

# January 28, 2020

# Limited Environmental Review and Finding of No Significant Impact

City of Toledo - Lucas County
Filter and Pipe Gallery Upgrade Improvements
Loan number: FS390915-0124

The attached Limited Environmental Review (LER) is for a drinking water project in Lucas County which the Ohio Environmental Protection Agency intends to finance through its Ohio Water Supply Revolving Loan Account (WSRLA) 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, as described in Ohio Administrative Code (OAC) 3745-150-05.

Ohio EPA analyzes environmental effects of proposed projects as part of its WSRLA 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, as described in OAC 3745-150-06. 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: Filter and Pipe Gallery Upgrade Improvements

Applicant: Wade Kapszuklewicz, Mayor

City of Toledo

One Government Center 640 Jackson Boulevard

Suite 2200

Toledo, Ohio 43604

Loan Number: FS390915-0124

### **Project Summary**

The City of Toledo has applied for funding from the Ohio Water Supply Revolving Loan Account (WSRLA) for the Filter and Pipe Gallery Upgrade Improvements project. The project is intended to rebuild the existing filters to convert to biologically active filters with sand and granular activated carbon media to provide for the third barrier in the treatment of toxins related to Harmful Algal Blooms (HABs) at the Collins Park Water Treatment Plant (WTP). The estimated loan amount for the project is \$43,253,000, with construction scheduled to begin in March 2020 and to be completed in 34 months.

#### **History & Existing Conditions**

The City of Toledo owns and operates the Collins Park WTP, which provides drinking water to a service population of approximately 482,700 in Toledo and surrounding areas. Collins Park WTP draws its raw water from Lake Erie via an intake located three miles offshore of Reno Beach. Water flows from the intake via gravity to the low service pump station located adjacent to the Cedar Point National Wildlife Refuge in Jerusalem Township, Lucas County through a 108-inch diameter intake pipe buried under Lake Erie. Raw water is then conveyed by the pump station to Collins Park WTP via 9 miles of water lines.

Although late-summer HABs in Lake Erie have occurred in the past, they have grown in frequency and severity since the early 1990s, with a record-setting bloom in 2011. Of greatest concern is Microcystis, which is difficult to control naturally and produces microcystin, a toxin that can cause liver damage if ingested. In August of 2014, a large HAB occurred near the intake for the WTP in Lake Erie, during which the microcystin concentration in the raw water increased to over 50 times the level allowed in finished drinking water. This led to a "Do Not Drink" advisory for Toledo and prompted efforts at the WTP to research and invest in better microcystin removal technology, including optimizing the current treatment processes.

In response to widespread HABs, Ohio Administrative Code (OAC) Rule 3745-90-05 was implemented. This rule requires a General Plan to address treatment deficiencies when microcystin levels exceed a certain threshold. Accordingly, Toledo has developed a General Plan in response to high microcystin levels. This General Plan documents the capabilities of the treatment in place to

remove microcystin in the short-term and how the existing treatment, along with new treatment technologies, will be capable of treating in the long-term. The Filter and Pipe Gallery Upgrade Improvements project is one of many ongoing and planned projects to update the facility.

Toledo's water service area and population are not expected to undergo major changes in the next 20 years, which is the planning horizon for water treatment projects that are proposed for funding by the WSRLA. While Toledo itself has gradually lost population, most of the loss is accounted for by migration to neighboring communities to Toledo's service area. This suggests relative long-term stability in the regional service population and its water demand.

# **Project Description**

The Filter and Pipe Gallery Upgrade Improvements project (see Figures 1 and 2) will rebuild existing filters to support a revised configuration of mixed media sand and granular activated carbon that will promote biological growth to metabolize HAB products that are still present following treatment via ozonation within the WTP. The work will include replacement of existing filter bottoms, which will provide direct support of filter sand media, enable proper distribution of backwash water, and add air scour to improve filter backwash efficiency. The project also includes new blowers, piping, valves, structures, power, and filter control modifications.

## **Implementation**

The total estimated construction cost of the project is \$43,253,000. Toledo proposes to borrow the entire project amount from the WSRLA. The project service area qualifies for a zero percent, 20-year construction loan for HAB-related projects. Borrowing at zero percent will save Toledo approximately \$11,600,000 over the life of the loan compared to the current market rate of 2.42 percent.

Debt for the project will be repaid with revenue generated by water rates in the service area. Annual revenue increases of approximately 5% are expected from 2020 through 2023 to support debt issuances required to complete the balance of Toledo's \$500 million capital improvement program. The local median household income is \$35,808. Under the water rates that are effective in 2020, and based on average water usage, the average residential water bill is \$17.68 per month, or \$212.16 per year. This represents 0.59 percent of the MHI, which is considered affordable.

### **Public Participation**

Toledo maintains the Toledooh20.com web site dedicated to the water capital improvement program. The site includes a narrative of the General Plan, projects list, costs, status, quarterly news, and updates. Also, numerous presentations noting the proposed project have been made at public, professional, and City council meetings. No public concerns have been raised about the project. Based on the limited environmental and economic impacts, this is considered an appropriate level of 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 water treatment system, which involves the functional replacement of and improvements to existing infrastructure and equipment. Furthermore, the project meets the other qualifying criteria for an LER; specifically, the proposed project:

- will have no significant adverse environmental effect, since sensitive resources such as floodplains, wetlands, riparian areas, prime or unique agricultural lands, aquifer recharge zones, archaeological or historically significant sites, or threatened or endangered species are not present in the project area.
- does not require extensive specific impact mitigation, as the proposed project involves
  the replacement of existing water treatment infrastructure and equipment located within an
  existing WTP with extensive and repeated excavation and construction activities.
- will have no adverse effect on high value environmental resources, as the project area includes an existing WTP with extensive structures, access roads and utilities, so no high value environmental resources are present there.
- **is not a controversial action**, as user rates will not be increased as a result of this project, adverse impacts to environmental resources are unlikely to occur, and Ohio EPA is unaware of any public opposition to the project.
- **is cost-effective,** as repair and replacement of the WTP infrastructure will help to improve the facility's operation, improve treatment for HABs, and ensure continuous potable drinking water supply to residents and businesses located in the project area at a reasonable cost.
- does not involve a new or relocated discharge to surface or ground water, involve any increase in volume of discharge or loading of pollutants from an existing source or new facilities, create a new source of water withdrawals from either surface or ground waters, or significantly increase the amount of water withdrawn from existing sources; or provide capacity to serve a design population substantially greater (thirty percent) than the current design population, as no discharge points or pollutant loading will be part of the project. The project does not require the expansion of Toledo's water treatment facility beyond its current capacity or require the addition of a supplementary water supplier, so it will not require a change in water withdrawal. Little population change is anticipated during the 20-year planning period.
- will not create new sources of water withdrawals from either surface or ground waters, or significantly increase the amount of water withdrawn from an existing source; nor will it provide capacity to serve a population substantially greater than the existing population, as the project scope is limited to replacing existing water treatment structures.

The planning activities for the project have identified no potentially significant short-term or long-term adverse impacts on the quality of the human environment or on sensitive resources. Implementation of appropriate construction mitigation measures is required by the contract specifications and construction activity will be limited to the existing WTP with extensive structures, access roads and existing utilities. The project will benefit the project service area by replacing and improving existing drinking water treatment structures and will help improve the system's ability to treat for HABs, protecting human health.

# **Contact info**

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Figure 1: General project area, in red



Figure 2: Specific project area, in red