Draft Environmental Assessment and Draft Finding of No Significant Impact

LEWISTOWN SANITARY SEWAGE COLLECTION SYSTEM PROJECT, LOGAN COUNTY, OHIO

Section 594 of the Water Resources Development Act Ohio and North Dakota Environmental Infrastructure Program

January 21, 2021



United States Army Corps of Engineers Louisville District

DRAFT FINDING OF NO SIGNIFICANT IMPACT

Lewistown Sanitary Sewer Collection System Project, Logan County, Ohio

The U.S. Army Corps of Engineers, Louisville District (Corps) has conducted an Environmental Assessment (EA) in accordance with the National Environmental Policy Act of 1969, as amended, for the Section 594 Lewistown Sanitary Sewer Collection System Project (Project) planned for the unincorporated community of Lewistown, Ohio (Lewistown). The draft EA, dated 21 January 2021, details the environmental consequences of the Project as well the other alternatives considered.

The Draft EA, incorporated herein by reference, evaluated various alternatives that would deliver cost-effective, environmentally-sound sanitary sewer services to residents within the Lewistown service area. The recommended plan, which is also the Locally Preferred Plan (LPP), involves regionalization of wastewater treatment for Lewistown, which involves connecting homes to a regional wastewater treatment plant. This involves the construction of a wastewater collection system that connects to an existing lift station maintained by the Logan County Water Pollution Control District.

In addition to a "no action" plan, three alternatives were evaluated. The alternatives included: 1) remediation, by replacing existing privately owned residential septic systems; 2) regionalization of wastewater treatment by connecting to an existing force main and lift station (recommended plan); and 3) centralization of wastewater treatment by building a wastewater treatment plant and sewage collection system for Lewistown.

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the recommended plan are listed in Table 1:

Table 1: Summary of Potential Effects of the Recommended Plan

	Insignificant effects	effects as a result of	Resource unaffected by action
Aesthetics		mitigation*	
Air quality	×		
Aquatic resources/wetlands			×
Invasive species			×
Fish and wildlife habitat			×
Threatened/Endangered species/critical habitat			×

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	Insignificant effects	Insignificant effects as a result of mitigation*	Resource unaffected by action
Historic properties			×
Other cultural resources			×
Floodplains	⊠		
Hazardous, toxic & radioactive waste			X
Land use			X
Navigation			X
Noise levels	⊠		
Public infrastructure			X
Socio-economics			\boxtimes
Environmental justice			\boxtimes
Soils			\boxtimes
Tribal trust resources			X
Water quality			\boxtimes
Climate change			X
Prime and unique farmland			X
Wild and Scenic Rivers			X
Transportation and traffic	×		

All practical means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices, as outlined in the EA (e.g. silt fences), would be implemented before, during, and after construction, and is expected to minimize the potential for deleterious effects to the environment. After construction is completed, re-seeding and re-vegetation would be performed to minimize erosion losses and protect surface soils.

No compensatory mitigation is required as part of the recommended plan.

Public review of the draft EA and FONSI was initiated on February 16, 2021. A 30-day state and agency review of the draft EA was initiated on February 16, 2021. All comments submitted during the public and state and agency review periods will be responded to in the Final EA and FONSI, and any necessary changes will be incorporated.



Pursuant to section 7 of the Endangered Species Act of 1973, as amended, the U.S. Army Corps of Engineers determined that the recommended plan would have no effect on federally listed species or their designated critical habitat.

Pursuant to section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that historic properties will not be adversely affected by the recommended plan. The Kentucky Heritage Council concurred with the determination on 18 November 2020.

A water quality certification pursuant to section 401 of the Clean Water Act is not required to implement the recommended plan, which will not result in any discharge into waters of the United States.

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed.

Technical, environmental, and economic criteria used in the formulation of alternative plans were those specified in the Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Based on this report, the reviews by other Federal, State and local agencies, Tribes, input of the public, and the review by my staff, it is my determination that the recommended plan would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.²

Date	Eric D. Crispino
	Colonel, U.S. Army
	District Commander

¹ 40 CFR 1505.2(B) requires identification of relevant factors including any essential to national policy which were balanced in the agency decision.

² 40 CFR 1508.13 stated the FONSI shall include an EA or a summary of it and shall note any other environmental documents related to it. If an assessment is included, the FONSI need not repeat any of the discussion in the assessment but may incorporate by reference.





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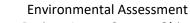
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List of Acronyms

APE – Area of Potential Effect

CEQ – Council on Environmental Quality

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

EA – Environmental Assessment

EIS – Environmental Impact Statement

EPA – Environmental Protection Agency

HTRW – Hazardous, Toxic, and Radioactive Waste

HUC – Hydrologic Unit Code

NEPA – National Environmental Policy Act

NPDES – National Pollutant Discharge Elimination System

NAA – No Action Alternative

ODT – Ohio Department of Transportation

RCRA – Resource Conservation and Recovery Act

USACE – United States Army Corps of Engineers

USGS – United States Geological Survey

WPCD – Water Pollution Control District

WRDA – Water Resources Development Act



1.0 PROJECT DESCRIPTION

1.1 Project Background and Authorization

The purpose of the Environmental Assessment (EA) is to analyze potential environmental impacts that would result from the Lewistown New Sanitary Sewage Collection System Project (Recommended Plan) and reasonable alternatives in Washington Township, Logan County, Ohio, and determine whether the preparation of an Environmental Impact Statement (EIS) is required.

The Recommended Plan would be carried out through a partnership agreement between the Logan County Water Pollution Control District (WPCD) and the Louisville District United States Army Corps of Engineers (USACE) established under the authority of Section 594 of the Water Resources Development Act (WRDA) of 1999 (Public Law 106-53, 113 STAT 381), as amended. Section 594 authorizes federal design and construction assistance to non-federal interests to carry out water-related environmental infrastructure and resource protection and development projects in Ohio and North Dakota.

This EA was prepared pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) Regulations (40 C.F.R. Parts 1500-1508), and Corps of Engineers Regulation ER 200-2-2, *Policy and Procedures for Implementing NEPA* (33 C.F.R. Part 230). This EA was prepared to describe the existing conditions in the vicinity of the Project Area and evaluate the potential impacts associated with the recommended plan and reasonable alternatives.

1.2 Location

The project area is located in Washington Township in the west central portion of Logan County, Ohio (Figure 1). Lewistown is 1.75 miles southeast of the intersection of State Route 235 and State Route 274, and is approximately eight miles northwest of Bellefontaine, the principal city of Logan County (Figure 1). The project area is within the 8-digit U.S. Geological Survey (USGS) Hydrologic Unit Code (HUC) 05080001, which is the Upper Great Miami Watershed (USGS 2020).



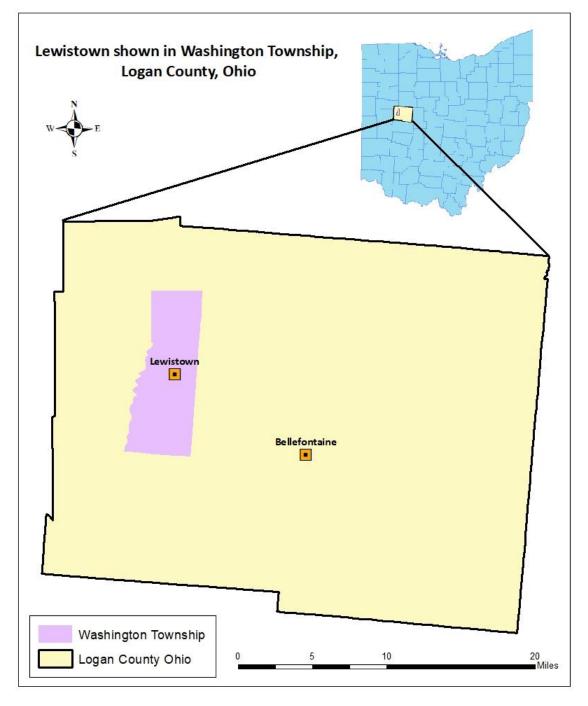


Figure 1. General Location of Lewistown New Sanitary Sewage Collection System Project Area

The Project Area consists of a 65.5-foot wide corridor for the sewer collection lines and two laydown yards (Figure 2). The first laydown yard is located at the intersection of OH-274 and Township Highway C-61. The second laydown yard is located along the Unincorporated community of Lewistown (hereafter referred to as Lewistown) street of Hartford. The Project Area totals approximately 18.1 acres.





Figure 2. Proposed Lewistown Force-main Route and Laydown Areas. Shown with Lewistown and the Potential Force-main Connection Sites of Indian Lake High School and Honda Transmission Manufacturing



1.3 Purpose and Need

The purpose of this project is to deliver a cost-effective, environmentally-sound approach to meet both the existing and future sanitary sewer needs for residents within the Lewistown service area. The plan for sewage improvements will correct unsanitary conditions as identified by the Logan County Board of Health and Washington Township Trustees. The proposed sanitary sewage collection system would service approximately 71 residential houses in Lewistown. The proposed system would currently have the capacity for 62,588 gallons of wastewater per day and would to be able to accommodate future growth to the community of Lewistown.

Wastewater treatment within the service area is currently provided by individual on-lot systems consisting of either a septic tank or an aeration unit. In most cases, these systems are malfunctioning and discharge untreated sewage to ditches, drainage ways, or underground tile lines with eventual discharge to Rennick Creek, which borders the southern edge of Lewistown. This is evidenced by high organic enrichment of Rennick Creek and is discussed further in section 4.3.

The completion of a new sewage collection system will allow for controlled and quality growth of residential and non-residential entities within the Lewistown sanitary service area and assist in bringing the area into compliance with federal and state water quality requirements outlined by the Clean Water Act and Ohio's Household Sewage Treatment Rules 3701-29. The Project will follow the guidelines set forth under the Program Implementation Guidance for the Ohio Environmental Improvement Program (30 July 2001).

2.0 RECOMMENDED PLAN AND ALTERNATIVES

2.1 No Action Alternative

Under the No Action Alternative (NAA), implementation of a new sewage treatment or collection system would not occur. Malfunctions of individual soil absorption systems in Lewistown (hereafter referred to as Lewistown) would be expected to continue and would result in surface ponding and discharge of improperly treated septic tank effluent. High fecal coliform levels in roadside ditches will continue to preclude compliance with Ohio's Water Quality Standards and present potential health risks to area residents. Although the NAA would not meet the purpose and need of the project, CEQ regulations require analysis of the NAA to serve as a baseline against which to measure the environmental impacts of other alternatives and to evaluate the adequacy of the Recommended Plan in meeting the purpose and need of the action.

2.2 Alternatives Considered

2.2.1 On-site Remediation of Residential Septic Systems

On-site remediation of residential septic systems would follow the Ohio Department of Health Household Sewage Treatment Rules 3701-29. Rule number 3701-29-07 discusses soil absorption and area requirements. A new sewage treatment system (STS) shall only be located where there is sufficient suitable area available to accommodate the system, including a designated area for complete relocation and replacement of the system. Due to the soil type in the Lewistown area, the most appropriate soil-based technology would be mounds. Section 3701-29-13.2 of the Ohio



Department of Health Rules regulates mounds and required lot sizes. Based on these rules, a significant number of lots within the Lewistown service area do not have sufficient area to site a new or replacement STS. Therefore, on-site remediation would not meet the purpose and need of the project. It was therefore determined to be infeasible and was not analyzed further in this EA.

2.2.2 Regionalization

Regionalization of the Lewistown service area will connect households in the service area to existing wastewater treatment facilities within the Logan County Water Pollution Control District (LCWPCD). The two facilities available for connection are located at the Indian Lake High School (ILHS) and Honda Transmission Manufacturing (HTM) (Figure 2). Both facilities have a lift station and force mains maintained by the LCWPCD.

Each connection point (HTM and ILHS) have available capacity for the Lewistown service area. The HTM force main routing is 3,900 feet longer than the ILHS routing but has a much greater average capacity. The regionalization of wastewater treatment in Lewistown would also include the construction of a collection system. The feasible collection system options are:

(1) Conventional gravity sewer with a single pump station

Conventional gravity sewer systems are the most common means of collecting and transporting raw sewage. The system layout would consist of:

- A 4-inch or 6-inch water-tight gravity sewer lateral and cleanout connection to each individual house/business from the sewer main to the right-of-way line. Connections to the building would be made by the property owner.
- The main sewer would be an 8-inch water-tight, PVC, sewer main transporting sewage from the laterals to a central point. The mains would be laid at a minimum grade of 0.44% to insure the transport of solid waste in the liquid stream.
- Manholes would be spaced every 400 feet and at all major intersections of pipes and grade changes.
- The pump station would be sized for peak hour volumes and future flows. Standby power and telemetry software would be compatible with the LCWPCD system.
- The force main would be six inches in diameter and could be directional bored to save restoration costs.
- A pump station site is available on property that Lewistown Township owns or property will be purchased.

Advantages:

• Minimal operation and maintenance costs, long useful life.



- Little energy consumption.
- The collection system is more accessible for repairs or maintenance.
- Very high reliability.
- A sloped terrain improves its ability.
- Low Visibility.

Disadvantages:

- High installation costs due to damage to existing yards and landscapes due to deep excavation, and potential deep excavations along township streets will require asphalt repair
- Potential for significant inflow and infiltration of stormwater
- Future growth capabilities are partially limited by high installation costs
- Pump station odors

(2) Pressure sewer system with individual grinder pumps

Pressure sewer systems with grinder pumps are typically appropriate in areas where lots are at least one-half acre. Pressure sewers are also well suited for small or widely dispersed communities to add collection areas as sporadic growth occurs. They are similar to septic tank effluent sewers except a grinder pump is used instead of a septic tank to prevent clogging.

Grinder pump pressure systems produce wastewater with higher than normal organic loading due to little or no dilution from inflow/infiltration. Operation and maintenance are higher than other options due to power cost and pump replacement costs. Power costs will range from \$2.50 to \$3.00 per pump/month for a single unit. In some cases, double units (units serving more than one connection) will need a meter set. Meter set charges are a minimum of \$35/month from the local utility company. The system layout would consist of the following:

- A network of small diameter PVC pipes ranging in size from 1 ½- to 3-inches buried with 4.5 feet of cover.
- A grinder pump station would be installed at each residence.
- Check valves would be installed between the pump and the force main in the street or roadway.



- Connections from the structure to the grinder pumps would be made by the property owner.
- Electric service would come from the residence. No additional electric meters will be set.
- Easements for the grinder pumps in some locations.
- Isolation and cleanout valves throughout the network.
- The grinder pump network would tie directly into the HTM or ILHS pump station. No additional pump station would be needed.

Advantages:

- Initial costs are lower due to easier installation with the smaller diameter pipe and shallower, narrower trenches.
- The grade of pipe installation is not critical and can vary dependent upon topography.
- System expansion can be accomplished one house at a time without consideration to large collector lines needed for future expansion.
- The sealed pipe system reduces inflow and infiltration and consequently reduces treatment facility sizing.
- The need for manholes at all junctions, changes in grade and alignment, and at regular intervals is eliminated resulting in further potential cost savings.

Disadvantages:

- Multiple pumping units increase maintenance costs due to higher number of maintenance calls for pump failures.
- High maintenance costs due to pump and pump control replacement.
- The small decentralized nature of the grinder pumps are susceptible to power failures, and only have minimal storage available in grinder pits.
- Damage to existing yards and landscapes to install grinder pump stations and electric services in front yards.
- Not aesthetically pleasing (pump station lid and controls).



2.2.2.1 Connection to the Honda Transmission Manufacturing Pump Station

The HTM pump station services only the HTM plant. At the time of construction, the pump station was built with additional capacity for future HTM expansion and other customers. The most current flow data available is outlined below.

• Average daily: 62,588 gallons per day (gpd).

• Peak day: 48,333 gpd.

• Pumps: 360 gallons per minute (gpm) each

Capacity used: 12%

2.2.2.2 Connection to the Indian Lake High School Pump Station

The ILHS pump station services the Indian Lake High School and Middle School. At the time of construction, the pump station and force main were built with additional capacity to service a future Industrial Park at the intersection of SR 235 and SR 708. The industrial park has not been constructed at this time. The most current flow data available for this station is outlined below.

• Average daily: 8,950 gpd.

• Peak day: 11,000 gpd.

• Two pumps: 225 gpm each

• Capacity used: 3%

2.2.3 Centralization

Centralization of the Lewistown service area involves the installation of a sanitary sewer collection system and construction of a sewage treatment system. Treatment system options for a service area of this size include mechanical treatment plant or lagoon treatment system. Both options would require additional environmental assessments, land purchase, stream anti-degradation addendum, and continuous operation and maintenance after construction. The treatment system would also require an individual National Discharge Pollutant Elimination System (NDPES) permit, additional staff to operate, and would result in a greater impact to the environment.

The options for a sewage collection system, which would need to be installed for a centralization or regionalization alternative, would be the same as if the area was regionalized (i.e., conventional gravity sewer with a single pump station, or a pressure sewer system with individual grinder pumps; described above in section 2.2.2). The environmental impacts would be therefore be the same for this aspect of a centralization alternative.

The centralization of the Lewistown service area was not considered reasonable due to the ability for regionalization, increased short-term and long-term costs, and increased impacts to the environment associated with the construction and operation of a sewage treatment plant. Thus centralization was not analyzed further in this EA.



2.3 Recommended Plan

The recommended plan is regionalization of wastewater treatment for Lewistown, with a conventional gravity sewage collection system with a pump station located on property owned by the Washington Township. A conventional gravity sewer was selected for its reliability, low maintenance cost, and lack of a need to install unsightly individual pumps on residential properties. A pressure sewer system with individual pumps would have required more disturbance to residential property and would have the same effects to the environment as the conventional gravity sewer system.

The new force main will connect to the HTM pump station with the route shown in Figure 2. This option was chosen because the HTM pump station has a higher capacity than the ILHS pump station, meaning that as the population of Lewistown grows capacity will be less of an issue. Additionally, distance from Lewistown to the HTM or ILHS pump stations is approximately the same and therefore environmental effects of the installation would be approximately the same.

With the implementation of the recommended plan, individual property owners would be responsible for the elimination, removal, or abandonment of their existing on-site septic system, and connection to the new sewage collection system. The cost for this work is estimated to be approximately \$1,500 to \$2,000 for each system.

3.0 ENVIRONMENTAL SETTING AND CONSEQUENCES

The NEPA and the CEQ's NEPA Implementing Regulations require that an EA identify the likely environmental effects of a proposed project and that the agency determine whether those impacts may be significant. Impacts can be either beneficial or adverse and can be either directly related to the action or indirectly caused by the action. Direct effects are caused by the action and occur at the same time and place (40 C.F.R. § 1508.8[a]). Indirect effects are caused by the action and are later in time or further removed in distance but are still reasonably foreseeable (40 C.F.R. § 1508.8[b]).

The determination of whether an impact significantly affects the quality of the human environment must consider the context of an action and the intensity of the impacts (40 C.F.R. § 1508.27).

The term "context" refers to the affected environment in which the recommended plan would take place and is based on the specific location of the recommended plan, considering the entire affected region, the affected interests, and the locality. The term "intensity" refers to the magnitude of change that would result if the recommended plan were implemented.

Determining whether an effect significantly affects the quality of the human environment also requires an examination of the relationship between context and intensity. In general, the more sensitive the context (i.e., the specific resource in the recommended plan's affected area), the less intense an impact needs to be in order for the action to be considered significant. Conversely, the less intense of an impact, the less scrutiny even sensitive resources need because of the overt



inability of an action to effect change to the physical environment. The consideration of context and intensity also must account for the indirect and cumulative effects from a recommended plan. This section describes the existing environmental conditions in the project area (affected environment), providing a baseline for measuring expected changes that would result from implementation of the proposed revised Master Plan.

This Section presents the adverse and beneficial environmental effects (direct and indirect) of the recommended plan and the NAA. The section is organized by resource topic, with the effects of alternatives discussed under each resource topic. Impacts are quantified whenever possible. Qualitative descriptions of impacts are explained by accompanying text where used.

Qualitative definitions/descriptions of impacts as used in this section of the EA include:

Intensity:

- No Effect, or Negligible a resource would not be affected, or the effects would be at or below the level of detection, and changes would not be of any measurable or perceptible consequence.
- Minor effects on a resource would be detectable, although the effects would be localized, small, and of little consequence to the sustainability of the resource. Mitigation measures, if needed to offset adverse effects, would be simple and achievable.
- Moderate effects on a resource would be readily detectable, localized, and measurable. Mitigation measures, if needed to offset adverse effects, would be extensive and likely achievable.
- Significant effects on a resource would be obvious and would have substantial consequences. The resource would be severely impaired so that it is no longer functional in the project area. Mitigation measures to offset the adverse effects would be extensive, and success of the mitigation measures would not be guaranteed.

Duration:

- Short-term temporary effects caused by the construction and/or implementation of a selected alternative.
- Long-term caused by an alternative after construction has been completed and/or when it is in full and complete operation.

3.1 Land Use

3.1.1 Existing Condition

Land use for the area is mixed (Figure 2). The land use within the Project Area is almost entirely road right-of-way, with one 0.15-acre empty lot in the community of Lewistown proposed as a laydown area. Surrounding the Project Area is residential land use with approximately 71 homes,



a high school, and a middle school. Some deciduous forest exists east of the Project Area area and along Rennick Creek. Agricultural land-use is also prevalent outside of Lewistown.

3.1.2 Environmental Consequences

3.1.2.1 *No Action*

The NAA would have no effect on land use. Land use in Lewistown would be expected to remain similar to the existing condition for the reasonably foreseeable future with the implementation of no action.

3.1.2.2 Recommended Plan

The sewage collection line installed with the recommended plan would have a negligible effect on land use. All sewage collection lines would be buried underground. Any areas of broken pavement will be fixed and any areas of lawn that is disturbed will be seeded and are thus temporary negligible effects. Implementation of the recommended plan would allow for environmentally sustainable growth of the community by facilitating the proper treatment of wastewater. Growth could be realized by an increase in residential homes or commercial properties and would be subject to any zoning regulations deemed appropriate by the township.

3.2 Climate

3.2.1 Existing Condition

Climate data were gathered from the nearest National Oceanic and Atmospheric Administration weather station in Bellefontaine, Ohio approximately eight miles southeast of Lewistown (latitude 40.3533 and longitude -83.7747) at 1,185 feet above mean sea level (National Oceanic and Atmospheric Administration 2020). This station collected temperature and precipitation data between 1981 and 2010. The climate of the area is generally temperate with cold winters and warm summers. The average daily temperature is 50.4°F. The average hottest month is July with a mean daily high of 82.7°F. The coldest average month is January, with the mean daily low being 17.3°F. The average yearly precipitation is 39.82 inches. The wettest average month is June (4.50 inches), and the driest average month is February (2.22 inches).

3.2.2 Environmental Consequences

3.2.2.1 *No Action*

There would be no impacts to climate as a result of the NAA.

3.2.2.2 Recommended Plan

The recommended plan would not involve permanent activities that could significantly affect the climate. The effects of increased local emissions caused by construction activities required by the recommended plan would be negligible and temporary.

3.3 Terrestrial Habitat

3.3.1 Existing Condition

The project area is located in the Clayey, High Lime Till Plains level IV ecoregion, which is within the Eastern Corn Belt Plains. The landscape is predominantly a rolling till plain, with glacial deposits of Wisconsinan age being extensive. This area is characterized by extensive



corn, soybean, wheat, and livestock farming. Prior to farming becoming the dominant land use, beech forest and scattered elm-ash swamp were the predominant habitat type. Soils are described in section 3.6.

The terrestrial habitats located in the vicinity of and within the Project Area (Figure 2) consist of mowed grass, urban forest, deciduous forest, and agricultural land.

3.3.2 Environmental Consequences

3.3.2.1 No Action

The NAA would have no effect on terrestrial habitat.

3.3.2.2 Recommended Plan

The recommended plan would have no effect on terrestrial habitat. The sewage collection system will be placed entirely within the maintained road right-of-way and no forest or farmland will be disturbed. The two laydown areas would be on road right of ways and a grassy lot respectively (Figure 2). No trees would be removed during implementation of the recommended plan. All areas of disturbed earth will be reseeded after construction.

3.4 Aquatic Habitat/Water Quality

3.4.1 Existing Conditions

The Project Area is a part of the Rennick Creek watershed. Rennick Creek and much of the broader watershed is considered imperiled (USEPA 2020). The reasons for impairment include habitat alterations, organic enrichment/low dissolved oxygen, polychlorinated biphenyls in fish tissue, and siltation (USEPA 2020). The Ohio EPA had not developed total maximum daily loads for the watershed at the time of this EA.

The proposed force main route crosses twice under Jordan Creek, a tributary to the Great Miami River. Jordan Creek is mostly unforested, highly incised, and runs through agricultural land, giving the tributary an appearance like that of an agricultural ditch. A site visit to the area revealed that drain tiles from the agricultural fields drain into Jordan Creek. Photos from the site visit can be found in Appendix A. Streams in this area are low gradient and turbid, with no exceptional fish communities (USGS 1998).

3.4.2 Environmental consequences

3.4.2.1 No Action

Under the NAA, there would be the continued release of untreated sewage onto the landscape and eventually into Rennick Creek. Thereby causing continued issues with organic enrichment/low dissolved oxygen in Rennick Creek and the Upper Great Miami River Watershed.

3.4.2.2 Recommended Plan

The recommended plan would limit the introduction of organic material on the landscape and thus result in long-term improved water quality for Rennick Creek and the Upper Great Miami River Watershed. There may be temporary minor increases in turbidity during the installation of underground sewage collection lines, however best management practices (BMP's) including silt



fences and reseeding disturbed ground will be utilized to reduce any impact. The sewage collection system would be installed by directional boring underneath Jordan Creek, resulting in no effect to aquatic habitat and water quality.

3.5 Floodplains

3.5.1 Existing Condition

Executive Order 11988 requires Federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. The northern portion of the Project Area is within the 100-year flood plain of Jordan Creek (FEMA 1985) and a map can be found in Appendix B.

3.5.2 Environmental Consequences

3.5.2.1 No Action

The NAA would have no effect on floodplains.

3.5.2.2 Recommended Plan

Consultation of Federal Emergency Management Agency (FEMA) floodplain maps indicate that a small portion of the Project Area is located in the 100-year, or 1% annual chance flood hazard zone, and therefore would require a floodplain construction permit (FEMA 1985). Implementation of the recommended plan would not alter elevation of the floodplain, impact floodplain function, or encourage development within the floodplain. Permitting and regulation by ODNR would ensure that there are no adverse effects on the floodplain from implementation of the recommended plan.

3.6 Soils and Prime and Unique Farmland

3.6.1 Existing Condition

Review of National Resource Conservation Service (NRCS) soil maps revealed there are 16 soil types present in the project area. All of them are prime farmland except for one. A detailed report and map of the soils found in the project area can be found in Appendix B. The five most predominate soils present are shown in Table 1 and all are prime farmland.

Table 1. Predominant soil types within the Lewistown New Sanitary Sewage Collection System Project Site.

Soil Name	Prime Farmland (Yes/No)
St. Clair silt loam, 2 to 6 percent slopes	Yes
Minster silty clay loam, 0 to 1 percent slopes	Yes
Latty silty clay	Yes
Eldean silt loam, 0 to 2 percent slopes	Yes
Nappanee silt loam, 2 to 6 percent slopes	Yes



3.6.2 Environmental Consequences

3.6.2.1 No Action

The NAA would have no effect on soils or prime and unique farmland.

3.6.2.2 Recommended Plan

The recommended plan would have no effect on soils or prime and unique farmland. All construction would occur within road rights-of-way which consist of heavily impacted soils and preclude any farming activities. The two laydown areas would be on road right of ways and a grassy lot respectively (Figure 2). The use of BMPs including silt fences and reseeding would minimize any potential erosion of soils.

3.7 Wetlands

3.7.1 Existing Condition

U.S. Fish and Wildlife National Wetlands Inventory (NWI) maps were reviewed for the proposed project area and can be found in Appendix B (USFWS 2020). The maps revealed that there are no wetlands along the route of the proposed force main. A site visit on July 13, 2020 confirmed this finding.

3.7.2 Environmental Consequences

3.7.2.1 *No Action*

The NAA would have no effect on wetlands.

3.7.2.2 Recommended Plan

The recommended plan would have no effect on wetlands, as all construction activities would take place outside of wetlands and construction BMPs would minimize potential stormwater runoff into wetlands.

3.8 Wild and Scenic Rivers

No designated State Wild or Scenic Rivers are present within the Project Area (EPA 2020). Therefore, no change to these resources is anticipated as part of the NAA or recommended plan.

3.9 Hazardous, Toxic, and Radioactive Waste (HTRW)

3.9.1 Existing Condition

A Phase I HTRW Environmental Site Assessment was conducted to identify environmental conditions and to identify the potential presence of HTRW contamination located in the project's construction work limits. This investigation included a Federal and state environmental database search, site reconnaissance on July 13, 2020, review of historical aerial and topographic mapping and interviews. Historic aerials revealed that the project area has had a similar land use, including residential, urban forest, agriculture, and small patches of forest, since prior to 1938. The investigation was performed in accordance with ASTM E-1527-13 Standards.

The U.S. Environmental Protection Agency's (USEPA) Envirofacts Facility Database was queried regarding the potential location of any Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund) or Resource Conservation and



Recovery Act (RCRA) sites in the vicinity of the proposed project footprint. There are no CERCLA or RCRA facilities on or within two miles of the project area (USEPA 2020).

The EPA's Landfill Methane Outreach Program (LMOP) National Map was viewed to investigate the proximity of landfills to the Project Area. There is one landfill, the Cherokee Run Landfill in Bellefontaine, OH, approximately eight miles east of the project footprint.

3.9.2 Environmental Consequences

3.9.2.1 No Action

The NAA would have no effect on HTRW. However, the implementation of the NAA would result in the continued release of untreated sewage into the environment that could pose a potential threat to human health.

3.9.2.2 Recommended Plan

The recommended plan would have no effect on HTRW. With no HTRW sites in or near the project area the recommended plan would not impact HTRW. Additionally, the recommended plan would not produce HTRW.

3.10 Cultural Resources

3.10.1 Existing Conditions

Numerous steps were taken to identify any historic properties within the proposed Area of Potential Effect (APE). A literature review conducted on July 12, 2020 and survey conducted on July 13, 2020 revealed 88 sites, 16 state listed historic structures are within one mile (1.6 km) of the APE and no sites or historic structures are within the APE. No structures listed on or eligible to be listed on the National Register of Historic Places (NRHP) were located within or adjacent to the APE. Additionally, the literature review identified four surveys conducted within one mile (1.6 km) of the APE and two surveys within the APE.

Consultation letters were sent to the Ohio State Historic Preservation Officer (SHPO) and 52 Tribes (see section 5.0 for list of tribes contacted). The Corps received responses from the Delaware Nation, Bad River Band of Lake Superior Chippewa, and the Ohio State Historic Preservation Officer (SHPO). The Bad River Band of Lake Superior Chippewa requested site information for the sites near the APE. The Corps responded to their request on October 8, 2020 and supplied the additional site information. The Delaware Nation concurred with the Corps' determination in a letter dated November 13, 2020. The SHPO concurred with the Corps' determination in a letter dated November 16, 2020. A detailed archeological report can be found in Appendix C. Correspondence from the SHPO and Tribes can be found in Appendix D.

3.10.2 Environmental Consequences

3.10.2.1 No Action

The NAA would have no effect on cultural resources.

3.10.2.2 Recommended Plan

The literature review and archaeological survey yielded no evidence of cultural resources. Thus, the Corps determined the recommended plan will have no effect to historic properties either



listed or eligible for listing to the NRHP (36 C.F.R. §t 800.4(d)(1)). However, if any unknown cultural resources are discovered during the process of construction then work must cease immediately, and the Ohio State Historic Preservation Office and the Corps must be notified within 72 hours.

3.11 Threatened and Endangered Species

3.11.1 Existing Condition

The Endangered Species Act of 1973 requires Federal agencies to consider the effects of actions on federally listed endangered, threatened, and/or candidate species. An official threatened and endangered species list from the USFWS (April 9, 2020) for the project area can be found in Appendix B. Three listed species have ranges that overlap with the project area: The Indiana bat (*Myotis sodalist*), northern long-eared bat (*Myotis septentrionalis*), and rayed bean (*Villosa fabalis*). There is no critical habitat within or adjacent to the Project Area.

Indiana bat has a range that intersects with the project area. In the spring, bats emerge from hibernation and migrate to summer roost sites. During the summer months, female Indiana bats establish maternity colonies of up to 100 bats under the loose bark of trees and in tree cavities. Loss and fragmentation of forest habitat are among the major threats to Indiana bat populations. Other threats include white-nose syndrome, winter disturbance, and environmental contaminants (USFWS, 2006).

The northern long-eared bat has a range that intersects with the project area. It was listed as threatened in 2015 due to declines mostly associated with white-nose syndrome. The bats spend winter hibernating in caves and mines. During the summer the bats roost singly or in colonies underneath bark or in cavities of both snags and live trees (USFWS 2015).

The rayed bean is a small (less than 1.5 inches) freshwater mussel that can be found in smaller headwater streams but may also be found in larger rivers or wave-washed areas of glacial lakes. It prefers gravel or sand substrate and is often found around roots of aquatic vegetation. The rayed bean is threatened by dams and altered flow regimes, pollution from agricultural and private septic runoff, sedimentation, and invasive species (USFWS 2012).

There are no federally designated critical habitats found within the project area.

3.11.2 Environmental Consequences

3.11.2.1 No Action

The NAA would result in untreated sewage running off into Rennick Creek. This would continue to have long-term negative effects on water quality in the stream and potentially impact any possible rayed bean populations in the watershed downstream of Lewistown.

3.11.2.2 Recommended Plan

The recommended plan would have no effect on threatened or endangered species. There would be no impact to the listed bat species in range of the project area because no trees over three inches in DBH would be removed. There would be a positive impact to any rayed bean



populations in the watershed, as the long-term water quality would be improved by the recommended plan.

3.12 Air Quality

3.12.1 Existing Condition

The Clean Air Act (CAA) allows the USEPA to set air quality standards for pollutants considered harmful to public health and welfare. The National Ambient Air Quality Standards (NAAQS) set limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. These standards have been established for six criteria pollutants including carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), and sulfur dioxide (SO₂), and each state is required to develop implementation plans for each pollutant. Areas are generally designated as being either in "attainment" of the standards for the pollutants listed above or in "nonattainment".

Nonattainment areas are required by the CAA to comply with the NAAQS standards through the evaluation and development of a maintenance plan. The U.S. EPA makes a conformity determination to assure that the actions within the maintenance plan conform to the respective state's implementation plan for each nonattainment pollutant.

According to the EPA Green Book, Nonattainment/Maintenance Area Status for Each County by Year for All Criteria Pollutants. Logan County is classified as in "attainment" for criteria pollutants as of March 31, 2020 (USEPA 2020).

3.12.2 Environmental Consequences

3.12.2.1 No Action

The NAA would have no effect on air quality.

3.12.2.2 Recommended Plan

The operation of the recommended plan would not result in appreciable impacts to air quality; however, construction of the recommended plan would have the potential to cause minor, localized and short-term air quality impacts. Potential sources of these impacts include emissions from heavy equipment operation which include diesel fuel fumes and exhaust. The recommended plan would not require around the clock construction; therefore, equipment downtime would allow for dispersion of any fumes generated during construction. The recommended plan is therefore exempt from the requirement to make a conformity determination, since estimated emissions from construction equipment would be far below minimum standards of 100 tons/year, which is the minimum threshold for which a conformity determination must be performed.

3.13 Noise

3.13.1 Existing Condition

Noise in the vicinity of the Project Area is characterized by light traffic in town, the noise created by farm and lawn care equipment.



Noise is measured as Day Night average noise levels (DNL) in "A-weighted" decibels that the human ear is most sensitive to (dBA). There are no Federal standards for allowable noise levels. The Corps Safety and Health Requirements Manual provides criteria for short-term permissible noise exposure levels for consideration of hearing protection or the need to administer sound reduction controls, which is concurrent with Occupational Safety and Health Administration (OSHA) standards (Table 2; USACE 2014).

 Table 2. Non-Department of Defense Continuous Noise Exposures (OSHA Standard).

Duration/day (hours)	Noise level (dBA)
8	85
4	88
2	91
1	94
0.5	97
0.25	100

3.13.2 Environmental Consequences

3.13.2.1 No Action

There would be no change in noise with the NAA.

3.13.2.2 Recommended Plan

Noise associated with the recommended plan would be limited to that generated during construction. The noise associated with construction would be short-term and would only occur during daylight hours. Construction noise would be similar to that of farm equipment and other small machinery used in the local area. A backhoe and a front-end loader are examples of equipment that is likely to be used during construction. Each emits noise levels around 85 dBA at 45 feet. Construction equipment would be operated during daylight hours; therefore, a reasonable exposure time of two hours would be expected during the time residents may be home during the day. Peak outdoor noise levels ranging from 78-90 dBA would occur during the time in which equipment is directly in front of or in proximity to homes and businesses (within 25-100 feet). A maximum noise exposure of approximately 94 dBA, for one hour could occur if equipment were within 10 feet of homes and business. The noise projections do not account for screening objects, such as trees, outbuildings or other objects that muffle and reduce the noise being emitted. The outdoor construction noise would be further muffled while residents are inside their homes. These limited exposures and time intervals are within allowable USACE safety levels. Further, they are similar to typical neighborhood noise generated by gas powered lawnmowers in the local area, which could range from 90-95 dBA at three feet and 70-75 dBA at 100 feet. Resident exposure to these noise levels would occur if and/or when residents are home and outdoors.



Due to daytime construction and the short and limited duration of elevated noise levels associated with the recommended plan, impacts from the noise to local residents would be short-term and minor.

3.14 Socioeconomic Conditions

3.14.1 Existing Conditions

Under Executive Order 12898 "Federal Action to Address Environmental Justice in Minority Populations and Low-income Populations," Federal agencies are directed to identify, address, and avoid disproportionately high and adverse human health or environmental effects on minority and low-income populations.

The EPA environmental justice tool (EJSCREEN) was used to analyze demographics for the project area, and a detailed demographic report can be found in Appendix B. According to EJSCREEN the 2017 population estimate for the project area was 182. There is no minority population within the project area. The area is 100% Caucasian and 81% of residents are age 18 and above, and 21% are age 62 and over. The estimated median household income base for the project area in 2017 was \$31,306. The estimated low-income population is 25%, compared to the state and national average of 33%.

3.14.2 Environmental Consequences

3.14.2.1 No Action

Under the NAA, untreated sewage will still be released into the environment from malfunctioning septic systems, which could have potential negative impacts to human health. However, the NAA would not be expected to disproportionately affect low-income or minority populations.

3.14.2.2 Recommended Plan

The recommended plan would improve wastewater treatment for all residents in the project area, which would positively impact the low-income population. The recommended plan would not be expected to negatively impact low-income or minority populations.

3.15 Aesthetics

3.15.1 Existing Conditions

The project area landscape is dominated by a residential neighborhood, with homes and mowed lawns. There are some views of agriculture, deciduous forest, and Rennick Creek, which may offer opportunities to see wildlife. There are no extraordinary aesthetic resources within the project area.

3.15.2 Environmental Consequences

3.15.2.1 No Action

Under the NAA, untreated sewage would still be released into the environment causing organic enrichment of the surface water. This could reduce opportunities to view wildlife in the stream.



3.15.2.2 Recommended Plan

The recommended plan would have short-term negligible effects to aesthetics. The recommended plan would disturb asphalt and the mowed grass in the short-term, but conditions would be returned to existing shortly after construction.

3.16 Transportation and Traffic

3.16.1 Existing Condition

The project area is located throughout the town of Lewistown. There are approximately 71 residential homes, a high school, middle school, and post office in the project area. Traffic would be expected to be light even during peak hours. Additionally, there are other routes that could be used to avoid the project area.

3.16.2 Environmental Consequences

3.16.2.1 No Action

The NAA would have no effect on traffic.

3.16.2.2 Recommended Plan

The recommended plan would have short-term minor effects to traffic. Construction could involve some short-term minor delays and potential detours in the normal traffic flow. Construction would follow Ohio Department of Transportation (ODT) guidelines. All appropriate ODT guidelines for traffic control would be implemented and emergency access would be maintained. There would be no new permanent traffic patterns as a result of the recommended plan and as such, no long-term impact would occur.

3.17 Health and Safety

3.17.1 Existing Condition

Data shows that Logan County, Ohio is in relatively poor health compared to the rest of the state. Logan County has higher obesity rates, drug overdoses, uninsured adults, and fewer health care providers (Ohio Department of Health 2020).

3.17.2 Environmental Consequences

3.17.2.1 No Action

Under the NAA, untreated sewage would still be released into the environment which could have potential negative health and safety impacts.

3.17.2.2 Recommended Plan

The recommended plan would improve wastewater treatment for the population, which would eliminate any possible negative health effects caused by untreated sewage on the landscape. Therefore, the recommended plan would have a long-term positive impact on health and safety.

4.0 STATUS OF ENVIRONMENTAL COMPLIANCE

The recommended plan is in full compliance with all local, State, and Federal statutes as well as Executive Orders. Compliance is documented below in Table 3.



Table 3. Status of Environmental Compliance with Lewistown New Sanitary Sewage Collection System Project.

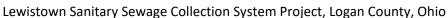
Statute/Executive Order	Full	In Progress
National Environmental Policy Act		X
Fish and Wildlife Coordination Act	X	
Endangered Species Act	X	
Clean Water Act	X	
Wild and Scenic Rivers Act	X	
Clean Air Act	X	
National Historic Preservation Act	X	
Archeological Resources Protection Act	X	
Comprehensive, Environmental Response, Compensation and Liability Act	X	
Resource Conservation and Recovery Act	X	
Toxic Substances Control Act	X	
Quiet Communities Act	X	
Farmland Protection Act	X	
Executive Order 11988 Floodplain Management	X	
Executive Order 11990 Protection of Wetlands	X	
Executive Order 12898 Environmental Justice in Minority Populations and Low-Income Populations	X	

5.0 PUBLIC REVIEW AND COMMENTS

This draft EA and unsigned FONSI will made available for public review for a period of 30 days beginning on February 16, 2021, as required by CEQ regulations. The draft EA will be posted on the Louisville District webpage and Notice of Availability letters were sent to the local community and local, state and Federal government agencies for a 30-day review/comment period. A list of persons, agencies, and organizations that will be notified for public review can be found in Table 4. All agency and tribal correspondence can be found in Appendix D.

Table 4. Agencies, Organizations, Persons, and Tribes to be contacted for public review of the Lewistown New Sanitary Sewage Collection System Project, Logan County, Ohio.

Stakeholder Type	Agency/Organization/Person/Tribe
Tribes	Absentee-Shawnee Tribe of Indians
	Eastern Shawnee Tribe of Oklahoma
	Shawnee Tribe of Oklahoma
	Saginaw Chippewa Indian Tribe of Michigan
	Quapaw Tribe
	Miami Tribe of Oklahoma
	Peoria Tribe of Oklahoma
	Osage Nation of Oklahoma





Wyandotte Nation of Oklahoma

Tuscarora Nation of New York

Tonawanda Seneca Nation

St. Regis Mohawk Tribe

Seneca Nation of Indians of New York

Onondaga Nation of New York

Oneida Nation of Wisconsin

Oneida Nation of New York

Delaware Nation of Oklahoma

Cayuga Nation of New York

Bad River Band of Lake Superior Chippewa

Citizen Potawatomi Nation

Prairie Band of Potawatomi

Gun Lake Tribe

Pokagon Band of Potawatomi

Delaware Tribe of Indians Oklahoma

Nottawaseppi Huron Band of Potawatomi

Bois Forte Band of Chippewa

Fond du lac Band of Lake Superior

Forest County Potawatomi

Grand Portage Band of Lake Superior Chippewa

Grand Traverse Band of Ottawa and Chippewa

Seneca-Cayuga of Oklahoma

Hannahville Indian Community

Keweenaw Bay Indian Community

Kickapoo Tribe of Kansas

Kickapoo Tribe of Oklahoma

Kickapoo Traditional Tribe of Texas

Lac Courte Oreilles Band of Chippewa

Lac du Flambeau Band of Lake Superior

Lac Vieux Desert Band of Lake Superior

Leech Lake Band of Ojibwe

Little River Band of Ottawa

Little Traverse Bay Band of Odawa

Mille Lacs Band of Ojibwe

Ottawa Tribe of Oklahoma

Red Cliff Band of Lake Superior Chippewa

Red Lake Chippewa

Sac and Fox Nation of Missouri in Kansas and Nebraska

Sac and Fox Nation of Oklahoma

Sac and Fox Tribe of Mississippi in Iowa

Sault Ste Marie Tribe of Chippewa

Sokaogon Chippewa

St. Croix Chippewa Community

Turtle Mountain Band of Chippewa



State Agencies	Ohio State Historic Preservation Officer Ohio Department of Natural Resource Ohio Environmental Protection Agency
Federal Agencies	United States Environmental Protection Agency, Region 5 Office National Resource Conservation Service, Ohio State Office United States Fish and Wildlife Service
Local Agencies	Washington Township Office
People	United States Congressman Jim Jordan United States Senator Rob Portman
	United States Senator Sherrod Brown
	Ohio State Senator Rob McColley
	Ohio State Senator Matt Huffman
	Ohio State Representative Jon Cross
	Ohio State Representative Nino Vitale

6.0 CONCLUSION

Wastewater treatment within Lewistown is currently provided by individual on-lot systems consisting of either a septic tank or an aeration unit. In most cases, these systems discharge untreated sewage to ditches, drainage ways, or underground tile lines with eventual discharge to Rennick Creek, which borders the southern edge of the Washington Township. The completion of a new sewage collection system will allow for controlled and quality growth of residential and non-residential entities within the Lewistown sanitary service area and bring the area into compliance with federal and state water quality requirements. Construction would take place on previously disturbed land within the road rights-of-way and easements held by the Lewistown Township. Effects associated with construction would be minor and short-term and construction BMPs would be implemented to minimize impacts to residents and the environment. No significant adverse impacts have been identified as a result of implementation of the proposed construction.

This EA has been prepared in accordance with the National Environmental Policy Act (NEPA); the Council on Environmental Quality, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 C.F.R. Parts 1500-1508); and the Corps of Engineers, Policy and Procedure for Implementing NEPA (33 C.F.R. Part 230).

This EA concludes that environmental impacts of the proposed sanitary sewage collection system in Lewistown, Ohio is minor and local in scope; the benefits of the recommended plan outweigh the minor impacts that would result from implementation of the recommended plan; and the recommended plan does not constitute a major Federal action significantly affecting the quality of the human environment.

Based on the conclusions of this Draft EA, preparation of an EIS is not required. Therefore, a Draft Finding of No Significant Impact (FONSI) is presented at the beginning of this Draft EA.



If the District Engineer determines that an EIS is not necessary, the Draft FONSI would be finalized and the recommended plan implemented.



7.0 REFERENCES

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USFWS (U.S. Fish and Wildlife Service) 2012. *Rayed Bean (Villosa fabalis)*. Available at: https://www.fws.gov/midwest/endangered/clams/rayedbean/rayedbeanfactsheet.html

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Appendix A

Photos From July 13, 2020 Site Visit





































































































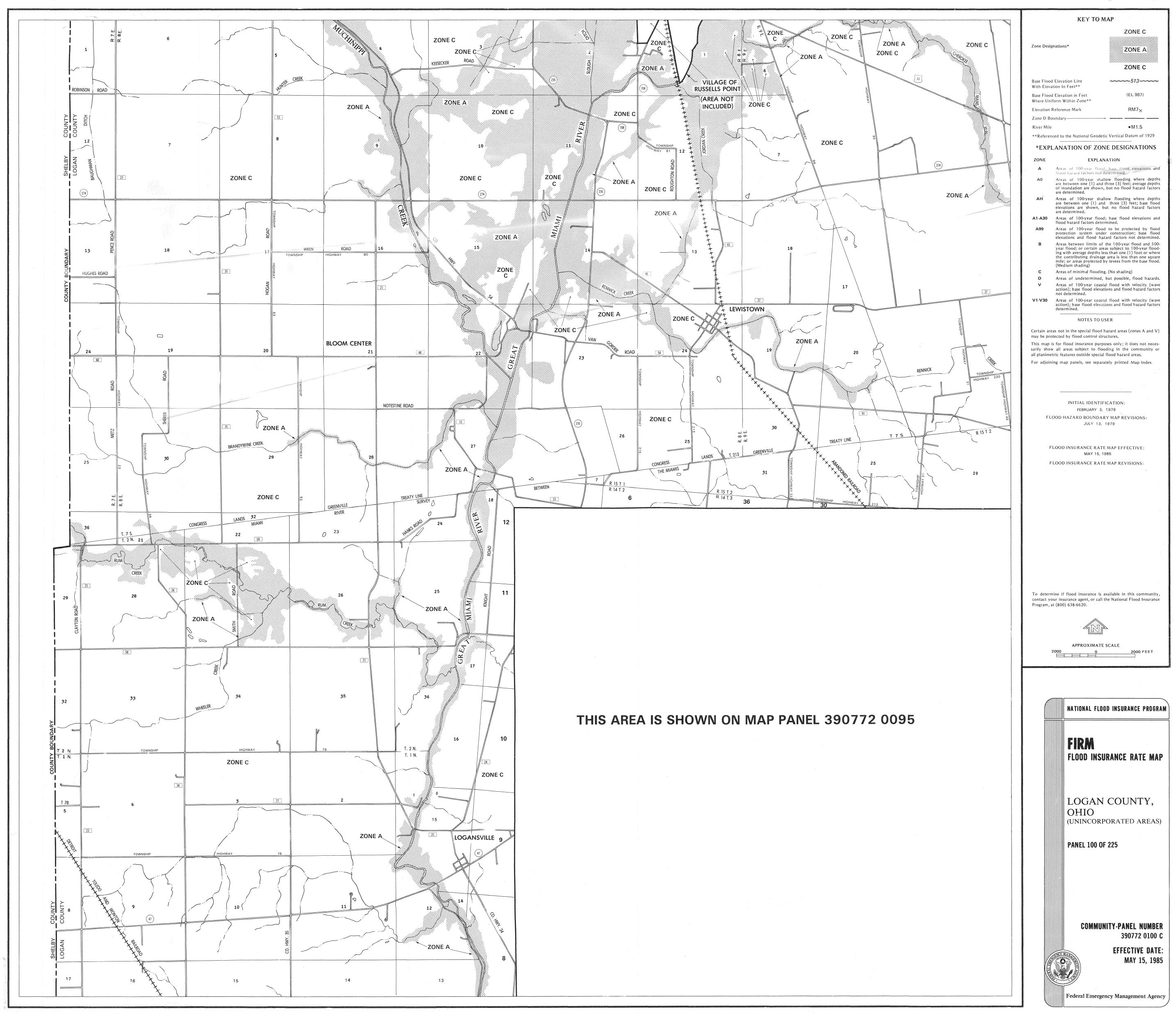


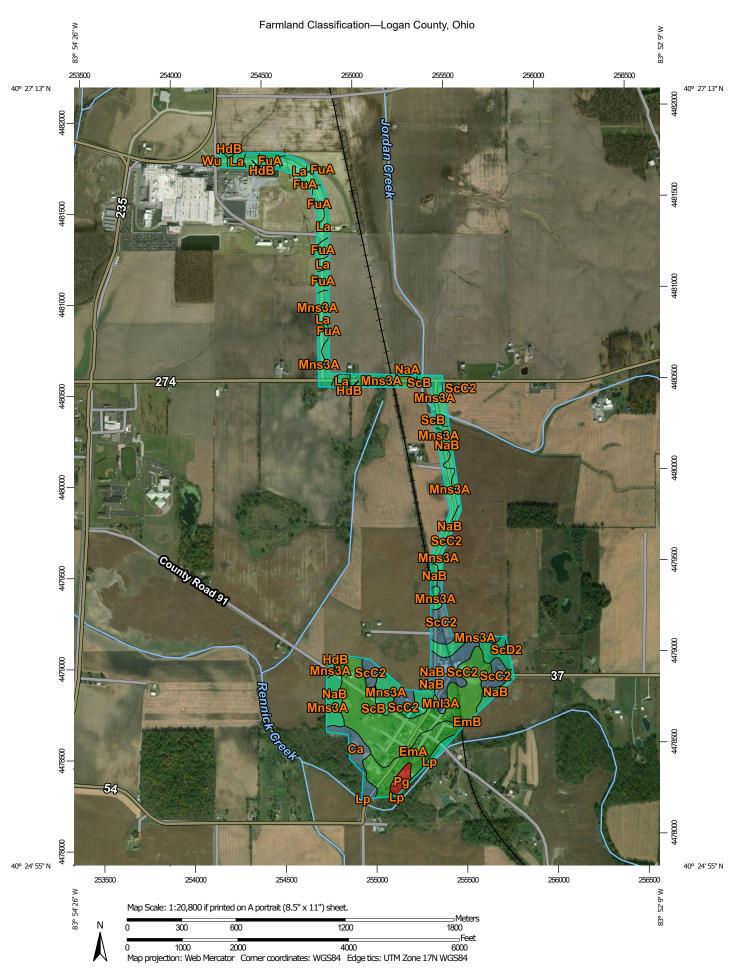




Appendix B

Supporting Environmental Documents





MAP LEGEND						
Area of Interest (AOI) Area of Interest (AOI) Soil Rating Polygons Not prime farmland All areas are prime farmland Prime farmland if drained Prime farmland if protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated and drained Prime farmland if irrigated and drained Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season	Prime farmland if subsoiled, completely removing the root inhibiting soil layer Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 Prime farmland if irrigated and reclaimed of excess salts and sodium Farmland of statewide importance Farmland of statewide importance, if drained Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if irrigated	Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if irrigated and drained Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if warm enough Farmland of statewide importance, if thawed Farmland of local importance Farmland of local importance, if irrigated	Farmland of unique importance Not rated or not available Soil Rating Lines Not prime farmland All areas are prime farmland Prime farmland if drained Prime farmland if protected from floodin or not frequently flood during the growing season Prime farmland if irrigated Prime farmland if drained and either protected from floodin or not frequently flood during the growing season Prime farmland if irrigated and drained Prime farmland if irrigated and drained Prime farmland if irrigated and either protected from floodin or not frequently flood during the growing season		

Farmland Classification—Logan County, Ohio

,e.,e	Prime farmland if subsoiled, completely removing the root inhibiting soil layer	~	Farmland of statewide importance, if drained and either protected from flooding or not frequently	~	Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium	~~	Farmland of unique importance Not rated or not available		Prime farmland if subsoiled, completely removing the root inhibiting soil layer
***	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	~	flooded during the growing season Farmland of statewide importance, if irrigated and drained	***	Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the	Soil Rat	ting Points Not prime farmland All areas are prime farmland	•	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
2 2 2 2 2		~ ~		<pre></pre>					
							flooded during the growing season		

Farmland Classification—Logan County, Ohio

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season

 Farmland of statewide
 - Farmland of statewide importance, if irrigated and drained
 - Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of unique importance
- Not rated or not available

Water Features

Streams and Canals

Transportation

Interstate Highways

US Routes

Major Roads

Background

04

Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Logan County, Ohio Survey Area Data: Version 18, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 6, 2014—Mar 28, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ca	Carlisle muck, Central Ohio clayey till plain, drained, 0 to 2 percent slopes	Farmland of local importance	7.2	3.7%
EmA	Eldean silt loam, 0 to 2 percent slopes	All areas are prime farmland	17.0	8.6%
EmB	Eldean silt loam, 2 to 6 percent slopes	All areas are prime farmland	0.1	0.0%
FuA	Fulton silt loam, 0 to 4 percent slopes	Prime farmland if drained	12.6	6.4%
HdB	Haskins loam, 2 to 6 percent slopes	Prime farmland if drained	3.9	2.0%
La	Latty silty clay	Prime farmland if drained	17.3	8.8%
Lp	Lippincott silty clay loam, 0 to 2 percent slopes	Prime farmland if drained	1.9	0.9%
Mnl3A	Minster silty clay loam, till substratum, 0 to 1 percent slopes	Prime farmland if drained	4.0	2.1%
Mns3A	Minster silty clay loam, 0 to 1 percent slopes	Prime farmland if drained	32.6	16.6%
NaA	Nappanee silt loam, 0 to 2 percent slopes	Prime farmland if drained	0.3	0.2%
NaB	Nappanee silt loam, 2 to 6 percent slopes	Prime farmland if drained	16.0	8.1%
Pg	Pits, gravel	Not prime farmland	2.8	1.4%
ScB	St. Clair silt loam, 2 to 6 percent slopes	All areas are prime farmland	53.2	27.0%
ScC2	St. Clair silt loam, 6 to 12 percent slopes, moderately eroded	Farmland of local importance	26.4	13.4%
ScD2	St. Clair silt loam, 12 to 18 percent slopes, moderately eroded	Farmland of local importance	0.7	0.3%
Wu	Westland silty clay loam, clay substratum	Prime farmland if drained	0.8	0.4%
Totals for Area of Inter	rest	ı	196.8	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The majority of soil attributes are associated with a component of a map unit, and such an attribute has to be aggregated to the map unit level before a thematic map can be rendered. Map units, however, also have their own attributes. An attribute of a map unit does not have to be aggregated in order to render a corresponding thematic map. Therefore, the "aggregation method" for any attribute of a map unit is referred to as "No Aggregation Necessary".

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

U.S. Fish and Wildlife Service

National Wetlands Inventory

Lewistown



October 13, 2020

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ohio Ecological Services Field Office 4625 Morse Road, Suite 104 Columbus, OH 43230-8355 Phone: (614) 416-8993 Fax: (614) 416-8994



In Reply Refer To: April 09, 2020

Consultation Code: 03E15000-2020-SLI-1176

Event Code: 03E15000-2020-E-01656

Project Name: Lewistown Environmental Infrastructure

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see http://www.fws.gov/migratorybirds/ RegulationsandPolicies.html.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/BirdHazards.html.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit http://www.fws.gov/migratorybirds/AboutUS.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

• Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ohio Ecological Services Field Office 4625 Morse Road, Suite 104 Columbus, OH 43230-8355 (614) 416-8993

Project Summary

Consultation Code: 03E15000-2020-SLI-1176

Event Code: 03E15000-2020-E-01656

Project Name: Lewistown Environmental Infrastructure

Project Type: WASTEWATER PIPELINE

Project Description: Installation of new sewage collection system in Lewistown.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/40.4220595477628N83.88499010657162W



Counties: Logan, OH

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an
office of the National Oceanic and Atmospheric Administration within the Department of
Commerce.

Mammals

NAME STATUS

Indiana Bat *Myotis sodalis*

Endangered

There is **final** critical habitat for this species. Your location is outside the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/5949

Northern Long-eared Bat Myotis septentrionalis

Threatened

No critical habitat has been designated for this species.

This species only needs to be considered under the following conditions:

Incidental take of the northern long-eared bat is not prohibited at this location. Federal
action agencies may conclude consultation using the streamlined process described at
https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html

Species profile: https://ecos.fws.gov/ecp/species/9045

Clams

NAME STATUS

Rayed Bean Villosa fabalis

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5862

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



EJSCREEN ACS Summary Report



Location: User-specified polygonal location

Ring (buffer): 0-miles radius
Description: Lewistown

Summary of ACS Estimates	2013 - 2017
Population	182
Population Density (per sq. mile)	238
Minority Population	0
% Minority	0%
Households	50
Housing Units	60
Housing Units Built Before 1950	23
Per Capita Income	31,306
Land Area (sq. miles) (Source: SF1)	0.77
% Land Area	100%
Water Area (sq. miles) (Source: SF1)	0.00
% Water Area	0%

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	182	100%	272
Population Reporting One Race	182	100%	328
White	182	100%	273
Black	0	0%	11
American Indian	0	0%	11
Asian	0	0%	11
Pacific Islander	0	0%	11
Some Other Race	0	0%	11
Population Reporting Two or More Races	0	0%	7
Total Hispanic Population	0	0%	11
Fotal Non-Hispanic Population	182		
White Alone	182	100%	273
Black Alone	0	0%	11
American Indian Alone	0	0%	11
Non-Hispanic Asian Alone	0	0%	11
Pacific Islander Alone	0	0%	11
Other Race Alone	0	0%	11
Two or More Races Alone	0	0%	7
Population by Sex			
Male	113	62%	176
Female	70	38%	122
Population by Age			
Age 0-4	6	3%	44
Age 0-17	35	19%	109
Age 18+	147	81%	190
Age 65+	38	21%	93

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EJSCREEN ACS Summary Report



Location: User-specified polygonal location

Ring (buffer): 0-miles radius
Description: Lewistown

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	138	100%	163
Less than 9th Grade	3	2%	30
9th - 12th Grade, No Diploma	13	10%	71
High School Graduate	80	58%	137
Some College, No Degree	29	21%	93
Associate Degree	4	3%	31
Bachelor's Degree or more	12	9%	53
Population Age 5+ Years by Ability to Speak English			
Total	177	100%	260
Speak only English	177	100%	250
Non-English at Home ¹⁺²⁺³⁺⁴	0	0%	11
¹ Speak English "very well"	0	0%	11
² Speak English "well"	0	0%	11
³ Speak English "not well"	0	0%	11
⁴Speak English "not at all"	0	0%	11
3+4Speak English "less than well"	0	0%	11
²⁺³⁺⁴ Speak English "less than very well"	0	0%	11
Linguistically Isolated Households*			
Total	0	0%	11
Speak Spanish	0	0%	11
Speak Other Indo-European Languages	0	0%	11
Speak Asian-Pacific Island Languages	0	0%	11
Speak Other Languages	0	0%	11
Households by Household Income			
Household Income Base	50	100%	101
< \$15,000	6	12%	51
\$15,000 - \$25,000	4	9%	43
\$25,000 - \$50,000	11	23%	91
\$50,000 - \$75,000	6	12%	46
\$75,000 +	23	45%	100
Occupied Housing Units by Tenure			
Total	50	100%	101
Owner Occupied	44	87%	110
Renter Occupied	6	13%	59
Employed Population Age 16+ Years		.0,0	- 55
Total	157	100%	192
In Labor Force	101	65%	202
Civilian Unemployed in Labor Force	2	2%	27
Not In Labor Force	56	35%	126

Data Note: Datail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

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^{*}Households in which no one 14 and over speaks English "very well" or speaks English only.



EJSCREEN ACS Summary Report



Location: User-specified polygonal location

Ring (buffer): 0-miles radius Description: Lewistown

	2013 - 2017 ACS Estimates	Percent	MOE (±
ulation by Language Spoken at Home*			
al (persons age 5 and above)	N/A	N/A	N/A
English	N/A	N/A	N/A
Spanish	N/A	N/A	N/
French	N/A	N/A	N/
French Creole	N/A	N/A	N/
Italian	N/A	N/A	N/
Portuguese	N/A	N/A	N
German	N/A	N/A	N,
Yiddish	N/A	N/A	N.
Other West Germanic	N/A	N/A	N,
Scandinavian	N/A	N/A	N,
Greek	N/A	N/A	N.
Russian	N/A	N/A	N
Polish	N/A	N/A	N
Serbo-Croatian	N/A	N/A	N.
Other Slavic	N/A	N/A	N
Armenian	N/A	N/A	N
Persian	N/A	N/A	N
Gujarathi	N/A	N/A	N
Hindi	N/A	N/A	N
Urdu	N/A	N/A	N
Other Indic	N/A	N/A	N
Other Indo-European	N/A	N/A	N
Chinese	N/A	N/A	N
Japanese	N/A	N/A	N
Korean	N/A	N/A	N
Mon-Khmer, Cambodian	N/A	N/A	N
Hmong	N/A	N/A	N
Thai	N/A	N/A	N
Laotian	N/A	N/A	N
Vietnamese	N/A	N/A	N
Other Asian	N/A	N/A	N
Tagalog	N/A	N/A	N
Other Pacific Island	N/A	N/A	N
Navajo	N/A	N/A	N
Other Native American	N/A	N/A	N
Hungarian	N/A	N/A	N
Arabic	N/A	N/A	N
Hebrew	N/A	N/A	N
African	N/A	N/A	N
Other and non-specified	N/A	N/A	N
Total Non-English	N/A	N/A	N.

Data Note: Detail may not sum to totals due to rounding. Hispanic popultion can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017.

*Population by Language Spoken at Home is available at the census tract summary level and up.

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Appendix C

Cultural Resources Documentation



PHASE I ARCHAEOLOGICAL SURVEY OF THE LEWISTOWN NEW SANITARY SEWAGE COLLECTION SYSTEM IN LEWISTOWN, OHIO

August 18, 2020

Report authored by:

Montana Martin Archaeologist, MA

U.S. ARMY CORPS OF ENGINEERS LOUISVILLE DISTRICT ATTN: PMC-PL P.O. BOX 59 LOUISVILLE, KENTUCKY 40201-0059 PHONE: (502) 315-7433

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Email: montana.martin@usace.army.mil

Abstract

The U.S. Army Corps of Engineers-Louisville District (USACE-Louisville District) has received a request for financial assistance for the Lewistown New Sanitary Sewage Collection System. The project is authorized by Section 594 of the Water Resources Development Act (WRDA) of 1999 (Public Law 106-53, 113 STAT 381), as amended. Section 594 authorizes federal design and construction assistance to non-federal interests to carry out water-related environmental infrastructure and resource protection and development projects in Ohio and North Dakota. The proposed undertaking consists of the proposed sewer line project. The Area of Potential Effects (APE) for the undertaking consists of the linear sewer line that is federally funded. The linear sewer line that makes up the APE measures approximately 3500 meters (2.2 miles) in length. The center of the linear sewer line was buffered by 10 meters (32.8 foot) on either side creating a 20 meter (65.6 foot) wide survey corridor and includes two laydown yards, one at the intersection of OH-274 and Township Highway C-61 and one along the City of Lewistown Street of Hartford. The entire survey corridor measures a total of 18.1 acres. Results of this investigation revealed no evidence of significant prehistoric or historic cultural resources within the project area. Given these results, the proposed undertaking is considered to have no effect to cultural resources eligible for listing to the National Register of Historic Places (NRHP) (36CFR part 800.4 (d)(1). Therefore, USACE has made the determination that no additional cultural resource surveys are needed for the federally funded portion of the Lewistown New Sanitary Sewage Collection System project.

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1. Introduction

The following report describes the results of the Phase I archaeological survey of the proposed Lewistown New Sanitary Sewage Collection System (the Undertaking) located in Washington Township in Logan County, Ohio, (Figure 1). The project is authorized by Section 594 of the Water Resources Development Act (WRDA) of 1999 (Public Law 106-53, 113 STAT 381), as amended. Section 594 authorizes federal design and construction assistance to non-federal interests to carry out water-related environmental infrastructure and resource protection and development projects in Ohio and North Dakota. The Undertaking consists of a linear sewer line project area that is federally funded which measures approximately 3.5 kilometers (2.2 miles) in length and will be located within the existing road right-of-way (ROW). The Undertaking starts at the Honda Transmissions Manufacturing plant in the north following Township Highway C-61 and Ohio 274 south to the City of Lewistown (Figure 2). The Area of Potential Effects (APE) then follows Center Street traveling southwest, Williams Street traveling northwest, and Hanford Street traveling southwest in the City of Lewistown, Ohio (Figure 3). The linear sewer line was buffered by 10 meters (32.8 foot) on either side creating a 20 meter (65.6 foot) wide survey corridor. Also included in the survey are two laydown yards one at the intersection of OH-274 and Township Highway C-61 and one along the City of Lewistown Street of Hartford. The APE is made up of the federally funded sewer line which measures a total of 18.1 acres. Results of this investigation revealed no evidence of significant prehistoric or historic cultural resources within the project area.

The Undertaking is in compliance with Section 106 the National Historic Preservation Act of 1966 (as amended). The work conducted followed the professional standards and guidelines in the Secretary of the Interior Standards and Guidelines for Archaeology and Historic Preservation (Secretary of the Interior 1983) and the Ohio Historical Society's *Archaeology Guidelines* (Ohio Historic Preservation Office 1994). The survey was performed by personnel from the United States Army Corps of Engineers-Louisville District (USACE).

The primary objective of the survey was to identify any prehistoric and historic sites that could be eligible for the National Register of Historic Places (NRHP). This objective was met through a literature review and records search to identify any known cultural resources, as well as a field survey to locate any previously unknown cultural resources in the project area. Fieldwork was conducted on July 13, 2020 by USACE archaeologist Keith Keeney with the assistance of USACE biologist Steele McFadden.

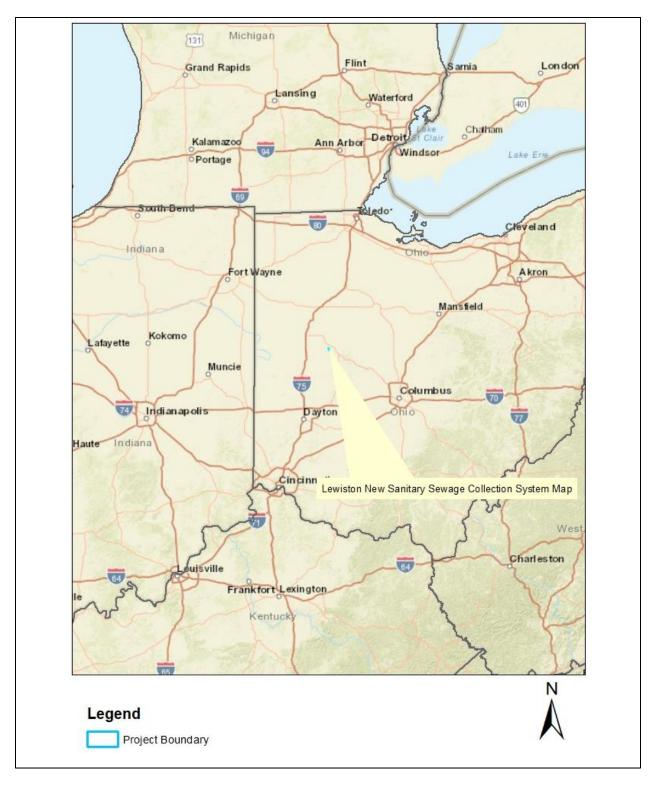


Figure 1: Lewistown New Sanitary Sewage General Location Map.

Lewiston New Sanitary Sewage Collection System Map

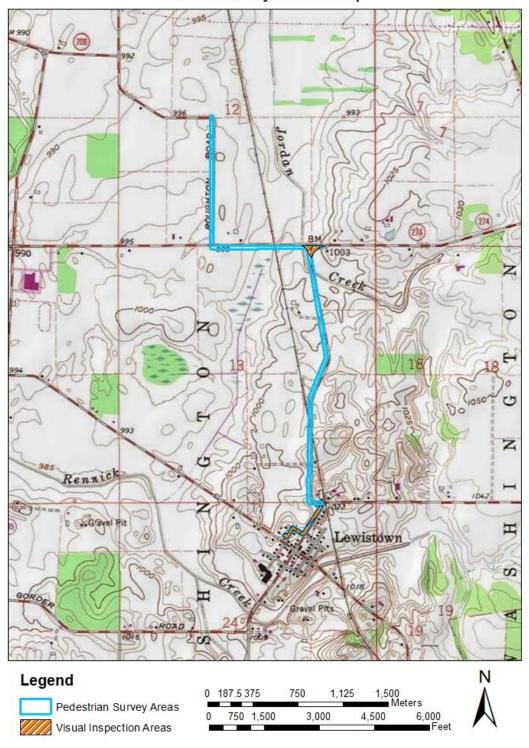


Figure 2: Excerpt of Bellefontaine, OH Topographic map showing proposed sewer line path to Lewistown, Ohio.

Lewiston New Sanitary Sewage Collection System Map



Figure 3: Aerial view of proposed sewer line project ending in Lewistown, Ohio.

2. Environmental Setting

2.1 General Project Area Description

Land use within the proposed sewer line consisted of existing highway ROW that shows prior disturbance from above and below ground utility lines, residential construction projects, and agricultural activities. General views of the project area are presented in Figures 4–8. Vegetation within the project area consists of mowed grasses, secondary growth trees, corn, and soybeans. The project area is in the Rennick Creek-Great Miami River watershed and is drained by Rennick and Jordan Creeks (USGS 2020). Elevations range from between 1000 to 1020 feet Above Mean Sea Level (AMSL).

2.2 Physiography

The project area lies within the Central Ohio Clayey Till Plain region of the Till Plains section of the Central Lowland physiographic province. The Till Plains is characterized by areas of low relief on broad till plains whose undulating surfaces are poorly drained (Brockman 1998). The bedrock underlying the project area consists of Silurian shale and limestone of the Richmond and Maysville group. Ordovician shale sand dolomite underlie the Silurian beds, and occasionally crop out (Garner et al. 1978). The Ordovician Period began around 500 million years ago which caused the Ohio landscape to be formed by the receding glacial formations. These sedimentary deposits have been covered by Wisconsinan age glacial drift which includes sand and gravel, lake deposits, and till-clay and pebble mixture.

2.3 Soils

The majority of the soils encountered within the project area consist of Minster silty clay loam 0-1% slopes, Nappanee silt loam 2-6% slope, Latty silt clay, and Fulton silt loam 0-4% slope (USDA WSS 2020). These soil profiles are generally characterized by silty clay loam, silt loam, and clay horizons and range from somewhat poorly drained to very poorly drained.

2.4 Climate

The climate of Logan County is of the continental type, which can fluctuate between the seasons. Summers are usually warm and humid, whereas winters are usually cold. The month of July is recorded as having the highest average temperature for Logan County is 83 degrees Fahrenheit with the low average falling in January at 33 degrees Fahrenheit. The average precipitation in the area is 39.82 inches (US Climate Data 2020).



Figure 4: View of proposed sewer line (in blue) along existing ROW showing utilities and ditch, facing north.



Figure 5: View of proposed sewer line (in blue) along existing ROW showing utilities and ditch, facing south.



Figure 6: Left: View of proposed sewer line (in blue) as it passes the Lewistown Elevator (LOG-210-16) on Township Highway C-61 facing south. Right: Historic 1989 Photo of Lewistown Elevator showing the now demolished elevator.



Figure 7: Left: View of Rider Property (LOG-516-16) from the APE facing northeast. Right Top: Barn at Rider Property. Right Bottom: Rider Property House



Figure 8: View of corn field within the APE (in blue), facing north

2.5 Flora and Fauna

This information has been extracted/adapted from (Lewthwaite *et al* 1997), to provide a background setting for the flora and fauna of the proposed project area.

Late Pleistocene and Holocene environmental profiles for the Ohio region are of a general nature and apply to a large section of Eastern North America. Pollen profiles for areas in Indiana, Ohio, Pennsylvania and New England indicate a relatively consistent climatic sequence across the northeast (Bergman & Rue 1990). This sequence originated around 15,000 BC with a moist cool climate. Between 9000 and 7000 BC a warming trend started, lasting until 2000 BC. This warming trend initiated the northern advance of deciduous forests (Bergman & Rue 1990; O'Malley 1984). Around 1000 BC the forests were dominated by the Oak-Chestnut climax forest that are still prevalent in the eastern woodlands today (Bergman & Rue 1990).

Pleistocene fauna were significantly different from modern fauna. The project area supported species such as ground sloths, mammoth (*Mammuthus jeffersoni*), mastodon (*Mammut americanus*), and musk ox (*Ovibos muschatos*), as well as wapiti (*Cervus sp.*), caribou (*Ragnifer sp.*), moose (*Alces sp.*), wolf (*Canis lupus*), and black bear (*Ursus americanus*) (Ball 1985; Bergman & Rue 1990). With the retreat of the glaciers, the Pleistocene megafauna in the area disappeared, with species such as the mastodon and mammoth becoming extinct, and the moose

and wapiti migrating northward. Post-glacial animal species were probably similar to modern types; the major differences being with population size and range (Ball 1985; O'Malley 1984).

3. Cultural Setting

Archaeologists have developed a general chronology for the Eastern United States that provides a useful framework for organizing and describing archaeological data (Dragoo 1977; Griffin 1967; Jennings 1974 and Keeney 2002). The cultural-historical sequence developed for the region is generally divided into the following chronological periods: Paleo-Indian (12,800-8000 BC), Early Archaic (8000-6000 BC), Middle Archaic (6000-3000 BC), Late Archaic (3000-600 BC), Early Woodland (600-200 BC), Middle Woodland (200 BC- AD 500), Late Woodland (AD 500-1000), Fort Ancient (AD 1000-1750), and European contact and settlement covering more than 14,000 years of human adaptation and re-adaptation to a changing environment.

The prehistoric cultural sequence in Ohio reflects a general trend toward increasing socio-cultural and technological complexity beginning with small mobile bands during the Palo-Indian period that later developed into more sedentary, complex societies. The subsistence activities of the earliest New World societies focused on hunting and gathering wild plant and animal foods. By late prehistoric times, however, agricultural economies based on three major tropical cultigenscorn, beans, and squash- were characteristic of many societies in the eastern United States. Increases in the size and density of the human population and trends toward increasing sedentism were also evident and reached their highest levels during the Fort Ancient period. In all, these cultural trends are marked by stylistic differences in artifacts and correspond to major technological innovations or important shifts in social, cultural, and subsistence adaptations (Ford 1977). However, there was considerable regional variation in the timing and extent to which these trends were expressed.

4. Literature Review and Records Check

A background check utilizing multiple sources was conducted prior to initiating a field survey, the sources consulted include: the online NRHP database, Ohio History Connection Online Mapping System, USACE Geographic Information System (GIS), historic maps, and previous cultural resources reports. These sources were utilized to identify NRHP-listed historic properties and previously recorded archaeological sites and historic structures within a 1.6 kilometer (1 mile) radius of the APE. The search of these sources showed that there were no archaeological sites or historic structures directly within the APE. The search identified 88 archaeological sites and 16 structures recorded within the 1.6 kilometers (1 mile) buffer of the APE (Appendix A: Appendix B). Most of the sites identified within the 1.6 kilometer (1 mile) buffer of the APE are located near the summit of glacial moraines. There were two surveys previously completed within the APE, Whitman et al. 1998 and Whitman et al. 1999 and an additional four archaeological surveys were completed within the 1.6 kilometers (1 mile) of the project area (Addington 1986; Baker 1998; 2007; Sprague & Hunter 1993). A majority of the 88 sites located within the 1.6 kilometer (1 mile) radius of the APE were recorded during a 1997-1998 archaeological survey conducted by ASC Group, Inc. for a proposed improvement of Highway US-33 in Auglaize, Logan, and Shelby

counties in Ohio (Whitman et al. 1998; 1999). The survey area from the 1997-1998 survey included multiple proposed options for the road alignment. The 1997-1998 survey identified 438 prehistoric concentrations, 93 historic sites, and 37 multicomponent prehistoric/historic sites (Whitman et al. 1999). The historic structures mapped within the APE on the 1913 USGS Topographic map and the 1875 plat map appear to still be extant or have newer structures built in the same locations (Figures 9–10). None of the historic maps show any structures within the boundaries of the APE.

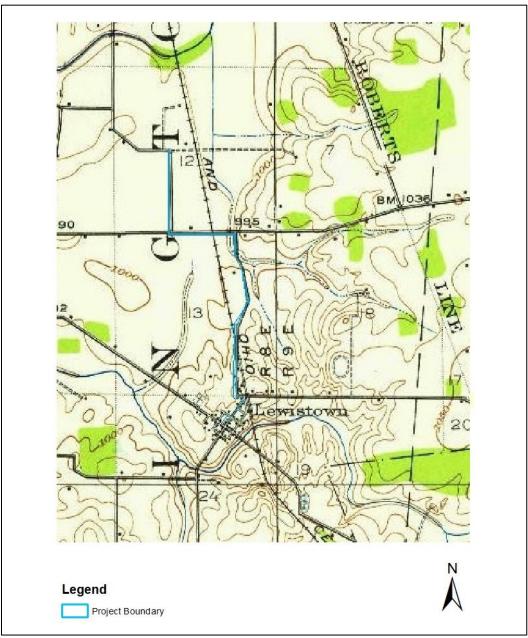


Figure 9: Excerpt of the 1913 Bellefontaine, Ohio topographic map showing location of proposed sewer line (in blue) (USGS 2020).

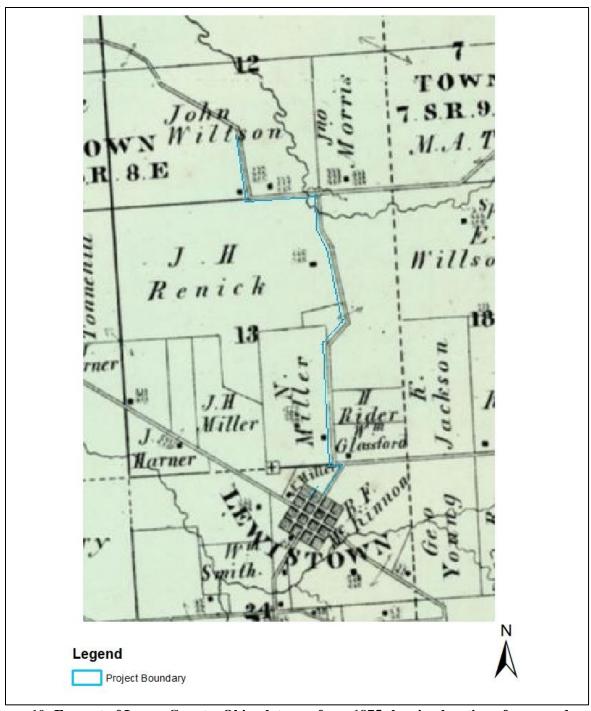


Figure 10: Excerpt of Logan County, Ohio plat map from 1875 showing location of proposed sewer line (in blue) (Washington Township 1875).

5. Field Methods

The goal of the Phase I archaeological survey was to identify all cultural resources within the APE and to evaluate their potential for inclusion in the NRHP. The specific methods used to conduct the survey are outlined below.

The survey closely followed all guidelines for Phase I archaeological investigations as defined in the *Archaeology Guidelines* issued by the Ohio Historic Preservation Office (1994). The survey of the APE included a systematic pedestrian examination of areas on both sides of the road ROW. The pedestrian survey included areas of prior disturbance and those with exposed ground surfaces with a visibility of at least 40 percent. Pedestrian survey transects were spaced no more than 5 meters (16.4 feet) apart. Developed or disturbed areas within the APE were visually inspected and recorded, but not shovel tested (Figures 11–13).

6. Survey Results

The entire APE was subjected to a pedestrian survey and visual inspection. The APE consisted of fields planted in soybeans with 40-75% visibility, corn with 80-100% visibility, and previously disturbed areas with 0-20% visibility (Figures 11–13). The survey located no sites or artifacts within the APE.

7. Conclusions and Recommendations

A Phase I archaeological survey of the proposed sewer line for the City of Lewistown revealed no evidence of significant prehistoric sites. There were two historic structures mapped near the APE, however, the visual effects of the sewer construction will be temporary. Given the negative results of the archaeological survey and temporary visual effects, the proposed undertaking is considered to have no effect to cultural resources eligible for listing to the NRHP (36CFR part 800.4 (d)(1)). Therefore USACE has made the determination that no additional cultural resource surveys are needed for the Lewistown New Sanitary Sewage Collection System project.

Lewiston New Sanitary Sewage Collection System Map



Figure 11: Aerial view showing pedestrian survey areas and disturbed areas visually inspected near the south end of the APE.

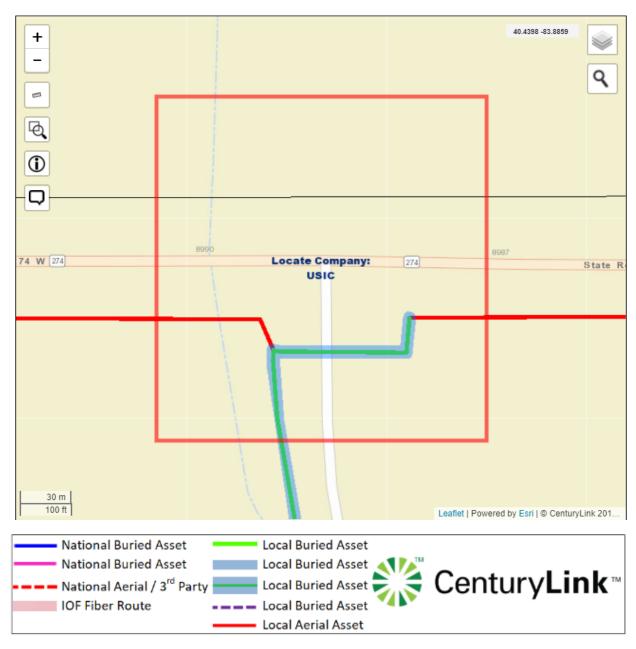


Figure 12: Map of buried utilities at the intersection of OH-274 and Township Highway 61.

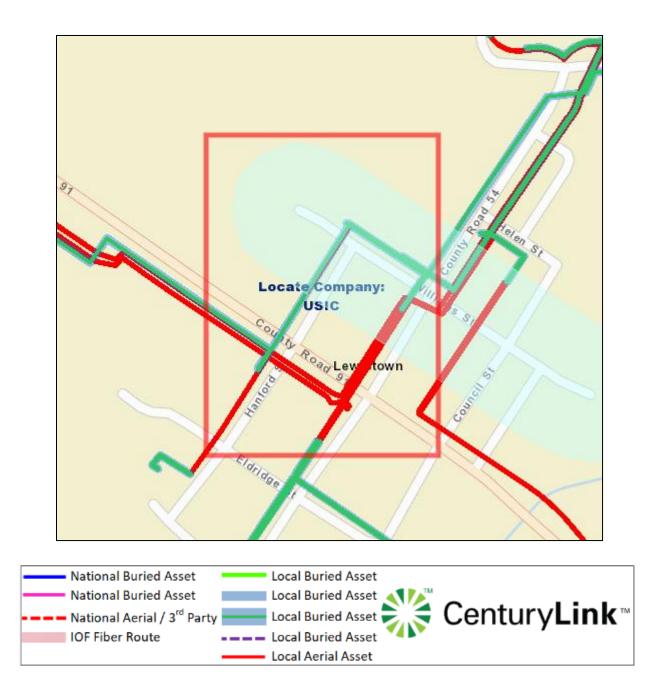


Figure 13: Map of buried utilities near the south end of the APE.

Appendix A: Previously recorded sites within a 1.6km (1mile) radius of the APE.

OAI NUMBER	AFFILIATION	SITE AREA
33LO0073	Historic	495
33LO0202	Prehistoric and	2600
	Historic	
33LO0273	Prehistoric	100
33LO0274	Prehistoric	3000
33LO0275	Prehistoric	7800
33LO0276	Prehistoric	Isolated
33LO0277	Prehistoric	3200
33LO0278	Prehistoric	1200
33LO0279	Prehistoric	Isolated
33LO0280	Prehistoric	3500
33LO0281	Prehistoric	Isolated
33LO0282	Prehistoric	2500
33LO0283	Prehistoric	900
33LO0284	Prehistoric	150
33LO0285	Prehistoric	375
33LO0286	Prehistoric	Isolated
33LO0287	Prehistoric	3500
33LO0288	Historic	3500
33LO0289	Prehistoric	2500
33LO0290	Prehistoric and	1200
	Historic	
33LO0291	Prehistoric	1600
33LO0292	Prehistoric	Isolated
33LO0293	Prehistoric	1500
33LO0433	Prehistoric	100
33LO0434	Prehistoric	625
33LO0435	Prehistoric	25
33LO0436	Prehistoric and	4800
227 00425	Historic	
33LO0437	Prehistoric	Isolated
33LO0438	Prehistoric	150
33LO0439	Prehistoric	3000
33LO0440	Prehistoric	Isolated
33LO0441	Prehistoric	100
33LO0442	Prehistoric	Isolated
33LO0443	Prehistoric	400
33LO0444	Prehistoric	Isolated
33LO0445	Prehistoric	Isolated
33LO0446	Prehistoric	Isolated
33LO0447	Prehistoric	Isolated
33LO0448	Prehistoric	Isolated
33LO0449	Prehistoric	Isolated
33LO0450	Prehistoric	Isolated
33LO0451	Prehistoric	1600

33LO0452	Prehistoric	Isolated
33LO0453	Prehistoric	1200
33LO0454	Prehistoric	50
33LO0455	Prehistoric	3600
33LO0456	Prehistoric	500
33LO0457	Prehistoric	Isolated
33LO0458	Prehistoric	200
33LO0459	Prehistoric	Isolated
33LO0460	Prehistoric	100
33LO0461	Prehistoric	Isolated
33LO0462	Prehistoric	Isolated
33LO0463	Prehistoric	Isolated
33LO0464	Prehistoric	Isolated
33LO0465	Prehistoric	Isolated
33LO0466	Prehistoric	Isolated
33LO0467	Prehistoric	Isolated
33LO0468	Historic	1500
33LO0469	Prehistoric	2400
33LO0409 33LO0470		625
	Prehistoric	
33LO0471	Prehistoric	750
33LO0472	Prehistoric	Isolated
33LO0473	Prehistoric	200
33LO0474	Prehistoric	100
33LO0475	Prehistoric	Isolated
33LO0476	Prehistoric	750
33LO0477	Prehistoric	Isolated
33LO0478	Prehistoric	Isolated
33LO0479	Prehistoric	Isolated
33LO0480	Prehistoric	600
33LO0481	Prehistoric	225
33LO0482	Prehistoric	250
33LO0483	Prehistoric	Isolated
33LO0484	Prehistoric	Isolated
33LO0485	Prehistoric	Isolated
33LO0486	Prehistoric	800
33LO0487	Prehistoric	100
33LO0488	Prehistoric	200
33LO0490	Prehistoric	Isolated
33LO0491	Historic	3500
33LO0492	Prehistoric	Isolated
33LO0493	Prehistoric	Isolated
33LO0494	Prehistoric and	2000
	Historic	
33LO0495	Prehistoric	Isolated
33LO0541	Prehistoric	Isolated
33LO0542	Prehistoric	Isolated
33LO0589	Prehistoric	Isolated
	•	

Appendix B: Historic structures recorded within 1.6km (1mile) radius the APE.

OHI NUMBER	Name	HISTORIC USE	DATE
LOG0051916		Single Dwelling	1870
LOG0020916	Storage	Carriage House/Garage	1860
LOG0021216	A Albright House	Single Dwelling	1850
LOG0052216		Single Dwelling	1880
LOG0020616	Lewistown Post Office	Financial Institution	1910
LOG0051616	Rider Property	Village/Twp/City Hall	1910
LOG0020716	Lewistown United Methodist Church	Church/Religious Structure	1880
LOG0051716	Simpkins House	Single Dwelling	1895
LOG0052016	Renick Barn	Barn	1925
LOG0020416	Lakeview Middle School	School	1925
LOG0021016	Lewistown Elevator	Mill/Processing/Manufacturing Facility	1900
LOG0020516	Storage	Zoo	1875
LOG0020816	House	Single Dwelling	1895
LOG0052116	Howard Barn	Barn	1910
LOG0020316	Storage	Village/Twp/City Hall	1870
LOG0021116	Lewistown Elevator Office	Office	1890

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In reply, refer to 2020-LOG-50019

November 18, 2020

Montana Martin U.S. Army Corps of Engineers 600 Dr. Martin Luther King Jr. Pl Louisville, KY 40202 Montana.martin@usace.army.mil

RE: Lewistown New Sanitary Sewage Collection System, Lewistown, Logan County, Ohio

Dear Mr. Martin:

This is in response to the correspondence, received electronically on November 10, 2020, regarding the proposed Lewistown New Sanitary Sewage Collection System, Lewistown, Logan County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C.470 [36 CFR 800]).

The following comments pertain to the *Phase I Archaeological Survey of the Lewistown New Sanitary Sewage Collection System in Lewistown, Ohio* by Montana Martin (U.S. Army Corps of Engineers, Louisville District, 2020).

A literature review, visual inspection, and surface collection was completed as part of the investigations. No previously identified archaeological sites are located within the project area, however, a number of sites are located immediately adjacent to the project area. No new archaeological sites were identified during the survey. Our office agrees no further archaeological survey is necessary.

Our office would like to request, for all future survey projects completed by U.S. Army Corps of Engineers, that proper History/Architecture Survey also take place for the proposed undertaking. You can find our *Guidelines for Conducting History/Architecture Surveys in Ohio* on our website: https://www.ohiohistory.org/OHC/media/OHC-Media/Documents/Guidelines-for-Conducting-History Architecture-Surveys-in-Ohio.pdf

Based on the information provided, we agree that the project as proposed will have no effect on historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. If you have any questions, please contact me at (614) 298-2022, or by e-mail at khorrocks@ohiohistory.org, or Diana Welling at dwelling@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Krista Horrocks, Project Reviews Manager

Resource Protection and Review

RPR Serial No: 1086254

Appendix D

Agency and Tribal Correspondence



November 13, 2020

To Whom It May Concern:

The Delaware Nation Historic Preservation Department received correspondence regarding the following referenced project(s).

Project(s): Lewistown New Sanitary Sewage Collection System, Lewistown, Ohio

Our office is committed to protecting tribal heritage, culture and religion with particular concern for archaeological sites potentially containing burials and associated funerary objects.

The Lenape people occupied the area indicated in your letter prior to European contact until their eventual removal to our present locations. According to our files, the location of the proposed project does not endanger cultural, or religious sites of interest to the Delaware Nation. **Please continue with the project as planned** keeping in mind during construction should an archaeological site or artifacts inadvertently be uncovered, all construction and ground disturbing activities should immediately be halted until the appropriate state agencies, as well as this office, are notified (within 24 hours), and a proper archaeological assessment can be made.

Please note the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge Munsee Band of Mohican Indians are the only Federally Recognized Delaware/Lenape entities in the United States and consultation must be made only with designated staff of these three tribes. We appreciate your cooperation in contacting the Delaware Nation Historic Preservation Office to conduct proper Section 106 consultation. Should you have any questions, feel free to contact our offices at 405-247-2448 ext. 1403.

Erin Paden

Director of Historic Preservation

Crie M. Paden

Delaware Nation

31064 State Highway 281

Anadarko, OK 73005

Ph. 405-247-2448 ext. 1403

epaden@delawarenation-nsn.gov

QUAPAW NATION

P.O. Box 765 Quapaw, OK 74363-0765

(918) 542-1853 FAX (918) 542-4694

September 17, 2020

Department of the Army U.S. Army Corps of Engineers, St. Louis District 600 Dr. Martin Luther King Jr Pl Louisville, KY 40202

Re: construction of a new sanitary sewage collection system for Lewistown in Logan County, Ohio

To Whom It May Concern,

This project is outside of the current area of interest for the Quapaw Nation; therefore, the Quapaw Nation does not desire to comment on this project at this time. Thank you for your efforts to consult with us on this matter.

Evertt Bandy

Everett Bandy, THPO Quapaw Nation P.O. Box 765

Quapaw, OK 74363 (p) 918-238-3100



October 9, 2020

Steele McFadden USACE Louisville P.O. Box 59 Louisville, KY 40201-0059

Re: THPO Response to consultation

Dear Mr. McFadden:

As the Tribal Historic Preservation Officer (THPO), we have received your request for consultation regarding the proposed undertaking in Logan County, OH. At this time, we are not providing comments. We have not identified any information concerning the presence of any cultural resources significant to the Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians within the Area of Potential Effect (APE). This is not to say that such a site may not exist, just that this office does not have any available information of the area(s) at this time.

However, in the event that a discovery of artifacts, human remains, or funerary objects are found, we request to be notified within 10 days. At that time, the Tribe will determine if further consultation is necessary.

Thank you,

Lakota Pochedley

THPO

2872 Mission Dr.

Shelbyville, Michigan 49344 Lakota.pochedley@glt-nsn.gov

Labota & Portudry

Phone: (269) 397-1780

Martin, Montana LRL

From: Martin, Montana LRL

Sent: Thursday, October 8, 2020 1:05 PM

To: Guffey, Jennifer M CIV USARMY CELRL (USA)

Subject: REview of response. Lewistown Environmental Infrastructure Project

Attachments: Bad River N.pdf; Bad River E.pdf; Bad River S.pdf; Response Bad River Overview.pdf; Lewiston Sites.csv

Edith,

Thank you for your response. Attached are an Overview Map, 3 zoomed maps, and an Excel Spreadsheet listing the archaeological sites within the 1 mile radius of the project. In the Excel spreadsheet you will find information regarding the cultural affiliation as well as further information, below I have listed the sites with known affiliations.

Paleolithic- Lo- 275
Early Archaic- Lo-542
Late Archaic- Lo- 277, 293, 469, & 541
Late Woodland- Lo- 459
Late Prehistoric- Lo- 282
Historic- Lo- 73, 288, 468, & 491

If you need any further information please let me know.

Thanks again,

Montana Martin Archaeologist

Civil Works - Planning, Programs, and Project Management Branch US Army Corps of Engineers Louisville District PO Box 59 Louisville, KY. 40201-0059 Office Phone: 502-315-7433

----Original Message-----

From: Guffey, Jennifer M CIV USARMY CELRL (USA) < Jennifer.M.Guffey@usace.army.mil>

Sent: Thursday, October 8, 2020 8:42 AM

To: Martin, Montana LRL < Montana. Martin@usace.army.mil> Subject: RE: Lewistown Environmental Infrastructure Project

No they want to know about all the archaeological sites near the project. This could include burials, but other objects of antiquity that would be considered sacred to the tribes. So you need to break down what each site is, meaning what is the cultural affiliation of the site if known. Develop a table of the sites to provide to the tribes. Keep in mind the table will need to be reviewed before it is sent to the tribe.

Hope this helps.

Jennifer

Jennifer Guffey Archaeologist & Tribal Liaison Planning Section,

Civil Works, Planning, Programs and Project Mgmt Branch Louisville District U.S.Army Corps of Engineers Office Phone-502.315.7468 Office Fax- 502.315.6864
Original Message
From: Martin, Montana LRL
Sent: Thursday, October 08, 2020 8:07 AM
To: Guffey, Jennifer M CIV USARMY CELRL (USA) < Jennifer.M.Guffey@usace.army.mil>

"Findings of our Ancestors"? I assume by the context this means they want to know about burials?

From: Edith Leoso <THPO@badriver-nsn.gov> Sent: Wednesday, October 7, 2020 5:43 PM

To: Martin, Montana LRL < Montana. Martin@usace.army.mil>

Subject: FW: Lewistown Environmental Infrastructure Project

Subject: [Non-DoD Source] RE: Lewistown Environmental Infrastructure Project

Boozhoo (Hello),

I have reviewed the information provided and would like to see a map of the 88 archeological sites determined to be within 1-mile of the APE. Also, if you could provide, via email, some context about the nearest archeological site to the APE, including, if any of those sites resulted in findings of our Ancestors. It will be most appreciated. The reason for this is that there is a waterway in close proximity to the APE. Most ancient burials are found near waterways, which corresponds with our Traditional teachings.

Miigwech (Thanks),

Edith Leoso

Bad River Band of Lake Superior Tribe of Chippewa

Tribal Historic Preservation Officer

P.O. Box 39

Odanah, WI 54861

thpo@badriver-nsn.gov <mailto:thpo@badriver-nsn.gov>

Office: (715) 682-7123, x 1662

Remote/cell: (715) 292-8286

From: Martin, Montana LRL < Montana. Martin@usace.army.mil < mailto: Montana. Martin@usace.army.mil > >

Sent: Wednesday, October 7, 2020 10:56 AM

To: Edith Leoso <THPO@badriver-nsn.gov <mailto:THPO@badriver-nsn.gov> >

Subject: Lewistown Environmental Infrastructure Project

Good afternoon,

The Louisville District Corps of Engineers, Planning Branch, is coordinating the archaeological report Archaeological Records Review and Phase Ia Field Reconnaissance for the report titled "Phase I Archaeological Survey of the Lewistown New Sanitary Sewage Collection System in Lewistown, Ohio." We are inviting you to consult under Section 106 with our finding of No Properties on or eligible for the NRHP will be effected. Therefore the Corps in accordance with 36CFR8004(d)(1) of the NHPA, has reached a determination of no effect. We are asking for your concurrence with this determination. Enclosed is the consultation letter and archaeological report for your review. Please let me know if you have any trouble opening the attachment or if you would like a paper copy.

I look forward to your comments. Thank you!

Montana Martin

Archaeologist

Civil Works - Planning, Programs, and Project Management Branch

US Army Corps of Engineers Louisville District

PO Box 59 Louisville, KY. 40201-0059

Office Phone: 502-315-7433