July 19, 2019

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

Northeast Ohio Regional Sewer District – Summit County
West 3rd and Quigley, Westerly Miscellaneous CSO Control
Loan Number: CS391430-0144

The attached Environmental Assessment (EA) is for a sewer infrastructure improvement and CSO control project in Cleveland 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, as stated in the Ohio Administrative Code (OAC) 3745-150-06.

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 me at the letterhead address. 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 Northeast Ohio Regional Sewer District can then proceed with its application for the WPCLF loan.

Sincerely,

Jonathan Bernstein, Assistant Chief
Division of Environmental & Financial Assistance

Attachment
ENVIRONMENTAL ASSESSMENT

Project Identification

Project: Northeast Ohio Regional Sewer District West 3rd and Quigley/Westerly Miscellaneous CSO Control

Applicant: Ms. Kyle Dreyfuss-Wells, Chief Executive Officer
Northeast Ohio Regional Sewer District
3900 Euclid Avenue
Cleveland, Ohio 44115

Loan Number: CS391430-0144

Project Summary

The Northeast Ohio Regional Sewer District (NEORSD) has applied to Ohio EPA for financial assistance from the Water Pollution Control Loan Fund (WPCLF) for the West 3rd and Quigley/Westerly Miscellaneous CSO Control project, here forward referred to as the W3QW project. The W3QW project is located in the City of Cleveland and includes approximately 3,200 linear feet (LF) of sanitary sewers, 430 LF of service laterals, diversion structures, junctions and manholes, flow regulator modifications, a vent structure, and other miscellaneous improvements. The W3QW project is one of several projects NEORSD has completed, has under construction, or is planning to implement its consent decree to address combined sewer overflows (CSO)1. W3QW will result in long-term water quality benefits that will be associated with the reduction of a public and environmental health threat related to the exposure to untreated sewage via combined sewer overflows to the Cuyahoga River which discharges to Lake Erie. The total estimated project cost is $11,300,000. Debt for the project will be repaid from monthly service charges. Ohio EPA anticipates awarding a WPCLF loan to NEORSD for the W3QW project in September 2019. Construction of the W3QW project will begin in the autumn of 2019 and last approximately 20 months.

History & Existing Conditions

NEORSD is responsible for three wastewater treatment facilities (Southerly WWTP, Westerly WWTP and Easterly WWTP) and the 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. Each portion of the wastewater interceptor system conveys wastewater to its respective WWTP. Wastewater from the W3QW project and service areas will be conveyed to the Westerly WWTP.

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.
In 1999, NEORSD developed the *Westerly District CSO Phase II Facilities Plan* to characterize the extent of CSO overflows in the Westerly District. The Westerly District service area comprises an area of approximately 10,000 acres west of the Cuyahoga River. About eighty-five percent of the service area has combined sewers, with the remainder served by separate sanitary sewers. The tributary sewers flow to the Westerly WWTP.

The *Westerly District CSO Phase II Facilities Plan* developed a recommended CSO control plan to control CSO discharges in accordance with the U.S. Environmental Protection Agency (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.

As a first step in implementing the recommended CSO control plan, NEORSD developed the *Westerly Tunnel Storage Advanced Facilities Plan* (AFP). The purpose of the AFP was to prepare preliminary designs for selected portions of the recommended CSO control plan.

Furthermore, in 2011, NEORSD entered into a consent decree with the USEPA, United States Department of Justice (USDOJ), and Ohio EPA to implement, within a 25-year period, a long-term control plan (LTCP) to control CSO currently impacting Lake Erie and its tributaries within NEORSD’s service area. The main component of the LTCP consists of a network of deep tunnels to temporarily store combined effluent during wet weather events, then release the effluent for eventual treatment at NEORSD WWTP facilities. The W3QW is a component of Control Measures #14 and #20 of the consent decree.

**Alternatives**

A “no-action” alternative is not feasible, since it would violate NEORSD's consent decree to control CSOs impacting Lake Erie and its tributary streams. This would result in continued threats to human health and the environment related to CSO events and enforcement, including fines.

NEORSD evaluated various alternatives, including sewer separation, relief sewer alignments, length and size of relief sewers, open-cut versus directionally-bored excavations, and regulator modification. Alternatives also evaluated construction disturbance, community impacts, existing utilities and infrastructure, and sensitive environmental and cultural areas. The various alternative actions and alignments were developed, modeled and evaluated, accompanied by preliminary sizing based on estimates of wastewater and stormwater runoff.

The cost analysis of the alternatives included the development of total construction, operation and management (O&M) and life cycle costs. The cost figures developed not only facilitated the direct comparison between alternatives but also indicated the magnitude of the cost for implementing each alternative. The cost estimates were based on conceptual layouts of each alternative which were developed to a concept level to determine the quantities for major site work required to implement each alternative.

**Selected Alternative**

The W3QW project (see Figures 1 and 2) consists of 2,500 LF of sewers ranging from 18-inch to 42-inch diameter installed by trenchless methods; 670 LF of sewers ranging from 18-inch to 30-inch diameter installed by open-cut methods; 430 LF of 8-inch diameter service lateral; 3 diversion
structures; 17 junctions and manholes; modifications of 6 flow regulators, a vent structure, and other miscellaneous improvements.

The W3QW project includes the following actions:

**Sewers:**
- Seymour Avenue Relief Sewer: Approximately 520 LF of 42-inch diameter pipe and 1,000 LF of 24-inch diameter pipe installed primarily using trenchless methods.
- Castle Avenue Relief Sewer: Approximately 1,120 LF of 18-inch diameter pipe, 200 LF of 21-inch diameter pipe, and 320 LF of 30-inch diameter pipe constructed using trenchless and open cut methods.
- West 3rd Street Sewer Separation: Approximately 475 LF of 8-inch diameter pipe as a new sanitary sewer lateral.

**Diversion, Junction, and Vent Structures:**
- Diversion Structure DS01: Retrofit the interior of an existing sewer manhole at West 25th Street to divert flow into the Seymour Avenue Relief Sewer.
- Diversion Structure DS02: Construct a new 9-ft x 10-ft sewer diversion structure at Scranton Road to divert flow into the Seymour Avenue Relief Sewer.
- Junction Structure JN01: Connect the Seymour Avenue Relief Sewer to the Walworth Run Interceptor at West 30th Street.
- Diversion Structure DS10: Construct a new 9-ft x 9-ft sewer diversion structure at West 14th Street to divert flow into the Castle Avenue Relief Sewer.
- Junction Manhole JN10: Connect the Castle Avenue Relief Sewer to the existing 24-inch sewer in Clark Field and abandon existing upstream 21-inch sewer.
- Edgewater Drive Vent Structure: Install a 4-foot diameter vent pipe on the existing Northwest Interceptor.

**Regulator Modifications:**
- WR-28: Raise the weir in the regulator located at West 14th Street, south of Castle Avenue.
- WR-01: Bulkhead existing 8-inch diameter dry weather outlet pipe located at West 3rd Street.
- WR-02: Bulkhead existing 8-inch dry weather outlet pipe located at 3rd Street.
- W-14A: Construct orifice restriction over 120-inch ID pipe located at 117th Street.
- NW-04 AED: Removal of inflatable air dam located at intersection of 117th Street and Edgewater Drive.
- W-10: Removal of inflatable air dam located near Lake Avenue and Desmond Avenue.
- W-11: Removal of inflatable air dam located near Lake Avenue and Viking Court.

**Special Items:**
Stormwater treatment devices are to be installed on the stormwater outlet pipes from Regulators WR-01 and WR-02 located on the West 3rd Street.

**Implementation**

The total estimated cost of the W3QW project is $11,300,000, all of which NEOBSD proposes to borrow from the Ohio Water Pollution Control Loan Fund (WPCLF). The project service area qualifies for the standard WPCLF below-market interest rate on 20-year construction loans, which for July is
1.5 percent (WPCLF loan interest rates are set monthly and the rate may change for this loan). Borrowing at 1.5 percent will save NEORSD approximately $1,645,000 over the life of the loan compared to the current market rate of 2.75 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.

<table>
<thead>
<tr>
<th>NEORSD Monthly Sewer Service Charge Rates</th>
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<tr>
<td>Rates Effective</td>
</tr>
<tr>
<td>2019</td>
</tr>
<tr>
<td>Cleveland</td>
</tr>
<tr>
<td>$103.98</td>
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<tr>
<td>Suburbs</td>
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<td>$104.92</td>
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</tbody>
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The median household income of the benefitting properties is $45,289. The annual sewer bill based on 1,037 cubic feet of monthly water use is $1,253.00. This represents 2.77% 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. Extensive outreach has taken place to discuss the project, alternatives, and measures to minimize community impacts. Specific entities and groups contacted include: City of Cleveland Council members, Canalway Partners, Cuyahoga County, Cleveland Metroparks, and the Greater Cleveland Regional Transit Authority. NEORSD has several publications and a website that serve to keep the members of their district informed of upcoming projects, and this project has received extensive coverage in the local media. NEORSD has also conducted public participation by advertising for bids and providing bid updates on their website, and by advertising for bids in the Cleveland Plain Dealer. Public notifications regarding the project will be distributed shortly after issuance of a construction Notice to Proceed. A public notice announcing the availability of this Environmental Assessment will be posted on NEORSD 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. 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 majority of the W3QW project will not have significant adverse long-term impacts on surface water resources as it involves no stream crossings, and the majority of work will be performed under urban streets, street rights-of-way, and one urban park, in which the predominant cover is pavement, gravel, sidewalks, or lawn. Minor, short-term impacts from the open-cut construction and directional boring could occur. Excavation of the trenches and pits 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. Once construction is complete, the area surrounding the project areas will be restored and returned to pre-construction conditions.

Based on the above, the proposed W3QW project will not result in significant adverse long-term impacts to surface or ground waters.

**Terrestrial Habitat and Endangered Species:** The U.S. Fish and Wildlife Service (USFWS) indicates that the project is within the range of the Indiana bat (federally endangered) and northern long-eared bat (federally threatened). Trees within the project areas are a mixture of isolated street trees and larger mature trees in an urban industrial, residential, and park setting. Limited removal of trees within project areas will take place. However, project design and placement, as well as construction barriers, will limit the number of trees removed and affected. Tree clearing will be limited to those that are necessary for the project. Other mature trees are located outside of the work areas and within the industrial, residential, and park corridors of Greater Cleveland, and would provide alternative habitat. Furthermore, an ecological survey performed for the project identified no potential bat roost trees that would be removed as part of the project. The project's design and alignment, surveys, construction controls, and barriers will reduce any potential impacts to Indiana bats or northern long-eared bats.

While Cuyahoga County is within the ranges of the Kirtland's warbler, piping plover (federally endangered), and red knot (rufa) (federally threatened), this project is located under urban streets, street rights-of-way, urban park, lawn grass, gravel drives, and areas of high motorist, bicycle and pedestrian traffic. These locations would not provide the habitat necessary for these species.

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

**Air Quality, Dust, Noise, and Odors:** Cuyahoga County is designated in “non-attainment” of the national ambient air quality standards for ozone and lead. Cuyahoga County meets air quality standards for the remaining four regulated air pollutants. The proposed project will result in a temporary increase of dust and fumes from construction activities. This will be mitigated using standard construction best management practices, such as emissions controls on motorized equipment. With these mitigation measures, any effects on air quality will be short-term, ending when construction is complete.

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 sewer system will operate with no excessive noise, dust or odors beyond that of a typical sewer system.

Therefore, the project will neither have significant adverse short-term or long-term impacts to air quality, nor will there be short-term or long-term significant adverse long-term impacts from noise, dust, and odors.
**Archaeological and Historical Resources:** The proposed W3QW project will be implemented exclusively in urban commercial, residential, and park settings that have undergone extensive historical grading and filling. The predominant cover is pavement, gravel drives, sidewalks, and lawn. Excavation and installation of large-diameter sanitary sewers and storm sewers, as well as other utilities, including water, gas, electric, and fiber optic lines have taken place in these locations and received periodic maintenance and repair activities. Contract specifications include geotechnical monitoring, physical inspections of potentially affected resources and, as necessary, remedies for affected resources.

In the event that archaeological remains are found during construction, contractors and subcontractors are required under Ohio Revised Code Section 149.53 to notify OHPO of any such discoveries in the project area, and to cooperate with that entity (and with Ohio EPA) in archaeological and historic surveys and salvage efforts when appropriate.

Based on this information, NEORSD and Ohio EPA believe that the proposed project will have no effect on unrecorded archaeological sites, or properties eligible or listed on the National Register of Historic Places.

**Safety and Traffic:** The W3QW project locations are aligned with existing public rights-of-way and well-defined utility easements. A detailed traffic control plan will be coordinated with the local municipalities and impacted property owners. The plan will then be implemented during construction to manage traffic disruptions and prevent public safety problems. It will include temporary detours for lane closures caused by the project and will require the provision of emergency access at all times. NEORSD has a good history of working closely with local officials on projects that will impact local roads and has taken measures to minimize the duration and impact of these effects.

Once construction is complete, the W3QW project areas will be restored and returned to pre-construction conditions and use. Therefore, the project will have no long-term change or adverse impacts on safety and traffic.

**Local Economy:** The median household income (MHI) of the benefitting properties is $45,289. The annual sewer bill, based on 1,037 cubic feet of monthly water use, is $1,253. This represents 2.77% of the MHI, which is considered affordable given the strong public need for the project and the favorable funding.

**Unaffected Environmental Features:** The project will have no adverse secondary (development-related) environmental impacts, including conversion of agricultural land to other uses, since it is not designed to serve growth in undeveloped areas. No state-designated scenic rivers or state-designated or federally-designated wildlife areas are present in or near the work sites. No wetlands are present in or near the work sites. No Sole Source Aquifers are present under the project, and residents obtain their drinking water from the City of Cleveland.

**Conclusion**

Based on the planning documentation, associated correspondence, public participation and the comments from interested agencies, the proposed project as designed will have no significant adverse long-term impacts 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 significant adverse long-term impacts with respect to noise, dust and odors. It will have long-term water quality benefits that will be associated with the prevention of a public and environmental health threat related to the exposure to untreated sewage via combined sewer overflows to the Cuyahoga River which flows to Lake Erie.

**Contact info**

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Figure 1: General project location.
Figure: Specific project locations, in red.