjunction with grading for site infrastructure, grading for a clearwell, and outfall bank protection. The project was designed to avoid and minimize impacts to waters of the US to the maximum extent practicable, including limiting wetland loss to 0.09 acre. The site preparation phase of the project will result in unavoidable stream bed loss of 0.041 acre and 640 linear feet of stream. To offset stream bed loss, Columbus will purchase stream mitigation credits.

Prior to any earthwork activity, flow from the streams will be captured in a stormwater conveyance pipe and routed to O'Shaughnessy Reservoir. During site preparation grading, these streams and their adjacent wetlands will be filled with native soil and graded to prepare the site for future construction.

### Energy Use

Through utilizing the already existing water distribution system in Columbus, this project will limit its effect on local or regional energy supplies.

### Unaffected Features

Coastal zones, prime farmland, ground water resources, and Wild and Scenic Rivers will remain unaffected as there are none located within the project area.

### **Conclusion**

Based upon Ohio EPA's review of the planning information and the materials presented in this Environmental Assessment, we have concluded that there will be no significant adverse impacts from the proposed project as it relates to the environmental features discussed previously. This is because these features do not exist in the project area, the features exist but will not be adversely affected, or the impacts will be temporary and mitigated.

The project will provide continued access to safe and reliable drinking water to support the growing population in Columbus throughout the upcoming years.

### **Contact information**

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