



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

December 23, 2021

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

**Northwestern Water and Sewer District – Wood and Lucas Counties
Willowbend Pump Station Rehabilitation
Loan Number: CS391432-0157**

The attached Environmental Assessment (EA) is for a sewer infrastructure improvement project in Wood and Lucas counties which the Ohio Environmental Protection Agency intends to finance through its Water Pollution Control Loan Fund (WPCLF) 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 WPCLF 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, Northwestern Water and Sewer District can then proceed with its application for the WPCLF loan.

Sincerely,

Jonathan Bernstein

Jonathan Bernstein, Chief
Division of Environmental & Financial Assistance

Attachment

ENVIRONMENTAL ASSESSMENT

Project Identification

Project: Willowbend Pump Station Rehabilitation

Applicant: Northwestern Water and Sewer District
12560 Middleton Pike
Bowling Green, OH 43402

Loan Number: CS391432-0157

Project Summary

The Northwestern Water and Sewer District (NWWSD) has applied for funding from Ohio EPA's Water Pollution Control Loan Fund (WPCLF) for the Willowbend Pump Station Rehabilitation project (here forward referred to as the "Willowbend project"). The project, located in Wood and Lucas counties, is intended to increase the pumping capacity and wastewater conveyance at the Willowbend Pump Station to improve the response to wet weather flows and reduce potential basement flooding in the project area by improving the existing pump station and constructing new sanitary force mains. The total estimated loan for the project is \$2,500,000, with construction scheduled to begin in the first quarter of 2022 and to be completed in seven months.

History & Existing Conditions

NWWSD, chartered under Section 6119 of the Ohio Revised Code, was organized in 1994 to assume the water and sewer operations of the Wood County Sanitary Engineer and the various communities it serves. In 1975, the existing Willowbend Pump Station was constructed as part of an expansion of the Wood County Sanitary Engineer's wastewater collection system for the Willowbend Subdivision. The Willowbend Pump Station is located on River Road in the City of Perrysburg and serves approximately 1,080 residences in nearby subdivisions. Currently the Willowbend Pump Station collects sanitary sewage from the City of Perrysburg, and Perrysburg and Middleton townships. This pump station serves NWWSD's Sanitary Sewer 300 Area (SS-300) that conveys wastewater to the Lucas County Water Resource Recovery Facility (LCWRRF) for treatment. Treated wastewater from the LCWRRF discharges to the Maumee River.

The Willowbend Pump Station discharges to an 8-inch force main running along West River Road, where it connects to a re-purposed 8-inch gas pipeline. The 8-inch gas pipeline was converted to a sanitary sewer force main as part of the 1975 project. The 8-inch gas pipeline was cut and connected to a new 8-inch force main installed along Jerome Road. The 8-inch force main on Jerome Road was likely constructed concurrent with the pump station in 1975. The original 8-inch force main on Jerome Road was connected to the Lucas County Sanitary Engineer's 90-inch truck sewer near the north terminus of Jerome Road at Fallen Timbers Lane via a short 24-inch diameter gravity sewer.

In 2005, the 8-inch force main constructed on Jerome Road was replaced with a new 12-inch PVC force main. Force mains from Willowbend, Saddlebrook, and Riverbend pump stations now share the

new 12-inch force main on Jerome Road and outlet to the existing 90-inch trunk sewer. However, the 12-inch force main is insufficient to convey the combined and projected flows in this area.

The condition and size of the existing Willowbend Pump Station wet well is a concern for the long-term operation of the pump station. The primary issue with the existing enclosure is a limitation on space available for the new pumping equipment to accommodate increased flows from anticipated new developments in the drainage basin.

In 2008, the Willowbend Pump Station was upgraded to add a flow meter, new pumps, piping, and new electrical controls. However, the limited storage and grade of the wet well is a significant issue during wet weather events and can lead to a situation where equipment failure could quickly result in flooding of adjacent customer basements.

Pump run data provided by NWWSD indicates that there are no major dry weather issues. During dry weather, the pumps operate roughly 17 minutes out of every hour. The pump cycle times during dry weather are reasonable to avoid significant wear on the pump components. During wet-weather conditions, NWWSD experiences elevated flows at the Willowbend Pump Station due to suspected inflow and infiltration (I/I)¹.

Population and Flow Projections

While new developments are anticipated to occur within project area and the drainage basin as a whole, flows are not expected to increase any organic or hydraulic loading beyond the LCWRRF capacity. Therefore, the LCWRRF's wastewater treatment capacity is more than sufficient to provide service to current and projected residential, commercial, and industrial users in the 20-year planning period.

Alternatives

1) No-Action

Due to the above-described existing conditions for wastewater conveyance within the project area, the No-Action alternative of continuing with the current situation would keep an undersized pump station and force main in service, likely resulting in pump failures, backups of untreated wastewater into basements, or bypasses of untreated wastewater into the Maumee River. These would create unacceptable public health and environmental health hazards.

2) Inflow and Infiltration Reduction

NWWSD has performed various improvements in SS-300 to reduce I/I. A study of additional I/I improvements predicted these actions would have a relatively low impact on flows. Furthermore, I/I improvements alone were determined to be insufficient to realize sufficient flow capacity for potential future development to be conveyed by the Willowbend Pump Station.

3) Other Alternatives

Various other alternatives were examined to address additional flow requirements, including a

¹ Infiltration is the ground water that seeps into sanitary sewers through cracks, offset joints and other flaws in the pipe. Inflow is surface runoff that enters sanitary sewers through directly connected downspouts, area drains, etc.

gravity sewer outlet and different force main alignments. However, these alternatives were determined to be less feasible due to significantly increased construction costs, problems with access and easements on private properties, and increased environmental impacts related to construction.

4) Pump Station Improvements and Replacement Force Main

This alternative includes upgrades and improvements to Willowbend Pump Station, construction of a new sewer force main, and abandonment of an existing sewer force main. The pump station improvements and replacement force main will allow for increased pumping and conveyance capacity during wet weather events. This will reduce the amount of sewage backups and basement flooding in the tributary sewer system.

Selected Alternative

The Pump Station Improvements and Replacement Force Main alternative was chosen as it is the most economical and least impactful on the environment of the alternatives examined by NWWSD to achieve the necessary conveyance of SS-300 and Willowbend Pump Station flows. The pump station improvements and replacement force main will allow for an increased pumping capacity and conveyance during wet weather events. This will reduce the amount of sewage backups, basement flooding, and wastewater bypasses in the tributary sewer system.

The proposed Willowbend project (see figures 1 and 2) will include the following:

- Replacement of the existing dry well/steel can wet well style pump station with a new submersible style pump station with pumps installed in a below-grade wet well.
- Variable speed operation will be used to adjust motor speeds, permitting pumps to respond to varying influent flow rates and downstream water levels in the County Sanitary Engineer's 90-inch Interceptor Sewer.
- A new 12-inch diameter force main will be installed from the Willowbend pump station site following a cross-country route in permanent easements to the Maumee River.
- At the Maumee River the new 12-inch force main will be connected to an existing, under-river petroleum pipeline that was purchased by NWWSD from Buckeye Partners, L.P. The petroleum pipeline will be repurposed as a sanitary sewer force main to cross the Maumee River.
- On the north side of the Maumee River, a new 20-inch diameter force main will be constructed up the river embankment to and along North River Road. From North River Road the 20-inch force main will then travel along a cross country route in permanent easements to reach to the LCWRRF and connect to the 90-inch diameter interceptor upstream of the WWTP headworks.
- New force mains from the Riverbend and Saddlebrook Pump Stations will be rerouted into the new 20-inch force main and then to the LCWRRF. Saddlebrook and Riverbend pump stations will share the force main pipes crossing the Maumee River. The capacity of the Saddlebrook Pump Station will be increased from 620 gallons per minute (GPM) to 750 GPM.
- The existing 12-inch force main running north of North River Road on Jerome Road will be abandoned in place.

Implementation

NWWSD proposes to borrow the entire cost for the project from Ohio's WPCLF. NWWSD will recover debt associated with the project from a general maintenance fund, which means that the sewer rate paid by SS-300 Area customers will not change to pay for the project. NWWSD qualifies for the WPCLF standard long-term interest rate, which for December 2021 is 0.65 percent, over 20 years. The monthly residential sewer rate in the project area is \$70.58 (\$847 annually), based on an average monthly usage of 1,037 cubic feet of water. This is 0.96 percent of the median household income of \$87,947 and compares favorably to the Ohio average of 1.3 percent.

The total estimated project cost is \$2,500,000. Borrowing this amount at 0.65 percent will save NWWSD approximately \$347,000 over the life of the loan compared to borrowing the same amount at the current market rate of 1.9 percent. Construction is expected to begin in the first quarter of 2022 and be completed in seven months.

Public Participation

NWWSD has a long history of working with the general public and local public officials when proposed projects are to be located in their community. This project has been discussed at NWWSD board meetings, has been detailed on NWWSD's website, has been discussed in local media, and has been advertised for bids. Advance notice to affected residents in the form of a letter will precede construction. A public notice announcing the availability of this Environmental Assessment will be posted on NWWSD 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 this project's planning information:

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: The project includes utilizing an existing, below-river, pipe to cross the Maumee River, and an overland connection to this pipe that includes sensitive habitat.

The project area includes residential and agricultural areas with land covers of successional woods, upland oil fields, wetlands, and portions of the work occurring adjacent to the Maumee River. Forested and emergent wetlands were identified in the project area. An ephemeral, intermittent, and perennial stream crosses through the project area. Alignment for the project was adjusted as much as feasible to minimize impacts to these streams and wetlands. The project will have temporary impacts to approximately 2.3 acres of wetland, and permanent impacts to 0.11 acres of wetland. 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.

To offset these impacts, NWWSD has Coordinated with the Stream and Wetlands Foundation to purchase wetland credits via a Wetland Mitigation Purchase Agreement with the Pearson Metropark Wetlands Mitigation Bank.

The project will be performed within 1,000 linear feet (LF) of the Maumee State Recreational River. As such, the project requires coordination with the Scenic Rivers Program to ensure that best management practices (BMP) are adhered to, including trench and groundwater de-watering BMPs, and requiring pre-construction notification sent to the Northwest Regional Scenic River Manager.

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.

The project requires coordination with the local floodplain administrator.

Based on the above, the proposed project 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 project is within the range of the federally endangered Indiana bat and federally threatened northern long-eared bat. Ohio Department of Natural Resources (ODNR) indicates that the project is also within the range of the state endangered little brown bat and tricolored bat. The project area includes successional woods with large and medium-sized trees, as well as small to large-sized street trees and scrubby brush in other project locations. Tree clearing and trimming will be limited to those that are necessary for the project. 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 project is within the range of the rayed bean, a federally endangered mussel; podhorn, a state threatened mussel; western banded killifish, and loggerhead shrike, both state endangered fish; and greater redhorse, a state threatened fish. While multiple stream and drainage crossings are present within the project area, no in-water work in the Maumee River will take place as part of this project. A SWPPP, and frac-out contingency plan to minimize potential impacts to these aquatic species are required.

The project is within the range of the Karner blue butterfly, Kirtland’s warbler, piping plover, eastern prairie fringed orchid, rufa red knot, and eastern massasauga, all federally endangered species; Kirtland’s snake, least bittern, spotted turtle, and trumpeter swan, all state threatened species; common tern, lark sparrow, upland sandpiper, and northern harrier, all state endangered species. However, due to the location and the lack of appropriate habitat present or timing of certain actions of the project, these species are not likely to be impacted.

The bald eagle is within the range of this project, and a bald eagle nest is present within the general project area. However, this nest is located outside the necessary buffer area from all project work.

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: Wood and Lucas County both meet air quality standards for the six regulated air pollutants (carbon monoxide, sulfur dioxide, nitrogen oxide, lead, particulate matter, and ozone). During construction, dust and vehicle exhaust will be insignificant sources of local air pollution. Dust due to excavation in dry weather will be controlled by good housekeeping measures (minimizing the area of disturbed soil, road sweeping, dust suppression with water or other benign dust suppressant). Because of its temporary nature and the use of emissions controls on motorized equipment, construction vehicle exhaust will be an insignificant pollution source compared to background sources of motorized vehicle exhaust in the greater project area.

Based on this information, the project should have no significant adverse short-term or long-term impacts on local air quality.

Noise, and Odors: Motorized equipment will be used for the majority of project work, generating noise and odors that will be unavoidable but temporary. Noise will be controlled by using equipment that does not generate excessive noise or vibration. Work will be restricted to weekdays from 7:00 AM to 6:00 PM. Emissions controls on motorized construction equipment will reduce diesel odors. Once the project is complete, the wastewater force mains and Willowbend Pump Station will operate with no additional noise or odors.

Based on this, the project will have no short-term or long-term significant adverse effects 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. For example, contractors are required to cover or close trenches overnight, to maintain access for emergency vehicles at all times, and utilize traffic direction devices such as flaggers, cones, and barricades. With these precautions, the project is unlikely to create significant traffic disturbance or threats to public safety.

Once construction is complete, the project areas will be restored and returned to pre-construction conditions. The project will not permanently alter traffic patterns. Therefore, the project will have no long-term change or adverse impacts on safety and traffic.

Archaeological and Historical Resources: Extensive pre-design review and historic structure avoidance went into the routing of the wastewater project, and Phase I and Phase II cultural surveys of the project area were also completed. The surveys by Lowlands Cultural Resources, LLC, entitled, "*Phase I Archeology Survey for the Northwestern Water and Sewer District, Willowbend Pump Station Improvements, Lucas and Wood Counties, Ohio*", and "*Phase II Investigation of Site 33LU0903, Lucas County, Ohio*", 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.

Based on this information, NWWSD and Ohio EPA believe that unrecorded archaeological sites or properties eligible for or listed on the National Register of Historic Places are not likely to be impacted.

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.

Unaffected Environmental Features: The project is not located in the Lake Erie coastal zone, no sole source aquifers are present under the project, it will have no effect on energy consumption, and will not impact farmland.

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 proposed project is a cost-effective way to address an aged wastewater conveyance system. Once implemented, the project will improve and replace aged infrastructure, helping NWWSD improve conveyance of collected wastewater to the Lucas County Water Resource Recovery Facility, and reduce potential basement flooding in the project area. Also, by using WPCLF low-interest financing, NWWSD has minimized the project cost.

Contact information

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Figure 1: General Project Area

