July 16, 2020

Limited Environmental Review and Finding of No Significant Impact

Northeast Ohio Regional Sewer District
Miscellaneous CSO Improvements
Loan number: CS391430-0182

The attached Limited Environmental Review (LER) is for a wastewater treatment project in Cuyahoga 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

Jonathan Bernstein, Assistant Chief
Division of Environmental and Financial Assistance

Attachment
LIMITED ENVIRONMENTAL REVIEW

Project Identification

Project: Northeast Ohio Regional Sewer District
Miscellaneous CSO Improvements

Applicant: Northeast Ohio Regional Sewer District
3900 Euclid Avenue
Cleveland, Ohio 44115

Loan Number: CS391430-0182

Project Summary

The Northeast Ohio Regional Sewer District (NEORSD) has requested financial assistance from the Ohio Water Pollution Control Loan Fund (WPCLF) for the Miscellaneous CSO Improvements project. The work includes the installation of storm and sanitary sewers, sewer cleaning, flow regulator and divider improvements, and other miscellaneous improvements within NEORSD’s collection system. The project is designed to address NEORSD’s Federal Consent Decree with the United States Environmental Protection Agency (USEPA) and the United States Department of Justice (USDOJ) to reduce combined sewer overflows (CSO) into Lake Erie and its tributary streams. The total project cost is $2,090,483. Debt for the project will be repaid from monthly service charges. The project is scheduled to begin in mid-2020 and be completed in 16 months.

History & Existing Conditions

NEORSD is responsible for wastewater treatment facilities and interceptor sewers in the greater Cleveland metropolitan area. This service area encompasses the City of Cleveland and all or portions of 61 suburban municipalities in Cuyahoga, Summit, Lake, and Lorain counties. The proposed Miscellaneous CSO Improvements project, here forward referred to as the MCSO project, is located within NEORSD’s Southerly District collection system, which is one of three wastewater districts and treatment plants owned and operated by NEORSD. Wastewater from the MCSO project and service areas will be conveyed to the Southerly Wastewater Treatment Center (WWTC).

NEORSD developed facilities plans to characterize the extent of CSOs in the District. The facilities plan recommended a CSO control plan to control discharges in accordance with the USEPA CSO Policy and the Ohio EPA CSO Control Strategy. The recommended CSO control plan consists of an integrated program of relief sewers, pump station and storage tank improvements, and CSO storage tunnels. The control plan is designed to reduce CSO discharges to four or fewer District-wide in a typical year of rainfall.

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1 Combined sewer systems are sewers that are designed to collect rainwater runoff, domestic sewage, and industrial wastewater in the same pipe. Most of the time, combined sewer systems transport all of their flow to a sewage treatment plant where it is treated and then discharged to a water body. During periods of heavy rainfall or snowmelt the combined flow volume in a combined sewer system can exceed the capacity of the sewer system or treatment plant. For this reason, combined sewer systems are designed to overflow occasionally (combined sewer overflow) and discharge excess combined sewage directly to nearby streams, rivers, or other water bodies.
As a first step in implementing the CSO control plan, NEORSD developed the Advanced Facilities Plan (AFP). The purpose of the AFP was to prepare preliminary designs for selected portions of the recommended CSO control plan. Hydrologic and Hydraulic (H/H) models were developed based on the CSO Long Term Control Plan to assist in the design development of MCSO. The 5-year, 6-hour design storm was used to design the various hydraulic components of the project. MCSO conveyance facilities are designed to achieve NEORSD’s Level of Service (LOS) criteria.

MCSO is designed to achieve several specific criteria, but NEORSD’s overarching design criteria are:

- Meeting the CSO overflow frequency requirements as established in the Consent Decree (3 or fewer activations at CSOs during the “typical year”).
- Where feasible and cost-effective, maintaining a peak Hydraulic Grade Line of 10 feet below ground surface within the new and existing sewers impacted by MCSO during the 5-year, 6-hour design storm.

Project Description

The MCSO project (see Figures 1 and 2) has four specific locations and includes the installation of 591 linear feet (LF) of 15-inch diameter storm sewer; 479 LF of 12-inch diameter sanitary sewer; 197 LF of 24-inch sanitary sewer; cleaning of 5,070 LF of existing sewers; abandonment of two flow regulators and one flow divider; modification of one flow divider; and site and pavement restoration. Specifically, the project work is as follows:

West 3rd Street Site: Work generally consists of modifications to Regulators WR-08 and WR-08A, sewer cleaning, and post-cleaning sewer CCTV work.

Literary Road Site: Work generally consists of open-cut sewer installation, manholes, inlet basins, catch basins, and roadway reconstruction.

Jefferson Avenue Site: Work generally consists of modifications to Regulator WR-07A, open-cut sewer installation, manholes, and sewer lateral reconnections.

Aetna Morgana Relief Sewer (AMRS) Site: Work generally consists of new flow divider structure AMRS-DS1, open-cut sewer installation, one manhole, one catch basin, and a sewer connection to the Morgana Run Culvert (MRC). Additional work generally consists of modifications to Flow Divider S-64.

Implementation

The total cost of the MCSO project is $2,090,483, all of which NEORSD proposes to borrow from the WPCLF. The project service area qualifies for the standard WPCLF below-market interest rate on 20-year construction loans, which for July is 0.87 percent (WPCLF loan interest rates are set monthly and the rate may change for a later loan award). Borrowing at 0.87 percent will save NEORSD approximately $294,000 over the life of the loan compared to the current market rate of 2.12 percent.

The sewer service charges for NEORSD customers are driven by the total indebtedness of NEORSD (and annual O&M costs), as opposed to the specific indebtedness of any particular project. NEORSD will not enact a special increase in user rates specifically to pay for this project; instead, rates were increased in 2017 to cover debt expected during the period of 2017-2021, which includes debt for this and other projects.
## NEORSD Monthly Sewer Service Charge Rates

<table>
<thead>
<tr>
<th>Rates Effective</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleveland</td>
<td>$108.10</td>
<td>$116.20</td>
</tr>
<tr>
<td>Suburbs</td>
<td>$108.70</td>
<td>$116.50</td>
</tr>
</tbody>
</table>

The median household income of the benefitting properties is $46,720. The annual sewer bill based on 7,480 gallons of monthly water use is $1,301. This represents 2.78% of the MHI.

### Public Participation

NEORSD has a long history of working with the general public and local public officials when proposed projects are to be located in their community. NEORSD has several publications and an internet website that serve to keep the members of their district informed of upcoming projects. NEORSD conducted public participation by advertising for bids and providing bid updates on their website, and by advertising for bids in the Cleveland Plain Dealer. This Limited Environmental Review will be posted on the websites of NEORSD and Ohio EPA – Division of Environmental and Financial Assistance. Thus, there have been adequate opportunities for information dissemination and public participation.

### Conclusion

The proposed project meets the project type criteria for a Limited Environmental Review; namely, it is an action within urban residential, commercial, and industrial areas with extensive prior excavation, existing public wastewater collection system, and extensive other utilities, which involves the functional replacement of, improvements to, and maintenance of existing wastewater collection infrastructure. Furthermore, the project meets the other qualifying criteria for an LER; specifically, the proposed project:

*Will have no adverse environmental effect and will require no specific impact mitigation*, as there are no known sensitive environmental resources within the proposed project area that will be affected. The proposed project involves installation of storm and sanitary sewers, sewer cleaning, flow regulator, and other miscellaneous improvements to equipment and structures within the wastewater collection system. There will be no significant adverse effects as a result of project implementation, or the need for any additional mitigation measures beyond typical erosion control and construction best management practices.

*Will have no effect on high-value environmental resources*, as construction will take place within urban residential, commercial, and industrial areas with extensive prior excavation, and existing public wastewater collection, treatment system, and other utilities. The project area includes one wetland. However, this is in a location where project work is limited to cleaning of an existing wastewater sewer. No other high-value resources are present.

*Is cost-effective*, as the proposed action satisfies technical goals of the project and utilizes existing infrastructure whenever possible.

*Is not a controversial action*, as there is no known opposition to the proposed project and the cost of the project is not overly burdensome to ratepayers, and will be financed through the WPCLF, saving approximately $294,000 in interest payments compared to conventional financing.
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 loading of pollutants from an existing source or from new facilities to receiving waters, since the project involves improvements to existing infrastructure and reduces the volume of CSO in the District’s system, and not increases to pollutant discharges.

Will not provide capacity to serve a population substantially greater than the existing population, since the project is not related to serving new growth or increasing capacity at the wastewater treatment facilities.

In summary, the planning activities for the project have identified no potentially significant adverse impacts. The project is expected to have no significant short-term or long-term adverse impacts on the quality of the human environment, or on sensitive resources (surface water, ground water, air quality, floodplains, wetlands, riparian areas, prime or unique agricultural lands, aquifer recharge zones, archaeologically or historically significant sites, federal or state-designated wild, scenic or recreational rivers, federal or state-designated wildlife areas, or threatened or endangered species). Typical construction impacts, such as noise, dust, and exhaust fumes, will be short-term and addressed by standard construction best management practices.

The proposed project is a cost-effective way to address the requirements of NEORSD’s Federal Consent Decree to reduce CSO discharges through the installation of storm and sanitary sewers, sewer cleaning, flow regulator and other miscellaneous improvements within NEORSD's collection system. Once completed, the project will reduce the frequency of overflows and contribute to compliance with NEORSD’s Federal CSO Consent Decree. Also, by using WPCLF low-interest financing, NEORSD has minimized the project cost.

Contact information

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Figure 1: Project location (in red)
Figure 2: Miscellaneous CSO Improvements Project Locations