



Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

July 21, 2021

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

**Logan County
Lewistown Sanitary Sewer System
Loan Number: CS390046-0018**

The attached Environmental Assessment (EA) is for a sewer regionalization project in Lewistown 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 me at 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, Logan County can then proceed with its application for the WPCLF loan.

Sincerely,

Jonathan Bernstein

Jonathan Bernstein, Assistant Chief
Division of Environmental & Financial Assistance

Attachment

ENVIRONMENTAL ASSESSMENT

Project Identification

Project: Lewistown Sanitary Sewer System

Applicant: Logan County Water Pollution Control District
8100 State Route 708 South
PO Box 1150
Russells Point, OH 43348

Loan Number: CS390046-0018

Project Summary

Logan County Water Pollution Control District (subsequently referred to as Logan County), has requested \$1,888,623 from the Ohio Water Pollution Control Loan Fund (WPCLF) to construct a new sanitary sewer collection system for the Lewistown community. The new sewer will connect approximately 80 homes in Lewistown to the existing Indian Lake wastewater treatment plant (WWTP) in Russells Point. One new pump station will be installed in Lewistown, and force main sewers will be installed along County Road 61, State Route 274, and Roughton Road to an existing pump station on Roughton Road at Honda Transmissions Manufacturing. The sewer alignment will cross Jordan Creek and Rennick Creek by horizontal directional drilling under the creeks.



Figure 1

Monthly sewer treatment service charges will be implemented for residents to pay for collection and treatment of wastewater. This project will result in long-term community water quality benefits to recreational and ground waters due to reduced public and environmental health threats caused by exposure to pathogens in untreated sewage. Logan County anticipates construction of the project beginning in summer 2021 and complete by the end of 2022.

History & Existing Conditions

The unincorporated community of Lewistown is located in west-central Logan County, south of Indian Lake (see Figure 1). Wastewater treatment is currently provided by household sewage treatment systems (HSTS) consisting of either a septic tank or aeration unit. Most of these systems are failing and discharge untreated sewage to ditches, drainage ways, and underground tile lines that eventually discharge to Rennick Creek. The Logan County Board of Health and Washington Township Trustees have cited unsanitary conditions caused by untreated sewage discharges from failing HSTS.

Population and Flow Projections

The population of Lewistown is approximately 179 people, with 71 residential houses. The service area is a rural small community with little to no growth over the past 25 years. The population of Logan County in 2000 was 46,005 and in 2010 was 45,858, which shows a 0.32% decrease in population over the service area study period. Despite the trend in population reduction, 0.5% per year population growth was included in the study for the service area. The total future population of the Lewistown service area was estimated to be 197 people, or 79 households. There are no anticipated commercial business expansions. Flow estimations include an average daily flow of 28,440 gallons per day (GPD) and a peak hourly flow of 142,200 GPD for the projected future population of 197 people.

Logan County has proposed regionalizing Lewistown with Indian Lake for wastewater treatment, as described below. The Indian Lake Water Pollution Control Facility's average daily flow is 2.78 million gallons per day (MGD) with a design flow of 4.60 MGD.

Alternatives

Three alternatives were considered to remedy the failing HSTS: on-site remediation, centralization, and regionalization.

On-Site Remediation

On-site septic system remediation for failing home systems is not a feasible option for Lewistown. For the on-site systems to be compliant, they would need to follow Ohio Department of Health Rules for soil absorption and area requirements. Due to the soil type in Lewistown, this would need to be mounds of soil, and a significant number of lots within the Lewistown service area do not have sufficient space to site a new or replacement HSTS.

Centralization

Centralization of the Lewistown service area involves installation of a sanitary sewer collection and treatment system. The new treatment options for a service area of this small size would be mechanical treatment plant or a lagoon. Both of these options require environmental assessments, land purchase, stream anti-degradation addendum, and continuous operation and maintenance after construction. The treatment system will also require a National Pollutant Discharge Elimination System (NDPES) permit and additional staff to operate. The collection system options are the same as if the area were regionalized. This option was discarded as not feasible and was not investigated further.

Regionalization

Regionalization of the Lewistown service area would connect the area to existing facilities within the Logan County Water Pollution Control District (LCWPCD). The two facilities with pump stations available for connection are the Indian Lake High School (ILHS) and Honda Transmission Manufacturing (HTM). Both facilities have a lift station and force mains that are maintained by the LCWPCD.

The HTM pump station currently only serves the HTM plant but was built with additional capacity for future HTM expansion and other customer connections. Currently its average daily flow is

62,588 GPD, which is only 12% of its capacity. The Honda Manufacturing pump station has a large wet well and sufficient extra capacity available for Lewistown.

The ILHS pump station average daily flow is 8,950 GPD, which is 3% of the two-pump station's capacity. However, after investigating the two-pump station connection options, the existing pump station at ILHS was found to need extensive repairs and upgrades if it were to accept the Lewistown flows. ILHS pump station discharge capacity is limited by the force main size and longer distance to the WWTP. Additionally, the ILHS pump station needs to reserve capacity for future school expansion and would need larger wet well capacity to accept Lewistown's flows.

Selected Alternative

Logan County chose to regionalize Lewistown with the nearby Indian Lake WWTP. The new collection system will connect to the Indian Lake WWTP through the HTM pump station. This route was chosen because the HTM pump station has sufficient available capacity to accept Lewistown's flows, as well as the long-term operational costs associated with using an existing pump station (See figures 2 and 3).

Indian Lake's WWTP has sufficient capacity to treat the flows from Lewistown, which would increase the total average flow to 2.86 MGD. To allow residents to tie into the new collection system, 5,413 linear feet of 8-inch gravity sewer will be installed along the streets of Lewistown. A new pump station will be constructed on Hanford Street; 11,650 linear feet of 6-inch force main and 1,346 linear feet of 4-inch force main will connect it to the existing pump station at Honda Transmissions Manufacturing (Figure 2). The collection system will connect 71 homes initially, with a design accommodation for 80 homes (See Figure 4). Wastewater design flows are for 28,000 GPD, with the hydraulic capacity of 500,000 GPD during peak flows.

The new force main sewer will cross under Jordan Creek by horizontal directional drilling (HDD) under the stream beds as to avoid impacting aquatic resources and wildlife. The new collection system in Lewistown will similarly cross Rennick Creek by HDD.

A new monthly sewer fee of \$46 will be implemented for residents of Lewistown and will begin after the sewer is constructed and residents are connected. The cost to decommission, crush, and fill old septic tanks will be \$5,000 to \$7,000. Sewer tap fees will be \$3,500 for residents to connect to the new collection system.

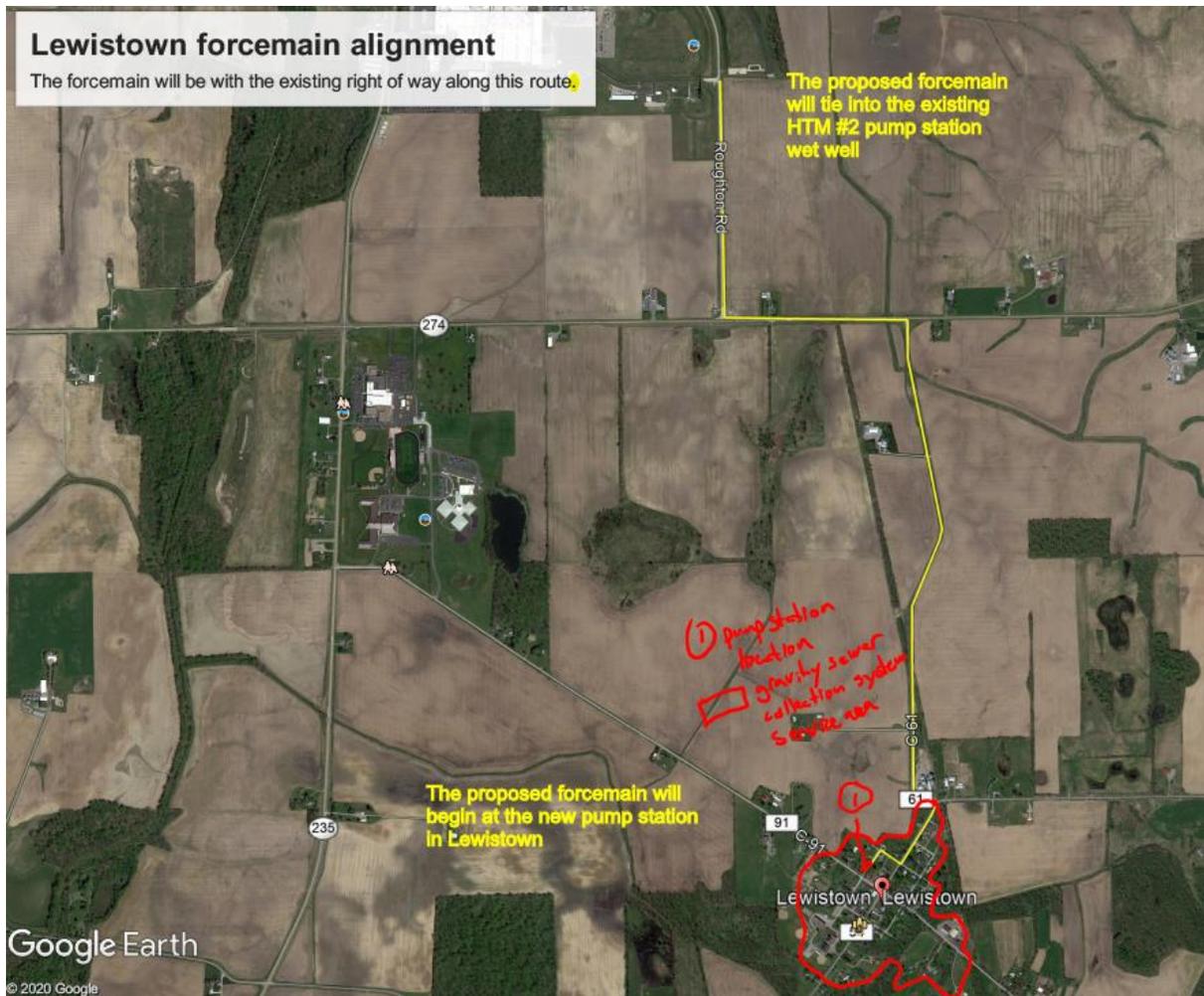


Figure 2. Map of Lewistown and proposed force main sewer extension and proposed new pump station in Lewistown on Hanford Street. The force main will connect to an existing pump station wet well on Roughton Road near Honda Transmissions Manufacturing.

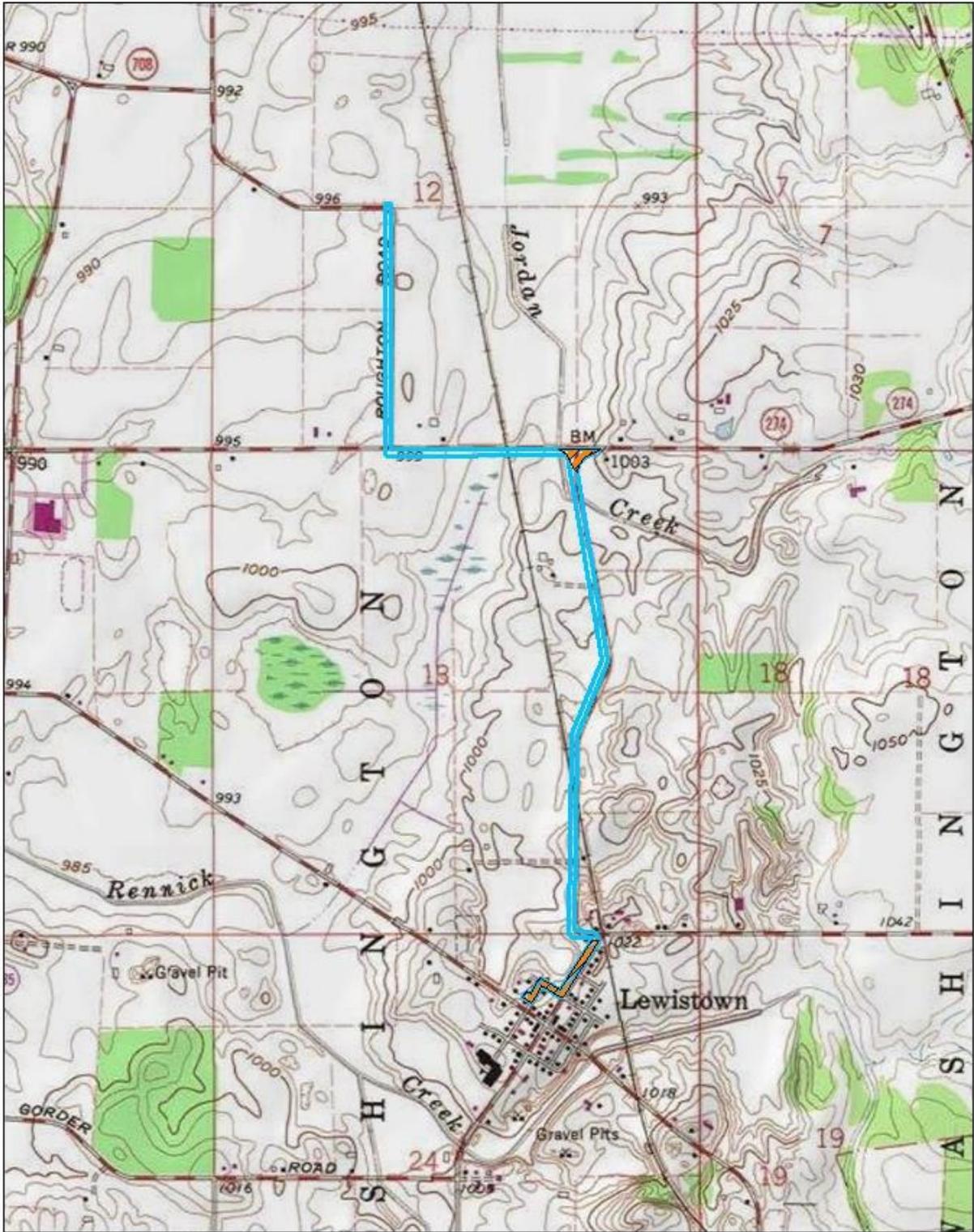


Figure 3. Map of Lewistown showing proposed force main alignment in blue.



Figure 4. Map of Lewistown collection system and new pump station located on the corner of Hanford Street.

Implementation

Logan County will combine \$1,110,000 from the Ohio WPCLF, with \$925,000 from the US Army Corps of Engineers 594 Program, and other sources to finance this construction project, for a total project cost of \$2,550,000. Logan County is eligible for a 0% regionalization interest rate. During the 30-year loan, Logan county will save approximately \$331,000 by using WPCLF dollars at this rate, compared to the market rate of 1.98%.

Logan County Water Pollution Control District will own and maintain the sewer system for the unincorporated community of Lewistown.

Assuming loan award in September 2021, construction should begin shortly after and be complete by fall 2022.

Public Participation

Logan County sent a detailed project flier to residents detailing the project scope, schedule, and what residents should expect with costs and the upcoming sewer bill. There is also further project information on their website (<https://www.logancowpc.com/Lewistown-Sanitary-Sewer-Project>). News articles have been published in local newspapers since 2020 about the project, and residents have been aware of Logan County's efforts and requirements to eliminate Logan County home septic systems since 2018.

Ohio EPA is not aware of any opposition to this project. Ohio EPA will make a copy of this document available to the public on its web page (<https://epa.ohio.gov/defa/ofa#169638769-wpclf-documents-for-review-and-comment>, WPCLF Documents for Review and Comment), to accept comments for one month, and will provide it on request to interested parties.

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. Most construction will occur in residential or road rights-of-way. Two creeks will be crossed by the new sewer alignment by HDD. Minimal amounts of tree removal and brush clearing will be needed, mainly on the abandoned lot in Lewistown where the new pump station will be installed.

Air Quality, Dust, Noise: Logan County meets standards for the six regulated air pollutants (carbon monoxide, sulfur dioxide, nitrogen oxide, lead, particulate matter, and ozone). The proposed project will result in temporary increases in dust, exhaust fumes, and noise from construction activities. This will be mitigated by standard construction best management practices, including emission control on motorized equipment and limiting work hours to the daytime. For these reasons, any effects on air quality will be short-term, and the project should have no significant adverse long-term impacts on local air quality.

Agriculture and Land Use: Because this project will be installing sanitary sewer and laterals underneath existing streets via narrow trenches dug, and horizontal directional drilled (HDD) pipe under Jordan Creek, Rennick Creek, and under road and farmland rights-of-way, land use will not sustain any permanent changes from sewer pipes installed. The new pump station will occupy part of an empty lot in Lewistown. All land use disruption will be from temporary construction disturbance and will be restored to the same residential and urban street land use after the project is complete.

Archaeological and Historical Resources: The proposed sanitary sewer system collection system, pump station, and force main will be constructed in residential and road rights-of-way, in areas that have already undergone grading, development, and disturbance. The collection system will be installed under streets that have been previously disturbed and graded, and the sewer force main will be installed using horizontal directional drilling to avoid surface disturbances in the right-of-way along County Road 61, State Route 274, and Roughton Road. A large area that the force main sewer will pass through has been previously surveyed and various artifacts were found within the surrounding survey area, but not the project area. These small lithic shards of objects and tools found were not eligible for registry. The State Historic Preservation Office has concurred with Ohio EPA's determination that this project will not cause an adverse effect to properties listed or eligible for

listing in the National Register of Historic Places, because there are no historic or listed archaeological sites in the project area.

In the event of archaeological finds during construction, Ohio Revised Code Section 149.53 requires contractors and subcontractors to notify the State Historic Preservation Office of any archaeological discoveries in the project area, and to cooperate with the Office in archaeological and historic surveys and salvage efforts. Work will not resume until a survey of the find and a determination of its value and effect has been made, and Ohio EPA authorizes work to continue.

Aquatic Habitat and Surface Water Resources: This project will cross under Jordan Creek and Rennick Creek by HDD to avoid disturbing aquatic habitat and aquatic wildlife. A stormwater pollution and protection plan will be in place to prevent sediment washing into streams and storm sewers. Silt fencing will be installed around excavations to prevent soil and sediment erosion.

Energy Use: By regionalizing Lewistown's sewer service with the nearby Indian Lake WWTP, compared to the amount of energy that would be required to construct an entire new wastewater treatment plant and treat sewage locally, Logan County is minimizing energy use. Gravity sewer passively carries sewage. The new pump station will use a small amount of energy to pump sewage via force main to the Indian Lake WWTP, but this is the lowest energy use of the considered alternatives.

Endangered Species, Fish and Wildlife: The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. To avoid impacting endangered bat species, tree removal should occur from October 1 through March 31.

The project is within the range of the rayed bean (*Villosa fabalis*), a state endangered and federally endangered mussel, the Iowa darter (*Etheostoma exile*), a state endangered species, the tongue-tied minnow (*Exoglossum laurae*) a state endangered fish, and the lake chubsucker (*Erimyzon sucetta*) a state threatened fish. The new sewer alignment will cross under Jordan Creek and Rennick Creek by horizontal directional drilling, to avoid negatively impacting the stream bed aquatic habitat. Because these habitats will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and federally threatened snake species, the spotted turtle (*Clemmys guttata*), a state threatened species, the cattle egret (*Bubulcus ibis*), a state endangered bird, and the sandhill crane (*Grus canadensis*), a state threatened species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Spotted turtles prefer fens, bogs and marshes, but are also known to inhabit wet prairies, meadows, pond edges, wet woods, and the shallow sluggish waters of small streams and ditches. Cattle egrets are not strictly wetland birds. They often forage in dry pastures and fields. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. Because these habitats will not be impacted, this project is not likely to have an impact on this species.

Floodplains: The new force main sewer along County Road 61 and State Route 274 will cross the regulatory floodplain. Because the force main will be HDD and buried where it crosses the floodplain,

this project will not permanently modify the floodplain, or create any structure above ground within the floodplain. The local floodplain coordinator has reviewed the project.

Local economy: A monthly flat rate sewer fee of \$46 will be charged to single family residences, and monthly sewer fees will begin to be collected after construction, resulting in an annual bill of \$552. This amount represents 1.0% of the median household income of \$55,150 in Logan County, and compares favorably to the Ohio average sewer bill of \$715. The septic tank decommissioning and connection to the new system costs are expected to be \$5,000 to \$7,000, and sewer tap fees are \$3,500. This may be a considerable new expense for residents, but it is understood that the new sewer improvements are necessary.

Safety, Traffic, and Aesthetics: The Logan County sanitary sewer project construction will occur along the residential streets of Lewistown and along local county roads. A traffic control plan will be coordinated with the county and Lewistown, as well as impacted homeowners that will be connected to the newly constructed sewer system. The plan ensures that county and village roads will remain open, and all local businesses and homeowners will have access to their properties throughout construction.

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

Terrestrial Habitat: Construction will involve digging trenches to install gravity sewer and the new pump station in Lewistown. Land will be restored to its previous grade and use after construction, and all piping will be buried. The new pump station will be located in town on an empty lot that is not valuable habitat.

Unaffected Environmental Features: The project will have no adverse secondary (development-related) environmental impacts. This project will have no adverse effect on *Coastal Zones, Farmland, Wild and Scenic Rivers, Ground Water Resources, Safe Drinking Water, and Wetlands* because these features are not present in the project area.

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.

This project will eliminate failing HSTS, construct a new gravity sewer collection system, and connect the residents of Lewistown to the Indian Lake WWTP, resulting in local public health and water quality benefits.

Contact information

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