February 1, 2021

Limited Environmental Review and Finding of No Significant Impact

Erie County
Mitiwanga Regional Pump Station
Loan number: CS390022-0020

The attached Limited Environmental Review (LER) is for a wastewater collection and treatment project in Erie 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: Erie County Mitiwanga Regional Pump Station

Applicant: Erie County Commissioners
2900 Columbus Avenue
Sandusky, Ohio 44870

Loan Number: CS390022-0020

Project Summary

Erie County Commissioners have requested financial assistance from the Ohio Water Pollution Control Loan Fund (WPCLF) for the Mitiwanga Regional Pump Station project. The work consists of the demolition of an aged wastewater treatment plant (WWTP) and its replacement with a wastewater pumping station, installation of two wastewater force mains, and improvements to an existing wastewater pump station. This regionalization project is designed to take wastewater flow from an aged collection and treatment system and convey it to the Huron Basin collection and treatment system. The project is also designed to reduce sanitary sewer overflows (SSOs) and the discharge of nutrients which cause harmful algal blooms (HAB). The total loan amount is $5,403,480. The project is scheduled to begin construction in the first quarter of 2021 and be completed in nine months.

History & Existing Conditions

The Mitiwanga-Ruggles Beach WWTP, located at 4224 East Cleveland Road in Berlin Township, was originally constructed in 1970. The WWTP is designed to treat an average daily flow of 0.15 million gallons per day (MGD) and a maximum daily flow of 0.3 MGD. However, the current average daily flow to the WWTP is 0.11 MGD with a peak daily flow of 0.96 MGD, which is beyond the capacity of the WWTP. During storm events SSOs occur via the pumping of untreated or partially treated wastewater directly to Cranberry Creek, adjacent to Lake Erie. In addition to excessive wastewater volume, the aged WWTP is not able to meet its current National Pollutant Discharge Elimination System (NPDES) permit for various wastewater parameters.

The collection system that serves the Mitiwanga and Ruggles Beach areas consist of 100 percent gravity flow separated sanitary sewers. In 2000, the collection system was rehabilitated via cured-in-place pipe lining of sewer mains. In addition, manhole rehabilitation was also conducted to further reduce inflow and infiltration (I/I)\(^1\) into the collection system. Despite these repairs the collection system continues to be plagued by I/I, which conveys excessive clean water to the WWTP.

As part of the current NPDES permit, a schedule of compliance specifically suggested elimination of the Mitiwanga-Ruggles Beach WWTP and a connection to the Huron Basin collection system.

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\(^1\) 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.
The A Street Pump Station, located at 408 Ontario Street in Huron, is a large pump station that transfers the sanitary flow from the east side of Huron to the Huron Basin WWTP. The pump consists of a 3-pump system, with two 1,900-gallon per minute (GPM) pumps and one additional 400-GPM pump in the wet well. Currently, the pump station maxes out at around 2,900 GPM pumping ability during peak flow events. These pumps were installed in the early 80s and have been re-built many times. The pump station’s dry well has a history of flooding, and the components within the dry well, including the metal exterior have begun to show major signs of corrosion. The pump station has become a daily maintenance issue as well as a safety concern. The county is planning to abandon the existing dry well configuration and convert the pump station into a submersible pump station utilizing the existing wet well.

The presence of algal toxins, related to HABs, in surface water, drinking water source water, and in treated drinking water has been receiving considerable attention in recent years. Algae populations generally proliferate during the summer and fall, corresponding to warm water temperatures, and HABs are becoming increasingly prevalent. These seasonal issues in water quality have led to beach closures and “Do Not Drink” advisories being issued in communities whose source water has become contaminated with algal toxins. Microcystin has been the predominant type of algal toxin present in Lake Erie, and a concern in the communities that use Lake Erie as a drinking water source, such as Toledo, Vermilion, and Huron. Microcystins are extremely stable and resist common chemical breakdown under conditions found in most natural water bodies and are even stable in boiling water. Microcystins are able to cause serious damage to the liver, as well as being irritants to the skin, eyes, and throat. As Vermilion and Huron utilize Lake Erie as their raw water source, concerns exist related to the potential for “Do Not Drink” advisories due to HABs and related toxins. An increase in HAB events and intensity have raised concerns related to a potential increase in these advisories and the associated health risks of exposure to these toxins.

**Project Description**

The Mitiwanga Regional Pump Station project (see Figures 1-4) consists of the following three project actions:

**Cranberry Creek Pump Station**
A new triplex submersible cast-in-place regional pump station will be constructed at the existing Mitiwanga-Ruggles Beach WWTP site, including:
- New control building
- Wet well
- Submersible pumps
- Standby generator
- Piping
- Abandonment of the existing Mitiwanga-Ruggles Beach WWTP once construction of the pump station is complete
- Site improvements and restoration

**Cranberry Creek Force Mains**
Two wastewater force mains will be installed between the new Cranberry Creek Pump Station and the A Street Pump Station, including:
- Open cut and directional bore installation of approximately 41,000 linear feet of 10-inch diameter force mains. (The force mains will be installed in parallel and within the same trench/bore)
• Plug valves, air release valves and other miscellaneous appurtenances
• Site improvements and restoration

**A Street Pump Station**
Extensive upgrades, including:
• New submersible pumps installed in the existing wet well
• New valve vault with magnetic flow meter
• New pump controls with variable frequency drives installed in the existing building
• New outdoor natural gas standby generator with sound attenuation
• Minor aesthetic building improvements
• Site improvements and restoration

**Implementation**
Erie County Commissioners propose to borrow the entire cost for the project from Ohio’s WPCLF. Erie County will recover debt associated with this capital improvement project from monthly service fees, and the sewer rate paid by its customers is not currently scheduled to change to pay for the project. Erie County qualifies for a WPCLF zero-percent interest rate for wastewater regionalization projects. The 2021 monthly residential sewer rate in Erie County is $34.81 ($417.72 annually), based on average monthly water usage. This is 0.8 percent of the median household income of $52,270, which is considered affordable.

The total estimated loan amount for the project is $5,403,480. Borrowing this amount at zero-percent will save Erie County approximately $1,700,700 over the life of the loan compared to borrowing the same amount at the current 30-year market rate of 1.89 percent. Construction is expected to begin in first quarter of 2021 and to be completed in nine months.

**Public Participation**
Erie County has discussed the project at county meetings that were open to the public, and the LER will be posted on county’s website. Given the limited potential environmental and economic impact of the project, this is considered adequate public participation.

**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 and treatment system, which involves the functional replacement of and improvements to existing mechanical equipment. 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. The proposed project activities include improvements within the facility boundaries of an existing WWTP and pump station. The project also includes the installation of sanitary force mains in the right-of-way along a busy roadway that includes extensive prior excavation and existing utilities. 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 an existing wastewater treatment plant, pump station, and busy roadway right-of-way where extensive excavation has previously taken place and where no high-value resources are present.

• **Is cost-effective**, as the proposed action improves wastewater treatment and conveyance utilizing existing structures, when possible.

• **Is not a controversial action**, as there is no known opposition to the proposed project, the cost of the project is not overly burdensome to ratepayers, and the project will be financed through the WPCLF, saving approximately $1,700,700 in interest payments over conventional financing.

• **Does not create a new 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 infrastructure to improve the wastewater conveyance to an existing wastewater collection system and treatment facilities.

• **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 through the use of standard construction best management practices.

The proposed project is a cost-effective way to address necessary upgrades of Erie County wastewater conveyance and treatment facilities. Once implemented, the project will improve aged infrastructure, helping Erie County reduce sanitary sewer overflows, eliminate an aged and poorly performing wastewater treatment plant, and reduce the discharge of nutrients which cause harmful algal blooms. Also, by using WPCLF zero-interest financing, Erie County Commissioners have minimized the project cost.

**Contact information**

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Figure 1: General project area
Figure 2: A Street Pump Station (indicated in red, to the west), Mitiwanga-Ruggles Beach WWTP (indicated in red to the east), force main installation (indicated in green)
Figure 3: A Street Pump Station location
Figure 4: Mitiwanga-Ruggles Beach WWTP location