



Draft Environmental Assessment

**Hardy County Public Service District Facility, DR-4378  
(PW045)**

Hardy County, West Virginia

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## **List of Acronyms and Abbreviations**

ACS – American Community Survey	NHPA – National Historic Preservation Act
APE – Area of Potential Effect	NLEB – Northern Long-eared Bat
BMP – Best Management Practice	NPDES – National Pollutant Discharge Elimination System
CAA – Clean Air Act	NRCS – Natural Resources Conservation Service
CEQ – Council on Environmental Quality	NRHP – National Register of Historic Places
CFR – Code of Federal Regulations	OSHA – Occupational Safety and Health Administration
CWA – Clean Water Act	PA – Public Assistance
EA – Environmental Assessment	PAAP – Public Assistance Alternative Procedures
ECHO – Enforcement and Compliance History Online	PSD – Public Service District
EIS – Environmental Impact Statement	SHPO – State Historic Preservation Officer
EO – Executive Order	THPO – Tribal Historic Preservation Officer
EPA – Environmental Protection Agency	TMDL – Total Maximum Daily Load
E&S – Erosion and Sediment	USFWS – United States Fish and Wildlife Service
FEMA – Federal Emergency Management Agency	USGS – United States Geological Survey
FIRM – Flood Insurance Rate Map	VOC – Volatile Organic Compounds
FONSI – Finding of No Significant Impact	WVDEP – West Virginia Department of Environmental Protection
FPPA – Farmland Protection Policy Act	WVDNR – West Virginia Division of Natural Resources
HCRDA – Hardy County Rural Development Authority	WVDEM – West Virginia Division of Emergency Management
HUC – Hydrologic Unit Code	WVDOT – West Virginia Department of Transportation
IPaC – Information for Planning and Conservation	
NAD83 – North American Datum of 1983	
NCA – Noise Control Act of 1972	
NEPA – National Environmental Policy Act	
NFIP – National Flood Insurance Program	

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## **SECTION ONE: BACKGROUND**

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### **1.1 Project Authority**

The Hardy County Public Service District (PSD) has applied through the West Virginia Division of Emergency Management (WVDEM) to the Federal Emergency Management Agency (FEMA) Public Assistance (PA) grant program for funding assistance, under the Presidentially Declared Disaster FEMA-4378-DR-WV, for the replacement of the Hardy County PSD facility. The project proposes to use the Alternative Procedures for Permanent Work Pilot program under Section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act to construct the facility in a new location. In accordance with FEMA Directive 108-1 and FEMA Instruction 108-1-1, this Environmental Assessment (EA) is being prepared pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ) in 40 Code of Federal Regulations (CFR) Parts 1500-1508. 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).

### **1.2 Location**

The project location is in the northeastern portion of the state of West Virginia within an unincorporated area of northwestern Hardy County. Hardy County has an approximate population of 14,025. Geographically, the project is located just outside the boundaries of the Town of Moorefield, and approximately 215 miles northeast of the City of Charleston and 21 miles west of the West Virginia-Virginia border. A general location map of Hardy County is included in **Appendix A**.

### **1.3 Purpose and Need**

Severe storms and heavy rainfall occurred throughout the Eastern Panhandle of the state of West Virginia over the period May 28, 2018 to June 3, 2018. The storms caused flooding, landslides, and mudslides resulting in damages to public infrastructure within seven counties. A major disaster was declared on July 12, 2018 for Grant, Hampshire, Hardy, Jefferson, Mineral, Morgan, and Pendleton Counties, which made Public Assistance funds available to state and local governments to aid in damage recovery.

During the storm system, all buildings comprising the Hardy County PSD were inundated by 4 inches of standing water resulting in damage to the office building, shop, garage, and associated interior components. After the water receded, the office building was determined to be unsafe for human use due to elevated mold levels. The facility previously experienced flooding in 2008 and 2010, although not as severe as that associated with the June 2018 event. These prior incidents required professional cleanings and mold treatments to completely repair damage sustained by the facility.

The Hardy County PSD building was deemed eligible for assistance under the FEMA PA grant program, specifically Public Assistance Alternative Procedures (PAAP) for Permanent Work. The PAAP funding is based on a fixed cost estimate for the repair of the damaged facilities in-kind, back

to pre-disaster condition. The objective of the Public Assistance Grant Program is to assist communities in recovering from the damage caused by natural disasters, with PAAP funding allowing the applicant to use funds in a manner that best meets their specific needs for recovery, long-term resiliency, and future preparedness. The PAAP fixed cost funds are eligible for use on an Alternate Project, such as constructing a new facility. The Hardy County PSD and WVDEM propose to fund the replacement of the Hardy County PSD facility with the construction of a facility at a new location. The purpose of the action alternative presented in this Environmental Assessment is to provide a safe facility, which is not affected by repeated flooding, for the Hardy County PSD to conduct necessary administrative, office, storage, and maintenance functions. The need for the project is to address prior flooding and drainage damages and to avoid future risk of flood damage to Hardy County PSD infrastructure.

In accordance with federal laws and FEMA regulations, the EA process for a proposed federal action must include an evaluation of alternatives and a discussion of the potential environmental impacts. This EA was prepared in accordance with FEMA's regulations as required under NEPA. As part of this NEPA review, the requirements of other environmental laws and executive orders are addressed.

#### **1.4 Existing Facility**

Currently, the Hardy County Public Service District is operating from a temporary, modular office trailer on PSD property, located at 2094 U.S. Route 220 (39.03780, -78.98889) in an unincorporated area just outside the boundaries of the Town of Moorefield, West Virginia. The 720-square foot temporary facility, which has been installed in the parking lot of the former building, includes two offices, an open waiting area for customers, and a bathroom and is Americans with Disabilities Act accessible. The temporary facility replaced the original 5,877-square foot, one-story, pre-engineered metal PSD building comprising an office, shop, and garage, which was damaged as a result of intense rain events and flooding in early June 2018. The original PSD office building, constructed in 1981, was determined to be unusable due to potential health risks associated with mold. Components damaged in the former building include computer equipment and flooring, carpet, drywall, insulation, and baseboards. The temporary office trailer is elevated approximately 3 feet above ground level and will continue to operate as the PSD facility until a permanent facility is established. The damaged PSD building remains on the property. Vehicles and equipment continue to be stored in the original shop and garage space, which was flooded during the 2018 event. A map depicting the general location of the damaged PSD building and the current temporary trailer is in **Appendix A**. It is anticipated that the damaged facility and associated land would be sold following completion of the proposed project. Emergency remediation replaced the damaged computer components. The placement of the temporary office trailer was approved under a separate FEMA project. The replacement of computer equipment and placement of a temporary trailer are separate from activities to replace the PSD facility, as discussed in this EA, and thus were independently evaluated for environmental compliance. Both activities met the criteria for a statutory exclusion under NEPA and therefore did not require the publication of an EA.

## SECTION TWO: ALTERNATIVE ANALYSIS

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Two options were evaluated to address the damaged Hardy County PSD facility, the no-action alternative and the proposed action alternative (replacement offsite). Consistent with the purpose of and need for the proposed action, the focus was placed on rebuilding the damaged PSD facility with a reduced risk for future flood damage. Due to the frequency and severity of recent flooding, the Hardy County PSD is proposing to construct a long-term solution to avoid future repair, replacement, or reconstruction projects in this area.

### 2.1 Alternative 1 – No Action

Under the No Action Alternative, replacement of the Hardy County PSD facility would not occur. The Hardy County PSD administrative and office functions would continue to operate from the temporary office trailer located in the parking lot adjacent to the damaged PSD building. Storage and maintenance functions would continue to take place within the shop and garage facilities, which were flooded during the June 2018 event. Although not located within a mapped flood hazard area, the property could still be subject to high water events as experienced in the past.

### 2.2 Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)

Under the Proposed Action Alternative, the Hardy County PSD would be replaced with a comparable facility at a new location. The proposed site is a 4.88-acre parcel within the Robert C. Byrd-Hardy County Industrial Park (39.070765 latitude, -78.939724 longitude). The site is owned by the Hardy County Rural Development Authority (HCRDA) and is located in the industrial park on Robert C. Byrd Industrial Park Road just outside the eastern city limits of the Town of Moorefield, West Virginia. The acquisition of the property would not be funded with the FEMA grant and will not be discussed further in this EA. A location map of the Proposed Action Alternative is in **Appendix A**. A map depicting the subject property and a United States Geological Survey (USGS) topographic map are represented in **Appendix A**.

The Proposed Action would construct a 6,300-square foot building to serve as the new Hardy County PSD facility. The building would consist of a 2,000-square foot office area for administrative staff and board members and a 4,300-square foot garage area for maintenance and storage of parts, vehicles, and equipment. A 2-hour fire-rated wall would separate the two areas. The building is anticipated to have a useful life of at least 50 years. Building use would be classified as mixed use occupancy consisting of Business occupancy for the office space and Low Hazard Storage occupancy for the garage area. The proposed site is a 4.88-acre vacant, undeveloped parcel consisting of herbaceous and scrub-shrub vegetation and limited trees. There are some areas of moderate elevation change; however, most of the developable area is relatively level with natural drainage flowing from southwest to northeast. The surrounding land is characterized by similar undeveloped properties and low to medium intensity development. Site access is provided from Industrial Lane, located off Robert C. Byrd Industrial Park Road. There are existing electric, gas, water, sewer, telephone, cable, and fiber optic utilities adjacent to the proposed site. Site plans and engineering drawings are attached in **Appendix A**.

Site development would be limited to approximately 3.32 acres and have cut/fill grading activities of approximately 4,514 cubic yards, to include approximately 16 paved parking spaces including two accessible spaces with associated loading zones, a gravel lot, a covered storage area with concrete pad, concrete walkways and curbs, and utilities. The Proposed Action would install stormwater drainage infrastructure including pipes, grass drainage swales, and drop inlets as well as connections to an existing offsite water line, sanitary sewer manhole, and other existing utilities. A paved access road to the parking area and a gravel service road to the gravel work lot would enter the property from Industrial Lane. It is anticipated that typical heavy equipment would be utilized for construction activities.

### **2.3 Alternatives Considered and Eliminated from Further Consideration**

One alternative, renovation of Hardy County PSD, was initially considered but was eliminated from further consideration in this environmental assessment because it did not meet the purpose of and need for the project.

#### **Renovation of Hardy County PSD**

This alternative would renovate and repair the current damaged Hardy County PSD facility to restore it back to its pre-disaster design, function, and capacity. Repairs would remove and replace damaged drywall, flooring, baseboards, carpeting, insulation, and cabinets/workstations in various rooms of the facility including three offices, lobby, foyer, kitchen, board room, file room, two bathrooms, garage, shop, and utility room. In addition to renovating the damaged building, this alternative would include hazard mitigation measures to prevent future flooding. Mitigation would include excavation of a portion of the embankment along U.S. Route 220 South adjacent to the PSD property and construction of a retaining wall with a riprap ditch across the front of property. A drop inlet and culvert would be installed to divert water to the back of property into a small constructed retention area. The area around the building would have positive grading. Lastly, this alternative would raise the elevation of the building floor by pouring new concrete over the existing building slab to raise the interior floor 8 inches. This alternative was considered but eliminated from further consideration by the Hardy County PSD because the site and building would continue to be at risk from future flood events and associated hazards due to its' location, and therefore, would not be a long-term solution. Even with mitigation measures, the site and infrastructure could continue to incur repeated water damage and require repairs, replacement, or reconstruction.

## **SECTION THREE: AFFECTED ENVIRONMENT AND CONSEQUENCES**

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### **Preliminary Screening of Assessment Categories**

A preliminary screening was used to narrow the list of categories for which detailed assessments need to be performed. The screening was based on available information on the general project area and the No Action and Proposed Action alternatives. The categories that were eliminated from further assessment were Coastal Zone Management, Coastal Barrier Resources, Migratory Birds, and Visual Resources.



The Coastal Zone Management and Coastal Barrier Resources categories were dismissed from further evaluation because the project area is not within or near a coastal zone or Coastal Barrier Resources System unit.

The proposed site of the new PSD facility is a previously disturbed field with fewer than five trees, no water resources, and surrounded by low to medium intensity development. The proposed project includes construction of a small one-story building and would not involve a communication tower or other infrastructure that would increase bird collision risks. The site of the proposed PSD facility likely has little value to migratory birds. It is not anticipated that disturbance to a small land area would affect any migratory birds that could use the existing disturbed field habitat because there is similar available habitat surrounding the proposed site. Therefore, the Migratory Birds category was eliminated from detailed assessment.

The landscape surrounding the proposed project site is low to medium intensity development located within an industrial park. Surrounding properties in the industrial park contain commercial, industrial, or manufacturing businesses, some larger than the proposed building. The site is not located within a protected viewshed. There is no residential property adjacent to the proposed site. The new proposed PSD facility would look similar to the other buildings in the area and would not provide a noticeable change to the surrounding landscape. The proposed use of the site would be consistent with zoning regulations. Therefore, the Visual Resources category was dismissed from further evaluation.

### **3.1 Physical Environment**

#### **3.1.1 Geology, Seismicity and Soils**

Hardy County and the project study area are located entirely within the Valley and Ridge Physiographic Province of West Virginia. The geology of Hardy County consists of folded and faulted rocks that range in age from late Precambrian to early Mississippian including shale, limestone, siltstone, sandstone, chert, and conglomerate, as well as alluvial deposits of sand, gravel, silt, and clay (West Virginia Geological and Economic Survey, 2017). The existing site of the Hardy County PSD is within the Mahantango Formation and part of Millboro Shale, which consists of Devonian age thickly laminated marine shale, siltstone, very fine sandstone, and some limestone, with an occasional coral reef or biostrome (USGS, 2005). Within the Proposed Action Alternative site, the geology is predominantly characterized by Devonian age Marcellus Formation and Needmore Shale, undivided. These rocks generally consist of thinly laminated non-calcareous pyritic shale or non-fissile shale and contain one or more thin-bedded limestones (USGS, 2005).

The elevation of the No Action Alternative site is approximately 860 to 875 feet North American Datum of 1983 (NAD83) (USGS, 2020). The existing PSD site sits at the base of an incline, which results in surface runoff draining down the slope towards the site. The elevation of the Proposed Action Alternative site ranges from approximately 922 to 980 feet NAD83, West Virginia State Plane, North Zone, US Foot; however, within the area of disturbance the highest elevation is approximately 948 feet NAD83. Local topography indicates that surface runoff in this area is from southwest to northeast, generally in the direction of Robert C. Byrd Industrial Park Road. The topography of the No Action and Proposed Action alternatives is in the USGS WV, 7.5-minute topographic Moorefield quadrangle (**Appendix A**).

The Natural Resources Conservation Service (NRCS) Web Soil Survey was consulted for detailed soil information (**Appendix B**). The soils at the No Action Alternative property are Clarksburg channery silt loam, 3 to 8 percent slopes; Clarksburg channery silt loam, 8 to 15 percent slopes; and Monongahela silt loam, 0 to 3 percent slopes. The soils within the Proposed Action Alternative property are Allegheny loam and Monongahela silt loam, 3 to 8 percent slopes. Additionally, there is a non-bedrock escarpment parallel to Robert C. Byrd Industrial Park Road within the Monongahela silt loam soil in the northern portion of the Proposed Action Alternative site.

- **Clarksburg channery silt loam, 3 to 8 percent slopes (CkB)** – This soil is observed throughout much of the existing site. CkB soil occurs on hillslopes and footslopes and consists of loamy colluvium derived from sandstone, shale, and limestone. It is moderately well drained and does not flood or pond. Permeability is slow and available water capacity is high. This soil does not meet hydric criteria. This soil is prime farmland.
- **Clarksburg channery silt loam, 8 to 15 percent slopes (CkC)** – This soil is observed in a very small sliver of the southeastern portion of the existing site close to the roadway. CkC soil occurs on hillslopes and footslopes and consists of loamy colluvium derived from sandstone, shale, and limestone. It is moderately well drained and does not flood or pond. Permeability is slow and available water capacity is high. This soil does not meet hydric criteria. This soil is farmland of statewide importance.
- **Monongahela silt loam, 0 to 3 percent slopes (MhA)** – This soil is observed in the northern portion of the existing site. MhA soil typically occurs on stream terraces and consists of old loamy alluvium from sandstone, shale, and limestone. It is moderately well drained and does not flood or pond. Permeability is slow and available water capacity is moderate. This soil does not meet hydric criteria. This soil is prime farmland.
- **Allegheny loam, 15 to 25 percent slopes (AgD)** – This soil is observed in the central portion of the proposed project site. AgD soil typically occurs on stream terraces on river valleys and consists of loamy alluvium derived from shale and siltstone. It is well drained and does not flood or pond. Permeability is moderate and available water capacity is moderate or high. This soil does not meet hydric criteria. This soil is farmland of statewide importance.
- **Monongahela silt loam, 3 to 8 percent slopes (MhB)** – This soil is observed in the northern half of the proposed project site and a small portion along the southern boundary. MhB soil typically occurs on stream terraces on river valleys and is formed in old alluvium derived from sandstone, shale, and limestone. It is moderately well drained and does not flood or pond. Permeability is slow and available water capacity is moderate. This soil does not meet hydric criteria. This soil is farmland of statewide importance.

The Farmland Protection Policy Act (FPPA – Public Law 97-98, 7 U.S.C. 4201) is intended to minimize the extent to which federal programs have on unnecessary and irreversible conversion of farmland to nonagricultural uses. Implementing procedures included in associated regulations found in Title 7 of the Code of Federal Regulations, Section 658, established the farmland conversion impact rating system to evaluate the impacts federal programs have on the conversion of farmland to nonagricultural uses. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are implemented

or assisted by a federal agency. The sites of both the No Action and Proposed Action alternatives contain farmland soils.

Seismic activity in the Valley and Ridge region of West Virginia is negligible because the area is not tectonically active (USGS, 2019d). Therefore, seismic concerns for each of the alternatives are relatively low and will not be discussed further in this assessment.

### ***Alternative 1 – No Action***

Under the No Action Alternative there would be no impacts to geological features or soils. Existing natural geomorphological erosional processes would continue to occur on a long-term basis. There would be no conversion of soils considered prime farmland or farmland of statewide importance, therefore, no FPPA compliance requirements are necessary at this site.

### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

Soils within the subject property would be disturbed and exposed during construction activities including clearing, grading, compacting and/or proof-rolling, excavation, and trenching resulting in moderate, short-term impacts. The site design would require cut and fill activities throughout the site. The grading plan proposes a total cut volume of 2,248 cubic yards and total fill volume of 2,266 cubic yards. Three topsoil stockpile areas would be placed on the property. The building foundation would be excavated to a depth of approximately 3 feet and require approximately 700 cubic yards of fill material. Approximately 1,687 cubic yards of pavement would be placed. Excavation and trenching for utilities would vary; however, installation would typically be a minimum of 24 inches to 36 inches below the surrounding exterior grade elevations. Prior to construction, all topsoil would be stripped and removed, and exposed surfaces would be compacted and proof rolled. A West Virginia Department of Environmental Protection (WVDEP) National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit would be required because the project disturbs more than one acre of land surface. Under the NPDES permit, the project must minimize or prevent soil erosion and sedimentation during construction through the use of an erosion and sediment (E&S) control plan and appropriate best management practices (BMPs). BMPs could include grass drainage swales, inlet and riprap outlet protection, a temporary sediment trap, placement of 18-inch compost filter socks, soil stabilization, and maintenance of a stabilized construction entrance. Compost filter socks around the temporary topsoil stockpiles would help prevent erosion and sedimentation. The contractor would maintain positive drainage throughout the construction site to divert runoff to the sediment trap. Seeding and mulching would be used for temporary and permanent soil stabilization.

Minor, long-term impacts would result from an increase in impervious surface and disturbance to soil features. An increase in impervious surface from the new building, parking lot, and sidewalk would diminish natural soil infiltration and associated drainage on a small portion of the site. Long-term stormwater drainage at the proposed site would be accomplished via storm drain systems consisting of downspout conveyances, stormwater pipes, and a grass drainage swale that would reroute water offsite towards the northern property boundary. Additionally, grading and contouring associated with the parking lot along the northern site boundary would disturb the non-bedrock escarpment running parallel to the roadway. Performance and placement of soils,

rock, and other fill materials and compaction activities would be pursuant to the engineering and design plans found in **Appendix A**.

Farmland of statewide importance occurs within the development area for the proposed Hardy County PSD facility. Due to the potential for the conversion of farmland, FEMA completed and submitted to NRCS the AD-1006 (Farmland Conversion Impact Rating) form on April 20, 2020. A response was received from NRCS on April 28, 2020. NRCS determined that the project would not impact prime or other important farmland due to the urban nature of the area, and therefore is not subject to FPPA.

### **3.1.2 Water Resources and Water Quality**

The Clean Water Act (CWA), as amended in 1977, established the basic framework for regulating discharges of pollutants into waters of the United States. In addition, Executive Order (EO) 11990 (Protection of Wetlands) requires federal agencies to avoid, to the extent possible, adverse impacts of wetlands.

The project areas are located close to the confluence of the South Branch Potomac River and the South Fork of the South Branch Potomac River. Hardy County is underlain by Valley and Ridge aquifers, where groundwater typically flows downgradient toward valleys and discharges to streams or springs in the absence of manmade systems (Evaldi and McCoy, 2004).

The existing Hardy County PSD is within the Hutton Run-South Branch Potomac River (Hydrologic Unit Code [HUC] 020700010601) subwatershed, with the South Branch Potomac River located approximately 0.3 miles to the west. There are no surface water resources on the site but there is a drainageway, fed by a culvert from under U.S. Route 220, approximately 75 feet south of the existing PSD building. The existing Hardy County PSD sits at the base of an incline, which results in surface runoff draining down towards the site with onsite drainage likely accomplished by infiltration and gradual surface runoff to the northwest.

The Proposed Action Alternative is located within the Fort Run-South Branch Potomac River (HUC 020700010603) subwatershed. There are no surface water resources located within the proposed site. The nearest surface water resources are an unnamed intermittent stream located approximately 360 feet west and a stormwater pond located approximately 300 feet southwest of the site (USGS, 2020). The intermittent stream flows northwest to join Fort Run. Local topography indicates that drainage in this area is likely accomplished by infiltration and surface runoff to the north-northeast into a drainage channel along Robert C. Byrd Industrial Park Road, then to the northwest via a roadside ditch towards an existing outfall at the intersection of Robert C. Byrd Industrial Park Road and Industrial Lane. There are no active USGS wells located within or close to the proposed site (USGS, 2019b, 2019c). According to the 2016 West Virginia Integrated Water Quality Monitoring and Assessment Report, Fort Run is not listed as impaired and does not have any available water quality data or assessment information (WVDEP, 2019). The nearest waterway with assessment information is Dumpling Run, also a tributary to Fort Run, located approximately 0.43 miles south of the proposed site. Dumpling Run was listed as impaired on the 2010 303(d) list, as evidenced by impacts to the benthic macroinvertebrate community. In response, Total Maximum Daily Loads (TMDLs) were established in 2015 for fecal coliform and iron (WVDEP, 2019). The United States Environmental Protection Agency (EPA) Envirofacts

website shows no discharge of pollutants or toxic chemicals into water resources, water pollution permits, or compliance data related to the existing or proposed sites of the Hardy County PSD (USEPA, 2020).

### ***Alternative 1 – No Action***

There are no surface water resources located within the No Action Alternative site. Existing groundwater resources and stormwater drainage would remain the same. Therefore, under the No Action Alternative, no adverse impacts to water resources would occur.

### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

The construction of the proposed Hardy County PSD facility would not directly impact surface water resources. However, the project could have minor, indirect short-term impacts on surface waters during the construction process. Stormwater drainage would continue to flow to the north-northeast but would encounter the stormwater drainage system proposed for the new Hardy County PSD. The stormwater drainage system would consist of both sheet flow and sub-surface drainage components including downspout conveyances, stormwater pipes, and a grass drainage swale before leaving the subject property to the north. A Construction Stormwater General Permit, containing a Stormwater Pollution Prevention Plan and Groundwater Protection Plan, is required by the WVDEP and would be submitted prior to construction activities. The contractor would implement BMPs during construction to limit water quality impacts from stormwater-related erosion and sedimentation. Proposed BMPs include grass drainage swales, inlet and riprap outlet protection, a temporary sediment trap, placement of 18-inch compost filter socks around areas of soil disturbance, temporary soil stabilization with seeding and mulching, and maintenance of a stabilized construction entrance. The contractor would install compost filter socks around the proposed topsoil stockpiles to help prevent erosion into stormwater drainage channels. The grading, excavation, and foundation and utility depths for site development would vary according to recommendations in the design and engineering plans and the location specifics; however, most are likely shallow in depth. If shallow groundwater were encountered during construction, adequate connection to the existing or proposed drainage system would be provided. Impacts to groundwater would be minimal on a short-term basis during construction activities with no long-term impacts anticipated. After construction is completed, any bare soils would be seeded and/or mulched to prevent future soil erosion. No long-term impacts to water resources and water quality are anticipated.

### **3.1.3 Floodplain Management (Executive Order 11988)**

EO 11988 (Floodplain Management) requires that a federal agency avoid direct or indirect support of development within the 100-year floodplain, whenever there is a practicable alternative. FEMA's regulations for complying with EO 11988 and 11990 are promulgated in 44 CFR Part 9. FEMA uses Flood Insurance Rate Maps (FIRMs) to identify properties located within the Special Flood Hazard Area.

According to the FEMA Flood Insurance Study for Hardy County, West Virginia and Incorporated Areas, the main sources of flooding in the area are from the South Branch Potomac River and the South Fork of the South Branch Potomac River with other sources including blocked drainage structures and overland flow traveling to low topographical areas. Hardy County participates in

the National Flood Insurance Program (NFIP) and floodplain development permits would be required at all sites prior to beginning any work within the 100-year floodplain. Hardy County's current Floodplain Ordinance was adopted in September 2009.

The No Action Alternative and the Proposed Action Alternative projects are not within the floodplain as indicated in the FIRM Panels 54031C0161G and 54031C0154G for Hardy County, West Virginia and unincorporated areas (**Appendix A**). According to FIRM Panel 54031C0161G, dated 09/02/2009, the site of the current Hardy County PSD facility is located within Zone X [unshaded], an area of minimal flood hazard. FIRM Panel 54031C0154G, dated 09/02/2009 shows the parcel for the new proposed PSD facility is located within Zone X [unshaded], an area of minimal flood hazard.

FEMA applies the Eight-Step Decision-Making Process to ensure that it funds projects consistent with EO 11988. The NEPA compliance process involves essentially the same basic decision-making process to meet its objectives as the Eight-Step Decision-Making Process. Therefore, the Eight-Step Decision-Making Process has been applied through implementation of the NEPA process.

#### ***Alternative 1 – No Action***

Under the No Action Alternative, the Hardy County PSD would continue to operate from a temporary trailer located on the site of the former facility and use the damaged shop and garage facilities. Therefore, the No Action Alternative would have no impact on the floodplain. Although the existing Hardy County PSD is not in a floodplain, the property and former building are located within an area of low topography and have experienced high water events and associated water damage in the past due to drainage and flooding issues. The property could continue to experience flooding events over the long-term.

#### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

Under the Proposed Action Alternative, the development would occur outside of the floodplain and there would be no impact to the floodplain or anticipated flood risks. The project would be required to obtain a permit and Certificate of Compliance from the local Floodplain Administrator for development of a building or structure including construction, excavation, filling, grading, paving, and storage of equipment or materials as referenced under Hardy County Floodplain Ordinance, Article 1, Section 1.3 and Article 7, Section 7.1, 7.2, 7.5.

### **3.1.4 Air Quality**

The Clean Air Act (CAA) requires that states adopt ambient air quality standards to protect the public from potentially harmful amounts of air pollutants. Primary and secondary air quality standards are established by the EPA. Primary air quality standards protect the public health, including the health of sensitive populations, such as people with asthma, older adults, and children. Secondary air quality standards protect public welfare by implementing and promoting healthy ecosystems, preventing poor visibility, and preventing damage to crops and buildings. The EPA has set national ambient air quality standards for six of the following criteria pollutants: Ozone (O<sub>3</sub>), Nitrogen Dioxide (NO<sub>2</sub>), Carbon Monoxide (CO), Sulfur Dioxide (SO<sub>2</sub>), Inhalable Particulate Matter (PM<sub>2.5</sub> and PM<sub>10</sub>), and Lead (Pb). According to the EPA, Hardy County is classified as an attainment area, defined as an area that meets National Ambient Air Quality Standards. The EPA

Envirofacts website shows no sources of criteria pollutants from air emissions, air pollution permits, or compliance data related to the existing or proposed sites of the Hardy County PSD (US EPA, 2020b). The WVDEP Division of Air Quality enforces and monitors air quality standards in the state of West Virginia. WVDEP monitors the above-mentioned pollutants, meteorology, and Air Toxic Pollutants such as metals, carbonyls, and Volatile Organic Compounds (VOCs). The closest WVDEP monitoring station to Hardy County is in Berkley County, which is also in attainment with air quality standards.

### ***Alternative 1 – No Action***

Under the No Action Alternative, no impacts to air quality would result from the continued operation of the Hardy County PSD from a temporary trailer located on the site of the former facility and use of the damaged shop and garage facilities.

### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

Impacts to air quality from construction would occur from fuel-burning equipment and fugitive dust emissions. Emissions from fossil fuel-powered engines used in construction equipment (e.g., heavy machinery and earthmoving equipment) could temporarily increase the levels of some of the criteria pollutants, such as CO, NO<sub>2</sub>, O<sub>3</sub>, PM<sub>10</sub>, and noncriteria pollutants such as VOCs. BMPs could be implemented to mitigate the criteria emissions such as management of engine run times and maintenance BMPs for fuel burning equipment. Construction activities could result in increased emission of fugitive dust from exposed soil areas including the proposed topsoil stockpiles; however, impacts from these emissions could be reduced by wetting down construction areas, as needed. Air quality permitting through WVDEP is not anticipated because the small area of land disturbance, localized area of grading, and short duration of construction activities would likely result in minimal pollutant emissions. The use of BMPs would reduce impacts to air quality during construction resulting in short-term, negligible impacts to air quality. After construction, the operation of the new Hardy County PSD facility would not emit any gases or materials. Therefore, no long-term impacts to local air quality would occur.

## **3.2 Biological Environment**

### **3.2.1 Terrestrial and Aquatic Environment**

According to the West Virginia Division of Natural Resources (WVDNR), over 2,300 species of vascular plants (i.e., trees, wildflowers, vines, ferns, grasses) have been found throughout the state. Common vegetation in the Ridge and Valley province, which includes Hardy County, consists of trees such as oak (*Quercus* spp.) and hickory (*Carya* spp.) as well as red maple (*Acer rubrum*), black walnut (*Juglans nigra*), and pine (*Pinus* spp.), and understory and herbaceous plants such as *Rhododendron* sp., redbud (*Cercis canadensis*), greenbrier (*Smilax* sp.), violet (*Viola* spp.), bedstraws (*Galium* spp.), goldenrods (*Solidago* spp.), asters (*Symphyotrichum* spp.), and other wildflower, grass, and weed species (Grafton, 2012; Harmon et al., 2006; WVDNR, 2015).

Per the WVDNR, there are over 600 species of animals in the state. This includes more than 57 species of reptiles and amphibians, 70 wild mammals, 178 species of fish, and 300 species of birds. Common wildlife species in Hardy County include white-tailed deer (*Odocoileus virginianus*), black

bear (*Ursus americanus*), eastern cottontail (*Sylvilagus floridanus*), wild turkey (*Meleagris gallopavo*), eastern gray squirrel (*Sciurus carolinensis*), eastern box turtle (*Terrapene c. carolina*), and eastern garter snake (*Thamnophis s. sirtalis*) as well as numerous songbirds, gamebirds, and raptors (WVDNR, 2001, 2003, 2015).

Both the No Action and Action alternatives are located in previously disturbed areas of low to medium intensity development. The No Action Alternative project site is a disturbed area with maintained grass, several ornamental trees and shrubs, and a gravel lot. The Proposed Action Alternative project site is a vacant field containing herbaceous and scrub-shrub vegetation and approximately five trees. Wildlife likely to be found in these areas include small mammals and birds adapted to anthropogenically impacted sites including deer, squirrels, rabbits, raccoons, foxes, rock pigeon (*Columba livia*), and American crow (*Corvus brachyrhynchos*). Additional transient species could be observed in the area.

### **Alternative 1 – No Action**

Under the No Action Alternative, there would be no impacts to terrestrial and aquatic habitats or species.

### **Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)**

Construction activities would take place only in a terrestrial area; no aquatic areas would be impacted. Loss of terrestrial habitat would be limited to approximately 3.32 acres of previously disturbed herbaceous and scrub-shrub land cover. This habitat is likely of limited value to most terrestrial flora and fauna species due to its previously disturbed nature and the surrounding development. During construction activities, the limits of disturbance would be indicated by stakes to prevent further disturbance and impacts to other areas by personnel and construction equipment. Mobile species could relocate to nearby areas not affected by construction activities. Non-mobile species such as vegetation and insects would be impacted in areas that are cleared or filled. However, the proposed project site is surrounded by similar terrestrial environments, which would be available for habitat use. There would be no loss of aquatic habitat. Impacts to terrestrial species resulting from the Proposed Action Alternative are expected to be short-term and negligible, on a localized scale.

### **3.2.2 Wetlands (Executive Order 11990)**

The United States Army Corps of Engineers regulates the discharge of dredged or filled material into waters of the U.S., including wetlands, pursuant to Section 404 of the CWA. In addition, EO 11990 (Protection of Wetlands) requires federal agencies to avoid, to the extent possible, adverse impacts on wetlands that may result from federally funded actions.

Wetlands are 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 (33 CFR §328.3(b)). Wetlands can be identified by the presence of hydrophytic vegetation, hydric soils, and wetland hydrology (Environmental Laboratory, 1987). According to the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory, there are no wetlands mapped within the No Action or Proposed Action alternatives sites. The closest wetland to the No Action Alternative site is a freshwater pond



south of the damaged PSD building associated with a culvert along the road. The closest wetland to the Proposed Action Alternative property is a freshwater wetland associated with a pond approximately 275 feet to the southwest of the site.

#### ***Alternative 1 – No Action***

There would be no construction or change to the operation of the current Hardy County PSD. Therefore, under the No Action Alternative, no impacts to wetlands would occur.

#### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

There are no wetlands within the subject property. Implementation of BMPs would limit erosion and prevent offsite movement of sediment during construction. Therefore, under the Proposed Action Alternative, no impacts to wetlands would occur.

### **3.2.3 Threatened and Endangered Species**

Section 7 of the Endangered Species Act requires any federal agency that funds, authorizes or carries out an action ensure that their action is not likely to jeopardize the continued existence of any endangered or threatened listed species or result in the destruction or adverse modification of designated critical habitats.

An Official Species List from the U.S. Fish and Wildlife Service's Information for Planning and Conservation (IPaC) tool, dated March 10, 2020, revealed that the Proposed Action project is located within a potential area of occurrence for three (3) threatened and endangered species (**Appendix C**). The USFWS determined that three federally-listed species could occur in the project area and may be affected by project construction. The listed species are the endangered Indiana bat (*Myotis sodalis*) and Virginia big-eared bat (*Corynorhinus townsendii virginianus*), and the threatened northern long-eared bat (*Myotis septentrionalis*) (NLEB).

#### ***Alternative 1 – No Action***

This site is within a previously disturbed area of low to medium density development that consists of structures, impervious surface, and maintained grass. Under the No Action Alternative, there would be no construction and no change from the existing conditions. Therefore, no impacts to listed species, their habitats, or designated critical habitat would occur under the No Action Alternative.

#### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

The Proposed Action Alternative site contains approximately five trees but is comprised primarily of herbaceous and scrub-shrub vegetation within a larger context of low to medium intensity development. The site is not within a floodplain and there are no streams or wetlands present. No caves or mine portals have been identified on the site. The site does not contain any critical habitat for any of the listed species but could be used as foraging habitat. Under the Proposed Action, approximately 3.32 acres of the property would be cleared to allow for construction and development. Development includes cut/fill grading, utility installation, and placement of impervious surfaces. An E&S control plan with BMPs would limit erosion and offsite movement of

sediment during construction. Site development would also require the removal of some of the existing trees; however, no forested or wooded habitat would be disturbed.

FEMA submitted a Section 7 consultation letter to the USFWS West Virginia Field Office on March 12, 2020 for a review of the Proposed Action at the site. In this consultation letter, FEMA determined that the proposed project *may affect, but is not likely to adversely affect* the Indiana bat or Virginia big-eared bat. Any take of NLEB associated with this project is exempted under the USFWS 4(d) rule, and no conservation measures are required. USFWS concurred with this determination on July 1, 2020. Correspondence is included in **Appendix C**.

### **3.3 Hazardous Materials**

A hazardous materials database search did not identify any potential hazardous materials concerns within the project areas. The EPA Envirofacts website identifies sites of hazardous waste generation, handling, treatment, storage, and disposal; contamination or cleanup related to brownfields; Superfund sites; Resource Conservation and Recovery Act activities; toxic chemical releases; and other facilities and activities related to hazardous materials and wastes. The EPA Enforcement and Compliance History Online (ECHO) displays federal, state, local, and tribal environmental agency compliance and enforcement records for EPA-regulated facilities. The Envirofacts and ECHO databases did not identify any issues or concerns related to the existing or proposed Hardy County PSD sites (US EPA, 2020a, b). Additionally, NPDES Discharge Monitoring Reports from the WVDEP Division of Water and Waste Management do not show any hazardous waste permits for the existing or the proposed sites (WVDEP, 2020). Currently, no hazardous materials are generated, treated, stored, or disposed of at the existing site of the Hardy County PSD.

#### ***Alternative 1 – No Action***

No hazardous materials or other recognized environmental concerns were identified at the site of the existing Hardy County PSD. Under the No Action Alternative, no impacts from hazardous materials are anticipated.

#### ***Alternative 2 – Construction of New Hardy County PSD Facility (Proposed Action)***

No hazardous materials or other recognized environmental concerns were associated with the proposed Hardy County PSD property. During construction, all debris and other unsuitable and excess material would be disposed of off-site by the contractor, who must obtain any necessary permits for off-site disposal/waste areas. Any hazardous materials discovered, generated, or used during construction would be handled, stored, and disposed of in accordance with applicable local, state, and federal regulations. Hazardous materials are not anticipated to be generated, treated, stored, or disposed of during operation of the new facility. Therefore, under the Proposed Action Alternative, there would be no impacts from hazardous materials over the short-term or long-term.

### **3.4 Socioeconomics**

#### **3.4.1 Zoning and Land Use**

The Hardy County Zoning Ordinance regulates land use and zoning for all properties within Hardy County except for incorporated areas. The No Action and Proposed Action alternatives are located within unincorporated areas and are subject to the Hardy County Zoning Ordinance. The Hardy County Planning Commission oversees and enforces land use ordinances in the unincorporated areas of the county.

The current Hardy County PSD facility, located on U.S. Route 220 south of the Town of Moorefield, is on property zoned as Agricultural, Class A. The Hardy County Public Service District owns two parcels, 5-303-31.1 and 5-303-55, totaling 1.18 acres. The current temporary facility is located on Parcel 5-303-31.1 with land use listed as office/warehouse.

The Proposed Action Alternative property is a vacant, undeveloped field within Robert C. Byrd-Hardy County Industrial Park. It is adjacent to a roadway and surrounded by low to medium intensity development. The site is listed as Parcel 3-285-1, Lot 3 and consists of 4.88 acres that is part of a larger parcel within the industrial park. According to the Official Zoning Map, the parcel is zoned as Industrial with a listed land use of manufacturing. Land uses permitted within the Industrial zone include manufacturing and processing plants, wholesale businesses, warehouses, and essential utilities and equipment.

##### ***Alternative 1 – No Action***

Under the No Action Alternative, no land use or zoning changes would be required at the site.

##### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

The proposed project is consistent with current zoning regulations and would not require a zoning change. The existing land use of the site would change following construction of the Hardy County PSD facility; however, the proposed land use is permitted in the Industrial zone and is compatible with the existing and planned land use of the surrounding area. Therefore, any long-term impacts to land use would be negligible.

#### **3.4.2 Noise**

Noise is generally defined as undesirable sound and is federally regulated by the Noise Control Act of 1972 (NCA). Although the NCA gives the EPA the authority to prepare guidelines for acceptable ambient noise levels, it only charges those federal agencies that operate noise-producing facilities or equipment to implement noise standards; the EPA's guidelines, and those of many federal agencies, state that outdoor sound levels in excess of 55 decibels are "normally unacceptable" for noise-sensitive land uses such as residences, schools, and hospitals.

The Robert C. Byrd-Hardy County Industrial Park is mainly surrounded by industrial and commercial land uses. The only sensitive noise receptor immediately adjacent to the subject property is a church parcel, located approximately 650 feet to the south along State Route 55. Residences and a school are located to the west and residences to the south of the subject property; however, these are over 1,000 feet from the proposed development area. A noise

ordinance does not exist for Hardy County; however, the Hardy County Zoning Ordinance states that industries within the Industrial Zone are not permitted to create noise that would be objectionable to adjacent zoning districts.

#### ***Alternative 1 – No Action***

Under the No Action Alternative, there would be no change to existing noise levels. Therefore, no impacts to noise would occur.

#### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

Under the Proposed Action Alternative, noise impacts from construction would be temporary and limited to the duration of construction activities. Most of the properties nearest to the proposed Hardy County PSD site are commercial and industrial. However, a church property is located adjacent to the subject property to the south with a school and residential properties slightly farther away to the west and south. These properties are located at least 600 feet away from the proposed construction area allowing for some attenuation of the construction noise with distance. Construction equipment could increase ambient noise levels for short durations during use. Construction activities would be restricted to normal business hours to reduce the impacts of noise generated resulting in minor, short-term impacts to noise. Furthermore, equipment and machinery used at the site would be required to meet all state and federal noise regulations. After construction is completed, the operation of the new Hardy County PSD facility would not increase the noise level of the surrounding area. Although there may be a slight increase in vehicles visiting the facility, the increase in noise levels from traffic would not be noticeable and would be limited to normal business hours. Therefore, negligible, long-term impacts to noise levels are anticipated in the surrounding area.

### **3.4.3 Public Services and Utilities**

Public services and utilities are provided to the project locations by private industries, local municipalities, and the state of West Virginia. Existing public services include police, fire, and emergency services. Utilities in the area include water, sanitary sewer, electric, natural gas, and stormwater systems.

Emergency fire services are provided by Moorefield Volunteer Fire Department; emergency medical services are provided by Hardy County Emergency Ambulance Authority; and police services are provided by the Hardy County Sheriff's Office. The nearest hospital is Grant Memorial Hospital approximately 10 air miles to the southwest. Emergency services can access the existing Hardy County PSD from U.S. Route 220. The primary road providing potential emergency services access to the Robert C. Byrd-Hardy County Industrial Park and the proposed Hardy County PSD site is State Route 55. Utility providers in the vicinity of the project sites include Hardy County Public Service District (water and sanitary sewer), Mountaineer Gas (natural gas), Hardy Telecommunications (telephone and internet), and Potomac Edison West Virginia (electric power). The current Hardy County PSD is served by all major utilities. Existing utility connections for gas, water, sanitary sewer, telephone, cable, and electric are located adjacent to the site parcel for the new proposed Hardy County PSD facility.

### ***Alternative 1 – No Action***

Under the No Action Alternative, public services and utilities would continue to be provided with no impact.

### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

Under the Proposed Action Alternative, public services and utilities are already established in the site vicinity. In the event of a road closure, emergency responders could access State Route 55 and the site from U.S. Route 220 to the west or Corridor H (U.S. Route 48/State Route 55) to the northeast. Short-term impacts to public services are not anticipated during construction. During construction, utility infrastructure for water, sanitary sewer, and stormwater would be installed and connected to existing utilities adjacent to the property. The proposed onsite stormwater management system would install downspout conveyances, stormwater pipes, and a grass drainage swale that would reroute water offsite towards the northern property boundary. During construction, the Proposed Action would locate and protect existing above ground and underground utilities and facilities from damage by equipment or personnel. Minor, short-term impacts to utilities could occur due to necessary utility outages during onsite utility development and connection. Long-term impacts to public services or utilities are not anticipated.

### **3.4.4 Traffic and Circulation**

The West Virginia Department of Transportation (WVDOT), Division of Highways is responsible for planning, engineering, right of acquisition, construction, reconstruction, traffic regulation and maintenance of state roads, highways, and a portion of federal roads within West Virginia's boundaries. Arterials, connectors, rural roads, local roads, and county roads are constructed and maintained by county or city governments.

The existing Hardy County PSD is located along southbound U.S. Route 220. This road serves areas to the north and south and connects to several major roadways including Corridor H. The Hardy County PSD typically receives approximately 50 daily visitors, including employees, customers, and deliveries. The associated vehicle traffic includes personal vehicles and large delivery and construction or repair vehicles.

The major roadways in the area of the new Hardy County PSD are Corridor H to the north and State Route 55 to the south. The proposed site is located at the intersection of county roads Robert C. Byrd Industrial Park Road, a two-lane street, and Industrial Lane, a cul-de-sac road. Circulation in the vicinity of the proposed site is aided by left turning lanes from eastbound State Route 55 to Robert C. Byrd Industrial Park Road and from Robert C. Byrd Industrial Park Road to eastbound State Route 55. There is no transportation study for Hardy County detailing quantity of traffic. Robert C. Byrd Industrial Park Road is likely not heavily traveled because only several businesses are located along the road whereas State Route 55 is a collector road for Corridor H and likely experiences slightly heavier traffic. Corridor H is an expressway that provides major intrastate and interstate travel and has higher travel volumes.

### ***Alternative 1 – No Action***

Under the No Action Alternative, no changes to the existing quantity of traffic or traffic patterns would occur.

### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

During construction, the movement of construction equipment and materials could result in a temporary increase in traffic in the vicinity the Proposed Action Alternative site. Additionally, the installation of the proposed sanitary sewer line connection to an existing manhole would require temporary closure of Industrial Lane. This roadway is not used by other industrial park occupants and would not impact traffic circulation. Therefore, the impacts to traffic during construction would be minor and short-term. At the proposed site, an access road and a service road would be constructed from Industrial Lane to aid ingress and egress to the site during construction and future operation of the new PSD facility. Over the long-term, there would be a minimal increase in vehicle trips to the Robert C. Byrd-Hardy County Industrial Park due to the operation of the new Hardy County PSD facility. However, the majority of these new vehicle trips would be distributed throughout normal business hours and would not result in a noticeable change in traffic volume or vehicular traffic pattern on the surrounding roads. Therefore, under the Proposed Action Alternative, the increase in vehicle trips generated by the proposed site would have minor, long-term impacts to traffic.

#### **3.4.5 Environmental Justice (Executive Order 12898)**

EO 12898 (Environmental Justice in Minority Populations and Low-Income Populations) mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Socioeconomic and demographic data for the project area were analyzed to determine if a disproportionate number of minority or low-income persons have the potential to be adversely affected by the proposed project.

United States Census Bureau data was used to assemble the following community profiles for the state of West Virginia, Hardy County, and Census Tract 9702. Specifically, information was taken from the 2018 American Community Survey (ACS) 5-Year Estimates (2014-2018 ACS 5-Year Estimate). The ACS 5-year estimates of social, economic, housing, and demographic characteristics are derived from 60 months of collected data.

West Virginia has a population of 1,829,054 with 20.4% under 18 years of age. The state population has an educational attainment rate of 86.5% of high school graduate level or higher. The median household income is \$44,921 and 17.8% of individuals are identified as living below the Federal Poverty Level. Within the state population, approximately 1.5% of individuals identify as being of Hispanic or Latino origin. The majority of the population identifies as white (93.2%), with 1.8% of individuals indicating they are of two or more races. Approximately 97.5% of the population is listed as predominantly English-speaking (2014-2018 ACS 5-Year Estimate). **Table 1** shows additional demographics for the state.

Hardy County has a population of 13,842 with 20.5% under 18 years of age. The county has an educational attainment rate of 80.0% of high school graduate level or higher. The median household income is \$47,186 and 11.5% of individuals are identified as living below the Federal Poverty Level. Within the Hardy County population, 1.6% of individuals identify as being of Hispanic or Latino origin. The majority of the population identifies as white (91.4%), with the next largest group of individuals identifying as black or African American (5.5%). Very few individuals (0.8%) indicate that they are of two or more races. **Table 1** shows additional demographics for the

county. Approximately 94.4% of the population is listed as English-speaking (2014-2018 ACS 5-Year Estimate). Due to the low percentage of non-English speakers/readers in the county, preparation of a non-English EA or public notice would not be necessary. However, appropriate plain language guidance would be made available if requested for limited English-proficiency residents.

A smaller subdivision of the county, Hardy County, Census Tract 9702, has a population of 5,619 with 18.9% under 18 years of age (2014-2018 ACS 5-Year Estimate). The population of the census tract has an educational attainment rate of 78.6% of high school graduate level or higher. The median household income is \$46,498 and 15.2% of individuals are identified as living below the Federal Poverty Level. Within the census tract population, 2.0% of individuals identify as being of Hispanic or Latino origin. The majority of the population identifies as white (90.0%), with the next largest group of individuals identifying as Asian (4.0%). Very few individuals (1.2%) indicate that they are of two or more races. **Table 1** shows additional demographics for the census tract.

Compared to the statewide population, both Hardy County and the smaller census tract have fewer individuals below the poverty threshold. The percentage of low-income individuals in the county is lower than those in both the state and census tract. Additionally, both the county and census tract have slightly more individuals that identify as a part of a minority group compared to the statewide total with the census tract having the larger percentage of minority individuals.

**Table 1 – Demographics of West Virginia, Hardy County, and Census Tract 9702**

<b>Race</b>	<b>West Virginia</b>	<b>Hardy County</b>	<b>Census Tract 9702</b>
<b>White</b>	93.2%	91.4%	90.0%
<b>Black or African American</b>	3.6%	5.5%	3.3%
<b>American Indian and Alaska Native</b>	0.2%	0.6%	1.4%
<b>Asian</b>	0.8%	1.6%	4.0%
<b>Native Hawaiian or Other Pacific Islander</b>	0%	0%	0%
<b>Some other race</b>	0.4%	0.1%	0%
<b>Two or more races</b>	1.5%	0.8%	1.2%

### ***Alternative 1 – No Action***

Under the No Action Alternative, the construction of a new Hardy County PSD facility would not be conducted, and FEMA would not provide funding. There would be no disproportionately high or adverse impacts on low-income or minority populations. The current Hardy County PSD facility would continue to operate in the same manner and provide the same services to the community.

### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

In compliance with FEMA's policy implementing EO 12898, Environmental Justice, the socioeconomic conditions and potential effects related to the Proposed Action have been reviewed. The Proposed Action Alternative would not have disproportionately high and adverse impacts on minority or low-income populations. Adverse environmental impacts would be negligible to minor during construction and operation of the new facility. Although both Hardy County and the smaller census tract area contain low-income or minority populations, the area surrounding the proposed site of the new Hardy County PSD is primarily commercial and industrial parcels not residential. Therefore, the Proposed Action Alternative would likely not have disproportionately or high adverse impacts on low-income or minority populations. Although the Hardy County PSD would change locations, the change would not affect access for, or services provided to, the population of the county. The proposed site is located approximately 3.5 miles from the existing site and in the vicinity of several major roadways, allowing for ease of access to the new location. There would be no disproportionately adverse effects from the construction or operation of the proposed Hardy County PSD.

### **3.4.6 Safety and Security**

To minimize risks to safety and human health, all construction activities would be performed using qualified personnel trained in the proper use of equipment, including all safety precautions. Additionally, all activities would be conducted in accordance with the standards specified in Occupational Safety and Health Administration (OSHA) regulations. EO 13045 (Protection of Children from Environmental Health Risks and Safety Risks) mandates that federal agencies identify and assess health risks and safety risks that may disproportionately affect children. Environmental health and safety risks include those that are attributable to products or substances that the child is likely to encounter or ingest (such as the air we breathe, the food we eat, the water we drink or use for recreation, the soil we live on, and the products we use or are exposed to).

### ***Alternative 1 – No Action***

Under the No Action Alternative, there would be no change to the personal safety and security of individuals at the site or in the area, including children. Although the existing Hardy County PSD is not located in a mapped flood hazard area, the property and former building are located within an area of low topography and have experienced high water events in the past due to drainage and flooding issues. The property could continue to experience high water events and associated mold issues in the future resulting in moderate, long-term impacts to the safety and security of individuals.



### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

Under the Proposed Action Alternative, safety and security concerns would be limited to temporary effects during construction and development of the site. Construction activities and workers would be required to follow all applicable federal OSHA standards and requirements, including completing applicable training and certifications. Health and Safety Plans and appropriate hazard mitigation practices would be implemented. All guidance associated with construction equipment, methods, and materials used onsite would be followed. The presence of the general public around the proposed construction site is not anticipated due to its' location within an industrial park. The proposed construction site is approximately 0.3 miles from a school but there are no anticipated health and safety risks to children from the construction or operation of the site. Therefore, compliance with all applicable regulations would result in negligible, short-term impacts to safety and security during construction activities. No long-term, adverse impacts to safety or security are anticipated from the operation of the new Hardy County PSD facility. The facility would be constructed in compliance with all applicable national, state, and local building and fire codes including the National Fire Protection Association (NFPA) 101 – Life Safety Code and the West Virginia State Fire Code. Long-term beneficial impacts to the safety and security of employees and visitors would result from the avoidance of future risk of flood damage to Hardy County PSD infrastructure.

### **3.5 Historic and Cultural Resources**

Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, 54 U.S.C. §306108, requires federal agencies to consider the impact an undertaking has on historic properties. The review activities required under NHPA are referred to as the Section 106 process. According to 36 CFR 60.4, historic properties are defined as districts, sites, buildings, structures, and/or objects that are listed in or eligible for listing in the National Register of Historic Places (NRHP). In accordance with the 36 CFR 800.4, federal agencies are required to identify historic resources within an undertaking's Area of Potential Effect (APE). As defined in 36 CFR Part 800.16(d), the APE "is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist." In consultation with the appropriate State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO), federal agencies must evaluate the identified historic resources for NRHP eligibility and assess the potential effects to those historic properties resulting from the proposed undertaking. If the undertaking is determined to have an adverse effect on historic properties, then the agency must attempt to avoid, minimize, or mitigate that adverse effect.

FEMA conducted an archives search of the West Virginia SHPO's Interactive GIS Map for each project location. A summary of those results and the subsequent Section 106 process for each alternative is provided below. Additionally, FEMA consulted with the West Virginia SHPO and the THPOs for the Catawba Indian Nation and the Seneca Nation of Indians of New York to assess potential impacts to historic properties and tribal resources.

### ***Alternative 1 – No Action***

A search of West Virginia SHPO's Interactive GIS map in the vicinity of the current Hardy County PSD facility identified one NRHP-listed property, a historic building (Wilson-Kuykendall Farm, Reference # 85001600). This historic building is approximately 930 feet to the northeast and is not

within the viewshed of the No Action Alternative. Under the No Action Alternative, there is no undertaking from the continued operation of the current Hardy County PSD facility. Therefore, Section 106 does not apply and there is no potential to affect historic properties, archaeological resources, or tribal resources.

### ***Alternative 2 – Construction of Hardy County PSD Facility at a New Location (Proposed Action)***

Under the Proposed Action Alternative, FEMA considers the APE to be the 3.32 acres of ground disturbance at the proposed site within Robert C. Byrd Industrial Park (centered on 39.07076, -78.939724), and its surrounding viewsheds. There are no recorded above ground historic resources within the viewshed of the APE according to a search of West Virginia SHPO's Interactive GIS map and review of historic aerial imagery. Based on this information, FEMA has determined there will be no affect to above ground historic resources. There were several previous archaeological investigations within Robert C. Byrd Industrial Park. An initial Phase I archaeological investigation (FR# 92-221-HY) was completed by Thunderbird Archaeological Associates (Thunderbird) in 1992 (Anderson et al., 1992). A total of nine sites, seven prehistoric and two historic, were identified within the survey area. Two additional investigations were completed within the Industrial Park by R. Christopher Goodwin & Associates (Goodwin) in 1994 (FR# unknown) and 2012 (FR# 10-331-HY-18) (Mintz et al., 1994; Maymon et al., 2012). The 1994 survey attempted to relocate the 1992 survey sites and also identified other sites. None of the recorded sites from the 1992 or 1994 surveys fall within the bounds of the APE for the Proposed Action Alternative. Additionally, the area has already been heavily disturbed from bulldozing and other construction activities. Based on the previous identification and evaluation efforts, FEMA concluded that there would be a low probability that significant archaeological remains would be identified within the APE, and no historic properties would be affected by the Undertaking. In a consultation letter dated April 27, 2020, FEMA determined that there were no historic properties within the APE and the proposed undertaking would result in no historic properties affected. In an April 28, 2020 response, West Virginia SHPO concurred with FEMA's determination that the proposed project would have no effect on archaeological historic resources or architectural properties at the new site.

Due to known cultural areas of interest in Hardy County, FEMA consulted with the Catawba Indian Nation and the Seneca Nation of Indians of New York on April 29, 2020 to determine potential impacts to tribal resources from the Proposed Action. The tribes were given thirty (30) days to respond; however, no responses were received in that timeframe.

This concluded the Section 106 Process for the Proposed Action Alternative, including documentation of compliance with the NHPA. Copies of correspondence between FEMA, West Virginia SHPO, and the THPOs can be found in **Appendix C** of this report.

## **3.6 Comparison of Alternatives**

The primary impact from the No-Action Alternative would be associated with the risks associated with keeping the temporary Hardy County PSD in a location that has in the past and could continue to experience high water events resulting in potential safety impacts from flooding and mold issues. The Proposed Action Alternative would include negligible to moderate short-term impacts to soils, water resources and water quality, air quality, terrestrial environment, noise, utilities,

traffic, and safety and security from construction activities. Negligible to minor long-term impacts could result to soils and geology, land use, noise, and traffic from the Proposed Action Alternative. Table 2 provides a description of impact intensity and duration. Table 3 summarizes the potential impacts analyzed for the No Action and Proposed Action alternatives.

**Table 2 – Impact Intensity Thresholds and Impact Duration Definitions**

<b>Impact Intensity Threshold</b>	<b>Definition</b>
<b>Negligible</b>	Changes in the resource or resource related values would be below or at the level of detection. If detected, effects would be considered slight with no perceptible consequences to health or visibility.
<b>Minor</b>	Changes in the resource or resource related values would be measurable; although the changes would be small, effects on the resource or the environment would be localized.
<b>Moderate</b>	Changes in the resource or resource related values would be readily apparent. The effects would be sufficient to cause concern, although effects would be relatively local and short-term.
<b>Major</b>	Changes in the resource or resource related values would be obvious, the effects would have substantial consequences to the resource and environment and be noticed regionally.
<b>Impact Duration</b>	<b>Definition</b>
<b>Short-term effect</b>	Recovers in less than three years and contributes to a beneficial effect.
<b>Long-term effect</b>	Takes more than three years to recover and does not contribute to the long-term beneficial effect.
<b>Long-term beneficial effect</b>	Takes more than three years to recover and contributes to the long-term beneficial effect.

**Table 3 – Summary of Environmental Impacts**

<b>Affected Environment</b>	<b>No Action Alternative</b>	<b>Proposed Action Alternative</b>
<b>Soils and Geology</b>	<ul style="list-style-type: none"> <li>• No impacts or FPPA compliance requirements.</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate, short-term impacts from soil disturbance.</li> <li>• Minor, long-term impacts from increase in impervious surface and disturbance to soil feature.</li> <li>• No FPPA compliance requirements.</li> </ul>
<b>Water Resources and Water Quality</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor, short-term impacts from stormwater runoff and water quality disturbances.</li> <li>• No long-term impacts.</li> </ul>

<b>Affected Environment</b>	<b>No Action Alternative</b>	<b>Proposed Action Alternative</b>
<b>Floodplain Management</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>
<b>Air Quality</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Negligible, short-term impacts from fuel-burning equipment and fugitive dust emissions.</li> <li>• No long-term impacts.</li> </ul>
<b>Terrestrial and Aquatic Environment</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Negligible, short-term impacts to terrestrial habitat and species from construction disturbance; no impacts to aquatic resources.</li> <li>• No long-term impacts.</li> </ul>
<b>Wetlands</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>
<b>Threatened and Endangered Species</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• May affect, but not likely to adversely affect, listed species.</li> </ul>
<b>Hazardous Materials</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>
<b>Zoning and Land Use</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• No short-term impacts.</li> <li>• Negligible, long-term impact from land use change.</li> </ul>
<b>Noise</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor, short-term impacts due to construction noise.</li> <li>• Negligible, long-term impacts from increased traffic noise.</li> </ul>
<b>Public Services and Utilities</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor, short-term impacts to utilities during potential construction-related outages.</li> <li>• No long-term impacts.</li> </ul>
<b>Traffic and Circulation</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor, short-term impacts on traffic from construction vehicles.</li> <li>• Minor, long-term impacts from increase in vehicle trips.</li> </ul>
<b>Environmental Justice</b>	<ul style="list-style-type: none"> <li>• No disproportionately high and adverse effects on minority or low-income populations.</li> </ul>	<ul style="list-style-type: none"> <li>• No disproportionately high and adverse effects on minority or low-income populations.</li> </ul>
<b>Safety and Security</b>	<ul style="list-style-type: none"> <li>• No short-term construction impacts.</li> <li>• Moderate, long-term impacts due to possibility of future flooding and associated mold issues.</li> </ul>	<ul style="list-style-type: none"> <li>• Negligible, short-term impacts from construction activities</li> <li>• No long-term impacts</li> </ul>

Affected Environment	No Action Alternative	Proposed Action Alternative
	<ul style="list-style-type: none"> <li>• No impacts to health and safety of children.</li> </ul>	<ul style="list-style-type: none"> <li>• No impacts to health and safety of children.</li> </ul>
<b>Historic and Cultural Resources</b>	<ul style="list-style-type: none"> <li>• No historic properties or cultural resources affected.</li> </ul>	<ul style="list-style-type: none"> <li>• No historic properties or cultural resources affected.</li> </ul>

## SECTION FOUR: CUMULATIVE IMPACTS

Cumulative effects are defined by the CEQ as the impact on the environment, resulting from the incremental impacts of the evaluated actions when added to other past, present, and reasonably foreseeable future actions, regardless of the source, federal or non-federal. Per 40 CFR §1508.7, cumulative impacts can result from individually minor but collectively significant actions taken over time.

Various recovery projects funded through federal and state sources as well as local and private sources have occurred in Hardy County. Past and present recovery activities in Hardy County associated with the 2018 storm event include repair and replacement of roads, shoulders, embankments, and culverts; restoration of flood-impacted facilities and utilities; and emergency protective measures to pump overflow water. Most of these activities would result in short-term adverse environmental impacts during construction with minor potential impacts to soils, water quality, air quality, and noise. Long-term impacts would likely be beneficial from the restoration of public services and utilities and improvement to traffic.

Other past actions in the area include the development and construction of Corridor H and the development of other businesses within the Robert C. Byrd-Hardy County Industrial Park. The construction of Corridor H north of the Proposed Action Alternative site resulted in impacts to water quality, streams, wetlands, terrestrial habitats, land use, air quality, and cultural and historic resources with long-term beneficial impacts to traffic and socioeconomic resources. The initial development of the Robert C. Byrd-Hardy County Industrial Park and the current individual business likely resulted in impacts to water quality, terrestrial habitats, land use, air quality, noise, and traffic as well as long-term beneficial impacts to socioeconomic resources.

Reasonably foreseeable future actions in the area include increased commercial development including continued development of the Robert C. Byrd-Hardy County Industrial Park, and transportation improvements. These reasonably foreseeable future actions would result in increased development and traffic, changes to socioeconomic resources and land uses, and potential disturbances to terrestrial and aquatic habitat, wetlands, and water and air quality.

This environmental assessment concludes that the long-term impacts of the Proposed Action would consist of negligible to minor impacts to soils, land use, noise, and traffic. In addition, there could be minor to moderate short-term impacts to soils, noise, and traffic during construction. The past, present, and reasonably foreseeable future actions could also impact these resources over the short-term and long-term. Impacts to soils from other projects would be minimized using E&S control plans and BMPs. Guidance provided by the Hardy County Comprehensive plan and local ordinances and policies should help to mitigate impacts to land use, traffic, and noise as well

as natural resources by promoting sustainable growth, focusing development into certain areas, minimizing land use issues, and helping the transportation system to meet demands. Improved utilization of the industrial parks in the county, including Robert C. Byrd Industrial Park, and sustainable land use policies would minimize impacts to land use, traffic, and noise. Because frameworks are in place to manage potential environmental impacts, no significant impacts are anticipated from the incremental impact of the Proposed Action in combination with other past, present, and reasonably foreseeable future actions near the former Hardy County PSD site and the proposed new Hardy County PSD facilities.

## SECTION FIVE: PUBLIC PARTICIPATION

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The NEPA process requires that opportunities be provided for public review and comment of an EA. The publication of this draft EA will kick off a 30-day public comment period, offering a formal opportunity for public involvement. FEMA will advertise the draft EA for the replacement of the Hardy County PSD facility as per NEPA requirements. The 30-day public review and comment period will begin with the initial publication of the Public Notice on September 2, 2020 in the *Moorefield Examiner* newspaper. The Draft EA Document will be posted online at the FEMA website at <https://www.fema.gov/disaster/4378>. Written comments can be submitted by email to [FEMA-R3-EHP-PublicComment@fema.dhs.gov](mailto:FEMA-R3-EHP-PublicComment@fema.dhs.gov) or by mail, addressed to FEMA Region III, Disaster 4378, 615 Chestnut Street, Sixth Floor, Philadelphia, PA 19106, ATTENTION: Hardy County PSD, DR-4378 (PW045) NEPA Comments. Substantive comments received during the public comment period will be addressed, as appropriate, in the final EA document. If no substantive comments are received, the Draft EA will become final and the initial Public Notice will also serve as the final Public Notice.

The Public Notice will be attached in **Appendix D**. A Response to Comments Document will be generated and included in the updated report as **Appendix E**, if necessary.

## SECTION SIX: MITIGATION MEASURES AND PERMITS

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- If deviations from the proposed scope of work result in substantial design changes, the need for additional ground disturbance, additional removal of vegetation, or any other unanticipated changes to the physical environment, the applicant (Hardy County PSD) must contact FEMA prior to the start of work so that the revised project scope can be evaluated for compliance with NEPA and other applicable environmental laws.
- The applicant is responsible for obtaining and complying with all required local, state and federal permits and approvals. Permits must be obtained prior to construction.
- Construction best management practices, as identified in the Erosion and Sediment Control Plan prepared for the Proposed Action, will be utilized and maintained throughout construction to control soil erosion and sediment.
- Perimeter and erosion and sediment controls will be installed prior to construction, excavation, and/or other ground disturbing activity.
- Remove accumulated sediment from behind compost filter sock when it reaches half the above ground height of the sock. Inspect compost filter socks and repair or replace if

- necessary. Depending on the type, replace filter sock after six months to one year.
- Inspect all E&S measures every seven days, at a minimum, to ensure effectiveness.
  - Implement stabilization measures (i.e., seeding and/or mulching) on disturbed areas within 7 days of temporary or permanent cessation of construction activities (except where construction activity will resume within 14 days).
  - Immediately reseed all areas that have failed to germinate adequately within 30 days after initial seeding and mulching.
  - Positive drainage will be used on the construction site to divert stormwater runoff to the sediment trapping device.
  - Locate and protect existing above ground and underground utilities and facilities from damage by equipment or personnel prior to construction. Use hand digging, if necessary.
  - Construction activities will be conducted during normal daytime hours to reduce adverse noise impacts.
  - All construction debris including broken concrete asphalt, trash, rubbish, organics and other unsuitable and excess material will be disposed of offsite. Permits for offsite disposal will be obtained, if necessary.
  - Material from clearing and grubbing (i.e., trees, logs, branches, stumps, etc.) will not be used in structural fill or deposited or buried on the site.
  - The applicant will monitor ground disturbance during the construction phase; should human skeletal remains, or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site shall cease and the applicant shall notify the coroner's office (in the case of human remains), FEMA, and the State Historic Preservation Office.
  - Any hazardous materials discovered, generated, or used during construction would be disposed of and handled in accordance with applicable local, state, and federal regulations. During all activities, appropriate measures to remove, prevent, contain, minimize, and control spills of any potentially hazardous materials will be employed.
  - Heavy machinery and equipment to be used for the Proposed Action will meet federal clean air standards.
  - All equipment shall comply with pertinent equipment noise standards of the U.S. Environmental Protection Agency. In addition, all equipment used shall have sound control devices no less effective than those provided on the original equipment.

## **SECTION SEVEN: CONSULTATIONS AND REFERENCES**

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Anderson, Sally C., Joan M. Walker, and William M. Gardner. 1992. Phase I Archaeological Reconnaissance at the Hardy County Industrial Park Site Moorefield, Hardy County, West Virginia. Archaeology Report, Thunderbird Archaeological Associates, Inc.

Brooks Bird Club. Birds of West Virginia: Field Checklist. Prepared in cooperation with West Virginia Division of Natural Resources, Wildlife Diversity Program.  
<http://www.wvdnr.gov/Publications/Publications.shtml>

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1.

- Evaldi, R.D., and K.J. McCoy. 2004. Water resources in the Wardensville Area, Hardy County, West Virginia, October 2003-May 2004. U.S. Geological Survey, Open-File Report 2004-1363. <https://pubs.er.usgs.gov/publication/ofr20041363>
- Grafton, W.N. 2012. "Flora". E-WV: The West Virginia Encyclopedia. 25 July 2012. <https://www.wvencyclopedia.org/articles/2206>
- Hardy County, West Virginia, Hardy County Floodplain Ordinance, August 2009.
- Hardy County, West Virginia, Hardy County Zoning Ordinance, April 2005.
- Harmon, P.J., D. Ford-Werntz, W. Grafton, Eds. 2006. Checklist and Atlas of the Vascular Flora of West Virginia. West Virginia Division of Natural Resources, Wildlife Resources Section, Elkins, WV. 381 p. <http://129.71.224.73/publications/PDFFiles/wvchklt.atlasvas.2006.pdf>
- Maymon, J.H., P. Godwin, and D. Baicy. 2012. Cultural Resource Survey of the Ludwig Adjustment and Twelve Projects to Connect to Community Anchor Institutions for the Hardy Anchor Ring (BTOP) Project, Hardy County, West Virginia. Technical Report, Frederick, MA: R. Christopher Goodwin & Associates, Inc.
- Mintz, J.J., T.W. Davis, T.W. Neumann, C.R. Polglase, D.K. Cannan, M.T. Moran, R. Draughon, and K. Saul. 1994. Phase I and Phase II Archival, Architectural, and Archeological Investigations for the Local Flood Control Project, Moorefield, Hardy County, West Virginia. Prepared for the U.S. Army Corps of Engineers, Baltimore District by R. Christopher Goodwin & Associates, Inc.
- Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture. 2020. Farmland Protection Policy Act Consultation.
- Natural Resources Conservation Service, U.S. Department of Agriculture. Web Soil Survey. <https://websoilsurvey.nrcs.usda.gov/app/>
- U.S. Census Bureau. 2018 American Community Survey 5-Year Estimates for West Virginia, Hardy County, and Census Tract 9702. <https://data.census.gov>
- U.S. Department of Labor, Occupational Safety and Health Administration. Construction Industry Webpage. <https://www.osha.gov/construction>
- U.S. Environmental Protection Agency (US EPA). 2020a. Enforcement and Compliance History Online (ECHO). <https://echo.epa.gov/>
- U.S. Environmental Protection Agency (US EPA). 2020b. Envirofacts for Hardy County, West Virginia. <https://enviro.epa.gov/>



- U.S. Fish and Wildlife Service (USFWS). 2020. Information for Planning and Consultation (IPaC) Tool. <https://ecos.fws.gov/ipac/>
- U.S. Fish and Wildlife Service. National Wetlands Inventory, Wetlands Mapper. <http://www.fws.gov/wetlands/Data/Mapper.html>.
- U.S. Geological Survey (USGS). 2005. Preliminary Integrated Geologic Map Databases for the United States: Kentucky, Ohio, Tennessee, and West Virginia. U.S. Geological Survey Open-File Report 2005-1324. <https://pubs.usgs.gov/of/2005/1324/>
- U.S. Geological Survey (USGS). 2006. Ground Water Atlas of the United States: Delaware, Maryland, New Jersey, North Carolina, Pennsylvania, Virginia, West Virginia HA 730-L. [http://pubs.usgs.gov/ha/ha730/ch\\_1/index.html](http://pubs.usgs.gov/ha/ha730/ch_1/index.html)
- U.S. Geological Survey (USGS). 2019a. 7.5-Minute Topographic Quadrangle Map for Moorefield, West Virginia. <https://ngmdb.usgs.gov/topoview/viewer/#4/40.01/-100.06>
- U.S. Geological Survey (USGS). 2019b. National Ground-Water Monitoring Network (NGWMN). <https://cida.usgs.gov/ngwmn/index.jsp>
- U.S. Geological Survey (USGS). 2019c. National Water Information System Data. <https://maps.waterdata.usgs.gov/mapper>
- U.S. Geological Survey (USGS). 2019d. 2018 Long-term National Seismic Hazard Map. <https://www.usgs.gov/natural-hazards/earthquake-hazards/hazards>
- U.S. Geological Survey (USGS). 2020. The National Map. <https://viewer.nationalmap.gov/advanced-viewer/>
- West Virginia Department of Environmental Protection-Division of Air Quality. <https://dep.wv.gov/daq/Pages/default.aspx>
- West Virginia Department of Environmental Protection. 2019. 2016 West Virginia Integrated Water Quality Monitoring and Assessment Report. WVDEP, Division of Water and Waste Management. [https://dep.wv.gov/WWE/WATERSHED/IR/Pages/303d\\_305b.aspx](https://dep.wv.gov/WWE/WATERSHED/IR/Pages/303d_305b.aspx)
- West Virginia Department of Environmental Protection. 2020. NPDES Discharge Monitoring Reporting, Electronic Discharge Monitoring Reporting (eDMR) System. <https://dep.wv.gov/WWE/permit/npdes/Pages/default.aspx>
- West Virginia Department of Transportation, Division of Highways. <https://transportation.wv.gov/HIGHWAYS/Pages/default.aspx>
- West Virginia Division of Natural Resources. 2003. Amphibians and Reptiles of West Virginia: A Field Checklist. <http://www.wvdnr.gov/Publications/Publications.shtm>

West Virginia Division of Natural Resources. 2001. Mammals of West Virginia: A Field Checklist.  
<http://www.wvdnr.gov/Publications/Publications.shtm>

West Virginia Division of Natural Resources. 2015. 2015 West Virginia State Wildlife Action Plan.  
[http://www.wvdnr.gov/Wildlife/Action\\_Plan.shtm](http://www.wvdnr.gov/Wildlife/Action_Plan.shtm)

West Virginia Division of Natural Resources. Wildlife Diversity Program and Natural Heritage Program. <http://www.wvdnr.gov/wildlife/wdpintro.shtm>

West Virginia Geological and Economic Survey. 2017. Physiographic Provinces of West Virginia.  
<https://www.wvgs.wvnet.edu/www/maps/pprovinces.htm>

West Virginia State Historic Preservation Office. Interactive Map.  
<https://mapwv.gov/shpo/viewer/index.html>

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## **APPENDICES**

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**Appendix A Maps and Figures**

**Appendix B Technical Reports**

**Appendix C Agency Correspondence**

**Appendix D Public Notice**

**Appendix E Public Comments**