



**US Army Corps of Engineers  
Baltimore District**

## **DRAFT ENVIRONMENTAL ASSESSMENT**

**PENDLETON COUNTY PUBLIC SERVICE DISTRICT,  
SANDY RIDGE WATER LINE EXTENSION PROJECT  
SANDY RIDGE, WEST VIRGINIA**

**SECTION 571 ENVIRONMENTAL INFRASTRUCTURE  
PROGRAM**

**January 2024**

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*Prepared by:*

**U.S. Army Corps of Engineers, Baltimore District  
2 Hopkins Plaza  
Baltimore, Maryland 21201**

**and**

**Cerrone Associates  
97 14<sup>th</sup> Street  
Wheeling, West Virginia 26003**

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## **FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

### **Pendleton County Public Service District Sandy Ridge Water Line Extension Project**

In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, the U.S. Army Corps of Engineers (USACE), Baltimore District, assessed the environmental effects of the Pendleton County Public Service District Sandy Ridge Water Line Extension Project, located in the Town of Franklin, Pendleton County, West Virginia. The Baltimore District is cost sharing the project with the Pendleton County Public Service District, the non-federal sponsor. The project involves removing and replacing existing waterlines that are currently located within existing rights-of-way (ROWs) and previously disturbed areas. The project proposes design and construction of a water line extension project along County Route 2/2 (Sandy Ridge Road) southwest from its intersection with County Route 23 (Thorn Creek Road) to the community of Moatstown, West Virginia, due south of Franklin, West Virginia, to just east of the Moatstown community in Sugar Grove, West Virginia. Specifically, the project would consist of the installation of approximately 37,600 LF of PVC water line ranging from 2 to 4 inches in diameter, a 50-gallon per minute (gpm) booster station, an 80-gpm booster station, and a 24,000-gallon storage tank. The total length of the project area is approximately six miles. The water storage tank accounts for 0.40 acres of impacts to open pasture/grass and the two booster stations combined accounting for 0.06 acres of impacts open pasture/grass. This project would service the surrounding neighborhoods and would provide potentially 65 customers with reliable, safe drinking water.

The Northern West Virginia Environmental Infrastructure and Resource Protection and Development Program was authorized by Section 571 of the Water Resources Development Act (WRDA) of 1999 (Public Law (PL) 106-53), as amended, by Section 5155 of WRDA 2007 (PL 110-114), Section 352(b)(13) of WRDA 2020 (PL 116-260), and Section 8373 (PL 117-263) of WRDA 2022. The primary objective of the Section 571 Program is to provide design and construction assistance to non-federal interests carrying out water-related environmental infrastructure and resource protection and development projects in counties within northern West Virginia. The environmental assessment was prepared in compliance with 40 Code of Federal Regulations parts 1500-1508, NEPA Implementing Regulation Revisions, dated 20 April 2022, and USACE Engineering Regulation 200-2-2, Procedures for Implementing NEPA. A proposed action alternative and a no-action alternative were analyzed for this project.

Potential impacts to the human and physical environment were assessed. Short-term, minor, adverse impacts from the proposed project include dust, air emissions, soil disturbance, and noise from construction activities, potential disruption of traffic during construction, as well as temporary and permanent loss of vegetation in areas of proposed booster stations. Short-term, minor, adverse impacts may occur to waterways, but appropriate steps to minimize potential adverse impacts, such as the implementation of best management practices will be incorporated into the project. The proposed project would not have adverse effects to surface water quality. It is the non-federal

sponsor's responsibility to coordinate with the state of West Virginia Department of Environmental Protection and with USACE Baltimore District – Regulatory Branch, as it pertains to the Clean Water Act, Waters of the U.S. and their respective permits. The U.S. Fish and Wildlife Service (USFWS) determined that the project “May Affect, Not Likely to Adversely Affect” Northern Long-Eared Bat (*Myotis septentrionalis*). Through further coordination with the USFWS West Virginia Field Office, critical habitat for Indiana Bat (*Myotis sodalis*) was identified in proximity to the project location. USACE Baltimore District coordinated directly with the USFWS West Virginia Field Office and determined there would be no adverse impacts to Indiana Bat critical habitat *so long as construction occurs during winter months, between 15 November – 31 March*. No other adverse effects are anticipated to occur to threatened or endangered species or their critical habitat. No impacts to cultural resources or National Register of Historic Places properties are expected. West Virginia State Historic Preservation Office concluded that the project would result in a “no adverse effect” to architectural or archeological resources. Tribal consultation has also been completed and tribal interests will not be affected by this undertaking.

The accompanying environmental assessment, which will be made available for a 30-day public review, supports the conclusion that the project does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is not necessary.

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Date

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Esther S. Pinchasin  
Colonel, U.S. Army  
Commander and District Engineer

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# **1 Introduction**

## **1.1 Project Authority**

The Northern West Virginia Environmental Infrastructure and Resource Protection and Development Program was authorized by Section 571 of the Water Resources Development Act (WRDA) of 1999 (Public Law (PL) 106-53), as amended, by Section 5155 of WRDA 2007 (PL 110-114), Section 352(b)(13) of WRDA 2020 (PL 116-260) and Section 8373 of WRDA 2022 (PL 117-263) (Section 571 Program). The primary objective of the Section 571 Program is to provide design and construction assistance to non-federal interests carrying out water-related environmental infrastructure and resource protection and development projects in counties within northern West Virginia (WV). This project is located within the Town of Franklin in Pendleton County, WV. The U.S. Army Corps of Engineers (USACE), Baltimore District is cost sharing the project with the Pendleton County Public Service District (PSD), the non-federal sponsor, in accordance with the Section 571 Program.

## **1.2 Project Background**

The Pendleton County PSD is proposing to implement a water line extension to provide public drinking water to the Sandy Ridge and Moatstown, WV communities. The water line extension would follow County Route 2/2 (Sandy Ridge Road) southwest from its intersection with County Route 23 (Thorn Creek Road) to the community of Moatstown, WV (see project location map below and in Appendix A). The communities in this area are located between steep ridges, and the geology in this part of WV does not provide effective aquifers. This has resulted in some residents having to build cisterns in areas where private wells could not be constructed. With this public demand, the Pendleton County PSD was able to obtain grant money in the form of a West Virginia Infrastructure Jobs Development Council (WVIJDC) grant and through the Section 571 partnership with USACE.

## **1.3 Purpose and Need**

The purpose of the proposed project would be to provide safe drinking water to the communities of Sandy Ridge (mainly the residents along Sandy Ridge Road) and the community of Moatstown. Currently, the residents of this area rely on private wells and cisterns for drinking water. The need for this project is to upgrade existing water lines and install new water lines to customers along areas of Sandy Ridge and Moatstown, as well as the surrounding areas.

This environmental assessment (EA) and Draft Finding of No Significant Impact (FONSI) have been prepared by USACE, Baltimore District and Cerrone Associates on behalf of the Pendleton County PSD, pursuant to 40 Code of Federal Regulations parts 1500-1508, National Environ-

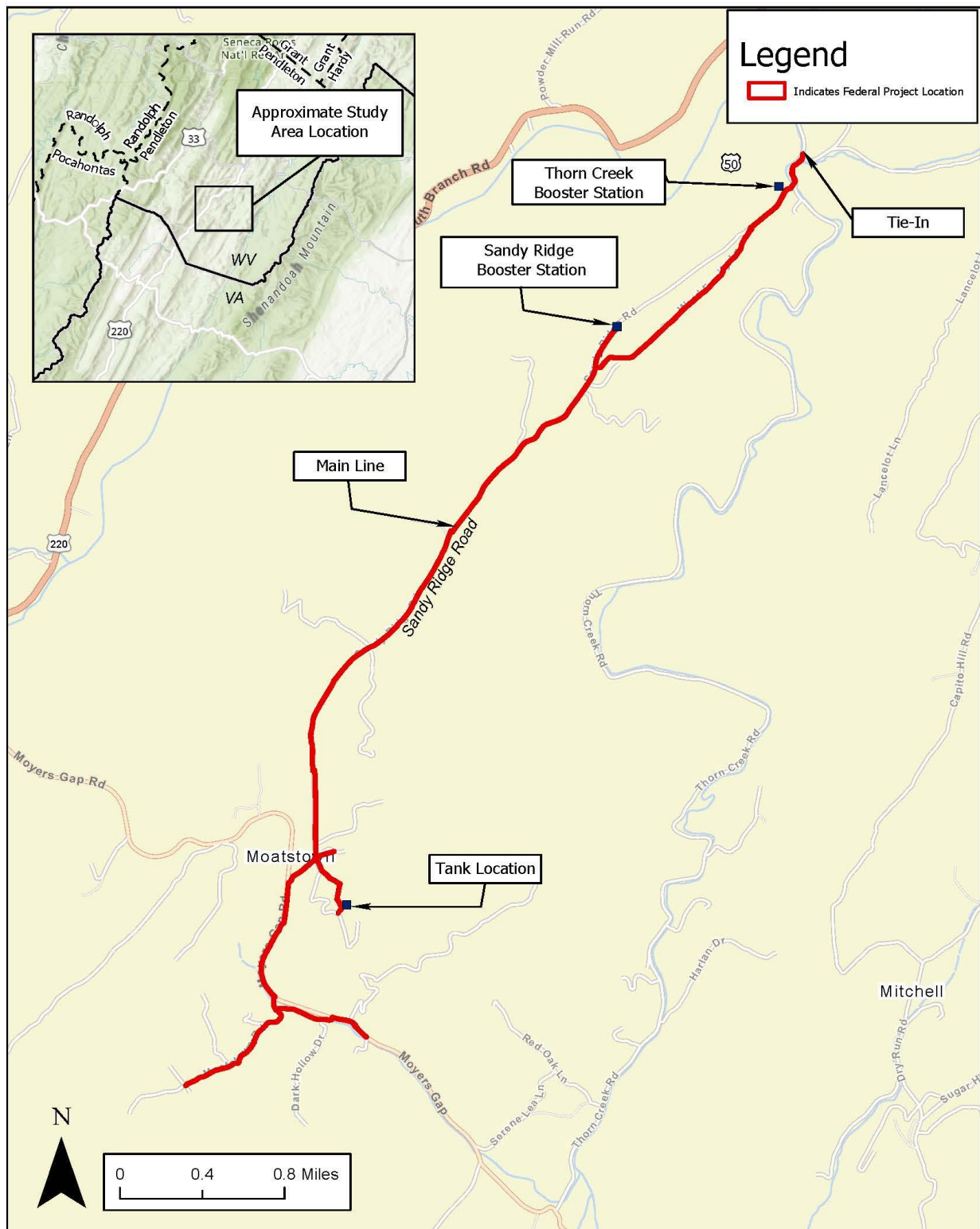


Figure 1 – Sandy Ridge Water Line Extension Study Area



-mental Policy Act (NEPA) Implementing Regulation Revisions, dated 20 April 2022, and USACE Engineering Regulation 200-2-2, Procedures for Implementing NEPA. This EA evaluates the potential environmental, cultural, and socioeconomic impacts from construction and general operation of the proposed project.

## **1.5 Public and Agency Coordination**

In compliance with NEPA, coordination was conducted with federal, state, and local resource agencies (Appendix C). A public notice of availability will be posted by the non-federal sponsor in a local newspaper, which will be published for general circulation in Pendleton County. The public will have 30 days to provide comments after the public notice is posted. The USACE will also post a public notice on the USACE Baltimore District public notice website.

Cerrone Associates coordinated with the WV State Historic Preservation Office (SHPO) in a letter, dated 2 April 2021, to ensure compliance with Section 106 of the National Historic Preservation Act (Appendix C). Consultation letters were electronically mailed on 7 March 2023 by the USACE to the Delaware Nation, Delaware Tribe of Indians, Osage Nation, Shawnee Tribe, and the Stockbridge-Munsee Community. Responses were not received from any of the beforementioned tribes; therefore, it is assumed by the USACE that there are no concerns from Tribal Nations for this undertaking.

Agency coordination was conducted by Cerrone Associates through the U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Consultation (IPaC) online system on 10 November 2021. A second coordination effort was performed by USACE Baltimore District in 2023 October to capture the new listing status of the northern long-eared bat (Appendix C). Additionally, a WV Division of Natural Resources (WVDNR) review was also performed, and a report was generated on 23 March 2021 (Appendix C). USACE Baltimore also coordinated with U.S. Department of Agriculture – Natural Resource Conservation Service in West Virginia for compliance with the Farmland Protection Policy Act (FPPA).

## **2 Project Description**

In 2010, Pendleton County PSD, a publicly owned water system, engaged in a regional study to determine the feasibility of providing public drinking water to several communities within its jurisdiction and included the communities of Sandy Ridge and Moatstown. In December 2012, an engineering report was developed, and the study was split into separate phases. The first phase provided potable water along Route 33, from the town of Seneca Rocks to just north of the town of Riverton into the northwestern portion of Pendleton County and was constructed in late 2018. After the first phase was completed, it was determined that the next viable phase and greatest public demand was to provide public drinking water to the Sandy Ridge and Moatstown area south of the town of Franklin.

The project will provide public drinking water to the residents of the Sandy Ridge and Moatstown communities. Of the approximately 65 potential customers in these communities, 37 have currently signed up for service. As the project approaches construction, more sign-ups are anticipated. The project would consist of the installation of approximately 37,600 linear feet (LF) of PVC water line ranging from 2 to 4 inches in diameter, a 50-gallon per minute (gpm) booster station, an 80-gpm booster station, and a 24,000-gallon storage tank. The total length of the project area is approximately six miles. The water storage tank accounts for 0.40 acres of impacts open pastureland/ grass and the two booster stations combined accounting for 0.06 acres of impacts open pastureland/grass.

Directional drilling or boring may take place under perennial waterways in some areas along the proposed water lines. The system will connect to the Franklin Municipal Water Department's existing distribution network at the intersection of Dry Run Road (County Route 23) and Thorn Creek Road (County Route 20) as shown in the project location map in Appendix A. This is approximately 1,000 LF from Sandy Ridge Road (County Route 2/2). The water transmission lines will be pressure tested and chlorinated to ensure sanitary drinking water reaches the residents. Public water will be brought to each customer's property and will include a water meter. It will be the responsibility of each customer to connect the water line into their residences.

“In the interest of safety and convenience to the customer, and as a measure of economic operation to the utility, it is required that all meters should be located at or near the property line: provided that when such location is impractical meters shall be placed outside of the customer's building as near as possible to where the "Point of Service" joins the "Customer's Service Pipe": provided, further, if neither of the foregoing requirements can be complied with on account of physical, economic, or climatic conditions, the meter may be placed within the building, preferably in the cellar, and when so placed within the building, the meter shall be so located that it will be easily accessible for reading, maintenance and protected from freezing and mechanical damage” (WV Code of Regulations, 2023).

All areas in the seven-foot-wide limit of disturbance are required to be restored to pre-construction conditions, pursuant to WV Department of Environmental Protection regulations. For purposes of this EA, the study area was expanded to 20-feet on either side (40-feet total) to capture environmental resources and data.

In April of 2022, USACE Huntington District informed USACE Baltimore District that this project was selected under the Section 571 Program for reimbursement, and that the project is located within USACE Baltimore District's area of responsibility. The non-federal share of the project costs (25 percent) will be funded, in total, through the WVIJDC District 2 Grant. The federal share of the project costs (75 percent) will be reimbursed with appropriations made available through the USACE Section 571 Program. The project will be implemented through two separate contracts: one contract covering the installation of the water storage tank, and another contract covering the booster stations and water lines. USACE funding will cover both contracts. Land, easements,

rights-of-way, relocation, and disposal areas (LERRDs) will be obtained through a third-party entity through project funds overseen by USACE Baltimore District.

### **3 Alternatives Considered**

#### **3.1 Proposed Action Alternative (PAA)**

The PAA would consist of the installation of approximately 37,600 linear feet (LF) of PVC water line ranging from 2 to 4 inches in diameter, a 50-gpm booster station, an 80-gpm booster station (1,600), a 24,000-gallon storage tank (17,400 square feet/0.40 acres) and water meters at each potential water customer's residence. The system will connect to the Franklin Municipal Water Department's existing distribution network at the intersection of Dry Run Road (County Route 23) and Thorn Creek Road (County Route 20). This is approximately 1,000 LF from Sandy Ridge Road (County Route 2/2).

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

Under the NAA, USACE Baltimore District would not provide funding for the project, and no construction would take place. Residents along the Sandy Ridge and Moatstown areas of south-central Pendleton County would not be given access to safe public drinking water. This alternative was determined to be unacceptable as it does not address the core issue and in-turn may pose as an environmental justice issue. Reliable public drinking water would not be provided to the project area's residents, leaving the public to continue utilizing private wells prone to erratic flow. Residents who are not able to develop a functioning well must either use a cistern or companies that haul water, often at considerable expense. However, the NAA is included in the alternatives analysis to serve as a baseline condition for existing conditions, and to provide a comparison between the future without and with-project actions, and the potential environmental, cultural, and socioeconomic effects of the proposed project.

#### **3.3 Evaluation of Alternatives**

When determining locations for booster stations and water storage tanks, several constraints were taken into consideration. These include the system hydraulics (elevation driven), site availability at the necessary elevation / elevations, accessibility (operation & maintenance), power, cost, environmental concerns, and a cooperative landowner willing to convey the site property.

The Sandy Ridge Water Extension Project faced severe topographic limitations. The large elevation gains of approximately 1,200 feet, measured from the tie in location to the overflow elevation of the proposed storage tank, necessitated the need for two booster stations. The project area is also restricted by steep hillsides and ridges, which limits possible booster station locations (Figure 1). Given the extreme elevation gain, the Sandy Ridge Booster Station needed to be located at an elevation that can receive adequate flow and pressure from the previous Thorn Creek Booster

Station. It must also be able to pump up to the overflow elevation of the proposed water storage tank. After working with pump vendors, an acceptable elevation range was established. Given the layout of the water extension, which also follows the same constraints as site determination, only a few areas were considered for the booster station. Most adjacent locations were ruled out due to the environmental impact of tree removal, line of sight along a West Virginia Division of Highways roadway, and conversations with landowners. The proposed location of the Sandy Ridge Booster Station prevailed as the best alternative.

It should also be noted that the landowner located adjacent to the Sandy Ridge Booster Station had previously stated his intent to timber this area. A recent follow up inspection (27 Sept 2023) of the proposed booster site shows this is indeed occurring. Please see the attached photos below. While trees remain at the edge of the road, the site itself is cleared as is a path to the road. It is likely that further timbering will occur between now and the beginning of construction.



Photo 1 – Existing site condition for Sandy Ridge Booster Station



Photo 2 – Existing site condition for Sandy Ridge Booster Station

## **4 Existing Conditions and Project Impacts**

This section describes the existing conditions (the affected environment for NEPA purposes) and the potential project impacts on the natural and socioeconomic resource categories that are applicable to the area affected by the project alternatives. Each environmental, cultural, and social resource category was reviewed for its applicability to the project.

### **4.1 Land Use**

Land use in the immediate project area is a mix between residential and agricultural. The proposed water lines would mainly be installed within county and state public road right of ways or previously disturbed areas. These previously disturbed areas include local residences, pasture, and county and state public road right of ways. The local watershed for this project is the South Branch of the Potomac River (USGS HUC8 watershed 02070001) through the Thorn Creek and South Branch Potomac River.

All areas in the seven-foot-wide limit of disturbance are required to be restored to pre-construction conditions, pursuant to WV Department of Environmental Protection regulations. Existing land contours would be reestablished upon completion of pipe installation. Construction and permanent easements would be required for this project. Land, easements, rights-of-way, relocation, and disposal areas (LERRDs) will be obtained through a third-party entity through project funds overseen by the USACE Baltimore District. Both booster stations and the water storage tank will be above ground structures built on land purchased through the project. Therefore, the PAA would have long-term, minor impacts to land use.

### **4.3 Terrestrial Habitat**

According to the WVDNR, the principal species of game in Pendleton County, WV are white-tailed deer, turkey, and a variety of small mammals, including squirrel and rabbit (WVDNR, 2023). The project area southwest of Cool Hollow Drive is mostly open land use, farm/pasture fields, and low-density residential housing. Areas northwest of Cool Hollow Drive are mostly wooded adjacent to Sandy Ridge Road and Ward Family Lane.

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 open trenching and directional boring for the water lines are implemented. One of the booster station sites (Thorn Creek Booster Station) would occur on previously disturbed ground, but the other booster station (Sandy Ridge Booster Station) would require approximately 1,600 square feet tree removal. It should be noted that the landowner is intending to harvest timber in the area. As of 27 September 2023, Cerrone Associates confirmed that harvesting was occurring. While trees remain at the edge of the road, the site itself is cleared, as is a path to the road. It is likely that further timbering will occur between now and the beginning of construction.

This area is lightly forested and contains approximately 25 young growth hardwoods. Correspondence and cooperation with the USFWS would ensure all potential impacts to vegetation would be minimal. In accordance with USFWS, all tree clearing should only occur during winter months (November 15 to March 31) to avoid impacts to bats. The storage tank contract will not require tree removal. Areas other than the booster station sites would be returned to pre-construction conditions upon completion of construction activities through soil grading and grass seeding. Long-term, permanent impacts to existing vegetation during construction are anticipated to occur in place of the two booster stations. Potential mitigation efforts of tree clearing should be coordinated with WV Department of Environmental Protection and/or WV Department of forestry by the non-federal sponsor before solicitation of the construction contract(s). No impacts to terrestrial habitat or wildlife are expected from the NAA unless continued tree clearing/timbering occurs from the local property owner at the site of the proposed Sandy Ridge Booster Station.

### **4.4 Floodplains**

Executive Order (EO) 11988 requires federal agencies to consider the potential effects of their proposed actions to floodplains. 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 Thorn Creek, its tributaries, and the section of the South Branch Potomac relevant to the project. These are part of the South Branch Potomac River watershed. FIRM maps reviewed include: 54071C0475D and 54071C0450D. The project components are located within Zone X and A. Zone X is an area of



minimal flood hazard and is outside of the 500-year floodplain, while Zone A is an area subject to inundation by the 1-percent-annual-chance flood event.

Underground infrastructure such as water lines will result in no adverse impact to floodplain areas as they would be buried and result in no change in grade or elevation. The proposed booster stations and water storage tank are located within Zone X. The PAA meets the intent of EO 11988 and no impacts to floodplains are anticipated to occur from the PAA. No impacts to floodplains are expected from the NAA.

#### **4.5 Soils**

The soil in the project area is predominantly stony loam and rock outcrops with small pockets of various silt loams. Most of the topography within the project area consists of rolling hills, with two thirds of the soil types being greater than 15 percent slope, and a quarter of the soil types being greater than 35 percent slope (Appendix B). Short-term, minor impacts to soils are expected from the PAA. Excavated soil would be replaced in-kind after the installation of the below-ground water line. Long-term, minor impacts to soils would occur in areas of the two booster stations and water storage tank, impacting approximately 20,000 square feet or 0.46 acres. Areas of earth disturbance and grading would be restored and seeded after construction. No impacts to soils are expected from the NAA.

#### **4.6 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 along roads, and/or road rights-of-way. However, some parts of the project intersect fields currently used as pastureland. The two locations of the booster stations, as well as the location of the water storage tank would be permanently converted from its current farmland classifications – these areas are subject to FPPA.

Based on a review of documents provided by the U.S. Department of Agriculture – Natural Resources Conservation Service-, to include the AD-1006 document, aerial photography, and the soil survey mapping, it is determined that the project does impact prime or other important farmland and is, therefore, subject to FPPA. USACE Baltimore District completed Parts VI and VII of the AD-1006 which are required to determine total points. Based on the results from the AD-1006, no further action is necessary or required by USACE to be compliant with FPPA (Appendix C). No impacts to FPPA are expected from the NAA.

## **4.7 Aquatic Habitat/Water Quality**

The project is located within the South Branch Potomac River Watershed. The proposed water line follows the east and west sides of a series of ridges predominately running north to south. On the eastern side of the ridge, water flows north via Thorn Creek towards Franklin, WV and into the South Branch Potomac River. On the western side of the ridge, water flows directly into the South Branch Potomac River via smaller tributaries. This portion flows into the South Branch Potomac River several miles upstream of where Thorn Creek discharges. From the City of Franklin, WV, the South Branch Potomac River flows north approximately 90 miles to its confluence with the Potomac River, outside of the Town of Green Spring, WV. There are no sole source aquifers in the project area (EPA aquifers, 2023).

Implementation of the PAA may result in short-term, minor impacts in the form of discharge of silt and soil, as the water line is directionally drilled underneath streams of various sizes throughout the project area. The impact to the aquatic habitat would be minimal. As the project's footprint is over approximately 35 acres in total, a Notice of Intent (NOI) will be submitted to the West Virginia Department of Environmental Protection. It is the non-federal sponsors responsibility to coordinate with the state of West Virginia Department of Environmental Protection and USACE Baltimore – Regulatory Division as it pertains to the Clean Water Act and Waters of the U.S. permits. Indirect impacts associated with run-off and erosion due to the installation of water lines may temporarily impact water quality in the area. Construction related impacts would be short-term and mitigated through the use of Best Management Practices (BMPs), such as placement of silt fences 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. No impacts to aquatic habitat and/or water quality are expected from the NAA.

## **4.8 Wetlands**

Executive Order 11990 requires federal agencies to evaluate potential impacts to wetlands, consider alternatives to wetland sites, and limit damage to wetlands if impacts cannot be avoided. Wetlands are defined as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands perform important water quality functions such as filtration and provide food and habitat for fish and other wildlife. Along with open water, wetlands are breeding, spawning, feeding, cover and nursery areas for fish and are important nesting, migrating, and wintering areas for waterfowl and other wildlife.

The USFWS National Wetland Inventory (NWI) maps 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 one wetland is located within the project area but will not be impacted by the project. The booster station sites and water storage site are not located near any wetlands. NWI maps are included in Appendix B of this EA. Considerations were taken in the design and layout of the water transmission lines to avoid wetlands, and BMPs would be utilized to minimize any potential impacts. It is the non-federal sponsor's responsibility to coordinate with the state of WV Department of Environmental Protection and USACE Baltimore District – Regulatory Branch as it pertains to the Clean Water Act and Waters of the U.S. permits. No impacts to wetlands are anticipated as part of the PAA.

#### **4.9 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.

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

The U.S. Environmental Protection Agency's (USEPA) NEPA Assist database and the Resource Conservation and Recovery Act (RCRA) information database indicated the presence of one hazardous waste RCRA facility less than a mile from the project area (EPA NEPA Assist, 2023). This excludes the Town of Franklin, WV, which has the typical assortment of mechanic shops, dry cleaners, and other assorted businesses that handle waste. According to the RCRA info database, the one facility in question is the non-operational Hanover Shoe Company Franklin Plant. This shoe factory was built in 1966, but closed in 1994, which is the last year the USEPA has a Toxics Release Inventory submittal from the business. The company was compliant as of the last USEPA report in 1994. The USEPA has an additional 5 years of compliance monitoring. The property is now owned by the Pendleton County Economic and Community Development Authority, and hosts offices for the Department of Motor Vehicles and Department of Health and Human Resources. This site is located approximately 3,500 linear feet from the north end of the project area, along US Route 220 due south of Franklin, WV. More information can be found in the Pendleton County Public Service District Phase I Environmental Site Assessment (Appendix D). Under the PAA, no construction related actions would be implemented near the listed hazardous sites; therefore, no impacts are anticipated. No impacts to HTRW are expected from the NAA.

#### **4.11 Cultural Resources**

In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), the WV State Historic Preservation Office (SHPO) was consulted regarding the proposed project. On 2 April 2021, SHPO responded in a letter that the project would have no affect or archeological or architectural properties eligible for or included in the National Register of Historic Places, nor would it affect any listed cemetery. WV SHPO concluded that the project will result in a conditional no adverse effect to cultural and/or architectural resources (Appendix

C). Consultation letters were electronically mailed on 7 March 2023 by the USACE to the Delaware Nation, Delaware Tribe of Indians, Osage Nation, Shawnee Tribe, and the Stockbridge-Munsee Community. Responses were not received from any of the beforementioned tribes; therefore, it is assumed by the USACE that there are no concerns from Tribal Nations for this undertaking.

#### 4.12 Threatened and Endangered Species

The WVDNR and the USFWS IPaC System website were consulted to identify federally listed species potentially occurring in the project area. According to correspondence from WVDNR in a letter dated 26 September 2023, four species were listed as endangered, one proposed to be listed, one rare avian species, and three high quality streams were identified (Table 1). The three streams identified are Thorn Creek; a state high quality reproducing trout stream, Dry Run and Rocky Run, which are both listed as state high quality warmwater streams (Appendix C).

Through additional USFWS IPaC service coordination, an Endangered Species Act species list was generated on 05 October 2023 (Attachment C). Nine species were identified as potentially occurring within the project area (Table 1).

**Table 1: WV DNR and USFWS Endangered Species Act Species**

Common Name	Scientific Name	Status	Location Description
Indiana Bat	<i>Myotis sodalis</i>	Endangered	4 caves-5-mile buffer* 1 cave- 10-mile buffer*
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Endangered	10 caves- 5-mile buffer*
Virginia Big-eared Bat	<i>Corynorhinus townsendii virginianus</i>	Endangered	25 caves- 6-mile buffer*
Tricolored Bat	<i>Perimyotis subflavus</i>	Proposed Endangered	20 caves- 5-mile buffer*
Rusty Patched Bumblebee	<i>Perimyotis subflavus</i>	Endangered	Low Potential Zone*
Bald Eagle	<i>Haliaeetus leucocephalus</i>	State: rare bird	3 nest sites- 2-mile buffer*
Green Floater	<i>Lasmigona Subviridis</i>	Proposed Threatened	Only listed through USFWS IPaC
Monarch Butterfly	<i>Danaus plexippus</i>	Candidate	Only listed through USFWS IPaC
Northeastern Bulrush	<i>Scirpus ancistrochaetus</i>	Endangered	Only listed through USFWS IPaC

\*According to WV DNR Letter, 26 September 2023.

**Indiana Bat** – found in a wide range of habitats, including deciduous forests, mixed forests, and agricultural lands. It is most commonly found in areas with large, mature trees that provide suitable roosting sites (USFWS, 2023).

**Northern Long-eared Bat** – hibernates in caves and mines during the winter months and swarms in surrounding wooded areas in the autumn. The Northern Long-eared Bat roosts behind loose pieces of bark within cavities and crevices of live and dead trees during the warmer months (USFWS, 2023).

**Virginia Long-eared Bat** – hibernate exclusively in limestone caves and are not migratory. If their roost is disturbed, the colony may move to a new site (USFWS, 2023).

**Tricolored Bat** – hibernates in caves and mines during the winter months and primarily roosts among leaves of live or recently dead deciduous hardwood trees during the summer months. They may also be found roosting in pine trees and occasionally human structures (USFWS, 2023).

**Green Floater** – On 25 July 2023, the USFWS announced a proposal to list the green floater as threatened under the ESA with a simultaneous critical habitat proposal and Section 4(d) rule. Green Floaters are often found in sand or small gravel substrates where they establish a foothold and bury themselves as deep as 15 inches. They have limited mobility, and fast-flowing currents or high-water events can cause them to be washed downstream (USFWS, 2023).

**Northeastern Bulrush** – grows in wet areas – small wetlands, sinkhole ponds or wet depressions with seasonally fluctuating water levels. It may be found at the water’s edge, in deep water or in just a few inches of water, and during dry spells there may be no water visible where the plant is growing (USFWS, 2006).

The USFWS came to the determination that the project “May Affect, Not Likely to Adversely Affect” NLEB (Appendix C). Due to the project’s footprint being limited to impervious surfaces or maintained/mowed grass-dominated areas, no impacts to the Monarch Butterfly are expected from the construction of the PAA. No impacts to rare, threatened, and endangered species will occur as part of the NAA. See Appendix C for USFWS and WVDNR consultation responses detailing the No-Effect Determinations for the PAA.

Due to the presence of a High-Quality Stream in the area, a mussel survey may be required before any in-stream construction takes place. However, all streams in the project scope will be crossed via directional drill, avoiding any in-stream construction.

On 06 October 2023, USACE Baltimore District used the Northeast Endangered Species Determination Key and the Northern Long-eared Bat Rangewide Determination Key to assess the potential impacts of this project on federally listed species. The responses provided determined that the proposed project is not likely to adversely affect the Indiana and northern long-eared bats and will have no effect on the Virginia big-eared bat and northeastern bulrush. Therefore, this response only addresses the Indiana bat critical habitat.

A cave designated as critical habitat for the Indiana bat is within proximity (10 miles) of the proposed project. Indiana bats utilize this cave during the winter hibernation season. They may also use the area around the cave entrance for spring staging and fall swarming. USACE Baltimore

coordinated with the USFWS West Virginia Field Office (WVFO). The USFWS WVFO evaluates potential impacts to federally listed bats or their critical habitat, they consider the biological requirements for the species, the location of the project, the timing of the impact, and the extent of impacts. The proposed project occurs near critical habitat for the Indiana bat; however, it will not affect any suitable caves or mines and will only remove a limited amount of suitable roosting habitat. Any construction should only occur *during the winter months (15 November-31 March)* when bats are not present on the landscape. Therefore, the USFWS WVFO concurs that the proposed project is not likely to adversely modify Indiana bat critical habitat (Appendix C).

This concurrence will be reevaluated if project plans change or amendments to the project are proposed that have not been considered, if additional information on listed species or critical habitats in the area becomes available, or if additional species are listed.

#### *Migratory Birds and Birds of Conservation Concern*

Certain birds are protected under the Migratory Bird Treaty Act of 1918 and the Bald and Golden Eagle Protection Act of 1940. As indicated in the 05 October 2023 USFWS IPaC survey, there are bald and golden eagles likely present in the project area. These birds are not considered Birds of Conservation Concern (BCC) but warrants attention because of the Acts currently in place. Please see Appendix C for further details.

#### **4.13 Air Quality**

There are no National Ambient Air Quality Standards (NAAQS) nonattainment areas within the project area. 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. 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 significant impacts to air quality are anticipated as part of the PAA. No impacts to air quality are expected from the NAA.

#### **4.14 Noise**

Noise levels are measured in decibels (dBA) for regulatory purposes. The threshold of human hearing is 0 dBA, with values above 85-90 dBA considered as loud and as potentially harmful to hearing if given sufficient exposure time. Noise levels above 140 dBA can cause damage to hearing after a single exposure (OSHA, n.d.). The project area is adjacent to both residential and commercial areas. A common source of noise within the project area includes vehicular traffic.

Noise generated during construction is expected to come from construction vehicles, backhoes, excavators, saws for cutting existing water lines, and jackhammering, to name a few. There would be no permanent changes to the noise levels in the project area; however, some of these construction activities may exceed values above 85-90 dBA during construction. Due to the

relatively close proximity of the project to residential areas, prior notification of the hours/dates of construction would be given and measures to minimize noise, such as equipment mufflers, would be used. The rise in noise levels would be minor and temporary, and primarily during the daylight hours of construction. Protective equipment would be recommended to protect workers from excessive noise levels during construction.

Noise associated with the PAA would be limited to heavy machinery and related sounds generated during construction. Construction noise would be similar to that of farm equipment and other small machinery used in the local area. The noise projections do not account for screening objects, such as trees, outbuildings or other objects that muffle and reduce the noise being emitted. The outdoor construction noise would be further muffled while residents are inside their homes. These are similar to typical neighborhood noise generated by gas powered lawnmowers in the local area, which could range from 90-95 decibels 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. Temporary noise activities may cause displacement of wildlife including nesting birds and hibernating bats (please refer back to Table 1 for proximity of caves to the project location); however, the daytime construction and short and limited duration of elevated noise levels associated with the PAA, impacts from the noise to local residences and wildlife would be temporary and minor. No long-term significant noise impacts are expected with the PAA. There would be no change in noise from the existing condition and thus, no impact under the PAA. No impacts to noise are expected from the NAA.

#### **4.15 Environmental Justice**

Executive Order (EO) 12898, Environmental Justice, requires Federal agencies to identify and address, as appropriate, “disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” According to the U.S. Census Bureau, the 2022 population estimate for Pendleton County was 6,011 and does not contain significant minority populations. The census indicates Pendleton County is 95.46 percent white and has a median household income (MHI) of \$46,506, compared with the median household income of \$50,884 for the State of West Virginia (USCB, 2022). While the majority of the project is located in the central district of Pendleton County, which has a MHI of \$48,350 as reported in 2020, Moatstown is located in the eastern district which had a much lower MHI of \$38,750 in 2020 (USCB, 2021).

The entire project area is identified as disadvantaged as defined by the Council on Environmental Quality Climate and Economic Justice Screening Tool (CEJST), Version 1.0 (November 22, 2022). The thresholds identified through CEJST include climate change (projected flood risk), health (heart disease and diabetes), transportation (transportation barriers), and low-income. Poverty rates in Pendleton County (16.1%) are lower than the state of West Virginia’s poverty level which is at 18.0%.

EO 14096, *Revitalizing our Nation’s Commitment to Environmental Justice for All*, expands on EO 12898 to also include Tribal affiliation and disability in the definition of environmental justice. Environmental justice analyses are performed to identify potential disproportionate adverse effects from proposed actions and to identify alternatives that might mitigate these effects. American Community Survey (ACS) data (2016-2020) was evaluated for disability characteristics.

**Table 2: Percent of Population with Disabilities**

Category	United States	West Virginia	Pendleton County
<b>Percent Population with Disability</b>	13%	19%	17%

Source: 2021: ACS 5-Year Estimates Disability Characteristics Table S1810 (USCB, 2021)

#### **4.15 Protection of Children**

Executive Order (EO) 13045 requires each federal agency “to identify and assess environmental 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 PAA would minimally impact children in the project area while construction occurs. Afterwards, the residents of the project area would have access to clean, reliable, public drinking water. The NAA results in children continuing to not have access to reliable, treated water. The potential for impacts on the health and safety of children is greater where projects are located near residential areas. The water line extension would environmentally improve the lives of all residents of the Sandy Ridge and Moatstown communities. Implementation of the PAA would provide residents, including children, with safe, quality public drinking water, 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.

#### **4.16 Aesthetics**

The project area is a rural community consisting primarily of residential properties and small commercial and agricultural properties. Neither the PAA nor NAA would significantly impact local aesthetics. Temporary disturbance of the local aesthetics would be anticipated during construction of the PAA water line extension and replacement; however, after construction the excavated areas would be restored to original conditions.

Three aboveground structures are included in this project. These structures, two booster station buildings and a water storage tank, are designed to have a minimized impact on the surrounding scenery. The booster station buildings are typically prefabricated concrete, measuring ten feet by ten feet, and are nine feet tall. The prefabricated concrete comes finished in a variety of styles typically chosen by the Pendleton County PCD or previous landowner during land acquisition negotiations. The water storage tank will measure approximately 11 feet in diameter and 33 feet in height. It will be located adjacent to a lightly forested area but will not require tree removal. The color of the tank will be chosen by the previous landowner during land acquisition negotiations. All three sites would be surrounded by a chain link fence. If mitigation is required for tree clearing, it is recommended that the non-federal sponsor provide native trees and shrubs be planted to improve the viewshed around the booster stations and storage tank.

#### **4.17 Transportation and Traffic**

The majority of the proposed water lines would be within the road right-of-ways. 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. Construction of the PAA along road right-of-ways would involve some delays and potential detours in the normal traffic flow. West Virginia Department of Transportation reports that traffic flow along Moyers Gap Road (County Route 25), which ties into Federal Route 220, averages 191 Annual Average Daily Traffic (AADT). Sandy Ridge Road (County Route 2/2) has an AADT of 253 (WVDOT, 2023). If detours would occur, they would be relatively minor and temporary in nature. Construction on or near road surfaces would comply with standard traffic controls to minimize traffic disruptions and avoid public safety problems. No impacts to traffic or transportation are expected from the NAA.

#### **4.18 Health and Safety**

The PAA has been designed to supply safe, reliable drinking water to the communities of Sandy Ridge and Moatstown and the surrounding neighborhoods. Residents have reported difficulties in constructing wells due to the geography of the area. Private wells and cisterns have been tested and proven to contain elevated levels of iron and manganese. The PAA is anticipated to have a long-term beneficial impact on the health and safety of residents in the project area. Under the NAA, residents would continue to rely on private water sources, where available, which pose health and safety concerns that could cause health impacts on the community.

#### **4.18 Safe Drinking Water Act**

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 to protect drinking water and its sources, which include, rivers, lakes, reservoirs, springs and groundwater wells. The SDWA authorizes the USEPA to set national health-based standards for

drinking water to protect against both naturally occurring and man-made contaminants that may be found in drinking water. Outside threats such as chemicals, the use of herbicides and pesticides, animal and human waste, wastes injected underground, and naturally occurring substances can all contaminate drinking water. To ensure drinking water is safe, the SWDA sets up barriers against pollution that include, source water protection, treatment, distribution system integrity, and public information (USEPA, 2004). Pendleton County PSD is responsible and is expected to maintain compliance with the SDWA for their water distribution system (including this project). Impacts to safe and clean water may continue to persist under the NAA.

## **5 Status of Environmental Compliance**

### **5.1 Summary**

The PAA would consist of the installation of approximately 37,600 LF of PVC water line ranging from 2 to 4 inches in diameter, a 50-gpm booster station, an 80-gpm booster station, and a 24,000-gallon storage tank. The Project would provide benefits to both demographic and socio-economic conditions as it would increase and improve water quality and distribution. No impacts, during or post construction of the PAA, are expected to occur to the land use, floodplains, wetlands, Wild and Scenic Rivers, federal or state listed species, or environmental justice communities within the project area. Some minor, temporary, adverse impacts are expected to occur to soils, air quality, noise, and transportation during the construction phase of the PAA. However, once construction has been completed, these impacts will cease to occur. Additionally, no hazardous waste is expected to be produced as a result of construction of the PAA.

Per WV SHPO, PAA has been assigned a *conditional no adverse effect* determination on architectural resources, assuming specific conditions are met during construction. Refer to Section 4.11 – Cultural Resources for information regarding WV SHPO’s special conditions.

Table 2 summarizes the level of compliance of the PAA with environmental protection statutes and other environmental regulations. Based on the evaluation of environmental effects described in Section 4, there are no significant impacts from the PAA, and a Draft FONSI have been prepared.



**Table 2. Compliance Proposed Action Alternative with Environmental Protection Statutes and Other Environmental Requirements**

<b>Federal Statutes, Executive Orders (EOs), and Memoranda</b>	<b>Level of Compliance</b>
Archeological and Historic Preservation Act	Full
Bald and Golden Eagle Protection Act	Full
Clean Air Act	Full
Clean Water Act	Full
Coastal Barrier Resources Act	N/A
Coastal Zone Management Act	N/A
Comprehensive Environmental Response, Compensation and Liability Act	Full
Consultation and Coordination with Indian Tribal Governments (EO 13175)	Full
Endangered Species Act	Full
Environmental Justice in Minority and Low-Income Populations (EO 12898)	Full
Farmland Protection Policy Act	Full
Federal Water Project Recreation Act	N/A
Fish and Wildlife Coordination Act	Full
Floodplain Management (EO 11988)	Full
Invasive Species (EO 13112)	Full
Magnuson-Stevens Act	N/A
Migratory Bird Treaty Act	Full
National Historic Preservation Act	Full
National Environmental Policy Act	Full
Prime and Unique Farmlands (Memorandum, CEQ, 11 August 1980)	Full
Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis (EO 13990)	Full
Protection of Wetlands (EO 11990)	Full
Revitalizing our Nation's Commitment to Environmental Justice for All (EO 14096)	Full
River and Harbors Act	N/A
Safe Water Drinking Act	Full
Tackling the Climate Crisis at Home and Abroad (EO 14008)	Full
Watershed Protection and Flood Prevention Act	Full
Wild and Scenic Rivers Act	N/A

## **6 Required Coordination**

### **6.1 Agencies Contacted**

Direct coordination with the USACE Baltimore District Regulatory Branch, WV DNR, WV SHPO, and USFWS has been completed or is ongoing. Agency correspondence is included in Appendix C.

## **6.2 Public Review and Comments**

The EA and Draft FONSI will be made available for public review and comment on USACE Baltimore's website, and for a period of 30 days, as required under NEPA.

## **7 Conclusion**

The Pendleton County PSD is proposing to extend its water line infrastructure. By providing safe and reliable drinking water, 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 private wells and cisterns. No significant, adverse, short-term or long-term impacts have been identified as a result of implementation of the proposed improvement project. The majority of 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 negative impacts on the human or natural environment.

## **8 List of Information Providers and Preparers**

The following agencies were involved in preparation of the EA.

U.S. Army Corps of Engineers, Baltimore District  
2 Hopkins Plaza  
Baltimore, Maryland 21201

Cerrone Associates Inc.  
97 14th Street  
Wheeling, West Virginia 26003

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