



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

**March 30, 2020**

**Limited Environmental Review and Finding of No Significant Impact**

**Northwestern Water and Sewer District – Wood County  
SS-300 and SS-400 Area Sanitary Sewer Improvements Phase 2  
Loan number: CS391432-0143**

The attached Limited Environmental Review (LER) is for a wastewater treatment project in Wood County 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 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 WPCLF 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,

Jonathan Bernstein, Assistant Chief  
Division of Environmental and Financial Assistance

Attachment

## LIMITED ENVIRONMENTAL REVIEW

### **Project Identification**

Project: SS-300 and SS-400 Area Sanitary Sewer Improvements Phase 2

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

Loan Number: CS391432-0143

### **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 SS-300 and SS-400 Area Sanitary Sewer Improvements Phase 2 project (here forward referred to as the "SS-300 and SS-400 project"). The project is intended to reduce wet weather flows within the aged wastewater collection system by repairing and replacing sections of the existing collection system. The total estimated loan for the project is \$1,500,000, with construction scheduled to begin in the spring of 2020 and to be completed in nine months.

### **History & Existing Conditions**

The Northwestern Water and Sewer District (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. NWWSD Sanitary Sewer 300 and 400 (SS-300, SS-400) Areas are located in western Wood County and provide sanitary sewer service to homes and businesses in Perrysburg Township, east of the City of Perrysburg. Wastewater from these areas is collected and conveyed through sewer infrastructure to the City of Perrysburg Wastewater Treatment Plant (WWTP) for treatment.

During wet weather events, infiltration and inflow (I/I)<sup>1</sup> increases flows beyond the hydraulic capacity of the collection systems and the State Route 20 Pump Station (SS-300) and Ford Road Pump Station (SS-400), causing sanitary sewer overflows (SSO) and basement flooding, causing a public health risk from potential human contact with raw sewage. These increased flows also use capacity needed by the City of Perrysburg for collection and treatment of the city's wastewater. The SS-300 and SS-400 project is the latest of several projects to manage I/I in the various service areas managed by NWWSD.

The SS-300 and SS-400 collection systems are approximately 45 years old and constructed of materials including vitrified clay pipe, concrete pipe, PVC pipe, reinforced concrete pipe, and ductile iron pipe. In 2005, NWWSD commissioned system-wide closed-circuit television sewer inspection videos of the collection systems in order to gain a better understanding of the existing conditions.

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<sup>1</sup> 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.

The inspection identified 119 locations with observed clear water entering the sanitary sewer collection systems, including through: broken and cracked pipe, leaks through lateral connections, misaligned pipe points, pipe joints with missing or loose gaskets, and locations of root intrusion. The inspection also identified various areas with mineral build up, grease build up, debris, and misshapen pipe.

The State Route 20 and Ford Road pump stations restrict flow into the City of Perrysburg's collection system. However, since the Perrysburg system has been unable to accept all of the flows, SSOs into Grassy Creek and basement flooding with sewage have occurred.

The City of Perrysburg and Perrysburg Township have experienced higher growth than the remainder of Wood County, and the areas are expected to see approximately 3.1 percent annual growth. This growth is related to both residential and commercial developments. Assuming the current growth rate continues into 2030, the wastewater collection system and WWTP will not be able to manage the anticipated volumes without significant reductions in I/I. In addition to an expanding population in the region, it is also expected that NWWSD's borders will expand into areas that currently do not have sewer services available to them. Therefore, reducing wet-weather flow in the SS-300 and SS-400 areas is important to ensure adequate capacity exists to serve these future service customers.

### **Project Description**

The proposed SS-300 and SS-400 project (see Figures 1 and 2) is designed to address 40 sewer laterals and 55,000 linear feet of aged and deteriorated sewer main through root cutting, sewer cleaning, rehabilitation of the existing sewer pipe by point repairs and sealing or grouting, and cured-in-place pipe (CIPP) repairs. Limited open cut replacement of existing sewers and laterals may occur depending on conditions at the time of the project. Reestablishment and sealing of lateral connections will follow repairs to the sewer mains.

Rehabilitation of the sewers and laterals was the selected technology because the generally structurally sound sewer pipes are good candidates for sealing, grouting, and relining. The joints and cracks of the various sewer pipes create infiltration sites that sealing, grouting, and CIPP repairs would eliminate. Repairs by sealing, grouting, and CIPP are also the most cost-effective alternative, as they will fortify the structural integrity to the deteriorated sections of the pipe and significantly reduce infiltration. These repairs, occurring primarily by access through manholes, also minimize traffic disruption, environmental and habitat degradation, site restoration, and potential impacts to historic or cultural resources, as opposed to sewer replacement or a flow equalization structure. Areas of potential open-cut construction will occur in the area of existing sewers, roads, and utilities which have experienced extensive and repeated disturbance.

This replacement strategy achieves the goals of addressing structural concerns, infiltration, and extending the useful life of the sewer in these areas. Furthermore, accessing subsurface work locations via manholes, where feasible, will limit surface disturbance, soil and pavement restoration, and reduce the potential effects of erosion and construction runoff.

This project will allow NWWSD to reduce wet weather flows to Perrysburg's WWTP, the potential of basement backups, and sanitary sewer overflows bypassing into tributaries of the Maumee River and Lake Erie. This will help reduce the public health risk from potential human contact with raw sewage as well as reducing potential impacts related to harmful algal blooms (HABs).

## **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 and SS-400 area customers will not change to pay for the project. NWWSD qualifies for the WPCLF standard long-term interest rate, which for March 2020 is 0.98 percent, over 20 years. The 2020 monthly residential sewer rate in the project area is \$139.78 (\$1,677 annually), based on an average monthly usage of 1,037 cubic feet of water. This is 1.9 percent of the median household income of \$87,947, which is considered affordable.

The total estimated project cost is \$1,500,000. Borrowing this amount at 0.98 percent will save NWWSD approximately \$212,000 over the life of the loan compared to borrowing the same amount at the current market rate of 2.23 percent. Construction is expected to begin in the spring of 2020 and be completed in nine 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, and has been advertised for bids. Advance notice to residents in the form of a letter will precede construction. NWWSD is not aware of controversy surrounding this project. For a project of such limited scope and impact, this is considered adequate public involvement.

## **Conclusion**

The proposed project meets the project type criteria for a Limited Environmental Review (LER); namely, it is an action within an existing public wastewater collection system which involves the functional replacement of and improvements to existing equipment. 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** because construction will not adversely affect any special resource type since general construction environmental protections will be in place: noise will be controlled with silencers on mobile equipment, dust and odors will be controlled, and air quality will be protected with emissions controls on mobile equipment and with the use of street sweeping and dust suppressants, as applicable. The project will have the public health and environmental benefits related to reducing risks related to potential human contact with raw sewage and will potentially reduce nutrients which contribute to HABs in Lake Erie.

**Will have no effect on high-value environmental resources** because the construction will largely be limited to the repair of sewer pipes under and within roads and in road rights-of-way. No significant ground disturbance will take place as part of this project, so there will be no effects to the following: floodplains, wetlands, surface water, endangered/threatened species or their habitat, state and federally designated wild and scenic rivers, recreational rivers, or wildlife areas, and archaeological, historic or cultural resources.

**Is cost-effective** because the combination of sealing, lining, and limited replacement of sewer mains and laterals is the most cost-effective alternative, as it will remove the sources of I/I by accessing the

work locations via manholes, when possible, without the more intrusive and costly actions related to the full open-cut excavation and replacement of all sewer pipe and laterals.

**Is not a controversial action** because no local rate increase will be associated with the debt repayment. It will have no effect on population, nor will it have significant adverse environmental effects that could raise public concern. The rates that NWWSD applies to its general service area are affordable.

**Does not create a new, or relocate an existing discharge to surface or ground waters, and will not result in substantial increases in the volume of discharge or the loading of pollutants from an existing source or from new facilities to receiving waters** because the project does not require the expansion of Perrysburg's wastewater treatment facility beyond its current design capacity, the installation of a satellite treatment facility, or other action that could increase discharges or add or relocate discharge points.

**Will not provide capacity to serve a population substantially greater than the existing population** because increases in pipe capacity or service extensions into undeveloped areas have not been included in the projects. Thus, the projects will not result in adverse secondary (development-related) environmental impacts, such as farmland or wetland conversion for building purposes.

#### **Contact info**

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Figure 1: General project location (in red).

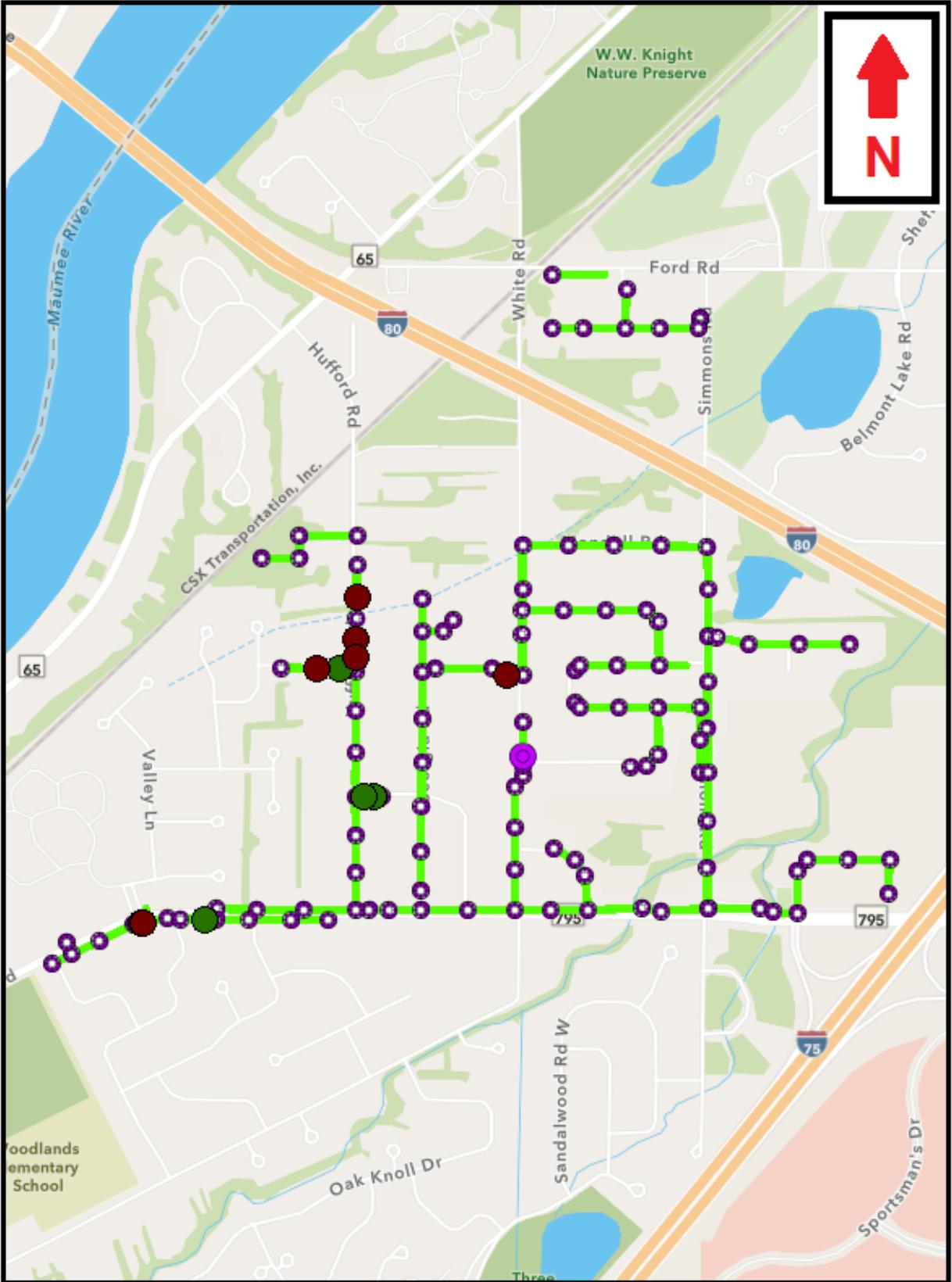


Figure 2: Project locations of sewer and lateral repairs.