



Environmental Assessment (EA)

## **Summersville Middle School**

City of Summersville, Nicholas County, West Virginia

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*Prepared by*

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## List of Acronyms and Abbreviations

APE – Area of Potential Effects	NRHP – National Register of Historic Places
ASTM – American Standard Testing Method	NWP – Nationwide Permit (USACE)
BFE – Base Flood Elevation	O <sub>3</sub> – Ozone
BMP – Best Management Practice	OSHA – Occupational Safety and Health Administration
CAA – Clean Air Act	PA – FEMA Public Assistance
CEQ – Council on Environmental Quality	Pb – Lead
CERCLA – Comprehensive Environmental and Liability Act	PCBs – Polychlorinated Biphenyls
CFR – Code of Federal Regulations	PEC – Potential Environmental Concern
CO – Carbon Monoxide	PM <sub>2.4</sub> and PM <sub>10</sub> – Particulate Matter
CWA – Clean Water Act	REC – Recognized Environmental Concern
EA – Environmental Assessment	SFHA – Special Flood Hazard Area
EDR – Environmental Data Resources	SHPO – State Historic Preservation Officer
EIS – Environmental Impact Statement	SO <sub>2</sub> – Sulfur Dioxide
EO – Executive Order	SRIA – Sandy Recovery Improvement Act
EPA – Environmental Protection Agency	THPO – Tribal Historic Preservation Officer
ESA – Environmental Site Assessment	TMDL – Total Maximum Daily Load
FEMA – Federal Emergency Management Agency	USACE – United States Army Corps of Engineers
FIRM – Flood Insurance Rate Map	USFWS – United States Department of the Interior Fish and Wildlife Service
FONSI – Finding of No Significant Impact	USGS – United States Geological Survey
FPPA – Farmland Protection Policy Act	VOC – Volatile Organic Compounds
IPaC – Information for Planning and Conservation	WVDE – West Virginia Department of Education
LESA – Land Evaluation and Site Assessment	WVDEP – West Virginia Department of Environmental Protection
LOD – Limits of Disturbance	WVDHSEM – West Virginia Division of Homeland Security and Emergency Management
NAAQS – National Ambient Air Quality Standards	WVDOH – West Virginia Division of Highways
NCA – Noise Control Act of 1972	WVDOT – West Virginia Department of Transportation
NCBOE- Nicholas County Board of Education	WVSBA – West Virginia School Building Authority
NEPA – National Environmental Policy Act	ZMM – ZMM Architects and Engineer
NFIP – National Flood Insurance Program	
NGVD – National Geodetic Vertical Datum	
NHPA – National Historic Preservation Act	
NOI – Notice of Intent	
NO <sub>2</sub> – Nitrogen Oxide	
NPDES – National Pollutant Discharge Elimination System	
NRCS – Natural Resources Conservation Service	

## Table of Contents

SECTION ONE: BACKGROUND .....	1
1.1 Project Authority .....	1
1.2 Location .....	1
1.3 Purpose and Need .....	1
1.4 Existing Facility .....	2
SECTION TWO: ALTERNATIVE ANALYSIS .....	3
2.1 <i>Alternative 1 – No Action</i> .....	3
2.2 <i>Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)</i> .....	3
2.3 <i>Alternative 3 – Redevelopment of Summersville Middle School</i> .....	4
2.4 Alternatives Considered and Eliminated from Further Consideration .....	5
SECTION THREE: AFFECTED ENVIRONMENT AND CONSEQUENCES .....	6
Preliminary Screening of Assessment Categories .....	6
3.1 Physical Environment .....	6
3.1.1 Geology, Seismicity and Soils .....	6
3.1.2 Water Resources and Water Quality .....	9
3.1.3 Floodplain Management (Executive Order 11988) .....	11
3.1.4 Air Quality .....	14
3.2 Biological Environment .....	15
3.2.1 Terrestrial and Aquatic Environment .....	15
3.2.2 Wetlands (Executive Order 11990) .....	16
3.2.3 Threatened and Endangered Species .....	17
3.3 Hazardous Materials .....	18
3.4 Socioeconomics .....	19
3.4.1 Zoning and Land Use .....	19
3.4.2 Noise .....	19
3.4.3 Public Services and Utilities .....	20
3.4.4 Traffic and Circulation .....	21
3.4.5 Environmental Justice (Executive Order 12898) .....	22
3.5 Historic and Cultural Resources .....	25
3.6 Comparison of Alternatives .....	27
SECTION FOUR: CUMULATIVE IMPACTS .....	29
SECTION FIVE: PUBLIC PARTICIPATION .....	30
SECTION SIX: MITIGATION MEASURES AND PERMITS .....	32

SECTION SEVEN: CONSULTATIONS AND REFERENCES .....	33
SECTION EIGHT: LIST OF PREPARERS .....	35
APPENDICES .....	36
Appendix A Maps and Figures .....	36
Appendix B Technical Reports .....	36
Appendix C Agency Correspondence .....	36
Appendix D Public Notice .....	36
Appendix E Public Comments .....	36

## SECTION ONE: BACKGROUND

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### 1.1 Project Authority

The West Virginia School Building Authority (WVSBA) in conjunction with the Nicholas County Board of Education (NCBOE) as a client, has applied through the West Virginia Division of Homeland Security and Emergency Management (WVDHSEM) to the Federal Emergency Management Agency (FEMA) Public Assistance (PA) Grant Program for funding assistance, under the Presidentially Declared Disaster FEMA-4273-DR-WV. In accordance with 44 Code of Federal Regulations (CFR) for FEMA, Subpart B, Agency Implementing Procedures, Part 10.9, 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); 40 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 within the City of Summersville, Nicholas County, West Virginia. According to the United States Census Bureau 2017 Population Estimates, the City of Summersville has a population of 3,361 predominantly of middle-class, English speaking households. Summersville is situated in the central region of Nicholas County, in the central region of West Virginia. Summersville is located approximately seventy miles east of Charleston, West Virginia. A general location map of Summersville, West Virginia is included in **Appendix A**.

### 1.3 Purpose and Need

According to the United States Geological Survey (USGS), central West Virginia experienced intense convection storms along a stationary front on June 23, 2016. The stationary movement of the storms led many areas to receive up to ten inches of rainfall within a twenty-four-hour period creating a 0.1% annual chance storm (1,000-year storm event). The intense rainfall resulted in widespread flash flooding crippling the state with 23 fatalities, intense damage and/or destruction of residences, homes, commercial buildings, and public infrastructure. The areas that were impacted the greatest were primarily in the Greenbrier, Elk, and Gauley River watersheds (USGS, 2016). In Nicholas County, the Gauley River watershed includes the communities of Summersville and Richwood, each of which were significantly impacted by the flood event.

Statewide, floodwaters damaged more than two dozen schools in ten counties, including three schools in the Gauley River Watershed of Nicholas County: Summersville Middle School, Richwood Middle School, and Richwood High School. These three schools were determined to be destroyed and, as such, they could not be repaired and were deemed eligible for replacement under the FEMA PA program.

Due to the severity of the damage, an agreement between FEMA, NCBOE, and the WVSBA was signed for the reconstruction of the three damaged schools at a total combined cost of \$178 million under the Sandy Recovery Improvement Act of 2013 (SRIA). SRIA was implemented by

President Barack Obama as a legislative modification to change the flexibility of how FEMA can allocate Federal funding for Federal disaster assistance to survivors. Specifically, the law adds Section 428, which authorizes alternative procedures for the PA program under sections 403(a)(3)(A), 406, 407 and 502(a)(5) of the Stafford Act. Section 428 goals include reducing the costs to the Federal Government of providing Public Assistance, increasing flexibility in the administration of such assistance, expediting the provision of assistance to a State, tribal or local government, or nonprofit owner or operator of a private nonprofit facility and providing financial incentives and disincentives for timely and cost-effective completion of projects with such assistance. On September 4, 2018, WVSBA, NCBOE, WVDHSEM, and FEMA signed the Nicholas County Alternative Procedures Pilot Program Section 428 Agreement, which accepted a fixed estimate in the amount of \$177,513,528. A portion of this funding will be used for the redevelopment of Summersville Middle School, while the remaining funds will be used for the redevelopment of Richwood Middle and Richwood High School. This undertaking is addressed under a separate EA. The subject EA addresses the replacement of Summersville Middle School only and does not address the construction in Richwood.

Due to a combination of factors, including decreased enrollment due to population declines, WVSBA and NCBOE have elected to pursue the consolidation of several facilities onto one consolidated campus, with the replacement of Summersville Middle School being among them. As part of the planned consolidation, the existing Nicholas County High School and Career Technical Education Facility would be combined into a comprehensive high school and would be co-located on the campus with the new Summersville Middle School. The purpose of the planned consolidation is to lower operating costs for the schools in Nicholas County, while providing state of the art learning facilities that would serve the current student bodies attending the existing middle school, high school and technical education center. All of the planned construction is eligible for FEMA-funded cost share, based upon the above-mentioned agreement. This project is necessary to provide permanent learning facilities for the middle-school aged population in a significant portion of Nicholas County.

In accordance with Federal laws and FEMA regulations, the EA process for a proposed federal action must include an evaluation of viable 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**

The Summersville Middle School was irreparably damaged following the June 2016 event and was demolished in early 2017. Summersville Middle School is currently operating out of 56 temporary classroom units, located on the damaged school property. The temporary classroom facilities are situated on the north central extent of the subject property, between the site of the former Summersville Middle School and current Nicholas County High School and outside of the Special Flood Hazard Area (SFHA). The redevelopment of Summersville Middle School is needed to provide adequate middle school classroom education by providing a permanent facility that is safe, accessible, and meets all applicable codes and educational standards.

## **SECTION TWO: ALTERNATIVE ANALYSIS**

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To determine a path forward for Summersville Middle School following the 2016 flood event several options were evaluated including no action, new development offsite, and redevelopment on-site. A large focus was on finding an alternative location that would allow for new development of the school offsite, outside of the SFHA. Selection of possible site locations was pursuant to West Virginia Department of Education (WVDE) Policy 6200, which provides a comprehensive outline of considerations for site selection. The selection process required the cooperative effort of the county board, central office and school staff, planning committee, architect, and legal consultants. NCBOE solicited community involvement through community meetings, local news outlets, and correspondence with community officials. Offsite selection criteria included, but was not limited to, development costs, availability of utilities, transportation and access to main transportation routes, attendance demographics, distance, traffic congestion, floodplain designation, proximity to hazardous contaminants, proximity to utility transmission lines, and acreage.

### **2.1 *Alternative 1 – No Action***

Under the No Action Alternative, the redevelopment of Summersville Middle School would not be conducted. The students of the Summersville Middle School would continue to utilize temporary classroom facilities located at the site of the former Summersville Middle School and adjacent to Nicholas County High School, along Grizzly Lane in Summersville.

### **2.2 *Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

Under the Proposed Action Alternative, the consolidation of the Nicholas County Schools would take place at a new location outside of the SFHA. The proposed project site is located at the Glade Creek Business Park at 395 Mable Lane, Summersville, West Virginia. This site is primarily located in a rural area, approximately three miles away from the former site of Summersville Middle School. The subject property is comprised of approximately 110 acres of primarily undeveloped and cleared land that is gently sloping and outside of the SFHA. Glade Creek Business Park was selected as the most viable location under the Proposed Action Alternative based upon WVDE Policy 6200 which provides a comprehensive outline of considerations for site selection. NCBOE has proposed to reconstruct the school at an offsite location with expanded acreage that would allow for the development of a consolidated school complex, using 428 funds, consisting of Summersville Middle School, Nicholas County High School, and Nicholas County Career Technical Education Center. The current Nicholas County High School is located at 30 Grizzly Ln, Summersville, WV 26651, next to the damaged Summersville Middle School. The Career Technical Education Center is located at 215 Milam Addition Ave, Craigsville, WV 26205, approximately 13 miles from the current high school and 11 miles from the proposed consolidated school complex. Richwood High School, also served by the Career Technical Education Center, is currently located 12 miles away and 22.9 miles from the proposed consolidated school complex. The Comprehensive Educational Facilities Plan Amendment, attached in **Appendix B**, describes the existing facilities, student populations, educational plan, community information, and student enrollments. It is undetermined at this time how the NCBOE would utilize some of the existing properties that would no longer be in use. The Nicholas County High School building would be re-used as an elementary school.

Coordinates for the center of the subject property are 38.323089 latitude, -80.807219 longitude, as noted in the map provided in **Appendix A**. A street map depicting the subject property and property boundary map with Limits of Disturbance (LOD) are represented in **Appendix A**. The acreage provided at the Glade Creek Business Park is large enough to accommodate the proposed consolidated complex, including the three distinct learning facilities and associated extracurricular activities, parking, and ease of ingress and egress to the site. The site location is approximately one mile from the current Summersville Middle School and Nicholas County High School facility.

A preliminary layout shown in **Appendix A** indicates that the complex would impact approximately 80 acres. The site size guidelines are outlined in WVDE Policy 6200 and the site would be large enough to accommodate all required amenities for a high school, middle school and career technical education center. The high school would incorporate a gymnasium, auditorium, media hub, collaboration areas, and Core Classroom Spaces, all working in tandem with Career Technical Education Spaces. The same would occur for the middle school. All the core classrooms would work in tandem with the Career Technical Education spaces. Shared spaces would include physical education areas, the kitchen, and some shared outside classroom spaces. The middle and high school areas would have separate dining areas. The parking would be calculated based off the student enrollment and school activities, as outlined in WVDE Policy 6200. Glade Creek Business Park is primed for development and has basic utilities, roads, sediment control and stormwater controls on site. As part of the design phase, considerations are being given to minimize environmental and cultural resource impacts to the maximum extent possible. Precise construction activities and staging areas have yet to be determined, but all activities would take place within the identified limits of disturbance. It is anticipated that earth-moving heavy equipment would be utilized, such as, but not limited to: excavators for material handling, trenching, foundations, rough grading, and heavy lifting; backhoe loaders for digging and minor grading; bulldozers for earth moving grading activities; skid-steer loaders for moving material throughout jobsite; trenchers; and common dump trucks to transport large amounts of material throughout the jobsite. Trenching on the jobsite would be anticipated to be minimal as Glade Creek Business Park is already developed with access to common utilities.

A roadway improvement project consisting of modifications to Route 41 would be required to accommodate new traffic. This development would consist of widening the existing roadway and adding turn lanes to safely accommodate the influx of traffic. The roadway improvements would be conducted entirely by the West Virginia Division of Highways (WVDOH). Additional discussion of the road improvements can be found in **Section 3.4.4 Traffic and Circulation**.

### ***2.3 Alternative 3 – Redevelopment of Summersville Middle School***

Under the Redevelopment Alternative, Summersville Middle School would be reconstructed on the existing site located at 40 Grizzly Lane, Summersville, West Virginia. The site consists of approximately 35.34 acres of gently-sloping-to-nearly-flat land that was previously occupied by the Summersville Middle School and is still occupied by Nicholas County High School. Coordinates for the center of the subject property are 38.321958 latitude, -80.830003 longitude, as noted in the map provided in **Appendix A**. The eastern portion of this property is situated within Zone A of the SFHA, defined as areas subject to inundation by the 1-percent-annual-chance flood event.

The flood risk on this property is associated with Muddlety Creek, which has historically been subject to repetitive flooding.

Prior to development, the site would be elevated above the Base Flood Elevation (BFE), according to National Flood Insurance Program (NFIP) regulations and local floodplain ordinances, utilizing soil from an offsite location. The design would accommodate the population needs and allow students to have a permanent learning facility. Because the NCBOE already owns the site of the former Summersville Middle School, this alternative would avoid land acquisition and would minimize concerns with ground disturbance as the land was previously developed. The development of the site to meet FEMA flood standards would have to undergo appropriate state and federal permitting. Utilities are already located on site; therefore, only minor trenching activities would take place to connect utilities to the new facility.

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

Two additional locations were evaluated during the relocation site selection process conducted by ZMM Architects and Engineers (ZMM) using the standards outlined in WVDE Policy 6200. The following properties were dismissed due to location (distance from student attendance zone), size, site access, number of property owners, topography, and/or transportation impacts. The Site Selection Narrative, attached in **Appendix B**, is available for further information.

### ***Ballew Ridge-Memorial Park Property***

The Memorial Park property is located at Ballew Ridge, Summersville, West Virginia at coordinates 38.317031 latitude, -80.834481 longitude. The property consists of approximately 20.86 acres of mostly undeveloped land with approximately seventy-five percent (75%) cleared designated residential area and approximately twenty-five percent (25%) forested land. Ballew Ridge Road is an asphalt-paved surface road which gives access to the subject properties from US Route 19. Ballew Ridge Road enters the subject properties on the eastern boundary of the parcels and traverses in a west-northwesterly direction. The road serves two residences located on the property. The property is located approximately 0.5 miles south of the former Summersville Middle School facility near extracurricular sports fields associated with the schools and Memorial Park. The property is well above all associated flood zones, primarily cleared, and within Summersville city limits. However, the property was dismissed as it was not large enough to accommodate the proposed consolidated school plan.

### ***Bright-Farmhouse Lane Property***

The Bright-Farmhouse Lane Property is located on Farmhouse Lane, Summersville, West Virginia at coordinates 38.245406 latitude, -80.852556 longitude. The property consists of approximately 65.6 acres of undeveloped land with approximately half consisting of cleared meadow and half of forested area. An unimproved dirt road continues from Farmhouse Lane and traverses the property along the northern boundary which eventually forks into two dirt roads. The two dirt roads head in a southerly direction; one through the property's forested area and the other along the eastern edge of the large cleared meadow. The two roads provide access to most of the subject property. The site is large enough to meet the needs designated by the NCBOE and community. However, the site was dismissed as it is located approximately seven miles away from the current facility and is outside of the Summersville city limits. Additionally, construction

at this site could pose a significant change to traffic patterns in the area immediately adjacent to Route 19.

## SECTION THREE: AFFECTED ENVIRONMENT AND CONSEQUENCES

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### Preliminary Screening of Assessment Categories

#### 3.1 Physical Environment

##### 3.1.1 Geology, Seismicity and Soils

The City of Summersville is located entirely within the Appalachian Plateau Province of West Virginia, in the Kanawha Formation of the Pennsylvanian Age System. These rocks generally consist of sandstones with some shale, siltstone, and coal. Regionally, the city is located within Quaternary Alluvium. The Natural Resources Conservation Service (NRCS) Web Soil Survey (**Appendix B**) of Summersville was consulted for detailed soil information. The general soil association for the city varies greatly. However, dominant soil types are listed below.

- **Buchanan Loam Variants** – These soils are classified as moderately well-drained soils, acid fine-loamy colluvium derived from sand stone and siltstone. Buchanan loam soils usually occur on mountain slopes and hillsides.
- **Clifftop Channery Silt Loam Variants** – These soils are prime farmland of state importance. They are classified as well-drained, parent material consisting of acid Pottsville group fine-loamy residuum weathered form shale and siltstone mountaintops.
- **Dekalb-Buchanan-Rock Outcrop (15-35% slopes)** – These soils are not prime farmland. They are classified as well-drained soils, residuum, weathered from sandstone. This type of soil usually occurs on mountain tops and flanks.
- **Udorthents (0-6 % slopes)** – These soils are not prime farmland. They are classified as cut and fill material, with parent material consisting of earth-spread deposits derived from interbedded sedimentary rock.
- **Fenwick Silt Loam, (3-8 % slopes)** – These soils are considered prime farmland. They are classified as residuum weathered from sandstone and shale. These soils typically occur on mountain tops and are moderately well drained.
- **Kaymine Channery Silt Loam, (very steep slopes)** – These soils are extremely stony, coal-extracted mine spoil, well drained and derived from sandstone and shale. These soils typically occur on mountain tops and slide slopes.

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 unnecessarily and irreversibly convert farmland to nonagricultural uses. Implementing procedures included in associated regulations found in Title 7 of the CFR, 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 uses and are implemented or assisted by a Federal agency.

Seismic activity in the Central Plateau region of West Virginia is negligible because the area is not tectonically active (USGS Seismic Hazards Map). Therefore, seismic concerns for all the alternatives are relatively low and will not be discussed further in this assessment.

### ***Alternative 1 – No Action***

The elevation of the site is approximately 1,845 feet National Geodetic Vertical Datum (NGVD). The Alternative 1 base map in **Appendix A** is the USGS WV, 7.5-minute topographic Summersville quadrangle. Local topography indicates that drainage in this area is accomplished by infiltration and surface run-off towards Muddlety Creek. The NRCS Web Soil Survey (**Appendix B**) of the subject property was consulted for soil information. The general soil association for the subject property is comprised of Buchanan Loam Variants. Geologically, Summersville is located predominately in the Kanawha Formation of the Pennsylvanian System. These rocks generally consist of sequences of sandstones, shales, siltstone, and coal. Under the No Action Alternative, students would continue to attend class in the temporary classroom facilities located in between the former Summersville Middle School and the current Nicholas County High School. Therefore, minimal to no impacts to geology or soils would occur on a short- or long-term basis.

### ***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

The elevation of the proposed project site is approximately 1,930 feet to 2,0040 feet. The Alternative 2 base map in **Appendix A** is the USGS WV, 7.5-minute topographic Summersville quadrangle. Local topography indicates that drainage in this area is accomplished by infiltration and surface run-off towards Glade Creek located south-southeast of the subject property.

The NRCS Web Soil Survey (**Appendix B**) of the subject property was consulted for soil information. The general soil association is comprised of (and by percent): Buchanan (44.2%) Loams, Clifftop (49.8%) Channery Silt Loams; and Fenwick Silt Loams (5.9%).

- **Buchanan Loam, (3-25 percent slopes)** – These soils are prime farmland, moderately well-drained, acid fine-loamy colluvium derived from sandstone and siltstone. They are located on mountain slopes, hillsides.

- **Clifftop Channery Silt Loam, (3-70 percent slopes)** – These soils are prime farmland of state-wide importance, well-drained, acid Pottsville group, fine-loamy residuum weathered from sandstone and siltstone. They are located on mountain tops.

**Fenwick Silt Loam, (3-8 percent slopes)** – These soils are prime farmland, moderately well-drained, residuum weathered from sandstone and shale. They are located on mountain tops.

Area soils would be moderately disturbed during short-term construction and site grading activities. Soil loss would occur directly from disturbance or indirectly via wind or water. To

reduce soil erosion, appropriate Best Management Practices (BMPs) would be required at the construction location and would be identified through the West Virginia Department of Environmental Protection (WVDEP) National Pollutant Discharge Elimination System (NPDES) permitting process. BMPs may include an erosion and sedimentation control plan utilizing silt fences, re-vegetation of disturbed soils, and maintenance of soil stockpiles during construction to prevent soils from eroding and dispersing off-site. Erosion control fiber mesh would be utilized for disturbed and seeded lawn impact areas. All short-term soil storage would not occur within floodplain areas. Most of the site is currently developed; therefore, short-term disturbances are anticipated to be moderate.

Moderate long-term impacts associated with drainage at the site are anticipated due to the increase in impervious surfaces, which would diminish natural soil infiltration. The primary site drainage at developed locations would be through man-made influences, such as storm drains obtaining surface water from paved areas and discharging off-site. Therefore, normal geomorphological erosional processes would not occur due to development and lack of infiltration, and higher discharge may be observed downstream of stormwater systems at offsite locations. Excavation depths for the site, soil staging, placement, and fill have yet to be determined. Following construction activities, exposed, compacted soils would be aerated and revegetated. Construction representatives for the development of the proposed action would abide by BMPs and implement a Sediment and Erosion Control Plan to be utilized throughout the construction process.

Based upon TERRADON Corporation's geotechnical investigation there was no evidence of landslide activity or significant slope erosion. Although there is considerable relief across the project site, it is rolling terrain thus steep slopes (>2:1) were not observed. No groundwater seepage nor springs were observed at the site, which could indicate a drainage issue. Typically, the soil to bedrock interface of colluvial soils in West Virginia are landslide prone; however, the project site has a relatively shallow depth of overburden, thus failure is not likely.

Subject to FPPA requirements, a consultation was conducted with NRCS, with the determination that the project does convert prime or other important farmland and is subject to the FPPA, thus requiring completion of AD-1006 by the federal agency. FEMA completed the AD-1006 form, requested a land evaluation on September 27, 2019, and received the land evaluation response from NRCS on October 9, 2019. The Proposed Action Alternative converts 28 acres of Prime Farmland and 53.3 acres of statewide or local important farmland. The relative value of farmland to be converted (on a scale of 0 to 100) was rated 50.1, while the total site assessment points equaled 63 (out of 160). For projects where the total is 160 or greater (out of 260), federal agencies must consider alternative actions that could reduce adverse impacts. At this site, the total was 113.1. Thus, the completion of AD-1006 meets the compliance requirements for FPPA. The final Land Evaluation and Site Assessment (LESA) form and correspondence with NRCS can be found in **Appendix C**.

### ***Alternative 3 – Redevelopment of Summersville Middle School***

The elevation of the site is approximately 1,845 feet NGVD. The Alternative 1 base map in **Appendix A** is the USGS WV, 7.5-minute topographic Summersville quadrangle. Local topography indicates that drainage in this area is accomplished by infiltration and surface run-off towards Muddlety Creek. The NRCS Web Soil Survey (**Appendix B**) of the subject property was consulted for soil information. The

general soil association for the subject property is comprised of Buchanan Loam Variants. Geologically, Summersville is located predominately in the Kanawha Formation of the Pennsylvanian System. Under this Alternative, minimal long-term impacts to site geology, seismicity, and/or soils would be anticipated.

Soil loss may occur directly from construction activities or indirectly via high wind or rain events. To reduce soil erosion, appropriate BMPs would be required at the construction location and would be identified through the WVDEP NPDES permitting process. BMPs may include an E&S control plan utilizing silt fences, re-vegetation of disturbed soils, temporary stormwater management, and maintenance of soil stockpiles during construction to prevent soils from eroding and dispersing off-site. Erosion control fiber mesh would be utilized for disturbed and seeded lawn impact areas. All short-term soil storage would occur outside of the SFHA.

Due to the previous development, the site is impacted by a lack of natural soil infiltration and stormwater would be managed through an improved stormwater system. Although construction activities would create a moderate short-term impact to on-site soils, appropriate BMPs would mitigate effects from the elevation of the site. The site design would incorporate stabilization techniques to minimize impacts to the added soils and increase long-term resiliency. Therefore, minimal impacts to geology or soils would be expected on a short or long-term basis. There would be no FPPA compliance requirements at the site.

### **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. It also establishes requirements associated with dredging and filling 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.

#### ***Alternative 1 – No Action***

Under the No Action Alternative, no adverse impacts to water resources near the former school sites would occur.

#### ***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

The proposed project site of the new school facility is in a traditional hydrogeological system; meaning that surface topography presumably is indicative of the direction of groundwater flow in the absence of manmade systems. Local topography indicates that drainage in this area is accomplished by infiltration and surface run-off to Glade Creek in the absence of manmade influences. However, the site drainage is currently being accomplished by stormwater management.

TERRADON Corporation (TERRADON) performed an Aquatic Resource Report and submitted a Preliminary Jurisdictional Determination letter to the United States Army Corps of Engineers (USACE) for review in November 2018. In TERRADON's professional opinion and subject to regulatory review, the assessment identified 17 Potential Jurisdictional Waters of the U.S. The

streams were documented as three Perennial Streams (5,340 linear feet), ten are Intermittent Streams (3,477 linear feet), and four Ephemeral Streams (720.4 linear feet). In TERRADON's professional opinion, and subject to regulatory review, there were two potential Jurisdictional Wetlands of the U.S. delineated within the limit of the subject property and denoted as Wetland 1 and Wetland 2 at 0.254 and 0.068 Acres, respectively. The Aquatic Resource Assessment Report for the subject property, dated November 2018, can be found in **Appendix B** of this report.

Per correspondence from the USACE Huntington District, dated May 28<sup>th</sup>, 2019, the proposed actions qualify for an Individual Permit. There would be a total 5,564.64 linear feet of fill material discharged into nine streams and 0.253 acres of fill into one wetland.

The project applicant would include BMPs during construction such as but not limited to: soil erosion monitoring at the project site, the project applicant would be required to install temporary silt fences and/or straw bales, and the staging of construction equipment in existing developed areas, such as paved parking lots; if project activities include the stockpiling of soil or fill onsite, the project applicant would cover these soils to help prevent fugitive dust and erosion into stormwater pathways; following construction, any bare soils would be vegetated to prevent future soil erosion.

Long-term impacts due to site development would be minimal once the site is developed and appropriate stream mitigation procedures followed. The current design confines stream impacts to nine low quality streams and one emergent wetland. The impacted streams and wetland would be filled within their ordinary high-water mark with fill material. The foundation depths and grading for site development would vary according to geotechnical investigations. In this location groundwater typically follows the topography before being discharged into tributaries and subsequently Glade Creek. Due to seasonal changes and rain events, fluctuations in groundwater should be expected. However, groundwater impacts should not be a major consideration at this site because there would be no construction below the water table.

A Construction Stormwater Permit and Notice of Intent (NOI) would be required by the WVDEP prior to construction and/or developmental activities. Impacts to Waters of the United States would undergo state and federal permitting and mitigation. The streams on this property do not have established WVDEP Total Maximum Daily Load (TMDL) to minimize pollutants into surface waters.

Site development would undergo state and federal permitting procedures to ensure appropriate mitigation components. An individual 404 Permit from the USACE and a WVDEP 401 Water Quality Certification would be required pursuant to sections 404 and 401 of the Clean Water Act.

There would be impacts to nine streams and one wetland resulting in 5,564,64 linear feet and 0.253 acres of fill material being placed within the ordinary high-water mark. Appropriate mitigation procedures would be followed according to the USACE's Individual 404 Permit and the WVDEP's 401 Water Quality Certification requirements. Appropriate mitigation activities would be conducted with associated mitigation plans, alternative analysis, potential In Lieu Fee, Mitigation Banking, etc.

**Alternative 3 – Redevelopment of Summersville Middle School**

Under Alternative 3, redevelopment of the existing Summersville Middle School may have minor temporary short-term impacts to downstream surface waters due to potential soil erosion during construction activities. Construction activities would include grading the site above the SFHA; therefore, the site would involve extensive earth moving activities adjacent to Muddlety Creek. Due to the stream located behind the existing Summersville Middle School, fill would have to be placed within the Ordinary High-Water Mark of the stream to raise it above the SFHA. An Individual Permit from the USACE would be required for this work to take place. To reduce impacts to surface water, the applicant would implement appropriate BMPs, such as installing silt fencing during construction, sediment control basins, staging of construction equipment in developed areas, and covering of stored soil/fill on site to help prevent fugitive dust to stormwater pathways, and revegetation of bare soils following construction. Once revegetation and site landscaping have taken place, long-term adverse effects to water quality and resources are anticipated to be minimal.

**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 SFHA, whenever there is a practicable alternative. FEMA’s regulations for complying with EO 11988 are promulgated in 44 CFR Part 9. FEMA uses Flood Insurance Rate Maps (FIRMs) to identify properties located within the SFHA. FIRM maps for all alternative sites are attached in **Appendix A**.

Nicholas County has experienced 18 federally-declared flood related disasters since 1967, more than half of which occurred since 2000. Nicholas County participates in the NFIP, which mandates that floodplain development permits are required prior to beginning any work within the 100-year floodplain. As some of the alternatives are located either partially or completely within the SFHA, the Eight-Step Planning Process for Floodplains and Wetlands has been included below.

<b>Eight-Step Planning Process for Floodplains and Wetlands</b>	
<p><b>Step 1:</b> Determine whether the Proposed Action Alternative is located in a wetland and/or the 100- year floodplain, or whether it has the potential to affect or be affected by a floodplain or wetland.</p>	<p><b>Project Analysis:</b> According to FIRM Panel 54067C0250C, effective 7/4/2011, the site discussed under the No Action Alternative is located within the 100-year floodplain (Zone A).</p> <p>According to FIRM Panel 54067C0250C, effective 7/4/2011, the site for the Proposed Action Alternative is outside the SFHA. 0.253 acres of wetland would be filled in this alternative.</p> <p>According to FIRM Panel 54067C0250C, effective 7/4/2011, a portion of the Redevelopment site is in Zone A the 100-year floodplain.</p>
<p><b>Step 2:</b> Notify public at earliest possible time of the intent to carry out an action in a floodplain</p>	<p><b>Project Analysis:</b> An initial Public Notice regarding the potential for work to occur within the floodplain was</p>

<p>or wetland and involve the affected and interested public in the decision-making process.</p>	<p>published following the declaration of DR-4273-WV, in July 2016.</p>
<p><b>Step 3:</b> Identify and evaluate practicable alternatives to locating the Proposed Action in a floodplain or wetland.</p>	<p><b>Project Analysis:</b> The following alternatives were considered in selecting the proposed action:</p> <p><i>No Action Alternative:</i> Under the No Action Alternative, redevelopment of Summersville Middle School would not occur. The students would continue to attend school at the temporary classrooms.</p> <p><i>Proposed Action Alternative:</i> Under the Proposed Action Alternative, Summersville Middle School would be replaced with a new facility at a new location, with the school outside of the SFHA. 0.253 acres of wetland would be filled in this alternative.</p> <p><i>Redevelopment Alternative:</i> Under the Redevelopment Alternative, the Summersville Middle School would be demolished, and redevelopment would occur on the existing site, elevated above the BFE.</p> <p>The Proposed Action Alternative is the best option to locate the new school facility outside the SFHA. 0.253 acres of wetland would be filled, with mitigation measures used to offset the impacts. The rest of the 8-step will address the Proposed Action Alternative.</p>
<p><b>Step 4:</b> Identify the full range of potential direct or indirect impacts associated with the occupancy or modification of floodplains and wetlands, and the potential direct and indirect support of floodplain and wetland development that could result from the Proposed Action.</p>	<p><b>Project Analysis:</b> All development for the Proposed Action Alternative would occur outside the SFHA. 0.253 acres of wetland would be filled in this alternative, permitted through USACE.</p>
<p><b>Step 5:</b> Minimize the potential adverse impacts from work within floodplains and wetlands (identified under Step 4), restore and preserve the natural and beneficial values served by wetlands.</p>	<p><b>Project Analysis:</b> All development for the Proposed Action Alternative would occur outside the SFHA. To minimize impacts to the floodplain, appropriate drainage would be constructed and/or upgraded to manage all stormwater on-site. 0.253 acres of wetland would be filled in this alternative, permitted through USACE.</p>
<p><b>Step 6:</b> Re-evaluate the Proposed Action to determine: 1) if it is still practicable in light of its exposure to flood hazards; 2) the extent to which it will aggravate the hazards to others; 3) its potential to disrupt floodplain and wetland values.</p>	<p><b>Project Analysis:</b> The Proposed Action remains practicable due to the entire school being located outside of the SFHA.</p>
<p><b>Step 7:</b> If the agency decides to take an action in a floodplain or wetland, prepare and provide the public with a finding and explanation of any final</p>	<p><b>Project Analysis:</b> Public notice of the Proposed Action Alternative will be given as a function of this EA, informing the public of a potential FEMA funded action, occurring</p>

<p>decision that the floodplain or wetland is the only practicable alternative. The explanation should include any relevant factors considered in the decision-making process.</p>	<p>partially within the SFHA. Public notice will be given for the wetland fill as well, as part of the USACE permitting process.</p>
<p><b>Step 8:</b> Review the implementation and post-implementation phases of the Proposed Action to ensure that the requirements of the EOs are fully implemented. Oversight responsibility shall be integrated into existing processes.</p>	<p><b>Project Analysis:</b> This step is integrated into the NEPA process and FEMA project management and oversight functions.</p>

***Alternative 1 – No Action***

Under the No Action Alternative, no additional impacts to the floodplain would occur. The middle school age students of the City of Summersville and surrounding community would continue to utilize temporary classroom facilities located at the former Summersville Middle School parcel. All temporary classroom facilities are located outside of the SFHA. Regardless of the alternative selected the original Summersville Middle School has been demolished. If a new school is not constructed on that site, the land would be retained as open space. Based on the review, Alternative 1 would have no effect on the floodplain.

***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

Under the Proposed Action Alternative, all development would occur outside of the SFHA. Access to and from the school would be located outside of the SFHA, as would the entire school facility. The best available data from FIRM Map 54067C0250C, dated 07/04/2011 (**Appendix A**) shows that the entire site is located in Zone X, Area of Minimal Flood Hazard. Based on the review, the Proposed Action alternative would have no impact on the floodplain.

***Alternative 3 – Redevelopment of Summersville Middle School***

The site of the original Summersville Middle School is within Zone X, an area of minimal flood hazard, with the eastern portion being located within Zone A of the SFHA, defined as areas subject to inundation by the 1-percent-annual-chance flood event. To accommodate the redevelopment of the school at its existing location, the site would require a change in the current elevation to meet criteria of FEMA and flood insurance policies, potentially resulting in a change to the flood risk of adjacent properties. The redevelopment of the school would require a change in the current elevation to meet the criteria of FEMA and NFIP Codes and Standards, potentially resulting in a change to the flood risk of adjacent properties. Fill would be brought to the site to elevate the reconstructed school outside of the SFHA, however support facilities, such as parking lots, may still be located within the SFHA. All work would be completed to construct the school building in accordance with NFIP Codes and Standards. Based on the review, Alternative 3 would have a moderate impact on the floodplain as the school would be elevated above BFE during redevelopment. However, children would continue to use flood prone areas including routes of ingress and egress.

### **3.1.4 Air Quality**

The Clean Air Act (CAA) requires that states adopt ambient air quality standards that have been established to protect the public from potentially harmful amounts of air pollutants. Under the CAA, the United States Environmental Protection Agency (EPA) establishes primary and secondary air quality standards. 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 air visibility, and damage to crops and buildings. The EPA has set National Ambient Air Quality Standards (NAAQS) 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>2.4</sub> and PM<sub>10</sub>), and Lead (Pb). The WVDEP Division of Air Quality enforces and monitors air quality standards in the state of West Virginia. The WVDEP monitors the pollutants mentioned above, meteorology, and Air Toxic Pollutants such as metals, carbonyls, and Volatile Organic Carbons (VOCs). According to the EPA and WVDEP, Nicholas County, West Virginia is classified as an attainment area. Attainment areas are areas that meet and do not exceed the NAAQS.

#### ***Alternative 1 – No Action***

Under the No Action Alternative, no impacts to air quality would result from the temporary classroom facilities remaining at Summersville Middle School.

#### ***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

Under the Proposed Action Alternative, minor, short-term impacts to air quality would occur during construction activities. To reduce impacts, the construction contractors would be required to wet down construction areas as needed to mitigate fugitive dust. Emissions from fuel-burning engines (e.g. heavy machinery and earthmoving machinery) could also 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. To mitigate these emissions, BMPs would be used such as run times for fuel burning equipment would be kept to a minimum and equipment would be properly maintained. Due to the development size and anticipated grading impact, and availability of debris recycling or disposal facilities, Air Quality Permitting through WVDEP is not anticipated. Long-term impacts to local air quality near the school site, including from increased traffic and utility usage, would be negligible.

#### ***Alternative 3 – Redevelopment of Summersville Middle School***

To reduce impacts during construction, the contractors would be required to wet down construction areas as needed to mitigate fugitive dust. Emissions from fuel-burning engines could also 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. To mitigate these emissions, BMPs such as management of engine run times and maintenance BMPs for fuel burning equipment would be implemented. Due to the development size and grading impact, Air Quality Permitting through WVDEP is not anticipated. Short-term air quality impacts during construction would be anticipated to be minor. Over the long-term, impacts to air quality would be negligible, no greater than they were when the school previously operated.

## 3.2 Biological Environment

### 3.2.1 Terrestrial and Aquatic Environment

#### **Alternative 1 – No Action**

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

#### **Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)**

During TERRADON's site reconnaissance, varying plant species were observed. Dominant plants observed during the reconnaissance survey were similar throughout the site. Dominant Upland Tree Vegetation is composed of Red Maple (*Acer rubrum*), Southern Red Oak (*Quercus falcata*), Northern White Oak (*Quercus alba*), Pignut Hickory (*Carya glabra*), Mockernut Hickory (*Carya alba*), American Beech (*Fagus grandifolia*), American Elm (*Ulmus Americana*), and Tulip Poplar (*Liriodendron tulipifera*). Dominant upland herbaceous plants are composed of Japanese Honeysuckle (*Lonicera japonica*), Red Fescue (*Festuca rubra*), Perennial Rye Grass (*Lolium perenne*), Tall Goldenrod (*Solidago altissima*), Russian Olive (*Elaeagnus angustifolia*), and Common Milkweed (*Asclepias syriaca*). The dominant plants in the wet area are wetland plants – herbaceous plants at the site were primarily Rush (*Juncus effusus*), and Sedge (*Carex lurida*).

Per the West Virginia Division of Natural Resources, 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 bird. Commonly observed species in the area include the Eastern Cottontail (*Sylvilagus floridana*), Common Raccoon (*Procyon lotor*), Virginia Opossum (*Didelphis virginiana*), Eastern Gray Squirrel (*Sciurus carolinensis*), Deer Mouse (*Peromyscus maniculatus*), White-tailed Deer (*Odocoileus virginianus*), Pileated Woodpecker (*Dryocopus pileatus*), Rock Pigeon (*Columba livia*), American Crow (*Corvus brachyrhynchos*), Wild Turkey (*Meleagris gallopavo*), Eastern box turtle (*Terrapene c. carolina*), Eastern River Cooter (*Pseudemys c. concinna*), Snapping Turtle (*Chelydra serpentina*), Eastern Fence Lizard (*Sceloporus undulatus*), Eastern garter Snake (*Thamnophis s. sirtalis*), Black Rat Snake (*Pantherophus obsoleta*), Northern Copperhead (*Agkistrodon contortrix mokasen*), Common Water Snake (*Nerodia s. sipedon*), Grey Tree Frogs (*Hyla crysoscelis* and *Hyla versicolor*), American Toad (*Anaxyrus americanus*), Fowlers Toad (*Anaxyrus fowleri*), Spring Peeper (*Pseudacris crucifer*), American Bullfrog (*Rana catesbeianus*), Northern Two-Lined Salamander (*Euracea bislineata*), Jefferson Salamander (*Ambystoma jeffersonianum*), Spotted Salamander (*Ambystoma maculatum*), Marbled Salamander (*Ambystoma opacum*), and the Red Spotted Newt (*Notophthalmus v. viridescens*). Additional transient species may be observed in the area.

Construction activities at this location would take place within a substantially-developed area and disturbance to the terrestrial environment would be minimal. During construction activities, the applicant would employ temporary fences and appropriate BMPs around the tree line to prevent any impact to forested areas. No trees would be removed as a result of the Proposed Action. Appropriate BMPs would be implemented to protect the vegetated embankment and the Glade Creek River from construction impacts. Impacts to terrestrial species resulting from the Proposed Action Alternative are expected to be minor, on the scale of the entire community. Mobile species

could relocate to nearby areas not affected by construction. Non-mobile species could be killed in areas cleared or filled, which are minimal in the project area. The streams to be impacted are lacking suitable substrate and habitat for macroinvertebrates. The streams are poor habitat for stoneflies, caddisflies, dragonflies, damselflies, hellgrammites, and mayflies, which is an indicator of poor stream quality. Therefore, the Proposed Action Alternative is anticipated to have minor short and long-term impacts to the terrestrial and aquatic habitats.

### ***Alternative 3 – Redevelopment of Summersville Middle School***

Under the Redevelopment Alternative, the damaged Summersville Middle School would be demolished and redeveloped on the existing site, located at 40 Grizzly Lane, Summersville, West Virginia. The eastern section of the subject property associated with Summersville Middle School would be elevated to meet FEMA requirements from offsite soil locations. Soil/fill and associated equipment would be stored at designated developed areas utilizing BMPs. The redevelopment would take place where the former middle school was demolished. The site is currently vacant, deforested, and undeveloped. As such, construction activities and redevelopment would have little to no impact on terrestrial environments short-term or long-term. However, short-term effects to aquatic environments are possible during construction activities if BMPs are not followed correctly. The potential impact would be silt/sediment in surface water discharging into Muddlety Creek during earth moving and construction activities if stringent BMPs and sediment control plans are not followed and maintained correctly. If construction activities adequately follow BMPs, little to no short-term impacts to aquatic environments are anticipated. After construction, the site would be developed to pre-flood margins. Therefore, long-term effects to aquatic environments are not anticipated.

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

The USACE regulated 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.

#### ***Alternative 1 – No Action***

Under the No Action Alternative, no impacts to wetlands would occur.

#### ***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

TERRADON was contracted to complete a wetland delineation for the approximate 110-acre project site in November 2018. The wetland delineation was performed in accordance with appropriate USACE Section 404 wetland delineation procedures. A jurisdictional determination report, entitled Glade Creek Park Aquatic Resources Assessment (**Appendix B**) was submitted to the USACE on March 8, 2019. Based on this information and other data available to them, USACE determined that both jurisdictional and non-jurisdictional waters are present within the project area. A preliminary jurisdictional determination issued on March 28, 2019 by USACE confirmed that two emergent wetlands exist on the property, 0.254 and 0.068 acres, with a total of 0.322 acres.

Based upon the current design, 0.254 acres of impacts are anticipated. The 0.254 acres of wetland to be impacted would be filled with clean, offsite material. Site development is undergoing state and federal permitting procedures to ensure appropriate mitigation measures. State permitting is being completed through the WVDEP Section 401 Water Quality Certification program while federal permitting is through the USACE Section 404 of the CWA. Based on the permitting through USACE and WVDEP and appropriate mitigation components, impacts to wetlands would be moderate. The cost for wetland mitigation is \$15,210, achieved through either mitigation banking or an In-Lieu Fee. The 401 Water Quality Certification application as well as the 404 Individual Permit application can be found in **Appendix C**.

### ***Alternative 3 – Redevelopment of Summersville Middle School***

Under this Alternative, no impacts to wetlands would occur because none are present on or near the site.

### **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.

#### ***Alternative 1 – No Action***

Under the No Action Alternative, no impacts to listed species, their habitats, or designated critical habitat would occur.

#### ***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

An Official Species List from the United States Department of Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) tool, dated February 8<sup>th</sup>, 2019, revealed that the project is located within a potential area of occurrence for ten threatened and endangered species (**Appendix C**). Several species that were returned on the IPaC report were immediately removed from consideration after validating the report against the "Status and Distribution of Threatened and Endangered Species" document on the USFWS West Virginia Field office website. The USWS determined that three federally-listed species could occur in the project area and may be affected by project construction. These are the endangered Virginia big-eared bat (*plecotus townsendii virginianus*); threatened northern long-eared bat (*Myotis septentrionalis*); and the endangered Indiana bat (*Myotis sodalis*). There is no designated critical habitat.

In a Section 7 Consultation letter, dated February 19, 2019, FEMA determined that the proposed project *may affect, but is not likely to adversely affect* the Indiana bat, Virginia big-eared bat, and the northern long-eared bat. Any take of northern long-eared bat associated with this project is exempted under the 4(d) rule, and no conservation measures are required. USFWS concurred with this determination on March 27, 2019. Please see relevant correspondence and the consultation letter attached in **Appendix C**.

### ***Alternative 3 – Redevelopment of Summersville Middle School***

Under the Redevelopment Alternative, all construction activities, including staging, would take place within the previously developed lot. Threatened and endangered species are listed in the project area and thus would require consultation with the USFWS. There would be no disturbance to existing trees or other ground cover. Although the site is adjacent to the Muddlety Creek, which is known habitat for several mussel species, there is a heavily vegetated area separating the parcel from the river that would provide protection from sedimentation. The redevelopment would require the site to be elevated above the SFHA. Additionally, BMPs, such as silt fencing, would be implemented during construction activities to avoid negative impacts to water quality. Therefore, this alternative would likely result in a *may affect, but not likely to adversely affect* federally listed species or critical habitat determination; however, FEMA has not consulted with USFWS about this alternative.

### **3.3 Hazardous Materials**

TERRADON completed a Phase I Environmental Site Assessment (ESA) for all sites, which consists of an onsite reconnaissance and review of Environmental Data Resources (EDR). An EDR report consists of radius maps, historical aerial photographs, historical topographic maps, historical Sanborn maps, city directory information, assessor information, environmental liens, National Wetland Inventory maps, floodplain information, historical well data, and other information used to characterize potential environmental hazards.

The Phase I ESA was performed in conformance with the scope and limitations of American Standard Testing Method (ASTM) E 1527-13 and in general accordance of the agreement between NCBOE and TERRADON. After review of the EDR report and geographic locations of Potential Environmental Concerns (PECs), it was determined that none of the sites posed a Recognized Environmental Concern (REC) to the potential sites or current facility. The full Phase I ESA report including the EDR report and site photographs can be found in **Appendix B**.

### ***Alternative 1 – No Action***

Under the No Action Alternative, no impacts from hazardous materials are anticipated. No change to the status quo is anticipated, and no RECs were listed or found in EDR database information that would impact the continued operation of the temporary classroom facilities at Summersville Middle School.

### ***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

Under the Proposed Action Alternative, no impacts from hazardous materials are anticipated during the consolidation of the Nicholas County Schools. No RECs were listed or found in EDR database information that would impact the site. Any hazardous materials discovered, generated, or used during construction would be handled and disposed of in accordance with applicable local, state, and Federal regulations. Hazardous materials would be stored in a locked, covered, facility wherever possible.

### ***Alternative 3 – Redevelopment of Summersville Middle School***

Under the Redevelopment Alternative, no impacts from hazardous materials are anticipated during redevelopment of Summersville Middle School. No RECs were listed or found in EDR database information that would impact the site. Any hazardous materials discovered, generated, or used during construction would be handled and disposed of in accordance with applicable local, State, and Federal regulations. Hazardous materials would be stored in a locked, covered, facility wherever possible.

## **3.4 Socioeconomics**

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

Nicholas County, West Virginia does not have any legislated zoning regulations in effect, but land use regulations are enforced within the city limits of Summersville.

#### ***Alternative 1 – No Action***

The current property consisting of Nicholas County High School and Summersville Middle School is listed as Parcel ID 34-07-0015-0017-0002 according to Nicholas County Assessor information. The subject property is currently listed as a Residential property class with a Land Use of 612-School totaling 30.91 acres. The No Action Alternative would not cause any change or be affected by any land use patterns or zoning.

#### ***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

The proposed project site is listed within Summersville, West Virginia. According to Nicholas County Assessor information, the subject property is listed with a property class of Residential with a Land Use of 600-Vacant Exempt Land. The Parcel ID is listed as 34-03-0057-0032-0000. The subject property is primarily vacant land consisting of gently rolling fields and one vacant residential building associated with a former farmstead. The surrounding land uses include farmland, warehouses, and a camp property, none of which would be impacted by the proposed action development. The proposed project site development would reclassify the land use to 612-School, per Nicholas County guidelines, therefore changing the property class long-term and resulting in a minor impact.

#### ***Alternative 3 – Redevelopment of Summersville Middle School***

Under this Alternative, no zoning or land use changes would be required. The existing Summersville Middle School site is listed as 612-School. Land use patterns would be a similar land use prior to the disaster, so any impacts 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 USEPA 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 level in excess of 55 decibels are "normally unacceptable" for noise-sensitive land uses such as residences, schools and hospitals. A noise ordinance does not exist for the community of Summersville, West Virginia.

***Alternative 1 – No Action***

Under the No Action Alternative, no increased long-term noise impacts are anticipated.

***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

Under the Proposed Action Alternative, construction and developmental noise impacts would be temporary and limited to the duration of construction activities. To reduce the impact of noise levels during that period, construction activities would be restricted to normal business hours. Equipment and machinery utilized at the site would meet all state and Federal noise regulations. Over the long-term, the noise level at immediate site is anticipated to be higher due to the operation of the new facility, but should have minimal impact on existing noise levels in the surrounding area.

***Alternative 3 – Redevelopment of Summersville Middle School***

Under the Redevelopment Alternative, construction and developmental noise impacts would be temporary and limited to the duration of construction activities. To reduce noise levels during that period, construction activities would be restricted to normal business hours. Equipment and machinery utilized at the site would meet all state and Federal noise regulations. Moderate, short-term, increases in noise levels would be anticipated to occur during construction activities. Long-term, vehicle traffic would return to pre-disaster levels with students returning to the original Summersville Middle School. No increased long-term noise impacts are anticipated.

**3.4.3 Public Services and Utilities**

Public services to all the alternative locations are provided by private industry, the City of Summersville and the State of West Virginia. These include police, fire, water, sewer, utilities, and road connections.

***Alternative 1 – No Action***

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

***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

The Summersville area has established public services and utilities. The site location has access to the necessary utilities, including: sewage, public water, garbage collection services, natural gas, electric, and stormwater management. Water supply services are provided by West Virginia American Water; sewage services are provided by Summersville Wastewater Treatment; natural gas heating is provided in the general area of the subject property; electric power service in the adjacent area of the subject property is provided by American Electric Power; emergency fire services are provided by Nicholas County Fire Department; emergency medical services are

provided by Jan Care Ambulance Services and/or Air Evac Life Team 103, garbage collection is provided by Nicholas Sanitation Incorporated; and police services are provided by Summersville Police Department, Nicholas County Police Department, and West Virginia State Police. The nearest medical facility is Summersville Regional Medical Center located 3.5 miles away and the nearest hospital is Montgomery General Hospital, located approximately 44 miles away. The primary road providing potential emergency services is Route 41 West Webster Road. Glade Creek Business Park is already developed with site utility access to water supply, sewage, electricity, and natural gas. During construction, minor, short-term impacts to public services and utilities may occur in the surrounding area; however, long-term effects due to utility access would not be anticipated.

### ***Alternative 3 – Redevelopment of Summersville Middle School***

Under this Alternative, there would be an increased use of public services or utilities during construction activities that would ultimately return to pre-disaster use levels.

### **3.4.4 Traffic and Circulation**

The WVDOH via West Virginia Department of Transportation (WVDOT) is responsible for planning, engineering, right of acquisition, construction, Redevelopment, 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.

### ***Alternative 1 – No Action***

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

### ***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

The proposed project site is located along Mable Lane and Trade Zone Drive accessed by West Virginia Route 41 (West Webster Road). Due to the increased traffic of the proposed facilities, a traffic study and potential traffic light at the confluence of West Webster Road and Trade Zone Drive was warranted. The trip generation analysis for the proposed campus indicated that a total of 2,775 new daily trips, 822 new external AM peak hour, and 452 new external PM hour trips would be generated once the campus opens.

The site is proposed to be served by four site driveways connected to Trade Zone Drive. Three driveways would be full movement with one driveway ingress only. All school traffic would enter West Webster Road via Trade Zone Drive with the proposed driveways operating under stop control.

The study indicates that the trips generated by the proposed school would have a substantial impact on existing traffic along Trade Zone Drive, West Webster Road, and other surrounding areas. The full traffic study report completed by ATM can be found in **Appendix B**. Roadway improvement recommendations for West Webster Road, (WV 41) and US Route 19 are included in the full traffic study, to mitigate the impact of the new trips and reduce the impact to the level

of service. All traffic improvements along WV 41 and Route 19 would occur within the study area of the proposed site and or within current right of way that has been established by the West Virginia Department of Highways. Following the recommended improvements from the traffic study, impacts to the surrounding environment would be moderate in the short-term during construction and minor long-term.

### ***Alternative 3 – Redevelopment of Summersville Middle School***

Under the Redevelopment Alternative, there would be minor temporary impacts to current traffic patterns during construction activities. No long-term impacts are anticipated.

### **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 were used to assemble the following community profiles for Nicholas County and the City of Summersville. Official 2010 Census Data were used as applicable, and additional information was taken from the 2012-2016 American Community Survey 5-year estimates. The American Community Survey 5-year estimates for the percentages of the population of the project area based on race and ethnicity are provided in **Table 3** below.

West Virginia has a population of 1,852,994, with school age children making up 18.1% of the population (2010 Demographic Profile). The state population has an educational attainment rate of 85.9% of high school graduate level or higher. The median household income is \$44,061 and 17.8% of individuals are identified as living below the Federal Poverty Level. Of the state population, approximately 1.5% of individuals identify as being of Hispanic or Latino origin. Most of the population identifies as white, with 1.7% of individuals indicating they are of two or more races. Approximately 97.5% of the population is listed as English-speaking (2013-2017 American Community Survey 5-Year Estimate).

In comparison, Nicholas County is characterized as having a population of 25,043 with children under the age of 5 years at 5.4%, the population under 18 years at 20.5%, and the population 65 years and over at 21.6%. Nicholas County is listed with an educational attainment of high school graduate or higher of 83.7%. Most of the population, approximately 99%, is listed as English speaking. According to 2013-2017 American Community Survey 5-Year Estimates along with 2010 Demographic Profiles, the average household income is \$39,901 with 20.1% below poverty levels.

Based on the 2017 Population Estimate from the United States Census Bureau (Dated July 1, 2017), Summersville is listed as having a population of 3,361 with a median household income of \$35,539 and 16.5% of all families are below the Federal Poverty Level. The median age of the city is approximately 53 years. According to 2012-2016 American Community Survey 5-Year Estimates along with 2010 Demographic Profiles, 85.8% of the population has an educational attainment of high school graduate level or higher, the number of foreign-born individuals is listed as 37, and total

number of housing units is approximately 1,859. According to 2017 estimates from the US Census Bureau, the population of the City of Summersville saw nearly a 2.4% reduction in population one year after the (2016) flooding described in this EA.

Based on American Community Survey 5-Year estimates, children under the age of 5 years old represent 2.7% of the population, ages 5 to 9 represent 1.3%, ages 10 to 14 represent 1.7%, and 15 to 19 years as 6.1%. Most of the population, approximately 99%, is listed as English speaking. Therefore, a non-English EA or public notice is not warranted as part of this EA. However, appropriate plain language guidance should be made if requested for limited- English speaking residents.

**Table 2 – Summary of Percent Populations for West Virginia, Nicholas County & Summersville**

Race	West Virginia	Nicholas County	City of Summersville
<b>White Alone</b>	93.3%	97.4%	93.9%
<b>Black or African American Alone</b>	3.6%	0.7%	1.4%
<b>American Indian and Alaska Native Alone</b>	0.2%	0.4%	1.5%
<b>Asian Alone</b>	0.8%	0.3%	1.1%
<b>Native Hawaiian and Other Pacific Islander Alone</b>	0%	0%	0%
<b>Some Other Race Alone</b>	0.4%	0.3%	0%
<b>Two or More Races</b>	1.7%	1.0%	1.0%
<b>Ethnicity</b>			
<b>Hispanic or Latino (of any race)</b>	1.5%	0.6%	1.1%

**Alternative 1 – No Action**

Under the No Action Alternative, the redevelopment of the original Summersville Middle School would not be conducted, and FEMA would not be providing funding. There would be no disproportionate and adverse impacts on low-income or minority populations. Nevertheless, the entire school-aged population would suffer from adverse impacts as the No Action Alternative would impact the educational development for all the school age students in Summersville. Following the near destruction of the original Summersville Middle School in the 2016 flood event, the school’s former students have been accommodated with portable classroom facilities. Without permanent facilities, students are subject to inadequate educational opportunities, creating a

disservice to the students and surrounding community. As stated in this report, Summersville Middle School students are being accommodated by 56 temporary classrooms following the flood event in 2016. The facilities are often operating beyond their intended capacity and intended amount of time to be utilized. The No Action Alternative would continue to utilize the temporary classroom facilities indefinitely.

***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

Under the Proposed Action Alternative, there would not be any environmental justice concerns related to the selected property. The Proposed Action Alternative would return Summersville Middle School to its pre-disaster capacity and is located approximately three miles away from the previous school. The new facility is expected to increase the student population 15%, which could drive associated economic benefits in the area. The proposed facility would have an estimated combined enrollment of 1,500 students, up from the current enrollment of the three schools of 1,339. The proposed project would relocate all students, teachers, and staff to the new campus well outside the SFHA. The Proposed Action Alternative would not permanently increase the number of residents in the project vicinity and is not anticipated to generate additional demand for housing or jobs. The site location and close proximity to current location would be beneficial to the students and surrounding community, allowing for ease of access to after school programs and extracurricular activities. The Proposed Action Alternative would not have disproportionately high and/or adverse effects on minority or low-income populations. The Proposed Action Alternative would comply with EO 12898 and would not result in long-term adverse socioeconomic impacts. Positive long-term benefits of the project would include providing a safer school environmental for students and staff by alleviating concerns, financial burden, and service interruptions associated with potential repetitive flooding at the existing site.

***Alternative 3 – Redevelopment of Summersville Middle School***

Under the Redevelopment Alternative, there would be no environmental justice issues or impacts. This alternative would allow for permanent facilities to be built on the site of the original Summersville Middle School to provide long-term educational facilities not currently being provided with the portable classrooms.

**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 the appropriate equipment, including all appropriate safety precautions. Additionally, all activities would be conducted in a safe manner 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 are required to identify and assess health risks and safety risks that may disproportionately affect children. Environmental health risks or safety risks refer to risks to health or to safety that are attributable to products or substances that the child is likely to come in contact with 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). To ensure safety and security of all populations site development would follow all applicable local, State, and Federal regulations.

### ***Alternative 1 – No Action***

Under the No Action Alternative, there would be no change to the status quo. There are no known health or safety issues for students.

### ***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

The Proposed Action Alternative would require extensive construction activities associated with development. Construction activities would require all personnel to have appropriate OSHA certifications and knowledge associate with their profession. Appropriate counter measures would be taken along with Health Site and Safety Plans. Although the proposed project site is surrounded by some rural development, it is located on a large plot that is well removed from regular pedestrian traffic, so there would not be any major risks to the area residents or public. During construction activities, appropriate signage and fencing would be implemented to ensure the public does not enter an active construction zone. Due to the relative remote location of the potential site development, impacts to child safety would be minimal and would not require construction activities to be limited during summer months, as considered under EO 13045. Safety concerns for this alternative are negligible because they would be limited to short-term development of the site and facilities and would not have a long-term effect on safety or security.

### ***Alternative 3 – Redevelopment of Summersville Middle School***

The Redevelopment Alternative would require extensive construction activities associated with development at the site of the former Summersville Middle School. Construction activities would require personnel to have appropriate OSHA certifications and knowledge associate with their profession. Appropriate counter measures would be taken along with Health Site and Safety Plans. During construction activities, appropriate signage and fencing would be implemented to ensure the public does not enter an active construction zone. Although the construction activities would be within a populated residential area, appropriate counter measures would mitigate safety risks to the public and no short-term risk would be anticipated.

Additionally, the safety and security of students, faculty and staff associated with Summersville Middle School would be at risk due to future flood disasters on a long-term basis. The former Summersville Middle school was located within a floodplain of a meandering stream system associated with Muddlety Creek. Although construction would elevate the site above BFE, the surrounding adjacent properties, community, and site access could be potentially impacted during a high flood event, resulting in a moderate impact.

## **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 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) 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.

For each of the proposed alternatives, FEMA conducted an archives search utilizing West Virginia SHPO's Interactive GIS Map. A summary of those results and subsequent consultation is provided in the below paragraphs. With regards to tribal resources, only the Catawba Nation has known cultural areas of interest in Nicholas County. FEMA consulted with the Catawba Nation in July of 2016, immediately following the disaster declaration for DR-4273-WV. At the time, the Catawba Nation of Indians did not express concerns with DR-4273-WV Public Assistance activities within the declared counties, including Nicholas County.

#### ***Alternative 1 – No Action***

Under the No Action Alternative, no new impacts to historic properties would result from the temporary classrooms facilities remaining on the former Summersville Middle School site along Grizzly Lane in Summersville.

#### ***Alternative 2 – Consolidation of Nicholas County Middle School, High School, and Technical Education Center (Proposed Action)***

Under the Proposed Action Alternative, NCBOE proposes to develop 110 acres of primarily undeveloped, cleared land at 395 Mable Lane, Summersville West Virginia. The proposed development property contains one abandoned structure. A search of West Virginia SHPO's Interactive GIS map in the vicinity of the proposed construction site one previously surveyed property within the project boundaries: The Rader Farm and Homeplace (NI-0106). The property had been surveyed between 2005 and 2007, during which time development of a business park, known as Glade Creek Business Park, was proposed for the site. Though the business park was never developed, consultation with WV SHPO determined the Rader Homestead to be ineligible for listing in the NRHP due to lack of integrity. An archaeological assessment was also conducted in 2006 and 2007 in correlation with the proposed business park. Archaeological investigations identified a secondary site, the Rader Family Cemetery (46NI657) and eventually concluded that as long as ground disturbing activities maintained a 100-foot buffer from the cemetery boundary (delineated by a chain-link fence), there would be no historic properties affected. In a consultation letter dated March 25, 2019, FEMA upheld the determinations of the previous historic resource surveys for the site. In response, on April 3, 2019, WV SHPO concurred with the archaeological assessment, but requested a re-evaluation of the Rader Farm and Homeplace and submission of Historic Property Inventory (HPI) forms for any properties 45 years or older within the viewshed of the proposed school development. FEMA responded on April 25, 2019 with an updated HPI form for the Rader Farm and Homeplace as well as identification of three

nearby properties: 84 Mabel Lane, 205 Trade Zone Drive, and 7329 Webster Road. None of these three properties were over 45 years of age and therefore did not merit evaluation for listing in the NRHP. FEMA upheld the determination that the Rader Farm and Homeplace was ineligible for listing in the NRHP as its integrity had further deteriorated due to neglect and vandalism. Therefore, the proposed action alternative would have no effect on historic properties. WV SHPO concurred with FEMA's determination on May 7, 2019. A connected action was later identified as widening of Route 41 was necessary to accommodate access to the proposed school facility. Though the road widening was planned by WVDOH, it is considered necessary to alleviate traffic concerns associated with the school (see Section 3.4.5 Traffic and Circulation). Because the widening is a connected action, FEMA notified WV SHPO of this ground disturbing activity on July 3, 2019 and July 29, 2019. This notification included HPI forms for properties adjacent to the roadway and an indication that WV DOH would conduct formal consultation on the ground disturbing activities in late 2019. On August 2, 2019 WV SHPO acknowledged that WV DOH would take the lead on the Route 41 widening consultation. In the same correspondence, WV SHPO maintained the April 3, 2019 concurrence determination with regards to archaeological resources: no historic properties affected.

This concluded the Section 106 Process for the Proposed Action Alternative. Copies of correspondence between FEMA and West Virginia SHPO (including HPI forms) can be found in **Appendix C** of this report.

### ***Alternative 3 – Redevelopment of Summersville Middle School***

Under the Redevelopment Alternative, Summersville Middle School would be reconstructed on fill on the original middle school parcel located at 40 Grizzly Lane, Summersville, West Virginia. a search of West Virginia SHPO's Interactive GIS map in the vicinity of 40 Grizzly Lane identified no known historic properties within the proposed parcel and only two previously surveyed structures within the potential viewshed of the proposed redevelopment site: NI-0010-0077 and NI-0010-0078. Both structures are mid-twentieth century residences for which no determination of eligibility has been issued. However, because these structures are vernacular, neither appears to meet the criteria for individual listing in the NRHP, nor do they appear to be part of a larger historic district. With regards to the redevelopment parcel, aerials indicate its land has been largely disturbed through the development of two school buildings, ball fields, and a bus garage. Therefore, the Redevelopment Alternative is likely to result in no historic properties affected.

## **3.6 Comparison of Alternatives**

The primary impacts from the No-Action Alternative would be the lack of a permanent school facility for the students attending Summersville Middle School. The impacts from the Proposed Action Alternative would include changes to land use, minor short-term impacts from construction activities, and minimal long-term impacts to farmland, water resources, and the floodplain. The impacts from the Redevelopment Alternative would include sort-term impacts from construction activities, with long-term impacts to the safety and security of the school and children due to the location of the building and surrounding areas within the floodplain. The following table summarizes the potential impacts analyzed for all three alternatives.

**Table 3 – Summary of Environmental Impacts**

<b>Affected Environment</b>	<b>No Action Alternative</b>	<b>Proposed Action Alternative</b>	<b>Redevelopment Alternative</b>
<b>Soils and Geology</b>	<ul style="list-style-type: none"> <li>No impact or FPPA compliance requirements</li> </ul>	<ul style="list-style-type: none"> <li>Moderate short-term and long-term. Meets FPPA compliance requirements</li> </ul>	<ul style="list-style-type: none"> <li>Moderate short-term, minimal long-term. No FPPA compliance requirements.</li> </ul>
<b>Water Resources and Water Quality</b>	<ul style="list-style-type: none"> <li>No Impact</li> </ul>	<ul style="list-style-type: none"> <li>Moderate short-term, minimal long-term.</li> </ul>	<ul style="list-style-type: none"> <li>Minor short-term and minimal long-term impacts.</li> </ul>
<b>Floodplain Management</b>	<ul style="list-style-type: none"> <li>No impact.</li> </ul>	<ul style="list-style-type: none"> <li>No impact</li> </ul>	<ul style="list-style-type: none"> <li>Moderate impact, as the school would be elevated above BFE during redevelopment; however, children would continue to use flood prone areas, with ingress and egress routes for the school in the floodplain.</li> </ul>
<b>Air Quality</b>	<ul style="list-style-type: none"> <li>No Impact</li> </ul>	<ul style="list-style-type: none"> <li>Minor short-term impacts during construction, negligible long-term impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Minor short-term impacts during construction, negligible long-term impacts.</li> </ul>
<b>Terrestrial and Aquatic Environment</b>	<ul style="list-style-type: none"> <li>No impact</li> </ul>	<ul style="list-style-type: none"> <li>Minor impacts to terrestrial species and the aquatic resources.</li> </ul>	<ul style="list-style-type: none"> <li>No impact to terrestrial species, minimal impact to aquatic resources.</li> </ul>
<b>Wetlands</b>	<ul style="list-style-type: none"> <li>No Impact</li> </ul>	<ul style="list-style-type: none"> <li>Moderate impacts</li> </ul>	<ul style="list-style-type: none"> <li>No Impact</li> </ul>
<b>Threatened and Endangered Species</b>	<ul style="list-style-type: none"> <li>No Impact</li> </ul>	<ul style="list-style-type: none"> <li>May affect, but not likely to adversely affect, listed species.</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 Impact</li> </ul>	<ul style="list-style-type: none"> <li>No impact</li> </ul>	<ul style="list-style-type: none"> <li>No impact</li> </ul>
<b>Zoning and Land Use</b>	<ul style="list-style-type: none"> <li>No impact</li> </ul>	<ul style="list-style-type: none"> <li>Minor impact</li> </ul>	<ul style="list-style-type: none"> <li>Negligible impact</li> </ul>
<b>Noise</b>	<ul style="list-style-type: none"> <li>No Impact</li> </ul>	<ul style="list-style-type: none"> <li>Moderate short-term impact due to construction noise, minimal long-term impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Moderate short-term impact due to construction noise, no long-term impacts.</li> </ul>

<b>Public Service and Utilities</b>	<ul style="list-style-type: none"> <li>• No Impact</li> </ul>	<ul style="list-style-type: none"> <li>• Minor short-term impact during construction, no long-term impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor short-term impact during construction, no long-term impacts.</li> </ul>
<b>Traffic and Circulation</b>	<ul style="list-style-type: none"> <li>• No Impact</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate short-term impact during construction, minor long-term impacts after roadway improvements.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor short-term impact during construction, no long-term impacts.</li> </ul>
<b>Environmental Justice</b>	<ul style="list-style-type: none"> <li>• No disproportionate and adverse effects on minority or low-income populations.</li> </ul>	<ul style="list-style-type: none"> <li>• No disproportionate and adverse effects on minority or low-income populations.</li> </ul>	<ul style="list-style-type: none"> <li>• No disproportionate and adverse effects on minority or low-income populations.</li> </ul>
<b>Safety and Security</b>	<ul style="list-style-type: none"> <li>• No impact.</li> </ul>	<ul style="list-style-type: none"> <li>• Negligible short-term construction impacts; no long-term impacts to health and safety of children.</li> </ul>	<ul style="list-style-type: none"> <li>• Negligible short-term construction impacts. Moderate long-term impacts due to possibility of future flooding.</li> </ul>
<b>Historic Structures</b>	<ul style="list-style-type: none"> <li>• No historic properties affected</li> </ul>	<ul style="list-style-type: none"> <li>• No historic properties affected.</li> </ul>	<ul style="list-style-type: none"> <li>• Likely result in no historic properties affected.</li> </ul>
<b>Archaeological Resources</b>	<ul style="list-style-type: none"> <li>• No historic properties affected.</li> </ul>	<ul style="list-style-type: none"> <li>• No historic properties affected.</li> </ul>	<ul style="list-style-type: none"> <li>• No historic properties affected.</li> </ul>
<b>Tribal and Religious Sites</b>	<ul style="list-style-type: none"> <li>• No effect</li> </ul>	<ul style="list-style-type: none"> <li>• No effect</li> </ul>	<ul style="list-style-type: none"> <li>• No effect</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.

The City of Summersville is currently engaged in numerous flood recovery projects, funded from various Federal and state sources, as well as local and private sources. Past and present recovery activities include demolition of flood damaged residential, commercial and public buildings, restoration of flood-impacted facilities, acquisition of residential homes from willing sellers, and mitigation of residential homes through elevation or reconstruction above BFE. These activities are being undertaken as part of the necessary recovery efforts following the 2016 flood, and focus is being placed on reducing future risk by removing or mitigating properties in the SFHA. Acquisition of homes in the SFHA may result in some individuals moving to other communities (some of whom may have already relocated, after the 2016 flood event). Additional factors may also influence demographics, including changes to nearby employment opportunities.

Reasonably foreseeable future actions in the area include continued public and private recovery projects. Additional future land use may occur within the project area due to private development, or currently unplanned flood mitigation projects that convert developed land to open space. There is not any planned future development in the immediate area of the proposed project area. Past, present, and future actions are not expected to result in increased long-term development or population growth, as the goal is to restore pre-disaster services to the community.

This assessment concludes that the long-term impacts of the proposed action would consist of minor to negligible impacts to soils, water resources, terrestrial and aquatic environments, and floodplains. Moderate short-term impacts to noise and traffic would occur. In addition, there may be moderate short-term impacts to water quality and soils during construction. The other activities described above affecting the same area could also impact these resources. Impacts from other projects to soils would be minimized using Erosion and Sedimentation Control Plans. Projects proposed in the floodplain are managed through the requirement to obtain permits from the local floodplain manager and projects proposed to impact waterways would need to obtain permits through WVDEP and USACE. 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 school site and the site of the consolidation of the Summersville and proposed new school facilities.

## **SECTION FIVE: PUBLIC PARTICIPATION**

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Prior to the start of the formal federal NEPA process, the selection of a site to construct the new Summersville Middle School was the focus of both City and County public meetings. Coordination with FEMA and public involvement have been conducted throughout the NEPA EA process. Public involvement included Nicholas County public meetings, NCBOE meetings, and town hall meetings to establish an open discussion with the surrounding community. Throughout the process representatives from state, local, and Federal agencies, state and Federal Representatives, politicians, local community, and schools have participated in the public comment process.

The NEPA process requires that opportunities be provided for public review and comment. NCBOE advertised the Draft EA for the relocation and development of Summersville Middle School, Nicholas County High School, and Development of a Technical Education Facility as per NEPA requirements. The proposed project site activities consist of approximately 110 acres located at Glade Creek Business Park located along Trade Center Drive and Mable Lane, Summersville, West Virginia. The Subject Property is currently owned by Nicholas County Building Commission. Coordinates for the center of the subject property are 38.323089 latitude, -80.807219 longitude. The 30-day comment period began on October 16, 2019 and lasted 30 days from the date of advertisement in the *Nicholas Chronicle* Newspaper, until November 15, 2019. The Draft EA Document was made available at the Summersville Public Library and posted online at the FEMA website at <https://www.fema.gov/disaster/4273>. Comments were submitted by email to FEMA-R3-EHP-PublicComment@fema.dhs.gov or by mail, addressed to FEMA Region III, Disaster 4273, 615 Chestnut Street, Sixth Floor Philadelphia, PA 19106,

ATTENTION: NCBOE Summersville NEPA Comments. A public meeting on the Draft Environmental Assessment was held October 21, 2019 from 6 p.m. to 8 p.m. at Nicholas County High School, located at 30 Grizzly Ln, Summersville, WV 26651. The meeting provided an overview of the Draft Environmental Assessment and allowed an in-person opportunity to submit public comments and ask questions. 48 public comments were received during the public comment period. Substantive comments received during the public comment period were addressed as appropriate in the final document. After substantive comments were addressed, the Draft EA becomes final and the initial Public Notice also serves as the final Public Notice. A Response to Comments Document was generated and included into the updated report, as **Appendix E**. The Public Notice was attached in **Appendix D**.

The USACE issued a Public Notice comment period for the Section 404 permit application submitted for the project on June 10, 2019. WVDEP issued a Public Notice comment period for Section 401 permit application on July 25, 2019.

## **SECTION SIX: MITIGATION MEASURES AND PERMITS**

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- The applicant is responsible for obtaining and complying with all required local, state and Federal permits and approvals.
- Terms and conditions set by USACE and WVDEP to minimize effects to water quality will be abided by the applicant.
- NCBOE will abide by all required Compensatory Mitigation Plans for stream impacts submitted in compliance with USACE and WVDEP.
- Construction BMPs, as identified in the Erosion and Sedimentation Control Plan prepared for the proposed action, will be utilized and maintained throughout construction to control soil erosion and sediment, reduce spills and pollution, and provide habitat protection.
- The project applicant would include BMPs during or after construction such as, but not limited to:
  - Soil erosion monitoring at the project site;
  - Installation of temporary silt fences and/or straw bales;
  - The staging of construction equipment in existing developed areas, such as paved parking lots;
  - If project activities include the stockpiling of soil or fill onsite, the project applicant would maintain these soils by covering or other means to help prevent fugitive dust and soil erosion and dispersion offsite into stormwater pathways or streams;
  - All short-term soil storage would not occur within floodplain areas;
  - Erosion control fiber mesh would be utilized for disturbed and seeded lawn impact areas; and
  - Following construction, any bare or exposed soils would be vegetated to prevent future soil erosion and compacted soils would be aerated and revegetated.
- Erosion controls will be in place prior to any ground disturbing activity.
- Avoided wetland and streams will be fenced during construction as no-work areas.
- Site soils will be covered and/or wetted during construction to minimize fugitive dust.
- Construction activities will be conducted during the daytime hours to reduce adverse noise impacts.
- All ground disturbing activities, including grading, must occur outside of a 100-foot buffer zone around the Rader Family Cemetery.
- 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 SHPO.
- Any hazardous materials discovered, generated, or used during construction would be disposed of and handled in accordance with applicable local, state, and Federal regulations, with WVDEP being the lead agency regarding compliance. During all activities, appropriate measures to remove, prevent, contain, minimize, and control spills of any potentially hazardous materials will be employed. Hazardous materials would be stored in a locked, covered, facility wherever possible.
- Heavy machinery and equipment to be used for the proposed action will meet Federal clean air standards. In addition, all equipment used shall have sound control devices no less effective than those provided on the original equipment. No equipment shall have un-muffled exhaust.

- All equipment shall comply with pertinent equipment noise standards of the EPA.
- 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, prior to the start of work the applicant (SBA and NCBOE) must contact FEMA so that the revised project scope can be evaluated for compliance with NEPA and other applicable environmental laws.

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

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USGS 7.5-Minute Topographic Quadrangle Map

West Virginia Department of Environmental Protection-Division of Air Quality

West Virginia Department of Natural Resources

West Virginia Wildlife Diversity Program

West Virginia National Heritage Program

West Virginia Department of Wildlife

West Virginia Division of Highways

West Virginia Division of Transportation

Pertinent and available local, state, and Federal government listing of recognized environmental conditions were reviewed for evidence of activities, which may have an adverse impact on the subject property. Some of those agencies/listings and the databases searched by EDR include the following:

- US Environmental Protection Agency (USEPA);
- West Virginia Department of Environmental Protection (WVDEP);
- Division of Water Resources (DWR);
- National Priorities List (NPL);
- Proposed National Priority List sites;
- National Priority List Deletions (Delisted NPL);
- Federal Superfund Liens (NPL Liens);
- active Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS);
- CERCLIS No Further Remedial Action Planned sites (CERC-NFRAP);
- Corrective Action Report sites (CORRACTS);
- Resource Conservation and Recovery Information System (RCRIS) databases including the Treatment, Storage and Disposal Facility (TSD) list and large and small quantity generator list (LQG/SQG) sites;
- Emergency Response Notification System (ERNS);
- Hazardous Materials Information Reporting System (HMIRS);
- Engineering Controls Sites List (US ENG CONTROLS);
- sites with Institutional Controls (US INST CONTROLS);
- Department of Defense Sites (DOD);
- formerly used defense sites (FUDS);
- US Brownfield;
- Superfund Consent Decrees (CONSENT);
- Records of Decision (ROD);

- Uranium Mill Tailings Sites (UMTRA);
- Open Dump Inventory (ODI);
- Toxic Chemical Release Inventory System (TRIS);
- Toxic Substances Control Act (TSCA);
- FIFRA/TSCA Tracking System (FTTS);
- Section 7 Tracking Systems (SSTS);
- Land Use Control Information System (LUCIS);
- Incident and Accident Data (DOT OPS);
- Integrated Compliance information System (ICIS);
- FIFRA/TSCA Tracking System Administrative Case Listing (HIST FTTS);
- Drug Lab Site Locations (CDL);
- Radiation Information Database (RADINFO);
- CERCLA Lien Information (LIENS 2);
- PCB Activity Database System (PADS);
- Material Licensing Tracking System (MLTS);
- Mines Master Index File (MINES);
- Facility Index System/Facility Identification Initiative Program Summary Report (FINDS);
- RCRA Administrative Action Tracking System (RAATS);
- Indian Reservations (INDIAN RESERV);
- Indian LUST (INDIAN LUST);
- Indian UST (INDIAN UST);
- Manufactured gas plants;
- State hazardous waste sites (SHWS);
- Municipal Solid Waste Landfills/Transfer Stations (State Landfill);
- Leaking Underground Storage Tank (LUST) list;
- registered underground storage tank (UST);
- Spills listing (SPILLS);
- Sites with Institutional Controls (INST CONTROLS);
- Voluntary Remediation Sites (VCP);
- List of Drycleaner Locations (DRYCLEANERS);
- Wastewater Discharge Permits Listing (NPDES); and,
- Permitted Facility and Emissions Listing (AIRS)

## **SECTION EIGHT: LIST OF PREPARERS**

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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**