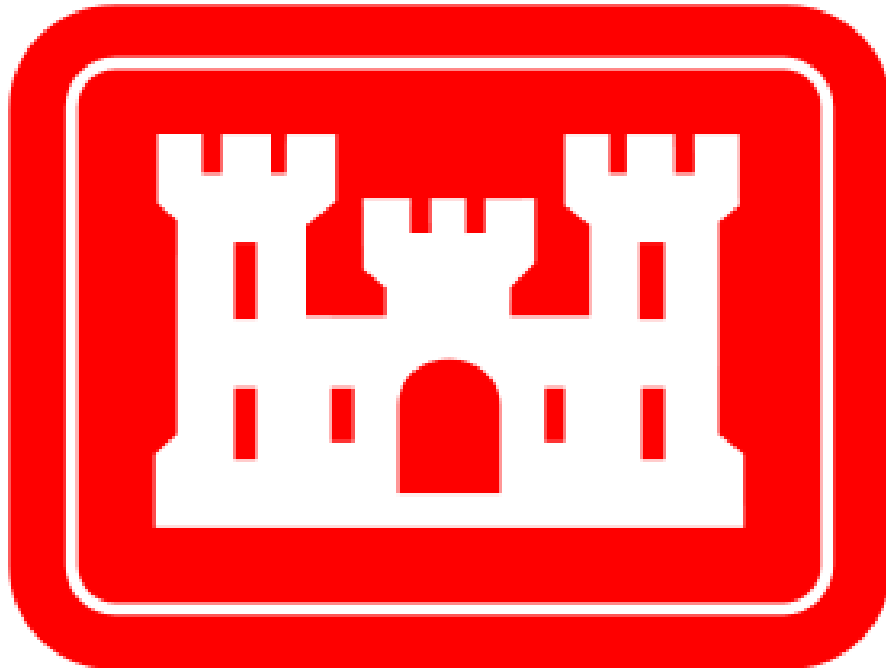


**Environmental Assessment**

**Section 594 City of Nelsonville  
Collection System Improvements Project  
Athens County, Ohio**



**U.S. Army Corps of Engineers  
Huntington District  
Huntington, West Virginia**

**September 2019**



## Executive Summary

The City of Nelsonville is proposing to design and construct a wastewater collection system improvement project to replace an existing pump station located on Back Street, and associated sewer line infrastructure. The improvement project would also include construction of a new master pump station adjacent to the wastewater treatment plant. Improvements to existing infrastructure are required in order to eliminate wastewater components, which have reached the end of their useful life and are in deteriorating condition. In addition to the above improvements, the proposed project would also include extension of sanitary sewer service in the area of Carbon Hill Buchtel Road and Burr Oak Boulevard by constructing gravity sewers, a force main and a pump station. This area is currently served by private on-site septic systems, which are failing and posing health risks to humans and increased risk of contamination to the local environment. The proposed infrastructure would enable waste to be transported to the existing City of Nelsonville wastewater treatment plant (WWTP) for proper treatment.

The Proposed Action Alternative would consist of construction of approximately 3,755 linear feet of 8-inch sanitary sewer pipeline; 1,520 linear feet of 4-inch force mainline; 800 linear feet of 6-inch force mainline; 410 linear feet of 1.25-inch pipeline; 15 standard manholes; 11 type-C manholes in the area of Carbon Hill Buchtel Road and Burr Oak Boulevard; replacement of the existing Back Street pump station; construction of a new master pump station adjacent to the existing WWTP site; and 2,138 linear feet of 21-inch trunk sewer line replacement. All construction areas would be returned to preexisting conditions through soil grading and seed planting.

The proposed project is a partnership agreement between the City of Nelsonville 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 106-109), 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.

**TABLE OF CONTENTS**

<b>1.0</b>	<b>Project Description</b>	<b>1</b>
1.1	Project Background	1
1.2	Purpose, Need, and Authorization	1
<b>2.0</b>	<b>Proposed Actions and Alternatives</b>	<b>2</b>
2.1	Proposed Action	2
2.2	No Action Alternative	2
<b>3.0</b>	<b>Environmental Setting and Consequences</b>	<b>2</b>
3.1	Location	3
3.2	Land Use	4
3.3	Climate	4
3.4	Terrestrial Habitat	4
3.5	Floodplains	5
3.6	Prime and Unique Farmland	5
3.7	Aquatic Habitat/Water Quality	6
3.8	Wetlands	7
3.9	Wild and Scenic Rivers	7
3.10	Hazardous, Toxic, and Radioactive Wastes	7
3.11	Cultural Resources	8
3.12	Threatened and Endangered Species	9
3.13	Air Quality	10
3.14	Noise	10
3.15	Environmental Justice and Protection of Children	11
3.16	Aesthetics	12
3.17	Transportation and Traffic	12
3.18	Health and Safety	12
3.19	Cumulative Effects	13
<b>4.0</b>	<b>Status of Environmental Compliance</b>	<b>14</b>
<b>5.0</b>	<b>Required Coordination</b>	<b>15</b>
5.1	Agencies Contacted	15
5.2	Public Review and Comments	15
<b>6.0</b>	<b>Conclusion</b>	<b>15</b>
<b>7.0</b>	<b>List of Information Providers and Agency Preparers</b>	<b>16</b>



**8.0 References**

**16**

**List of Tables**

<b>Table 1</b>	Permissible Non-Department of Defense Noise Exposures	10
<b>Table 2</b>	Status of Environmental Compliance	14

**List of Appendices**

<b>Appendix A</b>	Exhibits
<b>Appendix B</b>	Agency Coordination
<b>Appendix C</b>	Mailing List



## Acronyms

BMPs- Best Management Practices  
BUSTR – Bureau of Underground Storage Tank Regulations  
CEQ – Council on Environmental Quality  
CFR – Code of Federal Regulations  
Corps – U.S. Army Corps of Engineers  
DNL – Day Night Average Noise Levels  
EA – Environmental Assessment  
EIS – Environmental Impact Statement  
EO – Executive Order  
FAA – Federal Aviation Administration  
FEMA – Federal Emergency Management Agency  
FIRM – Flood Insurance Rate Map  
FONSI – Finding of No Significant Impact  
FPPA – Farmland Protection Policy Act  
HTRW – Hazardous, Toxic, and Radioactive Waste  
MCRP - Monday Creek Restoration Project  
NAA – No Action Alternative  
NEPA – National Environmental Policy Act  
NRCS – Natural Resource Conservation Service  
NWI – National Wetland Inventory Map  
PAA – Proposed Action Alternative  
PCS – Petroleum Contaminated Soil  
RCAP – Rural Community Assistance Program  
SHPO – State Historic Preservation Office  
UPUS - Unrestricted Portable Use Standard  
USDA – United States Department of Agriculture  
USEPA – U.S. Environmental Protection Agency  
USFWS – U.S. Fish and Wildlife Service  
VAP – Voluntary Action Program  
WRDA – Water Resource Development Act  
WWTP – Waste Water Treatment Plant



*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 Ohio Rural Community Assistance Program (RCAP) in conjunction with the U.S. Army Corps of Engineers (Corps).*

## **1.0 PROJECT DESCRIPTION**

### **1.1 Project Background**

This Environmental Assessment (EA) examines the potential environmental impacts of the wastewater collection system improvement project as proposed by the City of Nelsonville. 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). An EIS is typically conducted where significant human or natural resources exist and the implementation of a proposed project may have significant negative 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 would be to replace existing wastewater infrastructure within the collection system, which has reached the end of its useful life and is experiencing deterioration. These conditions affect the operations of the wastewater system and could pose health risks to residents if complete failure would occur. The project would also extend sanitary sewer service to an area near the City of Nelsonville, which is currently served by private on-site septic systems that are in failing condition and posing a health risk to residents and the environment. The need for replacing and extending the wastewater collection system in the proposed area is to provide residents with a reliable safe wastewater system.

The proposed project is a partnership agreement between the City of Nelsonville and the Corps established under the authority of Section 594 of the Water Resources Development Act (WRDA) of 1999 (Public Law 106-109), 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 plants (WWTP) 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 the 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 consist of construction of approximately 3,755 linear feet of 8-inch sanitary sewer line; 1,520 linear feet of 4-inch force mainline; 800 linear feet of 6-inch force mainline; 410 linear feet of 1.25-inch pipeline (HDPE DR 9); 15 standard manholes; 11 type-C manholes in the area of Carbon Hill Buchtel Road and Burr Oak Boulevard; replacement of the existing Back Street pump station; construction of a new master pump station adjacent to the existing WWTP site; and 2,138 linear feet of 21-inch trunk sewer line replacement along East Canal Street and Chestnut Street to the intersection of Third Street. Construction of the proposed gravity sewers and force mainline would occur within the road rights-of-way, which is in previously disturbed ground. Replacement of the sewer trunk line would occur within the surface of East Canal Street and Chestnut Street. The original brick surface of Chestnut Street would be repaired utilizing existing bricks in order to protect the historical integrity of the area. Replacement of the existing Back Street pump station and construction of the proposed master pump station would occur on previously disturbed ground in an area of approximately 20 feet x 20 feet. The proposed Carbon Hill Buchtel Road pump station would occur on a 20 feet x 20 feet area, which is located near a residential area and is currently grass covered. Two directional bore crossings of Monday Creek would occur during construction of the force main. Following construction, all areas would be returned to preexisting conditions through soil grading and seed planting.

### **2.2 No Action Alternative (NAA)**

Under the NAA, the Corps would not provide funding for the project. Additionally, the City of Nelsonville would not improve the wastewater collection system and the community would continue utilizing an aging and deteriorating collection system or private on-site septic systems. Further deterioration of the collection system would likely continue and result in failure of equipment, sanitary sewers and septic systems. Health risks could become a possibility due to the failing infrastructure and improper collection and treatment of waste. This alternative was considered unacceptable due to the continued failure of public and private infrastructure and potential health hazards resulting from these failures. 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 No Action Alternative (NAA) as well as with implementation of the Proposed Action Alternative (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, 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 and adverse 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.
- **Significant** – A measurable and adverse 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.
- **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. CEQ regulations also require that a proposed action's cumulative impact be addressed as part of a NEPA document. Cumulative impacts are discussed in section 3.19 below.

### 3.1 Location

The affected area is located within the City of Nelsonville in Athens County, Ohio. The project includes replacement of an existing sewer trunk line on Chestnut Street; replacement of an existing pump station on Back Street; construction of a master pump station adjacent to the wastewater treatment plant, installation of gravity sewer lines and force mainlines along Burr Oak Boulevard; and a gravity sewer line, force main and pump station on Carbon Hill Buchtel Road. See Appendix A for project location maps.

### 3.2 Land Use





Land use in the immediate project area is a mixture of commercial and residential within an urban-type setting. The proposed sanitary and force main would be constructed in the road right-of-way, which are previously disturbed areas. Land contours would be reclaimed upon completion of the underground installation. The proposed replacement of the Back Street pump station and construction of the proposed master pump station near the existing wastewater treatment plant, would occur on land that has been severely disturbed by previous construction activities. The location of this infrastructure is not anticipated to impact land use as the Back Street pump station is a replacement of existing infrastructure and the master pump station is located near existing wastewater infrastructure. Construction of the sewer trunk line replacement would be within East Canal Street and Chestnut Street, which is a brick street. This area has also been severely disturbed. Upon installation of the new sewer trunk line, the original bricks would be reinstalled on Chestnut Street to protect the historical integrity of the area. Construction of the proposed pump station along Carbon Hill Buchtel would occur on a small parcel of property, which is currently grass covered and near a residential area. Due to the small size of the parcel, 20 feet x 20 feet, and the previously disturbed nature of the area, land use is not anticipated to be adversely impacted.

There would be no significant adverse impacts to land use as a result of either the PAA or NAA.

### **3.3 Climate**

Nelsonville 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. Average temperatures during the summer months of May to September are 75 degrees Fahrenheit, with periods of hot and humid conditions in late summer months. The coldest season lasts for three months from December to March with an average temperature of 47 degrees Fahrenheit and average seasonal snowfall of 17 inches. The coldest month is typically January with an average low of 23 degrees Fahrenheit and high of 38 degrees. Average annual rainfall is 40 inches with the spring being the wettest season.

Only short duration, minor discharges of carbon based pollutants would occur during construction activities that could contribute to greenhouse gases. The NAA or PAA would not involve any activity that could significantly affect the environment in regards to climate change and 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.

### **3.4 Terrestrial Habitat**

The PAA would be constructed primarily on previously disturbed areas, including road rights-of-way. Removal of grass and vegetation may occur within areas where trenching for the sewer/main lines and bore pit directional activities are implemented. Potential impacts to vegetation would be minimal and temporary. It is anticipated that the removal of one dead pine tree at the pump station site would be needed. Areas would be returned to pre-construction conditions upon completion of construction activities through soil grading and grass seeding.



Only minor, 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, it is likely that private on-site septic systems would fail in the future, which could result in local environmental contamination from bacteria, nitrates, metals, trace quantities of toxic materials, and salts. This would pose a health risk to both humans and wildlife in the natural environment.

### **3.5 Floodplains**

Executive Order 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 portions of the proposed project that would be located within the floodplain of Hocking River and Monday Creek (<https://www.fema.gov/floodplain-management/flood-zones>). Project components to be located in Zone AE, 1-percent chance of a flood event in a given year, are the Back Street pump station replacement, proposed master pump station, a portion of the sewer trunk line replacement on south Chestnut Street, and a portion of the gravity sewer line and force mainline on south Carbon Hill Buchtel Road and east Burr Oak Boulevard. The southern portion of the existing Chestnut Street sewer trunk line is located within Zone X500, which is an area of 0.2% chance of flooding.

Underground infrastructure such as the gravity sewer lines and force mainline will result in no adverse impact to floodplain areas. Replacement of the Back Street pump station and construction of the proposed master pump station would consist of submersible pumps, which are not anticipated to adversely impact the floodplain. The only above ground components would be the pump station control panels, which would be constructed above the base flood elevation and would not impede flood waters. Coordination with the floodplain managers for the City of Nelsonville and Athens County has been conducted (see Appendix B). Prior to construction, submission of a Floodplain Development Permit Application is required. The PAA meets the intent of EO 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 from the PAA.

### **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. The majority of the project is within previously disturbed areas and the improvements would take place on property that is committed to urban development. The Corps' Huntington District has determined that due to the majority of the area being pre-disturbed and on urban lands, 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. Coordination with the Natural Resources Conservation Service (NRCS) determined that the project area is located in the right-of-way and/or committed to urban development and therefore is not subject to FPPA.

Likewise, there are no direct impacts to Prime and Unique Farmland anticipated as part of the NAA. However, there is potential for increased risk of contamination to agricultural lands located downstream of existing wastewater and septic systems if infrastructure failure occurs in the future.

### 3.7 Aquatic Habitat/Water Quality

The project is within the Monday Creek Watershed. According to the Monday Creek Watershed Management Plan <http://water.ohiodnr.gov/portals/soilwater/downloads/wap/MondayCr.pdf>, the main stem of Monday Creek runs 27 miles before emptying into the Hocking River. Monday Creek originates in southern Perry County and flows in a southerly direction through eastern Hocking County and northern Athens County. The creek enters the Hocking River approximately 2-1/2 miles southeast of Nelsonville. There are no Sole Source Aquifers in the project area. The entire length of Monday Creek was found impaired and poor to very poor aquatic communities have been commonly observed. Surface water has been equally degraded throughout the watershed and the leading impacts are caused from mine drainage problems, sedimentation, and coliform bacteria.

Implementation of the PAA would not result in any new discharge of pollutants. Two directional bore stream crossings on Carbon Hill Buchtel Road would occur. The Corps Regulatory Division has determined that the PAA will neither result in a discharge of dredged or fill material into waters of the United States nor involve work in, on, or under a navigable water of the United States. Therefore, a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act is not required and a Section 404(b)(1) analysis, Section 404 permit (individual or Nationwide) and associated Section 401 permit under the Clean Water Act is not required.

Impacts to aquatic habitat would be avoided at stream and water crossings through the use of directional boring construction techniques. The Hocking River, located near the City of Nelsonville, is the point for existing and future WWTP discharges. With and without project wastewater discharges to the Hocking River would occur under the authority of a National Pollutant Discharge Elimination System (NPDES) permit issued by the Ohio EPA. Discharge effluent limitations would be monitored by the Ohio EPA for compliance with the issued permit. In addition, a general NPDES permit for the proposed collection system improvements would be required due to the size of the construction area. Indirect impacts associated with run-off and erosion due to installation of a new collection system may temporarily impact water quality in the area. These construction related impacts would be short-term and minor and mitigated through the use of Best Management Practices (BMPs) 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 environmental impacts to aquatic habitat and water quality. In the long-term, implementation of the PAA is expected to have a positive



impact on the aquatic habitat and water quality within the project area. Implementation of the PAA would ensure the removal of untreated sewage during storm events and reduce the risk of future failure of deteriorating infrastructure.

Under the NAA, aquatic impacts would continue in nearby streams and surface water runoff would continue to negatively impact water quality in the project area due to deterioration of the existing collection system and failing on-site septic systems.

### **3.8 Wetlands**

National Wetland Inventory Maps (NWI) were reviewed for the proposed project area and a site reconnaissance field investigation was conducted to determine the validity of NWI Maps. NWI maps indicated that there are no wetlands adjacent to the project area and the site reconnaissance confirmed that no wetlands are located within the proposed project area.

No impacts to wetlands are anticipated as part of the PAA or NAA. However, there is potential for increased risk of contamination to wetlands that may be located downstream of existing wastewater and septic 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 as part of the PAA or NAA.

### **3.10 Hazardous, Toxic, and Radioactive Waste (HTRW)**

A Limited Phase I HTRW Environmental Site Assessment was conducted for the City of Nelsonville Collection System Improvements Project to identify environmental conditions and to identify the potential presence of HTRW contamination located in the project's construction work limits. Based on information reviewed and the proposed sewer locations, further assessment was recommended for seven (7) sites.

A Phase II HTRW Investigation was conducted on the seven (7) sites identified in the Limited Phase I HTRW Investigation to determine the presence of impacted media in the subsurface of the proposed project corridor. Below are the following Limited Phase II HTRW findings and analytical results for sampled soils.

All detected constituent concentrations were below the Bureau of Underground Storage Tank Regulations (BUSTR) for Petroleum Contaminated Soil (PCS) closure action levels and Voluntary Action Program (VAP) commercial and construction/excavation standards with the exception of arsenic in SB31-04, 12 to 14-feet, which was above the VAP commercial standard. The concentration of arsenic in that sample was 130 mg/kg and the VAP Commercial Standard for arsenic is 77 mg/kg. All soil samples were below the VAP construction/excavation direct contact concentrations. The report concluded that soils samples were below Ohio VAP direct



contact standard for construction/excavation, therefore no special precautions with regard to handling of excavated soil is required.

The Phase II HTRW investigation found that analytical results for groundwater samples had concentrations for all samples above VAP Unrestricted Potable Use Standard (UPUS) for arsenic, chromium, and lead. Concentrations for barium were above VAP UPUS for two samples, cadmium were above for six samples, and mercury was above for two samples. All analytical results for groundwater were below the BUSTR closure action level. The report concluded that the exposed groundwater is not expected to be used as drinking water during construction and is therefore not expected to be a safety risk or concern. Possible construction worker exposure pathways to the contaminated water could be from incidental dermal contact or ingestion. Though no BUSTR or VAP generic standards for metals are available for incidental contact or ingestion of exposed groundwater, it should be noted that concentrations of metals in tested soils are below the VAP direct-contact soil standard for construction/excavation activities. As the excavation is expected to be drained of water when workers are in the excavation areas, the potential for accidental ingestion of water would be minimized. Additionally, exposure would be minimized further through the use of engineered BMPs and proper personal protective equipment.

After review of the Limited Phase II HTRW investigation, Corps' HTRW staff determined that no further investigation of the seven (7) sites was needed and no further HTRW action is required. Therefore, no impacts to HTRW are anticipated with the PAA. A clearance memorandum was signed by Corps' HTRW staff on July 18, 2019 and is included in Appendix B.

The NAA would not result in ground disturbing activities. Therefore, no direct construction related HTRW impacts would be associated with the NAA. However, there is the potential for increased contamination to the human and natural environment if failure of wastewater and septic system infrastructure occurs in the future.

### **3.11 Cultural Resources**

In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), the Ohio State Historic Preservation Office (SHPO) was consulted regarding the proposed project. The SHPO advised that although the proposed master pump station is within the boundary of the Hocking Valley Railway Historic District, there are no features or ruins of features of the railway in the construction area, and therefore the new pump station would not have an adverse effect on the historic district. Furthermore, since the City of Nelsonville is committed to restoring any disturbed areas of brick paving using existing bricks, the proposed replacement of this deteriorating sewer trunk line would not affect any historic properties. No further cultural resources coordination is required unless the scope of the project changes and the bricks are not placed back, which would cause an adverse effect. Therefore, in accordance with 36 CFR 800.4(d) (1) (i), the Huntington District has fulfilled its obligation under Section 106. See Appendix B for coordination letters.



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 Athens County Coroner, and SHPO must also be notified immediately if human remains are discovered.

Under the NAA, 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), the project area is within the range of the Indiana bat, Northern long-eared bat, Fanshell mussel, Pink Mucket pearly mussel, Sheepnose mussel, Snuffbox mussel, American Burying beetle, Running buffalo clover flowering plant, Small Whorled Pogonia flowering plant, and Northern Wild Monkshood flowering plant.

The proposed project would primarily occur in previously disturbed areas and it is anticipated that only one tree would need to be cleared. Tree clearing would only occur from November 15 – March 31 to minimize potential detrimental impacts to Federally listed bat species. Therefore, the Corp's Huntington has determined that the proposed action may affect but is not likely to adversely affect the Indiana bat and Northern Long-eared bat.

No construction related activities would take place with the proposed action that would directly disturb surface water resources. Instead, two directional bore stream crossings would occur that would avoid potential impacts to water resources. Therefore, the Corp's Huntington District has determined that there would be no effect to endangered or threatened aquatic species.

Project elements associated with the collection system improvements would be constructed in a populated area on previously disturbed ground that is devoid of vegetation used by the American Burying Beetle. It is not anticipated that this species would be impacted by the proposed project. In addition, George Keeney, Research Associate II, Department of Evolution, Ecology and Organismal Biology, Ohio State University, completed an American Burying Beetle survey in March 2018 as part of a USDA Rural Development environmental assessment. This assessment was conducted on a project where the project footprint overlaps with the proposed PAA project elements. Mr. Keeney's review concluded that given the apparent preexisting condition of land proposed for the project footprint, the relatively linear and/or limited footprint of the project within the greater suitable habitat of the area, and coupled with the known biology and mobility of this species, it is his expert opinion that the project would not adversely affect the American Burying Beetle. Therefore, the Corp's Huntington District has determined the project may affect but is not likely to adversely affect the American Burying Beetle. See Appendix B for coordination information.

Furthermore, the proposed action would have no effect on endangered or threatened flowering plant species as work would occur in previously disturbed areas that do not fall within the habitat requirements of these species. The Huntington District continues to coordinate with the USFWS



Ohio Field Office as required through Section 7 consultation under the Endangered Species Act. It is anticipated that coordination and consultation will be completed prior to issuance of a Finding of No Significant Impact. See Appendix B for coordination information.

### 3.13 Air Quality

According to the U.S. Environmental Protection Agency (USEPA) website, Athens County is classified as “in attainment” for all criteria pollutants. 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 as part of the NAA.

### 3.14 Noise

Noise associated with the PAA would be limited to constructed related sounds 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 Whitepaper, 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 3.1 below), for consideration of hearing protection or the need to administer sound reduction controls.

<b>Table 1 - Permissible Non-Department of Defense Noise Exposures</b>	
<b>Duration/day (hours)</b>	<b>Noise level (dBA)</b>
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 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 should 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. 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 7-75 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. No long-term significant noise impacts are expected with the PAA.

There would be no change in noise and thus no impact under the NAA.

### 3.15 Environmental Justice and Protection of Children

Executive Order (E.O.) 12898 requires Federal actions to address environmental justice in minority populations and low-income populations. According to the U.S. Census Bureau, the 2018 population estimate for Athens County was 65,818 and does not contain significant minority populations. The census indicates Meigs County is 90.8% white and has a median household income of \$37,191 compared with the median household income of \$52,407 for the State of Ohio. Individuals residing in the county below the poverty level is 28.8% compared to 14% statewide. According to the U.S. Census Bureau, the City of Nelsonville has a total population of 5,005 and a median household income of \$26,139.

EO 13045 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 EO 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 City of Nelsonville wastewater system improvements would serve approximately 2,004 existing customers and additional customers would be added to the system as a result of the proposed gravity sewers included in this PAA. Implementation of the PAA would provide residents, including children, with a safe and reliable sanitary sewer system, thereby improving the living conditions in the service area. No homes or buildings would be adversely impacted by the proposed project; therefore the PAA meets the directive of EO 12989 and EO 13045 by avoiding any disproportionately high adverse human health or environmental effects on minority or low income populations or children.

The NAA could result in children being exposed to untreated waste from failing on-site septic systems, which could pose a safety and long-term health risk.

### **3.16 Aesthetics**

The project area is a rural community consisting primarily of residential properties and small commercial properties. Temporary disturbance of the local aesthetics would be anticipated during construction of the PAA wastewater improvements; however after construction the excavated areas would be restored to original conditions. Additionally, the proposed pump stations are submersible and the only visible signs of the infrastructure would be control panels, which would not be visually unappealing or intrusive to the local environment.

Neither the PAA nor NAA would significantly impact local aesthetics.

### **3.17 Transportation and Traffic**

The proposed force mainline and gravity sewer lines would be within the road rights-of way. Construction of the PAA in and along road 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.

No impacts to transportation and traffic are anticipated to occur from the NAA.

### **3.18 Health and Safety**

The PAA has been designed to provide a safe, reliable public wastewater system to serve residents in the project area that are currently utilizing failing septic systems and to improve existing public infrastructure that has deteriorated and is past its useful life. Providing improvements and extending service to new customers is necessary to provide a safe and reliable public wastewater service to the community. Therefore, the PAA is anticipated to have a long-term beneficial impact on health and safety of the residents in the project area.



Under the NAA residents would continue to experience failing septic systems and a deteriorating public wastewater system, which pose health and safety concerns that could cause minor to potentially significant negative impacts on the community.

### 3.19 Cumulative Effects

The Corps must consider the cumulative effects of the proposed project on the environment as stipulated by NEPA. Cumulative effects are "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or Non-Federal) or person undertakes such actions". Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR Part 1508.7 Council on Environmental Quality [CEQ] Regulations).

The cumulative effects analysis is based on the potential effects of the proposed project when added to similar impacts from other projects in the region. An inherent part of the cumulative effects analysis is the uncertainty surrounding actions that have not yet been fully developed. The CEQ regulations provide for the inclusion of uncertainties in the analysis and states that "when an agency is evaluating reasonably foreseeable significant adverse effects on the human environment...and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking" (40 CFR 1502.22).

Temporal and geographical limits for this project must be established in order to frame the analysis. These limits can vary by the resources that are affected. The construction of a wastewater collection system improvement project would have minimal and insignificant negative impacts on the environment. Long-term, beneficial effects would result from the project and would include improved health and safety living conditions and improved operations of an existing sanitary sewer system. The temporal limits for assessment of this impact would initiate in 1972 with the passage of the Clean Water Act and end 50 years after completion of this project. The geographical extent would be broadened to consider effects beyond the PAA. The geographical extent considered is the Monday Creek Watershed.

The Monday Creek Watershed is listed in the Ohio EPA's Water Resource Inventory 305(b) 2005 Report as a "Warmwater Habitat" with an aquatic life use designation of "Limited Resource Water" and a recreational use designation of "Primary Contact". The report identifies "pH" and "metals" as the causes of impairment and "acid mine drainage" as the source of the impairment. It lists the entire 27 miles of the main stem as having very poor quality. In the past, other villages within the watershed have performed upgrades to existing wastewater systems. These past actions had similar temporary impacts but no significant cumulative impact. The Monday Creek Restoration Project (MCRP) was formed in 1994 and is comprised of agencies, institutions, and local watershed residents committed to improving the watershed health and water quality for the benefit of the community. The MCRP has undertaken numerous efforts and projects including reclamation within the watershed. Currently, MCRP is promoting education and working to promote improvement of water quality within the watershed, collecting different types of water quality data, watershed restoration and reclamation of abandoned mine lands, and



streambank stabilization. Additionally, the Friends of Monday Creek is a citizen support group that meets to discuss topics of interest within the watershed. Impairment of the Monday Creek Watershed is expected to continue but as communities continue to eliminate failing on-site septic systems and improve existing public wastewater systems, a cleaner, healthier watershed would be possible. Water quality standards and regulations are expected to remain as stringent in the future as today.

Section 3.0 documents the existing environment and potential environmental effects of the PAA and NAA with respect to existing conditions. The effects of the PAA, as discussed beforehand, are localized and minor. Past actions that may have resulted in similar effects may include wastewater or water infrastructure improvement actions. Future projects that would have similar impacts would be the proposed construction of a new wastewater treatment facility, force mainline construction and demolition of the existing wastewater treatment facility. This future project is to be funded by the USDA, Rural Development. All required environmental reviews for this proposed project have been completed, which identified no adverse cumulative effects. In scoping cumulative effects issues, no resources were identified as having a potential to be significantly affected with the completion of the PAA. Only minor and temporary impacts to ecological resources would be sustained with the implementation of the PAA. These resources would be reestablished upon completion of construction.

The availability of Federal funds through programs, such as the 594 Program, to assist communities with installation and construction of water-related environmental infrastructure and resource protection and development projects in Ohio is an additional benefit to the area. The significance of this action on health, safety, and water quality would be positive. Given that the current program remains in place for the foreseeable future and the overall beneficial effect from implementation of the PAA, there is expected to be a positive, though small, cumulative effect on health and safety based on past, present, and reasonably foreseeable actions.

#### 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 the issuance of a FONSI. Compliance is documented below in Table 2.

<b>Table 2 - Environmental Compliance Status</b>			
<b>Statute/Executive Order</b>	<b>Full</b>	<b>Partial</b>	<b>N/A</b>
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	X		



<b>Table 2 - Environmental Compliance Status</b>			
Liability Act			
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		

\*Anticipated FONSI signature to occur after public review

\*Endangered Species Act concurrence will be completed prior to FONSI

\*Fish and Wildlife Coordination Act will be completed prior to FONSI

## 5.0 REQUIRED COORDINATION

### 5.1 Agencies Contacted

Direct coordination with the Corp’s Regulatory Division, Ohio Department of Natural Resources, NRCS, SHPO, Athens County Floodplain Coordinator, and the City of Nelsonville’s Floodplain Coordinator was 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 made 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 Athens Messenger, advising the public of this document’s availability for review and comment. A copy of the EA will also be placed in the Nelsonville 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 City of Nelsonville is proposing to improve existing, deteriorating wastewater infrastructure as well as extend sanitary sewer service to areas that are currently utilizing failing on-site septic systems. The current wastewater system services approximately 2,004 customers and will add additional customers as a result of sewer extensions in the Carbon Hill Buchtel Road and Burr Oak Boulevard area. By providing a safe and reliable wastewater system, 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 eliminating failing septic systems, which pose contamination issues for local streams. No significant, adverse, short-term or long-term impacts have been identified as a result of implementation of the proposed improvement project.



The proposed project would take place on previously disturbed land. 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.

RCAP- Ohio Rural Community Assistance Partnership  
942 Slab Hill Road  
Oak Hill, OH 45656

U.S. Army Corps of Engineers Huntington District  
Planning Branch  
502 Eighth Street  
Huntington, WV 25701

## **8.0 REFERENCES**

Black, Rebecca and Steinmaus, Mike. Monday Creek Watershed Management Plan.  
<http://water.ohiodnr.gov/portals/soilwater/downloads/wap/MondayCr.pdf>

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

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1997 Considering cumulative Effects Under the National Environmental Policy Act.

Federal Emergency Management Agency 2019 Floodplain Maps Website:  
<https://msc.fema.gov/portal/home>

Schomer, Paul  
2001 *A White Paper: Assessment of Noise Annoyance*. Schomer and Associates

U.S. Census Bureau  
2019 American FactFinder Website:  
<https://www.quickfacts.census.gov>

U.S. Fish and Wildlife Service  
2019 National Wetlands Inventory website:  
<https://www.fws.gov/wetlands/data/mapper.html>

U.S. Fish and Wildlife Service  
2019a Information for Planning and Conservation website:



<https://www.fws.gov/ipac>

U.S. Geological Survey

2019 StreamStats: Streamflow Statistics and Spatial Analysis Tools for Water- Resources

Application. StreamStats Application Website:

<https://streamstats.usgs.gov/ss/>