

Draft Environmental Assessment
Section 594 Town of Devola
Sanitary Sewer Improvements Phase II Project
Washington County, Ohio



U.S. Army Corps of Engineers
Huntington District
Huntington, West Virginia
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Environmental Assessment
Section 594 Town of Devola
Sanitary Sewer Service Extension and Rehabilitation Project
Washington County, Ohio
Executive Summary

The Washington County Commissioners is proposing to design and construct Phase II of their sanitary sewer improvements project for the Town of Devola in Washington County, Ohio. Phase I was completed in 2012 and involved construction of a gravity system. Currently, centralized wastewater facilities are unavailable in the project area, and residents instead rely on privately-owned septic systems that are failing. The proposed infrastructure would connect to the gravity system from Phase I, providing a central sanitary sewer system to residents in project area and therefore addressing the unsanitary and unsafe conditions associated with the existing wastewater system.

The Proposed Action Alternative would consist of a low-pressure central sanitary sewer system that would include approximately eight miles of sewer main network to be installed at a minimum depth of three feet below the frost line via borings or directional drillings; connections to approximately 556 properties; individual effluent pump units at the exterior of each property to lift sewage and pressurize the system, thereby eliminating the potential need for a new major lift station; new meandering septic tanks, control panels and lateral connections to the sewer mains at each property; and disconnection and abandonment of the existing individual septic systems that are currently failing. Upon completion of the project, areas impacted by construction would be returned to their pre-existing conditions via right-of-way/driveway repair, seeding, and mulching.

The proposed project is a partnership agreement between the Washington County Commissioners and the U.S. Army Corps of Engineers (Corps), established under the authority of Section 594 of the Water Resources Development Act of 1999 (Public Law 106-53), as amended, which provides authority for the Corps to establish a program to provide environmental assistance to Non-Federal entities in Ohio. This law provides design and construction assistance for water related environmental infrastructure projects to Non-Federal interests in Ohio. Funding, as established under Section 594, shall be shared 75% Federal and 25% Non-Federal (State and Local).

This Environmental Assessment is prepared pursuant to the National Environmental Policy Act, Council on Environmental Quality Regulations (40 CFR 1500-1508) and the Corps Implementing regulation, ER-200-2-2.



SECTION 594 TOWN OF DEVOLA
SANITARY SEWER IMPROVEMENTS PHASE II PROJECT
WASHINGTON COUNTY, OHIO
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The brief and concise nature of this document is consistent with the 40 CFR requirements of the National Environmental Policy Act (NEPA) to reduce paperwork and delay by eliminating duplication with existing environmental documentation, incorporating pertinent material by reference, and by emphasizing interagency cooperation. The majority of data collection and analysis in this document was performed by Lawhon & Associates, Inc. in conjunction with the U.S. Army Corps of Engineers (Corps).

1.0 PROJECT DESCRIPTION

1.1 Project Background

The Washington County Commissioners (County) are located in Washington County, Ohio and includes the Town of Devola (Town) in its service area. The Town contains more than 900 homes and businesses and is located on the east side of the Muskingum River and north of the City of Marietta, Ohio. In 2009, the Putnam Community Water Association (PWCA) noted multiple samples of high nitrates in the water provided to the Town, and the Ohio Environmental Protection Agency (OEPA) determined in 2011 that individual septic systems and groundwater from Devola were significant contributors to an exceedance of nitrate maximum containment load (MCL) observed at the PWCA wellfield and Muskingum River. In 2012, the OEPA ordered that a plan for the Town's sewage treatment improvements, or other methods of abating pollution and correcting the unsanitary conditions, be implemented. Phase I of the sanitary sewer service improvements project was completed in 2012 for the southeastern area of the Town, and Phase II would further improve the Town's wastewater facilities by replacing the individual, failing septic systems with a central sanitary sewer system.

This Environmental Assessment (EA) examines the potential environmental impacts of the proposed improvements to the wastewater system as proposed by the County. The purpose of the EA is to analyze the potential environmental impacts of the proposed project and to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI), but it is anticipated that an EIS would not be required. An EIS is typically conducted where significant human or natural resources exist and the implementation of a proposed project may have significant effects to those resources. An EA typically involves projects where no significant resources occur, or the project is expected to have less than significant impacts to the human and natural environment. In both EISs and EAs, additional project actions can be implemented to help avoid, minimize, or mitigate for potential project impacts.

1.2 Purpose, Need, and Authorization

The purpose of the proposed project is to improve the Town's sanitary sewer system by providing centralized wastewater facilities to residents in the project area who are currently utilizing individual, failing septic systems. In addition, the failing septic systems and groundwater flow from the Town are significant contributors to high nitrate readings. Due to small residential lot sizes and soil conditions, repair of the existing sanitary sewer system was determined an unacceptable solution to address such issues. Therefore, the County proposed to



construct new wastewater facilities for the Town. The proposed project is needed to address the unsanitary and unsafe conditions caused by failing septic systems and an exceedance of nitrate MCL.

The proposed project is a partnership agreement between the County and the Corps established under the authority of Section 594 of the Water Resources Development Act (WRDA) of 1999 (Public Law 106-53), as amended, which provides authority for the Corps to establish a program to provide environmental assistance to Non-Federal entities in Ohio. This law provides design and construction assistance for water related environmental infrastructure projects to Non-Federal interests in Ohio, including projects for wastewater treatment and related facilities, water supply, water storage, water treatment, water distribution facilities, and surface water resource protection and development.

This EA is prepared pursuant to NEPA, Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508), and Corps implementing regulation, ER 200-2-2.

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action Alternative (PAA)

The PAA would include of installation of a low-pressure central sanitary sewer system that would include approximately eight miles of sewer main network to be installed at a minimum depth of three feet below the frost line via borings or directional drillings; connections to approximately 556 properties; individual effluent pump units at the exterior of each property to lift sewage and pressurize the system, thereby eliminating the potential need for a new major lift station; new meandering septic tanks, control panels and lateral connections to the sewer mains at each property; and disconnection and abandonment of the existing individual septic systems that are currently failing. Upon completion of the project, areas impacted by construction would be returned to their pre-existing conditions via right-of-way/driveway repair, seeding, and mulching.

2.2 Without Project Conditions

Without the PAA, the County would not improve their sanitary sewer system, and the County would not be in compliance with the OEPA's Director's Final Findings and Orders dated 13 September 2012. In addition, residents would continue to rely on failing septic systems and further deterioration of local waterways from contaminated wastewater would occur. However, it is included in the alternatives analysis to establish a baseline condition for existing human and natural environmental conditions, to allow comparison between future without and with project actions, and to determine potential environmental effects of proposed with project alternatives.

3.0 ENVIRONMENTAL SETTING AND CONSEQUENCES



This section discusses the existing conditions by resource category and any potential environmental impacts associated with the future without project conditions as well as with implementation of the PAA.

The Corps took context and intensity into consideration in determining potential impact significance, as defined in 40 CFR part 1508.27. The intensity of a potential impact is the impact's severity and includes consideration of beneficial and adverse effects, the level of controversy associated with a project's impacts on human health, whether the action establishes a precedent for future actions with significant effects, the level of uncertainty about project impacts and whether the action threatens to violate federal, state, or local laws established for the protection of the human and natural environment. The severity of an environmental impact is characterized as none/negligible, minor, moderate, significant, and may be adverse or beneficial. The impact may also be short-term or long-term in nature.

- None/negligible – No measurable impacts are expected to occur.
- Minor – A measurable effect to a resource. A slight impact that may not be readily obvious and is within accepted levels for permitting, continued resource sustainability, or human use. Impacts should be avoided and minimized if possible but should not result in a mitigation requirement.
- Moderate – A measurable effect to a resource. An intermediate impact that may or may not be readily obvious but is within accepted levels for permitting, continued resource sustainability, or human use. Impacts may or may not result in the need for mitigation.
- Significant – A measurable effect to a resource. A major impact that is readily obvious and is not within accepted levels for permitting, continued resource sustainability, or human use. Impacts likely result in the need for mitigation.
- Adverse – A measurable and negative effect to a resource. May be minor to major, resulting in reduced conditions, sustainability, or viability of the resource.
- Beneficial – A measurable and positive effect to a resource. May be minor to major, resulting in improved conditions, sustainability, or viability of the resource.
- Short-Term – Temporary in nature and does not result in a permanent long-term beneficial or adverse effect to a resource. For example, temporary construction-related effects (such as, an increase in dust, noise, traffic congestion) that no longer occur once construction is complete. May be minor, significant, adverse, or beneficial in nature.
- Long-Term – Permanent (or for most of the project life) beneficial or adverse effects to a resource. For example, permanent conversion of a wetland to a parking lot. May be minor, significant, adverse, or beneficial in nature.



The Corps used quantitative and qualitative analyses, as appropriate, to determine the level of potential impact from proposed alternatives. Based on the results of the analyses, this EA identifies whether a particular potential impact would be adverse or beneficial, and to what extent.

3.1 Project Location

The affected area is located in the Town of Devola, Washington County, Ohio. The project area is bound to the north by County Road 341 to Town Hall Lane including areas around Strecker Lane, Sylvan Way, Ohio Boulevard, and Kentucky Avenue; to the east by State Route 60; to the south to a line approximately 200 ft south of Lawton Road near the Muskingum River; and to the west by Elm Tree Lane including Magnum Magnetics and an unidentified trailer park along County Route 341. The proposed work would be within existing rights-of-way, construction areas, and permanent easements that would be acquired by the local Sponsor. Figure 1 below shows the overall project location. See Appendix A for project location maps.

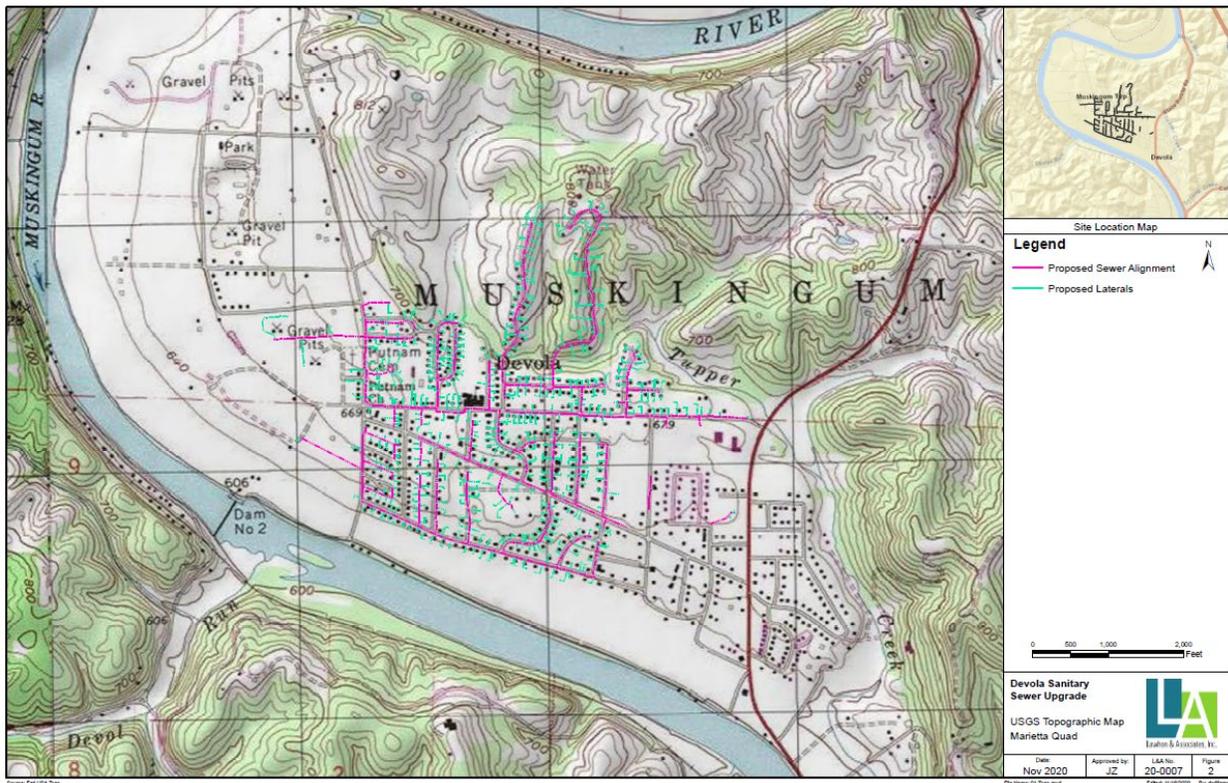


Figure 1: Project Location

Land use in the project area consists of residential homes, commercial businesses, and agricultural fields. The entirety of the project would be constructed in residential lawns, developed open space, agricultural fields, and existing right-of-way or utility easements. Areas



disturbed by construction would be returned to their pre-existing conditions, therefore land use changes from construction would be minor and temporary. No long-term land use changes would result from the project.

Without the proposed project, there would be no changes to the project area; therefore, there would be no impacts to land use.

3.3 Climate

The climate in the Muskingum River Basin is typical of the North Temperate Zone. Topographic characteristics considerably modify the climate as marked variations in temperature and precipitation occur between mountain and plateau areas. Frequent and rapid changes in weather occur due to the passage of fronts associated with general low-pressure areas. Washington County, Ohio experiences seasonal weather patterns with typical summer conditions of hot and humid days and winters being mild to moderate cold temperatures with snowfall. Fall is typically the driest season while spring is typically wetter. The hottest month is July with an average high temperature of 85 degrees Fahrenheit with the summer season lasting from May to September. The coldest month is January with an average low temperature of 21 degrees Fahrenheit and the winter season lasting from December to March. Average annual precipitation is 42 inches and average snowfall is 20 inches for Washington County, Ohio. The heaviest precipitation of late fall and the winter months occurs during passage of general storms that move from the southwest to northeastward over the Ohio River Valley. Occasionally, tropical hurricanes moving northward parallel to the Atlantic coast will cross the Appalachian range and deposit enough rain to cause heavy flooding.

Maintaining and providing adequate wastewater infrastructure within the constraints imposed by primary project purposes helps reduce stormwater runoff and soil erosion; mitigates air pollution; and moderates temperatures. The USACE, also Corps, Strategic Sustainability Performance Plan implements Executive Order (EO) 13693, stating:

“As a prominent Federal entity, a key participant in the use and management of many of the Nation’s water resources, a critical team member in the design, construction, and management of military and civil infrastructure, and responsible members of the Nation’s citizenry, the USACE strives to protect, sustain, and improve the natural and manmade environment of our Nation and is committed to sustainability and compliance with applicable environmental and energy statutes, regulations and Executive Orders.”

Further, the USACE has prepared an Adaptation Plan in response to previously existing related EOs and Climate Action Plan. The Adaptation Plan includes the following USACE policy statement:

“It is the policy of USACE to integrate climate change preparedness and resilience planning and actions in all activities for the purpose of enhancing the resilience of our built and natural water-resource infrastructure and the effectiveness of our military support mission, and to reduce the potential vulnerabilities of that infrastructure and those missions to the effects of climate change and variability.”



The Muskingum River Basin is part of the larger Ohio River Basin (ORB). Although the modeled climatic predictions vary across the ORB and are somewhat uncertain (especially in the latter portion of the 21st century), much of the basin appears likely to experience significantly higher high-flow events and in some cases, lowered low-flow events, interspersed with periods of drought. In the face of changing land use and energy development, and where these projected air temperature and flow changes deviate more than 25% from the current levels, it is likely that fish and mussel populations, wetland complexes, reservoir fisheries, trans-boundary organisms such as migratory fish and water body-dependent birds, and human use and safety will also be noticeably impacted.

IWR climate modeling results indicate that climatic conditions in the ORB will remain largely within the mean ranges of precipitation and temperatures, with the exception of a gradual warming that has been experienced between 1952 and 2001. Summer highs and winter lows between 2011 and 2040 are expected to remain generally within what has been observed over that historic period, but extreme fluctuations (record temperatures, rainfall, or drought) are expected to become more likely than before.

After 2040, temperatures may rise at one degree per decade through 2099. Likewise, there may be significant changes in precipitation with associated increases or decreases in river flow on an annual mean basis and a seasonal maximum and minimum basis.

During 2070-2099, the annual percent change in maximum streamflow increases substantially across PA, WV, OH, IN, and IL. It is anticipated there would be some increases between 2040 and 2070 in precipitation and river flow in the base period during the spring season; however the fall season will bring significant rainfall and increased river flows by as much as 35% to 50% more during the base period.

Only short duration, minor discharges of carbon-based pollutants would occur during construction activities that could contribute to greenhouse gases. The PAA or future without project conditions would not involve any activity that could significantly affect the environment in regard to climate change and the project would not likely be influenced by future changes in climate. Therefore, no significant adverse impacts to climate or climate change would occur as a result of the PAA or without the proposed project.

3.4 Terrestrial Habitat

The project area consists of developed open space, an agricultural field, residential lawns, and existing right-of-way or utility easements. In addition, the project area consists of impervious surfaces such as asphalt, concrete roadways, driveway aprons, and parking lots. Terrestrial habitat in the developed open spaces, residential lawns and easements primarily consists of regularly maintained areas such as turf that is composed of common lawn species and previously



disturbed areas. The agricultural field is currently vacant and does not contain prime terrestrial habitat. Removal of grass and vegetation may occur within areas where trenching and directional boring for the sewer lines are implemented. It is anticipated that some tree removal would be required. However, tree clearing would be minimal and would only entail removal of approximately 18 trees. Potential impacts to vegetation would be minimal and temporary. Areas disturbed by construction would be returned to their pre-existing conditions upon completion of the project. Only minor and/or temporary impacts to existing vegetation during construction are anticipated to occur. Therefore, no significant long-term impacts to terrestrial habitat are anticipated as part of the PAA.

Without the proposed project, there would be no changes to the project area; therefore, there would be no impacts to terrestrial habitat.

3.5 Floodplains

Executive Order (E.O.) 11988 requires Federal agencies to consider the potential effects of their proposed actions to floodplains. In order to determine the PAA's potential floodplain impact, the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were reviewed for the portion of the proposed project that would be located within the floodplain of the Muskingum River (<https://www.fema.gov/floodplain-management/flood-zones>). The entirety of the project is located outside of the floodplain in an area of minimal flood hazard (Zone X).

On 25 February 2021, the Washington County floodplain coordinator determined that a floodplain permit would not be required since the project area is located outside of the floodplain and/or regulatory floodway. No further coordination with the floodplain coordinator is required. The PAA meets the intent of E.O. 11988 and no significant impacts to floodplains are anticipated to occur from the PAA.

As no construction related activities would be implemented, no impacts to floodplains are anticipated to occur without the proposed project.

3.6 Prime and Unique Farmland

The Farmland Protection Policy Act (FPPA) requires Federal agencies to minimize the conversion of prime and unique farmland to non-agricultural uses. A portion of the sewer line would be constructed through five (5) parcels zoned as vacant agricultural land with mapped prime farmland soils and actively farmed. However, the sewer line would be buried, and areas containing prime and unique farmland impacted by construction would be returned to their pre-existing conditions upon completion of the project and available for future farming activities. The Corps' Huntington District has determined that impacts as a result of the project to prime and unique farmland would be minor and temporary. Therefore, the FPPA would not apply to this proposed project and no impacts on prime or unique, statewide, or locally important farmland is expected to occur. The Natural Resources Conservation Service (NRCS) concurred with the Corps' Huntington District's determination via email on 13 January 2022.



Without the proposed project, there would be no changes to the project area; therefore, there would be no impacts to Prime and Unique Farmland.

3.7 Aquatic Habitat/Water Quality

The project area is located along the Muskingum River within the Devol Run-Muskingum River Watershed (HUC 050400041204). The OEPA has listed the waterbody as impaired and included it on the 303(d) list in 2020. In addition, aquatic life (warmwater habitat) and recreation (primary contact) in the watershed were assessed in 2020 and determined impaired with no probable sources of impairment. Implementation of the PAA would not result in new discharge of pollutants and is expected to have a positive effect on the aquatic habitat and water quality within the project area by reducing pollutant discharge into surrounding waters.

Lawhon & Associates, Inc. prepared a Jurisdictional Waters & Isolated Wetland Delineation Report for the project in November 2020. Two (2) streams, Tupper Creek and an unnamed tributary to Tupper Creek, were identified within the project area. The unnamed tributary would be crossed by the sewer line via horizontally drilling through the existing embankment above the culvert crossing. Tupper Creek would also be crossed by the sewer line at two (2) locations. However, the existing roadway crossings over the culverted sections of Tupper Creek would be utilized during construction of the sewer line. There is approximately 10 ft of fill above each culvert, and the fill depth would be excavated to a minimum depth of three (3) ft just off the edge of the pavement of the roadway to install the sewer line. Therefore, no discharge or fill below the Ordinary High Water Mark (OHWM) or surface water impacts would result from the proposed action.

Based on the above information, a Department of the Army (DA) permit under Section 404 of the CWA/Section 10 of the Rivers and Harbors Act would not be required. If conditions change and it is determined that waters may be impacted, coordination with the Huntington District Corps' Regulatory Branch will be required and all applicable permits shall be obtained by the local Sponsor.

A NPDES permit for construction of the proposed action would be required due to the size of the construction area, and a stormwater pollution prevention plan would be required prior to construction. In addition, the local Sponsor has obtained an OEPA Permit to Install. Construction related impacts would be short-term and minor and mitigated through the use of Best Management Practices (BMPs) such as silt fencing, temporary seeding, and other measures as necessary throughout the project area to prevent runoff into adjacent surface waters. Based on the above, implementation of the PAA would not result in significant adverse short or long-term adverse environmental impacts to aquatic habitat and water quality. The PAA is anticipated to have beneficial effects to aquatic habitat and water quality by reducing surface runoff and risk for contamination that could negatively impact water resources.

Without the proposed project, no aquatic impacts would occur and water quality in the project area would remain unchanged. However, without the proposed project, it is likely that water quality would continue to be negatively impacted by surface water runoff.



3.8 Wetlands

National Wetland Inventory (NWI) Maps were reviewed for the proposed project area and identified approximately two (2) wetlands within the project area. Lawhon & Associates, Inc. prepared a Jurisdictional Waters & Isolated Wetland Delineation Report for the project in November 2020 to determine the validity of the NWI maps. Formal wetland delineations determined that the wetlands would not be impacted by construction. Therefore, there would be no impacts to wetlands under the PAA.

Without the proposed project, no impacts to wetlands are anticipated to occur. However, there is potential for increased risk of contamination to wetlands that may be located downstream of existing wastewater systems if infrastructure failure occurs in the future.

3.9 Wild and Scenic Rivers

No designated State Wild or Scenic Rivers are present within the Project Area. Therefore, no impacts to these resources are anticipated without the proposed project or as part of the PAA.

3.10 Hazardous, Toxic, and Radioactive Waste (HTRW)

A Limited Phase I HTRW Environmental Site Assessment was conducted by Lawhon & Associates, Inc. in October 2020 for the project to identify environmental conditions and to identify the potential presence of HTRW contamination located in the project's construction work limits. During their assessment, no recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), historical recognized environmental conditions (HRECs), or de minimis conditions were found.

After review of the Limited Phase I HTRW investigation, Corps' HTRW staff determined that no further investigation or action is required. Therefore, no impacts to HTRW are anticipated with the PAA. A clearance memorandum was signed by Corps' HTRW staff on 9 July 2021 and is included in Appendix B.

Without the proposed project, there would be no ground disturbing activities therefore, there would be no direct construction related HTRW impacts.

3.11 Cultural Resources

Lawhon & Associates submitted the proposed project to the Ohio State Historic Preservation Office (SHPO) for their review and consultation. In addition, a Phase I archaeological survey was performed by Lawhon & Associates, Inc. in October 2020 that identified two (2) previously undocumented archaeological sites (33WN521 and 33WN522). On 4 November 2021, the SHPO determined that sites 33WN521 and 33WN522 are not eligible for inclusion to the National Register of Historic Places (NRHP) and that the project would have no effect to historic properties. The Corps' Huntington District Archaeologist has reviewed the Undertaking and concurs with the SHPO's determinations. In accordance with Section 106 of the National



Historic Preservation Act of 1966, as amended (36 CFR 800), the Corps Huntington District will submit a letter to the SHPO for their review. Coordination with the SHPO is on-going and will be completed prior to issuance of the FONSI.

If unanticipated archaeological deposits or human remains are discovered during construction, all work near the location of the discovery shall cease and the Project Manager and Huntington District Archaeologist shall be contacted immediately. The Ohio State Police, the Washington County Coroner, and Ohio SHPO must also be notified immediately if human remains are discovered.

Without the proposed project, no construction related actions would be implemented, so no significant detrimental impacts to cultural resources would occur.

3.12 Threatened and Endangered Species

According to the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool, the project area is within the range of the Indiana bat (*Myotis sodalis*), Northern long-eared bat (*Myotis septentrionalis*), Fanshell mussel (*Cyprogenia stegaria*), Pink mucket pearly mussel (*Lampsilis abrupta*), Rabbitsfoot (*Quadrula cylindrica cylindrica*), Sheepnose mussel (*Plethobasus cyphus*), and Snuffbox mussel (*Epioblasma triquetra*).

Lawhon & Associates, Inc. coordinated with the USFWS Ohio Field Office regarding the proposed project. On 4 February 2020, the USFWS recommended in a letter (TAILS# 03E15000-2020-TA-0728) that removal of any trees greater or equal to three (3) inches diameter-at-breast height (dbh) occur between October 1 to March 31. In addition, the USFWS determined that the listed mussel species are known to occur in the Ohio River in Washington County, Ohio. However, there would be no in-water work or fill placed in the Ohio River as a result of the project.

Approximately 18 trees would need to be cleared. In addition, trees would only be cleared during the designated tree clearing window (October 1 to March 31). Therefore, the Corps' Huntington District has determined the project may affect, but is not likely to adversely affect, the Indiana bat, and Northern long-eared bat.

The unnamed tributary would be crossed by the sewer line via horizontally drilling through the existing embankment above the culvert crossing. Tupper Creek would also be crossed with the sewer line at two (2) locations. However, the existing roadway crossings over the culverted sections of Tupper Creek would be utilized during construction of the sewer line. Therefore, no in-water work in Tupper Creek or the unnamed tributary would be required. In addition, the unnamed tributary is an ephemeral stream with primarily sand and silt substrates and unlikely to contain suitable habitat for the listed mussel species. Tupper Creek is a small, perennial stream with primarily sand and silt substrates, and no mussel species were observed during the stream delineation. Potential impacts to aquatic habitat would be minimized by utilization of BMPs during construction. Therefore, the Corps' Huntington District has determined that the proposed project may affect, but is not likely to adversely affect, the listed mussel species. On 27 January



2022, the USFWS concurred with the Corps’ determination. No further coordination under Section 7 of the Endangered Species Act and Fish and Wildlife Coordination Act is required.

Without the proposed project, there would be no additional ground disturbing activities, tree clearing, or fill within waters. Therefore, there would be no effect to Federally Threatened and Endangered Species.

3.13 Air Quality

According to the United States Environmental Protection Agency (USEPA), Washington County, Ohio, is classified as “in attainment” for all but one (1) criteria pollutant. Under the PAA, emissions from construction equipment would occur during the construction period. Contractors would be required to operate all equipment in accordance with local, state, and Federal regulations. The PAA is exempt through 40 CFR Part 93.153 from making a conformity determination, since estimated emissions from construction equipment would not be expected to exceed de minimis levels or have direct emissions of a criteria pollutant or its precursor. Any impacts would be short-term, localized and would occur during construction activities. Impacts to air quality under the PAA would be temporary during construction and would be considered minor.

No impacts to air quality are anticipated without the proposed project.

3.14 Noise

Noise associated with the PAA would be limited to that generated during construction. The noise associated with construction would be short in duration and would only occur during daylight hours. 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. According to the Department of Housing and Urban Development Guidelines, DNLs below 65 dBA are normally acceptable levels of exterior noise in residential areas. The Federal Aviation Administration (FAA) denotes a DNL above 65 dBA as the level of significant noise impact. Several other agencies, including the Federal Energy Regulatory Commission, use a DNL criterion of 55 dBA as the threshold for defining noise impacts in suburban and rural residential areas. According to Dr. Paul Schomer in his 2001 *A White Paper: Assessment of Noise Annoyance*, while there are numerous thresholds for acceptable noise in residential areas, research suggests an area’s current noise environment, which has experienced noise in the past, may reasonably expect to tolerate a level of noise about 5 dBA higher than the general guidelines. The Corps Safety and Health Requirements Manual provides criteria for temporary permissible noise exposure levels (see Table 1 below), for consideration of hearing protection or the need to administer sound reduction controls.

Table 1 - Permissible Non-Department of Defense Noise Exposures	
Duration/day (hours)	Noise level (dBA)
8	90
6	92



4	95
3	97
2	100
1.5	102
1	105

Construction noise would be similar to that of farm equipment and other small machinery used in the local area. A backhoe, end loader, road grader and/or vibratory roller 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 98 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, or existing noise conditions that residents already experience in the project area such as traffic along U.S. Route 60 and a mixture of residential, commercial, and industrial noise. The outdoor construction noise would be further muffled while residents are inside their homes. While the construction noise generated would be considered unacceptable according to HUD and FAA standards, these limited exposures and time intervals are still within allowable Corps 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. Residents being exposed 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 PAA, impacts from the noise to local residences would be temporary and minor.

There would be no change in noise without the proposed project and thus no impact.

3.15 Environmental Justice and Protection of Children

Executive Order (E.O.) 12898, as amended, requires Federal actions to address environmental justice in minority populations and low-income populations. According to the U.S. Census Bureau, the 2019 population estimate for Washington County was 59,911 and does not contain significant minority populations. The 2019 estimates indicate Washington County is 95.9% white and has a median household income of \$50,021 compared with the median household income of \$56,602 for the State of Ohio. Individuals residing in the county below the poverty level is 11% compared to 13.1% statewide. In addition, 19.7% of individuals residing in the County are under the age of 18 compared to 22.1% statewide.

E.O. 13045, as amended, requires each Federal agency “to identify and assess environmental health risks and safety risks that may disproportionately affect children” and “ensure that its



policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.” This E.O. was prompted by the recognition that children, still undergoing physiological growth and development, are more sensitive to adverse environmental health and safety risks than adults. The potential for impacts on the health and safety of children is greater where projects are located near residential areas.

Service provided by the sewer system improvements would benefit residents in the project area that rely on individual, failing septic systems. Implementation of the PAA would provide residents and children with safe, reliable wastewater facilities, thereby improving the living environment for all residents. There would be no residential or commercial displacements; however, homes and buildings would be temporarily impacted by the proposed project. Impacts would be minimal, and areas disturbed by construction would be returned to their pre-existing conditions. Therefore, the PAA meets the directive of E.O. 12898 and E.O. 13045 by avoiding any disproportionately high adverse human health or environmental effects on minority or low-income populations or children.

Without the proposed project, residents would continue to experience unsanitary and unsafe conditions, perpetuating health and safety concerns.

3.16 Aesthetics

The project area is a rural community consisting primarily of residential and commercial properties and an agricultural field. Temporary disturbance of the local aesthetics would be anticipated during construction of the PAA; however, areas disturbed by construction would be returned to their pre-existing conditions upon completion of the project. The project consists primarily of subsurface sewer improvements, and aboveground components would be limited to manhole covers and individual effluent pump units at the exteriors of each building receiving a lateral sewer connection.

Neither the PAA nor future conditions without the proposed project would significantly impact local aesthetics.

3.17 Transportation and Traffic

The proposed project would be within the rights-of-way and previously disturbed areas. Construction of the PAA in and along rights-of-way would involve some delays and potential detours in the normal traffic flow. If detours would occur, they would be relatively minor and temporary in nature. Construction on or near road surfaces would be in compliance with standard traffic controls to minimize traffic disruptions and avoid public safety problems. Impacts anticipated to occur from the PAA would be minimal and temporary in nature.

Without the proposed project, there would be no changes to the project area; therefore, there would be no impacts to transportation and traffic.

3.18 Health and Safety



The PAA has been designed to provide safe, reliable wastewater facilities to the residents of the project area that are currently utilizing individual, failing septic systems. Providing service to residents is necessary to address public health and safety concerns in the area and degradation of local waterways and the environment. Therefore, the PAA is anticipated to have a long-term, beneficial impact on health and safety for the residents in the project area.

Without the proposed project, residents would continue to rely on inadequate septic systems, which pose health and safety concerns that could cause minor to potentially significant negative impacts to the community.

4.0 Status of Environmental Compliance

The PAA will be in full compliance with all local, state, and Federal statutes as well as Executive Orders prior to issuance of a FONSI. Compliance is documented below in Table 2.

Table 2 - Environmental Compliance Status			
Statute/Executive Order	Full	Partial	N/A
National Environmental Policy Act (considered partial until the FONSI is signed)		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			N/A
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		
Executive Order 13045 Protection of Children	X		

5.0 REQUIRED COORDINATION

5.1 Agencies Contacted



Direct coordination with the USFWS Ohio Field Office, Ohio Department of Natural Resources, OEPA, Ohio SHPO, NRCS, and Washington County floodplain coordinator were completed prior to publication of the EA. Agency correspondence is included in Appendix B.

5.2 Public Review and Comments

The EA and FONSI will be available for public review and comment for a period of 30 days, as required under NEPA. A Notice of Availability will be published in the local newspaper, The Marietta Times, advising the public of this document's availability for review and comment. A copy of the EA will also be placed in the Washington County Public Library and made available on-line at <http://www.lrh.Corps.army.mil/Missions/PublicReview.aspx>. The mailing list for the EA is located in Appendix C.

6.0 CONCLUSION

The County is proposing to improve the Town's sanitary sewer system by providing centralized wastewater facilities to residents in the project area of Devola, Ohio. The sewer system improvements would reduce the amount of nitrate MCL and address the unsanitary and unsafe conditions caused by inadequate septic systems. In addition, residents who rely on the individual septic systems would benefit from a central sanitary sewer system. By providing safe and reliable wastewater facilities, the proposed project is anticipated to have long-term beneficial impacts on health and safety for residents in the project area and surrounding area by providing a reliable system. No significant, adverse impacts have been identified as a result of implementation of the proposed improvement project. Future conditions without the proposed project were considered unacceptable due to health and safety hazards for the community in the proposed project area.

The majority of the proposed project would take place on previously disturbed land or rights-of-way. Health and safety would be realized immediately with project implementation. Effects associated with construction would be minor and temporary. BMPs would be implemented during construction to minimize impacts to residents and the environment. Therefore, the PAA would not be expected to have significant impacts on the human or natural environment.

7.0 LIST OF INFORMATION PROVIDERS AND PREPARERS

The following agencies were involved in preparation of the EA.

Lawhon & Associates, Inc.
1441 King Avenue
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502 Eighth Street
Huntington, WV 25701



8.0 REFERENCES

Council for Environmental Quality
1996 Draft Guidance for Addressing Environmental Justice under NEPA. 1996.

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U.S. Census Bureau
2021 American FactFinder Website:
<https://www.quickfacts.census.gov>

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2021 How's My Waterway Waterbody Report website:
https://mywaterway.epa.gov/waterbody-report/WVDEP/WVK-up_02/2016

U.S. Fish and Wildlife Service
2021 National Wetlands Inventory website:
<https://www.fws.gov/wetlands/data/mapper.html>

U.S. Fish and Wildlife Service
2021 Information for Planning and Conservation website:
<https://www.fws.gov/ipac>

U.S. Geological Survey
2021 StreamStats: Streamflow Statistics and Spatial Analysis Tools for Water- Resources Application. StreamStats Application Website:
<https://streamstats.usgs.gov/ss/>

Washington County, Ohio Climate
<https://www.bestplaces.net/climate>