



**Mike DeWine**, Governor  
**Jon Husted**, Lt. Governor  
**Anne M. Vogel**, Director

**March 3, 2023**

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

**Morrow County  
SoMoCo WWTP Improvement  
Loan Number: CS390059-0021**

The attached Environmental Assessment (EA) is for a wastewater treatment construction and improvement project in Morrow 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 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.

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 the email address of the contact named at the end of the EA. 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, Morrow County can then proceed with its application for the WPCLF loan.

Sincerely,

A handwritten signature in black ink that reads "Kathleen Courtright".

Kathleen Courtright, Assistant Chief  
Division of Environmental & Financial Assistance

Attachment

## ENVIRONMENTAL ASSESSMENT

### **Project Identification**

Project: SoMoCo WWTP Improvement

Applicant: Morrow County  
80 North Walnut Street  
Mount Gilead, Ohio 43338

Loan Number: CS390059-0021

### **Project Summary**

Morrow County has requested financial assistance from the Ohio Water Pollution Control Loan Fund (WPCLF) for the SoMoCo WWTP Improvement project. Work for this project will primarily include the construction of a new wastewater treatment plant (WWTP), wastewater lift station, and force main sewer to correct environmental and public health issues related to runoffs of treated wastewater to surface water, and to replace a WWTP that is aged and in poor condition. Morrow County is eligible for approximately \$3,070,000 in grants from various entities to help pay for this project. The remaining estimated WPCLF loan amount is \$839,000. Debt for the project will be repaid from monthly sewer fees. The project is scheduled to begin in spring 2023 and be completed in 21 months.

### **History & Existing Conditions**

The Southern Morrow County (SoMoCo) Wastewater Treatment Facility, constructed in 1998, primarily receives wastewater generated from commercial facilities in the area of the State Route 61 and Interstate 71 interchange. The existing system is an aerated lagoon facility rated with an average daily flow of 0.35 million gallons per day (MGD). Influent wastewater is passed through a comminutor to break up any solids in the raw wastewater. Wastewater is then transferred to two aerated lagoon cells for biological treatment and then into a storage lagoon that allows for 120 days of hydraulic retention time. Effluent from the storage lagoon passes through an ultraviolet disinfection unit before being spray irrigated on an adjacent farm field.

For several years, the operation of the spray irrigation has had several concerns. Irrigation is only permitted under favorable weather conditions, which limits spray irrigation to a limited amount of the year. Even under favorable conditions, the soils present do not allow for a high infiltration rate, which can lead to ponding and runoff of treated sewage from the site; limiting the frequency that irrigation can occur. Furthermore, the existing mechanical components of the irrigation system have historically suffered from a poor operations and maintenance (O&M) program, and are beyond their useful life expectancy, causing maintenance issues.

Currently the WWTP receives an average daily flow of 70,000 gallons. However, the receiving flows fluctuate season to season and, often, day to day. Tourism at nearby businesses can generate large amounts of flow during the spring and summer months. This service area is also the subject of several proposed developments. The WWTP, which was formerly privately owned, was purchased by

Morrow County to allow for improvements and expansion to the plant in order to improve water quality by reducing the runoff of treated wastewater, and to allow for development in this commercial corridor of the county.

### **Population and Flow Projections**

This area has been identified as a critical part of Morrow County's strategic development plan due to its proximity to Columbus and its location along Interstate 71. Residential and, in particular, commercial growth is expected to occur in the 20-year planning period and has thus far been limited due to the condition of the existing WWTP. The WWTP is currently underperforming due to age and maintenance issues and is also impacting surface water due to runoff of spray irrigated, treated wastewater. The new WWTP has been designed to expand the capacity of the treatment system to manage existing and project flows in the service area, with a maximum design flow of 0.43 million gallons per day (MGD) and an average flow of 0.145 MGD.

### **Alternatives**

#### **Alternative 1. No Action**

A "no-action" alternative is not feasible since the existing WWTP would continue with its operational limitations, which results in the runoff of treated sewage from its spray irrigation locations, impacting and diminishing water resources in the area. This would result in continued threats to human health and the environment related to the release of pollutants of concern and stream enrichment. This alternative also does not allow for the treatment capacity for the desired development in this area of the county.

#### **Alternative 2. Regionalization**

Regionalization to the Delaware County Upper Olentangy Water Reclamation Center was considered. However, this alternative was found to be cost prohibitive due to the required transport of the project area's wastewater approximately 13 miles to Delaware's facility, requiring the installation of multiple pump stations, force mains, and gravity sewers, as well as the decommissioning of Morrow County's existing WWTP.

#### **Alternative 3. Sequencing Batch Reactor (SBR)**

SBR technology, while maintaining good effluent quality and requiring a small footprint, would require the majority of the existing facility to be abandoned, require larger disinfection facilities and additional operator skill and staffing times, and have a high level of power consumption.

#### **Alternative 4. Oxidation Ditch**

Oxidation ditch technology is reliable and energy efficient. However, this technology would also require the majority of the existing facility to be abandoned, require a large area for the new facility, and require extensive control systems and maintenance to operate.

#### **Alternative 5. Moving Bed Biofilm Reactor (MBBR)**

MBBR systems maintain good effluent quality, are easy to expand for future development, and have lower construction costs as compared to the other technologies. However, this technology does require high operational skills, and have high power consumption.

## **Selected Alternative**

An MBBR system was chosen through the process for several reasons. The MBBR facility utilizes the existing facility to provide the biological oxygen demand (BOD) removal portion of the treatment process. This minimizes the amount of treatment required in additional tanks which, in turn, minimizes the capital costs required to build the facility. This alternative provides a high degree of treatment and flexibility for variations in influent wastewater flow. The possibility for expansion can be accommodated using additional plastic media in each reactor or the addition of additional reactors.

The project includes construction of the following:

- Effluent meter chamber
- Lagoon integrated nitrification reactor (MBBR)
- Chemical mixing tank
- Disc cloth media filtration
- Equipment and treatment building
- Controls
- Ultraviolet disinfection
- Flow meters, valves, pumps
- Wastewater lift station
- 7,850 linear feet of 6-inch sanitary sewer force main piping
- Gates and fencing
- Grading and restoration

## **Implementation**

Morrow County expects to receive grants and funding from, among others, Ohio Builds and the American Rescue Plan Act, totaling approximately \$3,070,000. The remaining estimated project amount is \$839,000, and Morrow County proposes to borrow this balance from Ohio's WPCLF and qualifies for a zero-percent Nutrient Reduction Discount (NRD) WPCLF interest rate. Borrowing \$839,000 at zero percent will save Morrow County approximately \$606,000 for the 30-year loan period compared to borrowing the same amount at the current market rate of 3.98 percent.

Morrow County will recover debt associated with the project with revenue generated by monthly sewer fees. The projected 2023 monthly residential sewer rate in the project area is \$52.71 (\$632.52 annually). This is 1.02 percent of the median household income of \$61,769, as compared to the state average of 1.3 percent.

## **Public Participation**

This project has been discussed in multiple public meetings, and has been discussed extensively in the local media and through social media. A public notice announcing the availability of this Environmental Assessment will be posted on the Morrow County 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. Furthermore, coordination for this project has taken place with various federal, state, and local agencies and institutions, including the following:

Ohio Environmental Protection Agency  
Ohio Department of Natural Resources  
State Historic Preservation Office  
U.S. Fish and Wildlife Service

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: This project is not expected to have significant adverse long-term impacts on surface water resources, as the majority of the proposed force main sewer will be performed via directional bore within previously-disturbed road rights-of-way and limited easements on private properties, in which the predominant cover is pavement, gravel, and lawn grass. The proposed WWTP is adjacent to the existing WWTP, and will utilize a portion of the existing system. The project will not be located within a 100-year floodplain or regulatory floodway, and no wetlands are present in the project area. The proposed project will discharge treated effluent to Alum Creek with a permit to surface water, but will also eliminate threats to surface water related to the continued runoff of the existing WWTP's spray irrigated, treated wastewater.

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.

Based on the above, the proposed project will not result in significant adverse impacts to surface waters.

Terrestrial Habitat, Wildlife, and Endangered Species: The U.S. Fish and Wildlife Service (USFWS) indicates that the project is within the range of the endangered Indiana bat, proposed endangered tricolored bat, and threatened northern long-eared bat. Limited tree clearing is expected as part of this project, and is only permitted to occur October 1 to March 31 or in coordination with USFWS, and tree removal is limited to only those trees necessary for completion of the project (e.g., trees within the excavation location or within the path of heavy equipment, etc.).

The project is within the range of the federally protected bald eagle. However, no nesting sites are known or believed to be in the project area. The project is also within the range of the candidate species monarch butterfly. However, due to the location of the project and the lack of appropriate habitat present, this species is not likely to be impacted.

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

Air Quality: Morrow County air quality meets standards for the six regulated air pollutants (carbon monoxide, sulfur dioxide, nitrogen oxide, lead, particulate matter, and ozone). During construction, dust and vehicle exhaust will be insignificant sources of local air pollution. Dust due to excavation in dry weather will be controlled by good housekeeping measures (minimizing the area of disturbed

soil, road sweeping, dust suppression with water or other benign dust suppressant). Because of its use of emissions controls on motorized equipment, construction vehicle exhaust will be an insignificant pollution source compared to background sources of motorized vehicle exhaust in the greater project area.

Based on this information, the project should have no significant adverse short-term or long-term impacts on local air quality.

Noise and Odors: Motorized equipment will be used for the majority of project work, generating noise and odors that will be unavoidable but temporary. Noise will be controlled by using equipment that does not generate excessive noise or vibration. Work will be restricted to weekdays from 7:00 AM to 6:00 PM. Emissions controls on motorized construction equipment will reduce diesel odors. Once the project is complete, the wastewater collection and treatment systems will operate with no additional noise or odors.

The new WWTP and its operation will have the potential to create limited noise and odors in the project area. However, this WWTP will be replacing an existing underperforming WWTP that also creates noise as well as odors related to plant operation and spray irrigation of treated waste. Odors related to spray irrigation will be eliminated as part of this project, and the project will also eliminate threats to the environment related to the continued runoff of treated wastewater.

Based on this, the project will have no short-term or long-term significant adverse effects from noise, dust, and odors.

Safety and Traffic: Construction in road rights-of-way will cause temporary traffic disruption and potential threats to public safety. Contract documents require contractors to implement standard traffic controls to minimize traffic disruption and public safety risks. For example, contractors are required to cover or close trenches overnight, to maintain access for emergency vehicles at all times, and utilize traffic direction devices such as flaggers, cones, and barricades. With these precautions, the project is unlikely to create significant traffic disturbance or threats to public safety.

Once construction is complete, force main areas will be restored and returned to pre-construction conditions. The project will not permanently alter traffic patterns. Therefore, the project will have no long-term change or adverse impacts on safety and traffic.

Land Use: The installation and operation of the new WWTP and force main is likely to have indirect, development-related impacts. This project is being undertaken, in part, to allow for controlled growth and development in the service area. While development is expected to occur, the new WWTP and related improvements will improve wastewater treatment and reduce discharges of pollutants to surface waters, resulting in overall improved conditions for public health and the environment.

Archaeological and Historical Resources: Ohio EPA has concluded, based on the extensive pre-design review and historic structure avoidance that went into the design of the project, and based on the findings of the Phase I Cultural Resources Survey, *SoMoCo WWTP Improvement Project, Morrow County, Ohio L&A Project No: 22-0539*, that no features listed on, or eligible for listing on, the National Register of Historic Places will be adversely impacted by the proposed project. The State Historic Preservation Office has concurred with this finding.

Based on this information, Ohio EPA believes that due to the extent of disturbance in the project area, unrecorded archaeological sites or properties eligible for or listed on the National Register of Historic Places are not likely to be present. The Ohio State Historic Preservation Office has agreed with this conclusion.

In the event that archaeological properties are found during construction, contractors and subcontractors are required under Ohio Revised Code Section 149.53 to notify the Ohio State Historic Preservation Office and Ohio EPA and to cooperate with those entities in archaeological and historic surveys and salvage efforts when appropriate.

Unaffected Environmental Features: The project is not located in the Lake Erie coastal zone, no Wild or Scenic Rivers are present within the project area, no sole source aquifers are present under the project, and no prime or unique farmland will be impacted.

### **Conclusion**

Based upon Ohio EPA's review of the planning information and the materials presented in this Environmental Assessment, we have concluded that there will be no significant adverse impacts from the proposed project as it relates to the environmental features discussed previously. This is because these features do not exist in the project area, the features exist but will not be adversely affected, or the impacts will be temporary and mitigated. Once implemented, the project will provide a cost-effective way to address environmental and public health issues related to the continued runoff of the existing WWTP's spray irrigated, treated wastewater. Also, by using WPCLF low-interest financing, Morrow County has minimized the project cost.

### **Contact information**

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Figure 1. General project area





Figure 2. Project area