

Fayette-Raleigh Metropolitan Planning Organization
Attn: Mr. John Tuggle
885 Broad Street, Suite 100
Summersville, WV 26651

June 30, 2026

RE: US-19 New River Gorge National Park Entrance Intersections Study (Task Order No. FY2026 03)

Burgess & Niple (B&N) is pleased to submit this technical memorandum summarizing the conceptual study performed for the New River Gorge National Park entrance intersections along US-19, conducted under Task Order No. FY2026 03 for the Fayette-Raleigh Metropolitan Planning Organization (FRMPO). This study builds on the long-term concepts previously identified in the 2025 US-19 Corridor Study, with the goal of verifying the feasibility of those planning-level concepts at the intersections of US-19 with Fayette Mine Road/Burnwood Campground Drive and Lansing-Edmond Road/Ames Heights Road, and developing more defined planning-level estimates and next steps to advance the project into subsequent phases of development. This memorandum documents the field review, recommendations, conceptual layouts, preliminary cost estimates, and environmental desktop screening completed as part of this effort.

Task 1: Field Review

The field review was conducted on Saturday, May 23, 2026, during the Memorial Day holiday weekend, to observe the study area intersections under peak park visitation conditions. One representative each from B&N, FRMPO, and the National Park Service attended. Observations were performed between approximately 11:00 AM and 12:30 PM. Photos collected during the field review are provided in *Appendix A*.

Weather conditions during the observation period were partly cloudy with temperatures in the mid-70s. Pavement conditions appeared dry. However, it is important to note that actual conditions differed substantially from the forecast, which predicted heavy rain and thunderstorms throughout the holiday weekend. Because the majority of recreational activities in the New River Gorge region occur outdoors, the unfavorable forecast likely suppressed visitation considerably relative to a typical Memorial Day weekend. This was corroborated by the National Park Service representative, who noted that visitorship appeared lower than expected for the holiday period. As a result, traffic volumes observed during the field review should be considered conservative and not representative of typical peak conditions under favorable weather.

An additional contextual factor is that active roadway repaving operations were underway along US-19 at the time of the visit. In the northbound direction, the outside lane was closed to traffic. In the southbound direction, the outside lane was closed in the vicinity of the second intersection at Lansing-Edmond Road/Ames Heights Road, and the inside lane was closed in the vicinity of the first intersection at Fayette Mine Road/Burnwood Campground Drive. Dedicated turn lanes at both intersections remained open and were not affected by the paving operations.

US-19 is a four-lane divided roadway generally oriented in a northeast-southwest direction through this segment, with a posted speed limit of 65 mph. The roadway functions as the primary north-south connector between I-64 to the south, which continues toward Virginia, and I-79 to the north, which continues toward Pennsylvania. The town of Fayetteville, the nearest incorporated community with shopping, dining, and services, is located approximately two miles south of the study area intersections.

Intersection 1: US-19 at Fayette Mine Road/Burnwood Campground Drive

The first intersection is located approximately one-quarter mile north of the New River Gorge Bridge and serves as the primary entrance to the New River Gorge Canyon Rim Visitor Center via Fayette Mine Road. Burnwood Campground Drive opposes Fayette Mine Road on the northwest side of US-19, providing access to the NPS Burnwood Group Campground. The intersection legs are generally perpendicular to US-19.

In the northbound direction along US-19, dedicated left- and right-turn lanes are provided. The southbound approach includes a dedicated left-turn lane but no dedicated right-turn lane to serve Burnwood Campground Drive. Fayette Mine Road is a two-lane undivided section with no dedicated turn lanes onto US-19. Burnwood Campground Drive is similarly a two-lane undivided section; however, sufficient pavement width exists to allow through/left-turn movements to operate independently from right turns. The US-19 grades at this intersection are uphill in the northbound direction and downhill in the southbound direction.

Intersection 2: US-19 at Lansing-Edmond Road/Ames Heights Road

The second intersection is located approximately one-third mile north of the first intersection and sits near the crest of a hill, with the southbound US-19 approach being uphill and the northbound approach relatively flat. Lansing-Edmond Road and Ames Heights Road are generally aligned with each other but are skewed relative to US-19, intersecting at an oblique angle rather than 90 degrees. Dedicated left- and right-turn lanes are provided along US-19 in both the northbound and southbound directions. Both minor road approaches are two-lane undivided sections without dedicated turn lanes.

Ames Heights Road serves Adventures on the Gorge, a popular outdoor adventure resort and major whitewater rafting operator. Lansing-Edmond Road provides access to numerous New River Gorge hiking trails as well as New & Gauley River Adventures, another whitewater rafting operator. The rafting operations are a notable traffic consideration at this intersection, as operators regularly transport participants to and from the river using buses, some of which tow trailers carrying rafts. These bus and trailer movements can be frequent during peak season and present turning movement and sight distance challenges given the skewed intersection geometry.

General Observations

Given the nature of the New River Gorge National Park as a destination for outdoor recreation, both intersections experience higher-than-average volumes of RVs and vehicles towing travel trailers, particularly at Fayette Mine Road and Ames Heights Road. This vehicle mix, combined with the 65 mph posted speed limit on US-19, the skewed geometry at the second intersection, and the grade conditions present at both locations, are factors that all contribute to the operational and safety challenges that long-term improvement alternatives will need to address.

The most significant and recurring operational issue observed at both intersections was vehicles making two-stage turns from the minor road approaches, stopping in the paved median along US-19 before completing the turn across the opposing travel lanes. Neither intersection was designed to accommodate a two-stage crossing. The paved medians at both locations do not meet the typical design guidance thresholds for accommodating passenger vehicles or design vehicles within a median refuge. As a result, vehicles stopping in the median are doing so outside of any intended operational framework, creating undefined conflict points and driver uncertainty regarding right-of-way. For reference, the next intersection to the north along US-19 at Milroy Grose Road features a wider median that meets the threshold for formal two-stage crossing designation, with appropriate signage and pavement markings in place.

It is also worth noting that the New River Gorge region hosts a number of large-scale events throughout the year, most notably Bridge Day, which draws significant crowds and substantially elevated traffic volumes to the area. While these events are acknowledged as part of the overall context of the study area, it is generally not reasonable or

practical to design long-term infrastructure improvements around peak event-day conditions. The recommendations developed as part of this study are therefore intended to address typical visitation conditions rather than extraordinary event-driven demand, though operational strategies may be evaluated separately in the future for event management.

At the first intersection, three consecutive vehicles were observed turning left from Fayette Mine Road, each crossing the northbound lanes and stopping in the median before a sufficient gap in southbound traffic allowed them to complete the movement. With multiple vehicles queued in the median simultaneously, the situation created significant uncertainty among other drivers regarding right-of-way and effectively blocked the median. The National Park Service representative noted that park employees frequently need to make the through movement from Burnwood Campground Drive across US-19 to the Canyon Rim Visitor Center, and that this crossing is exceptionally difficult under normal conditions. In some cases, it is reportedly easier to turn onto US-19, travel to a downstream location, and make a U-turn rather than attempt the direct crossing. This issue is compounded during fog events, which are common in the area due to the proximity of the New River Gorge, as visibility along US-19 is already limited and the lack of formal median crossing accommodations becomes a more acute safety concern.

At the second intersection, a rafting bus was observed making a left turn from Ames Heights Road, crossing the southbound lanes and stopping in the paved median to wait for a gap in northbound traffic. Simultaneously, a smaller vehicle turning left from Lansing-Edmond Road entered the median and positioned itself to the left of the stopped bus. This created a compounded hazard: the smaller vehicle had no sightline to approaching southbound traffic due to the bus obstructing the view, and the smaller vehicle would similarly be hidden from any driver on US-19 southbound attempting a left turn onto Lansing-Edmond Road. The median was effectively blocked during this sequence, with multiple vehicles in conflict and limited visibility for all parties involved.

An additional sight distance concern was noted for drivers stopped at Ames Heights Road waiting to turn left onto US-19. Looking left toward southbound approaching traffic, the vertical curve in the US-19 profile creates restricted stopping sight distance and limited intersection sight distance that prevents a waiting driver from seeing the majority of approaching vehicles until they are already in close proximity to the intersection. This condition, combined with the 65 mph posted speed limit and the frequency of large vehicles such as buses and RVs at this location, represents a meaningful safety concern that warrants further evaluation.

Task 2: Identify Recommendations

The recommendations developed for this study build directly on the long-term concepts previously identified in the 2025 US-19 Corridor Study and the associated public engagement efforts. The field review observations documented in Task 1 were combined with that prior work to refine the long-term solutions for the study area. Consistent with the scope of this task order, only long-term improvement alternatives were considered. Short- and medium-term solutions were not evaluated.

Each alternative was vetted through a multidisciplinary team of B&N subject matter experts and discussed with FRMPO and relevant stakeholders to confirm that the concepts carried forward continue to address local needs and concerns. The purpose of this task is to confirm feasibility and advance two viable long-term alternatives into conceptual layout and planning level cost estimating. Selection of a preferred alternative is not part of this study and is anticipated to occur during a future feasibility study phase.

As part of developing the recommendations, West Virginia 811 (WV811) was contacted to provide notification to any utility companies with assets in the study area. No utility companies provided feedback in response to this notification. The lack of response should not be interpreted to mean that utility assets are absent from the study area, and further utility investigation is recommended during subsequent phases of project development. B&N is also aware that plans are in progress to decommission the existing Burnwood treatment ponds and install a sanitary sewer

connection from Burnwood Campground to the existing sanitary sewer at Ames Heights Road. However, these plans were not made available to B&N at the time of this study and were therefore not incorporated into the conceptual alternatives.

The field review confirmed that any long-term alternative will need to address the following conditions observed at both study area intersections:

- Two-stage crossing movements, where vehicles from the minor approaches stop in a paved median that is not wide enough to be formally designated as a refuge for that movement
- The difficult and frequent through movement from Burnwood Campground Drive across US-19 to the Canyon Rim Visitor Center
- Skewed intersection geometry and limited left-turn sight distance at the second intersection, aggravated by the US-19 vertical curve and the 65 mph posted speed
- A high frequency of large vehicles, including RVs, travel trailers, and rafting buses towing raft trailers
- The need to preserve the through function of US-19 as the primary north-south connector between I-64 and I-79

Two long-term alternatives were carried forward. Both are shown in the conceptual layouts provided in *Appendix B* and are described below.

Alternative 1: Grade-Separated Interchange with Roundabouts

Alternative 1 converts US-19 to free-flow operation through the study area by grade-separating the mainline and relocating all local and turning movements off of US-19. Two “peanut” roundabouts, one on each side of US-19, collect the local road approaches and the ramp terminals, and are connected to one another by a new bridge over US-19. Entrance and exit ramps in both directions tie US-19 to the roundabouts. The bridge also presents a placemaking opportunity to serve as a gateway feature at the park entrance, as illustrated in the concept sketch on the exhibit.

This alternative addresses the observed conditions as follows:

- Eliminates all at-grade crossing and left-turn conflicts on US-19, which removes the two-stage median crossing movement entirely
- Provides a controlled, low-speed connection for the Burnwood Campground Drive to Visitor Center movement through the roundabout and bridge network
- Removes the skew and sight distance constraints at the second intersection by replacing the at-grade junction with ramp terminals at the roundabout
- Accommodates large vehicles through roundabout geometry sized with a mountable truck apron
- Preserves and improves the through function of US-19 by removing all conflicting movements from the mainline

Planning considerations for this alternative include a major bridge structure, ramp construction, and the largest right-of-way footprint of the two options, with a minimum of approximately 19.7 acres of total take, split between National Park Service and privately owned parcels.

Alternative 2: Restricted Crossing U-Turn (RCUT) with Connector Roads

Alternative 2 keeps US-19 at grade and reconfigures how the minor roads access the corridor. The offset minor road approaches are connected by two new connector roads running parallel to US-19, one on each side of the corridor, joining Burnwood Campground Drive to Ames Heights Road on the north and Fayette Mine Road to Lansing-

Edmond Road on the south. Access to US-19 is then handled at two RCUT intersections, where direct crossing and left-turn movements from the minor approaches are redirected to a downstream U-turn bulb.

This alternative addresses the observed conditions as follows:

- Eliminates the two-stage median crossing by removing direct crossing and left-turn movements from the minor approaches
- Reduces the number of conflict points on US-19 and consolidates access into two defined intersections
- Provides U-turn bulbs sized to accommodate the large vehicles common to the area
- Maintains US-19 at grade, which avoids the cost and footprint of a major structure

Planning considerations for this alternative include additional travel distance for movements that must reroute to a U-turn bulb, and a smaller right-of-way footprint than Alternative 1, with a minimum of approximately 13.3 acres of total take, split between National Park Service and privately owned parcels. In a future phase, the need for a traffic signal at the RCUT U-turn locations should be evaluated through a traffic study.

Task 3: Conceptual Layouts and Exhibits

The conceptual layouts are provided in *Appendix B*. Conceptual plan view layouts were developed for two long-term improvement alternatives using available aerial imagery and LiDAR data. Rough draft vertical profiles were also investigated using LiDAR data to estimate grading impacts and provide data for quantity and cost estimates. Approximate limits of disturbance are shown on the plan view layouts for reference.

Task 4: Preliminary Construction Cost Estimates

The preliminary cost estimates are provided in *Appendix C*. Planning level construction cost estimates were prepared for each alternative based on primary cost contributors including pavement, structures, and earthwork. Additional items such as maintenance of traffic and drainage were estimated as a percentage of total construction cost. Estimated costs for completing a feasibility study and detailed design are also included to provide a total project cost for planning purposes.

Task 5: Environmental Desktop Screening

The environmental desktop screening is provided in *Appendix D*. The project location was researched using environmental desktop resources only; no field investigations were performed as part of this study. The intent of this screening was to identify any "red flag" environmental impacts that would need to be addressed as part of future project development.

The environmental desktop screening did not identify any red flag impacts that would preclude either alternative from advancing. The screening did, however, identify several environmental resources within the study limits that will require further evaluation as the project progresses, including potential waters of the U.S., wetland and pond features, potential threatened and endangered species habitat, historic and archaeological resources, and Section 4(f) and Section 6(f) properties associated with the National Park Service lands. Additional field investigations and agency coordination will be required during preliminary and detailed design to confirm the presence or absence of these resources and to determine actual impacts. As previously mentioned, the NPS has indicated the Burnwood Campground treatment ponds will be abandoned prior to this project, which may alter the environmental conditions in the northwestern portion of the study area.

Summary

In summary, the field review confirmed that both study area intersections experience recurring operational and safety challenges that long-term improvements will need to address. Two long-term alternatives were advanced to conceptual layouts and planning-level cost estimates: a grade-separated interchange with roundabouts (Alternative 1) and a restricted crossing U-turn configuration with connector roads (Alternative 2). Both alternatives address the observed conditions while preserving the through function of US-19. Neither alternative is identified as preferred, as alternative selection is anticipated to occur during a future feasibility study phase.

Several potential funding sources may be available to advance the recommended improvements. These include the Better Utilizing Investments to Leverage Development (BUILD) discretionary grant program, the Rural Surface Transportation Grant program, and the Safe Streets and Roads for All (SS4A) program. The Nationally Significant Federal Lands and Tribal Projects (NSFLTP) program may also be applicable given the project's location on National Park Service lands, although any pursuit of NSFLTP funding would need to be advanced through the NPS. It should be noted that the current federal surface transportation authorization is set to expire in September 2026. As a result, the upcoming reauthorization and the funding opportunities it establishes should be closely monitored, as the availability and structure of these and other discretionary programs may change.

To select a preferred alternative and advance the project, B&N recommends that a future feasibility study include, at a minimum, the following:

- Field survey and topographic mapping to supplement the available aerial and LiDAR data
- Property and right-of-way mapping to define ownership and refine the right-of-way footprint of each alternative
- Utility mapping and verification, including coordination on the planned Burnwood treatment pond decommissioning and sanitary sewer connection
- NEPA documentation and environmental field studies, including waters delineation, threatened and endangered species surveys, and cultural resources surveys
- Preliminary roadway design, including plan, profile, and cross sections. Including a general bridge plan and profile for the Alternative 1 grade-separated structure
- Schematic temporary traffic control (TTC) plans
- Drainage analysis
- Geotechnical borings and report
- Updated construction cost estimate(s)
- List of anticipated environmental permits
- Alternatives matrix comparing cost, impacts, right-of-way, constructability, and operational performance to support selection of a preferred alternative

Respectfully submitted,



Stuart Adkins, P.E.
Project Manager

Appendix A – Site Visit Photos



Fayette Mine Road/Burnwood Campground Drive Intersection – Looking north along US-19



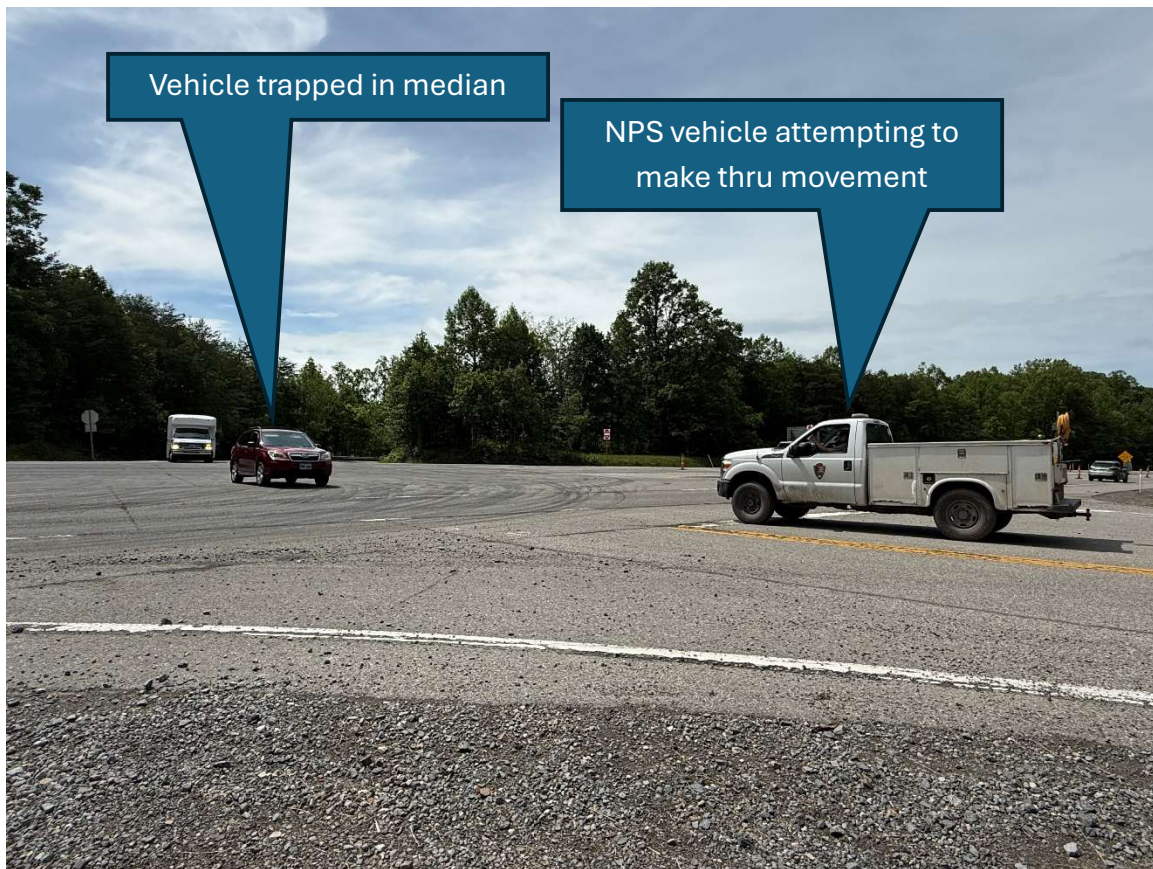
Fayette Mine Road/Burnwood Campground Drive Intersection – Looking south along US-19



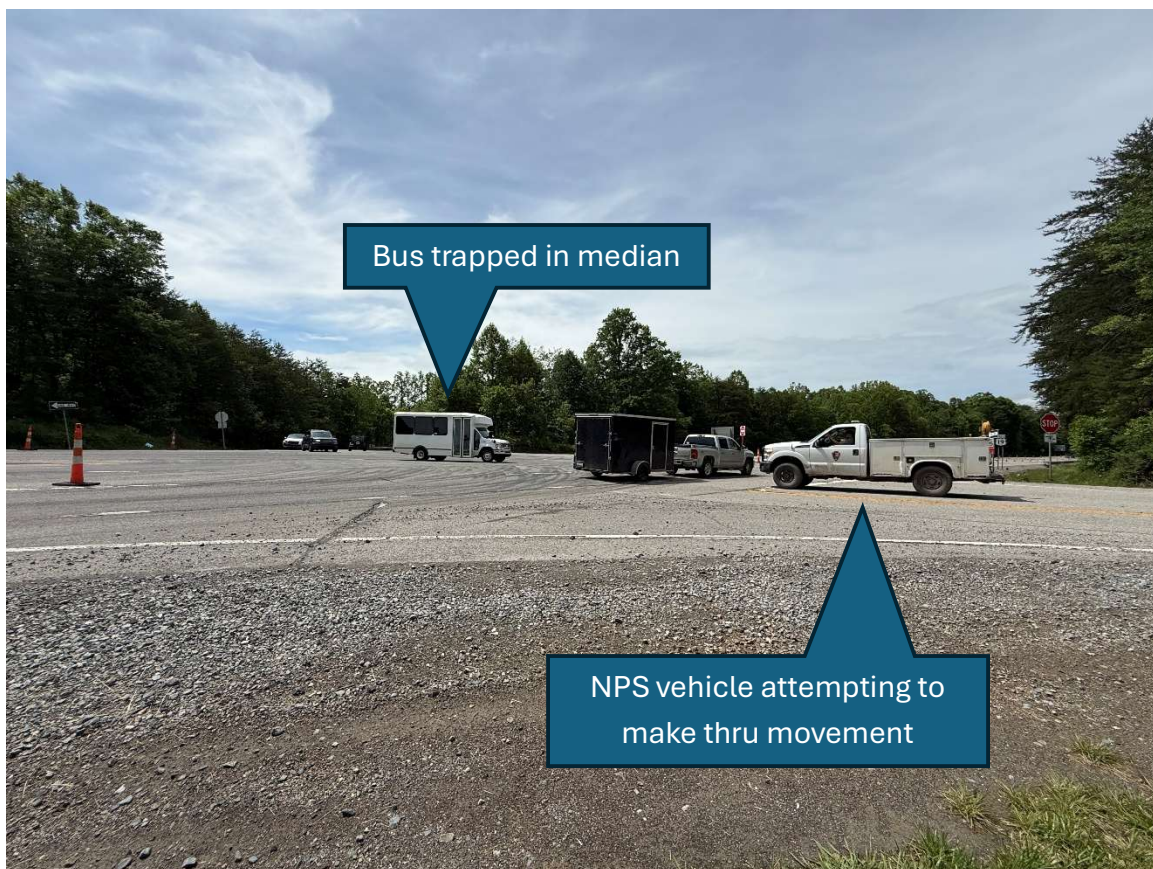
Fayette Mine Road/Burnwood Campground Drive Intersection – Looking East



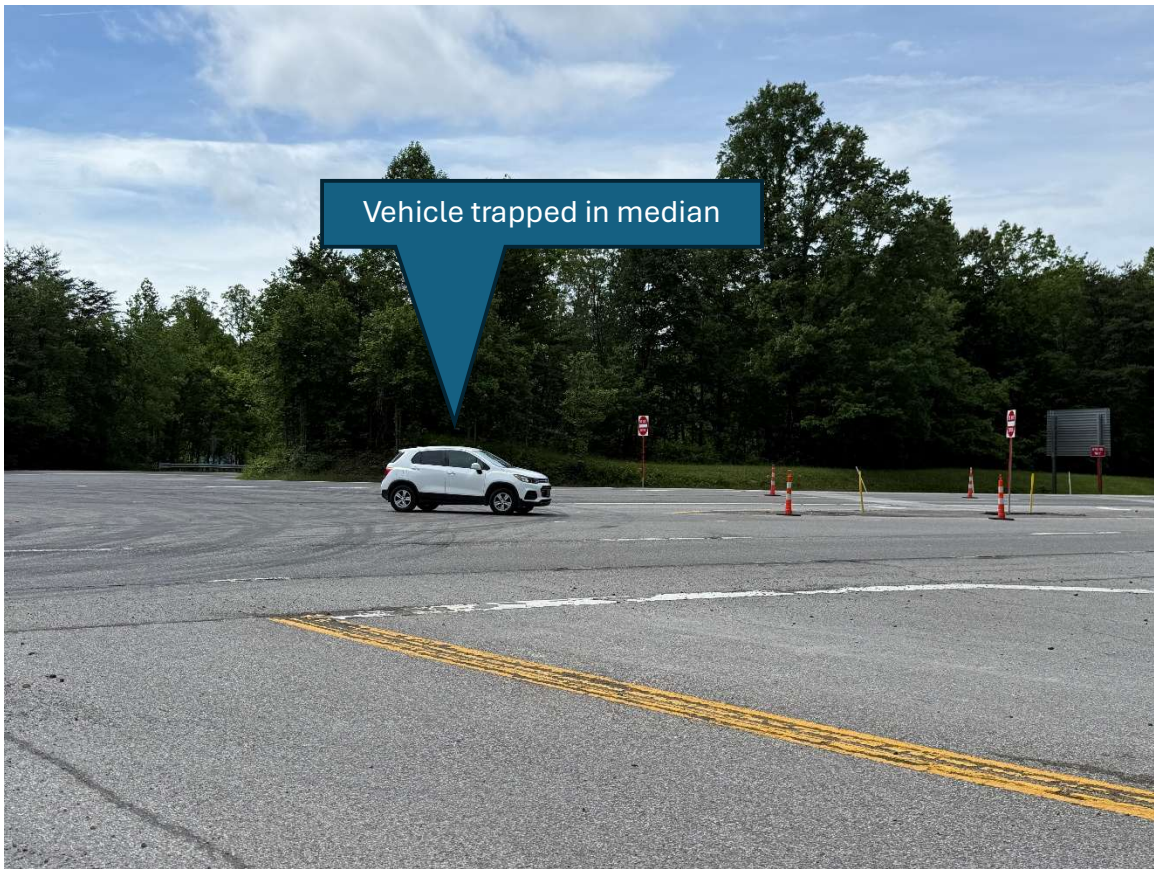
Fayette Mine Road/Burnwood Campground Drive Intersection – Looking East



Fayette Mine Road/Burnwood Campground Drive Intersection – Looking East



Fayette Mine Road/Burnwood Campground Drive Intersection – Looking East



Fayette Mine Road/Burnwood Campground Drive Intersection – Looking East

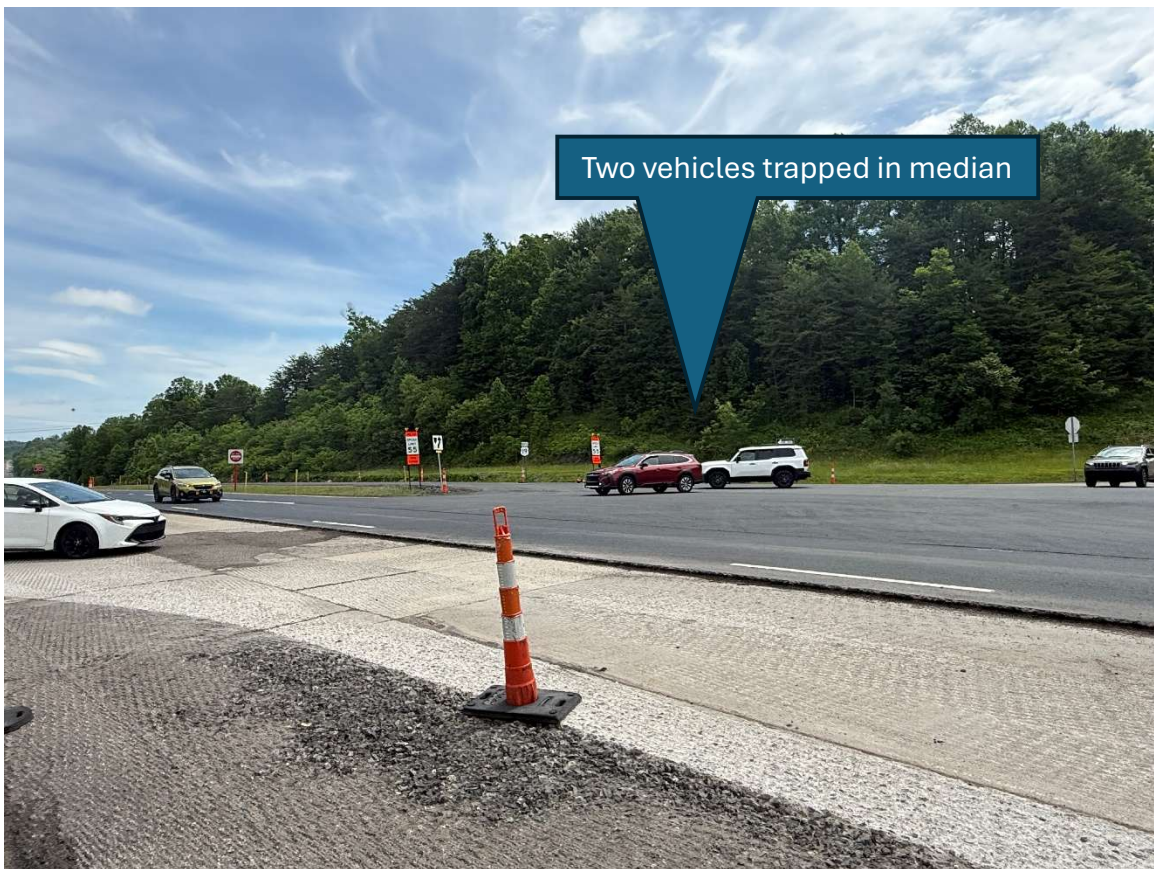


Fayette Mine Road/Burnwood Campground Drive Intersection – Looking East



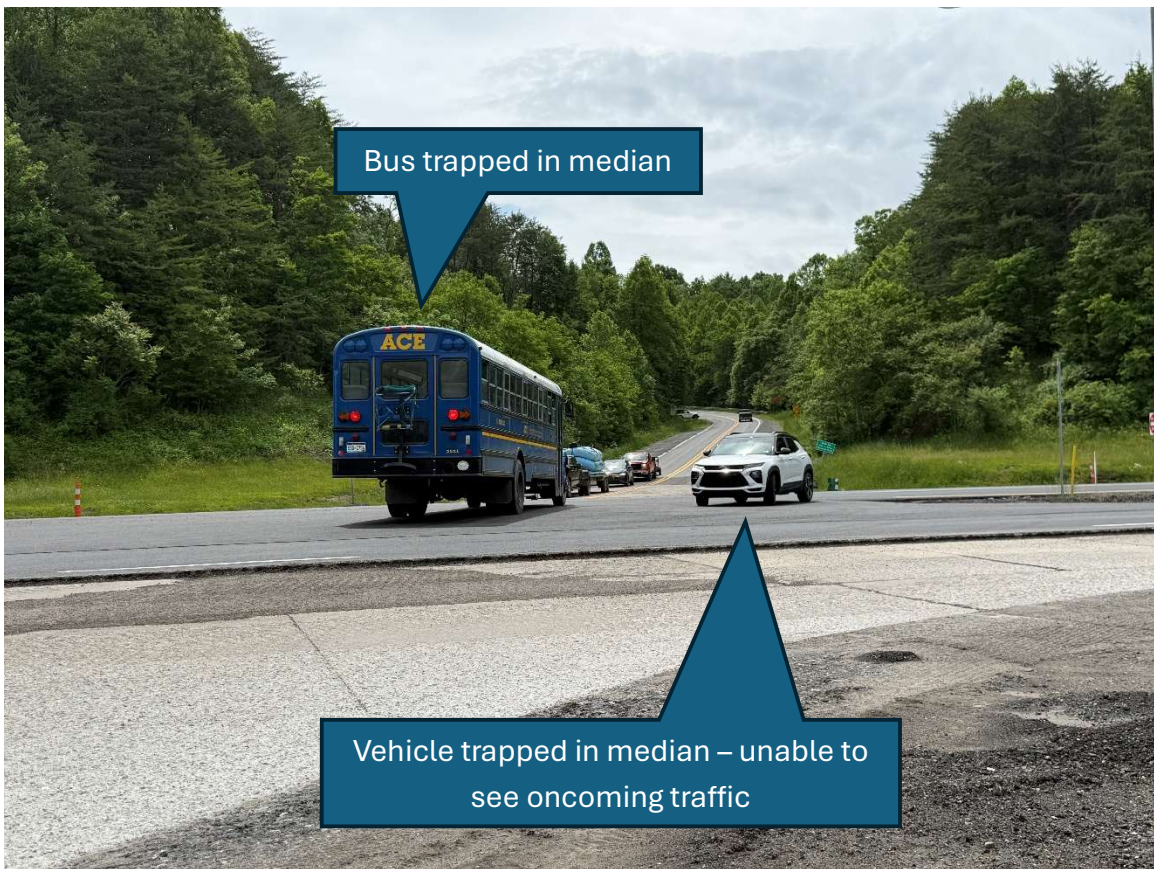
Restricted stopping sight
distance and limited
intersection sight distance

Ames Heights Road/Lansing-Edmond Road Intersection – Looking North

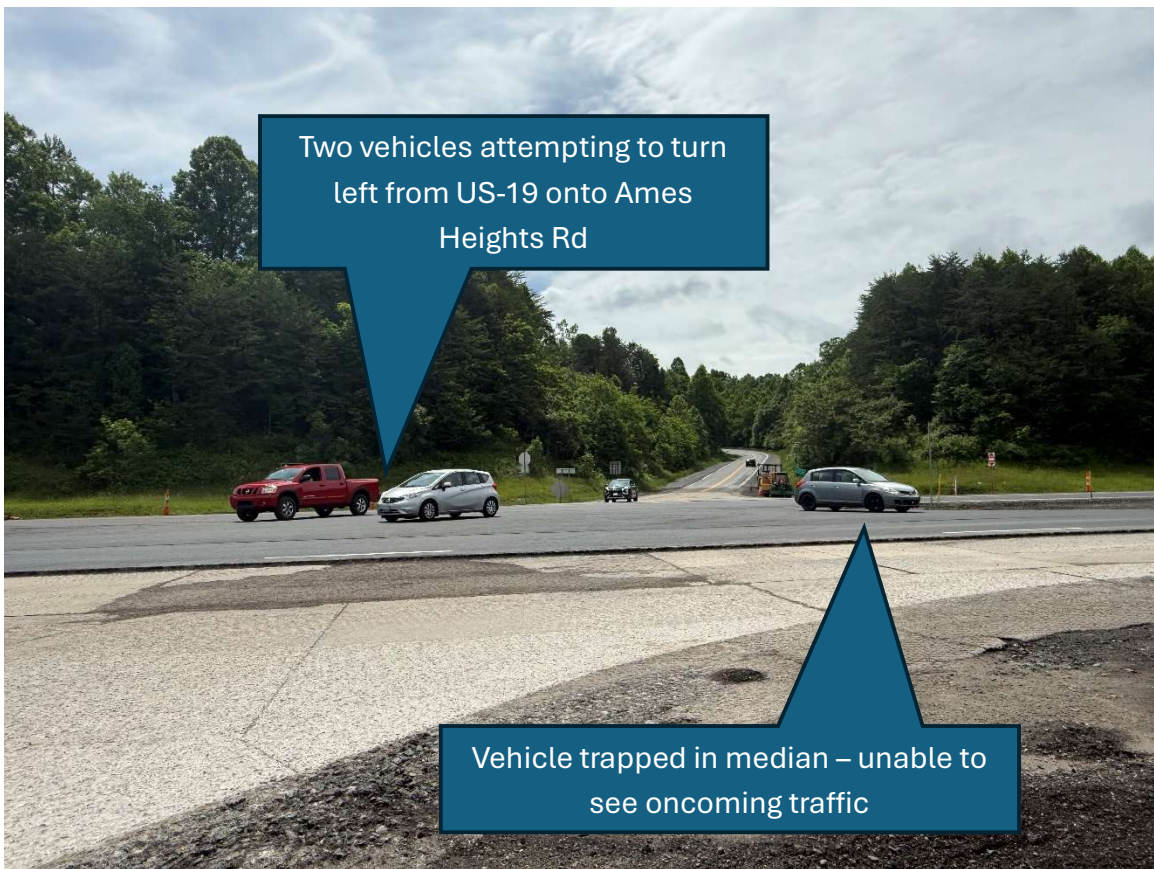


Two vehicles trapped in median

Ames Heights Road/Lansing-Edmond Road Intersection – Looking North



Ames Heights Road/Lansing-Edmond Road Intersection – Looking East



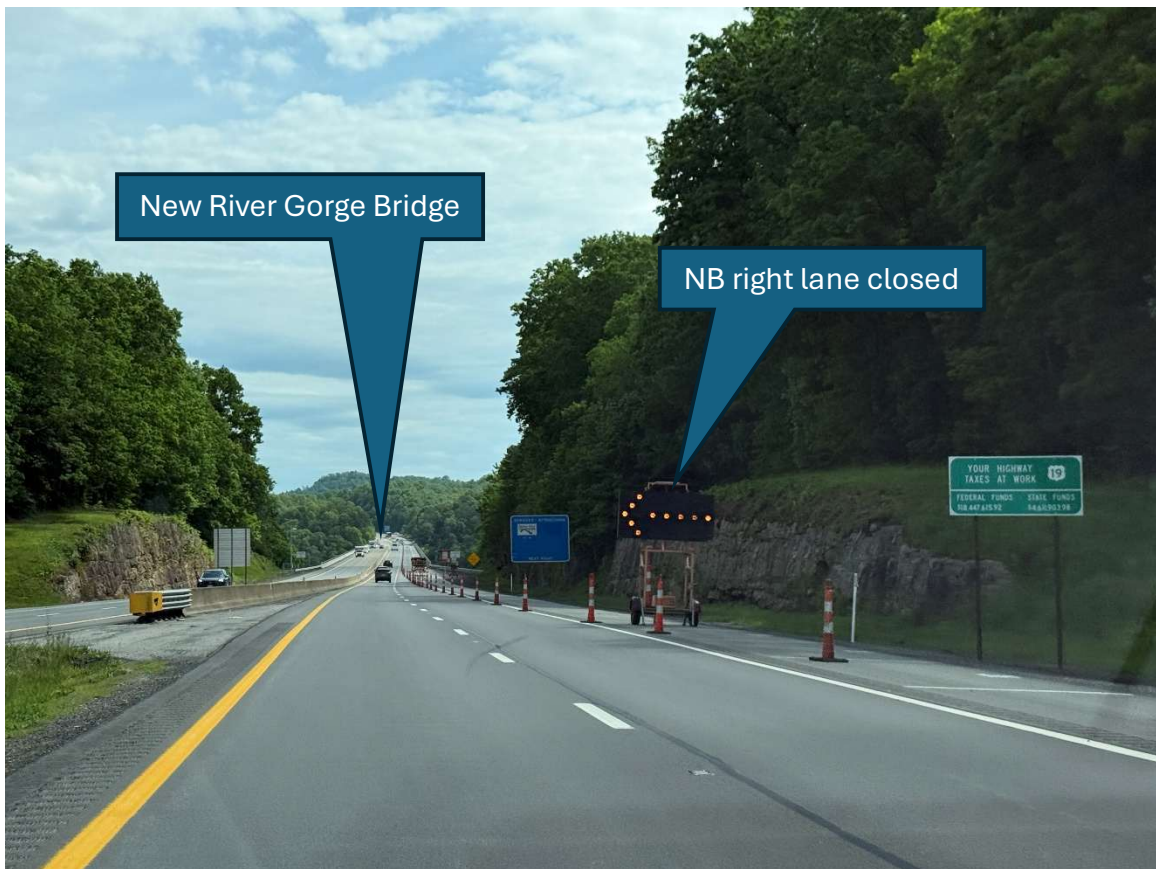
Ames Heights Road/Lansing-Edmond Road Intersection – Looking East



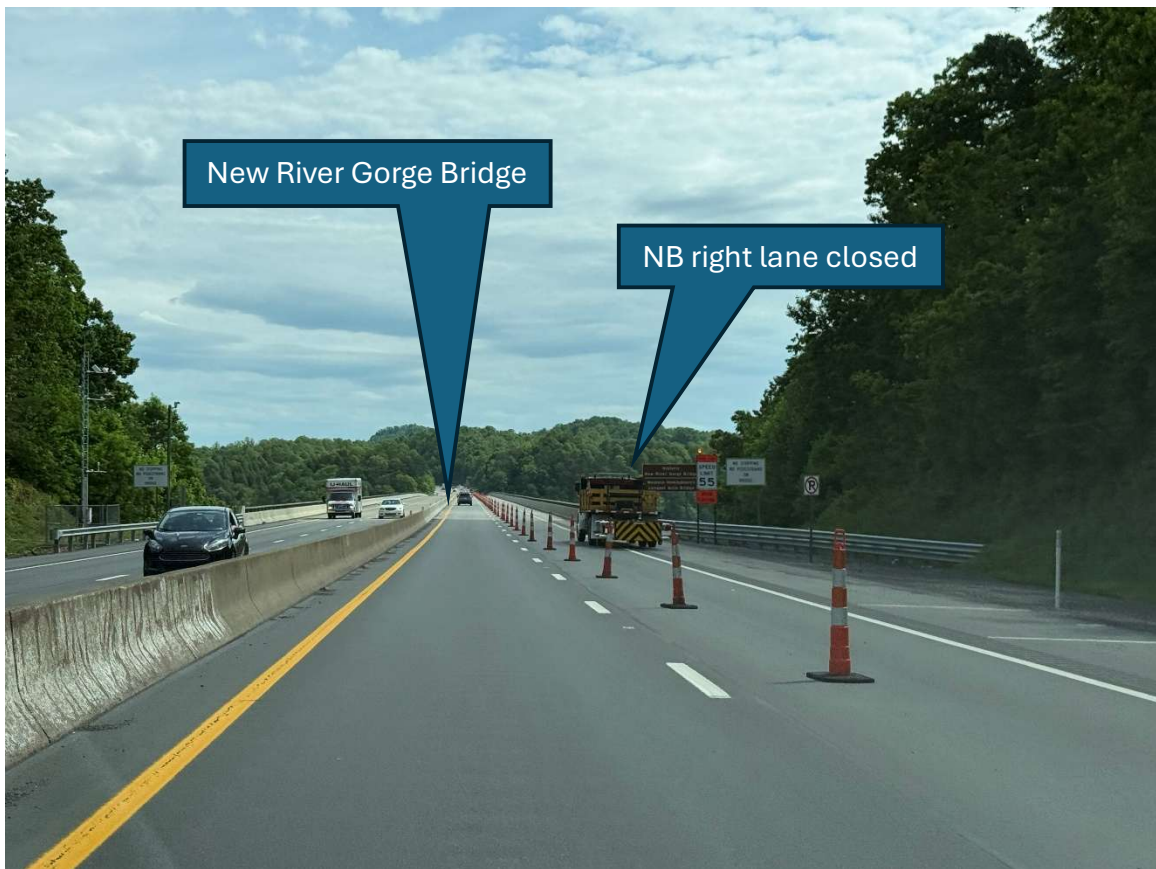
Ames Heights Road/Lansing-Edmond Road Intersection – Looking East



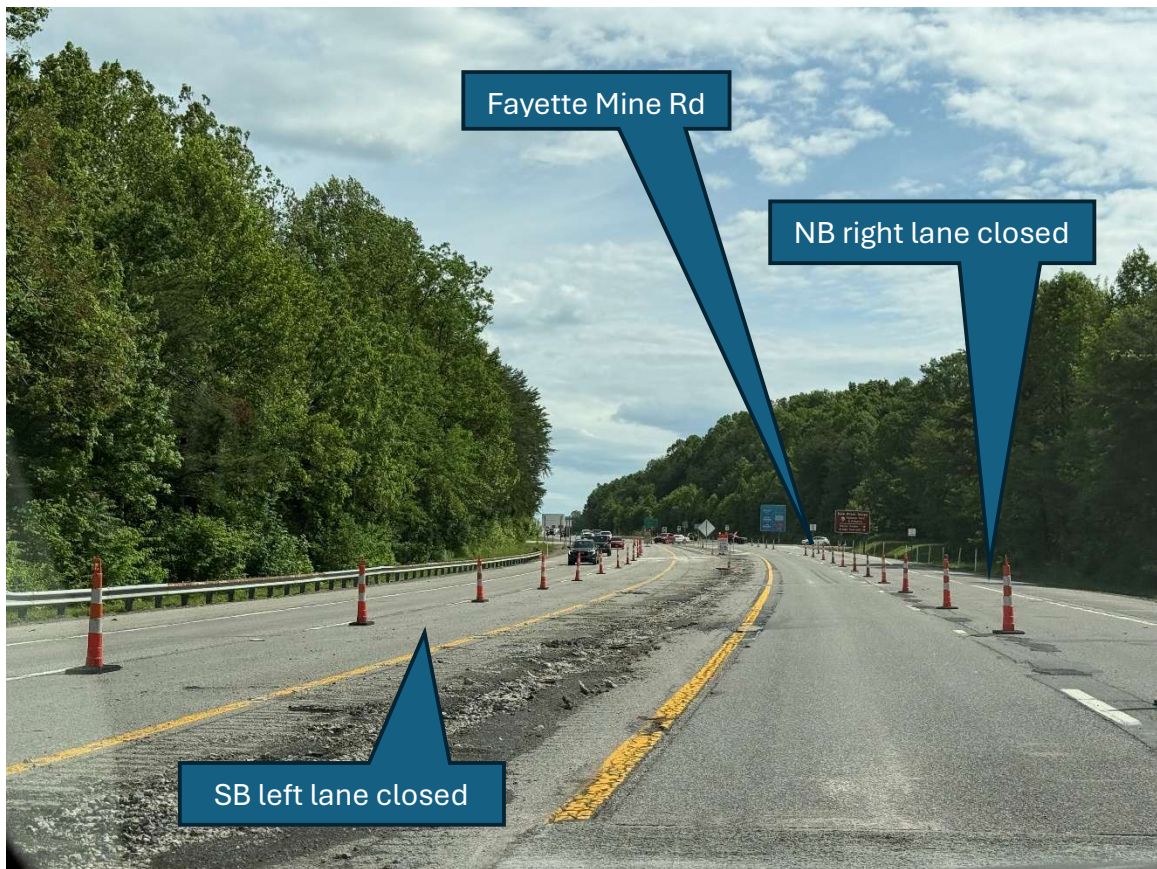
Ames Heights Road/Lansing-Edmond Road Intersection – Looking Northeast



US-19 Northbound – Road conditions during site visit



US-19 Northbound – Road conditions during site visit



US-19 Northbound – Road conditions during site visit

Appendix B –

Conceptual Layouts



INSERT A
CONCEPT BRIDGE SKETCH

BURNWOOD GROUP
CAMPGROUND

EX WATER TREATMENT PONDS
(TO BE DE-COMMISSIONED
UNDER SEPARATE CONTRACT)

1.583 AC ROW TAKE

8.025 AC ROW TAKE

EX OVERHEAD POWER
LINES TO BE ADJUSTED
ABOVE FINISHED GRADE
2.530 AC ROW TAKE

AMES HEIGHTS ROAD

BURNWOOD CAMPGROUND DRIVE

2.781 AC ROW TAKE

PROPOSED BRIDGE
(SEE INSERT A)

0.639 AC ROW TAKE

4.144 AC ROW TAKE
HALL TEKOA & MYRA SUE
PID: 01 4900470000
SURF 6 554/ LANSING
DEED BOOK 504, PAGE 121
CALLED 6.55 AC

FAYETTE MINE ROAD

EX OVERHEAD
POWER LINES

ROW NOTE:
PUBLICLY AVAILABLE MAPS SHOW THE AREA
OF PROPOSED FAYETTE MINE ROAD AND NB
EXIT RAMP AS EXISTING R/W. MAPS PROVIDED
BY NPS IDENTIFY IT AS NPS PROPERTY.
FURTHER INVESTIGATION WILL BE REQUIRED
FOR SUBSEQUENT DESIGN PHASES

BRIDGEWALK

US POST OFFICE

CEMETERY

PROPOSED
PRIVATE
DRIVE

LANSING-EDMOND ROAD

LEGEND

- EXISTING PAVEMENT TO BE REMOVED
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE
- PROPOSED MOUNTABLE TRUCK APRON
- PROPERTY IMPACTS - OWNED BY NPS
- PROPERTY IMPACTS - OWNED BY OTHERS

DESIGN CRITERIA

DESIGN SPEEDS:

- FAYETTE MINE ROAD: 35 MPH
- BURNWOOD CAMPGROUND DRIVE: 25 MPH
- AMES HEIGHTS ROAD: 25 MPH
- LANSING-EDMOND ROAD: 35 MPH
- PROPOSED BRIDGE: 25 MPH
- US-19: 65 MPH
- RAMPS: 45 MPH

MAXIMUM SUPERELEVATION RATE (e_{max}): 8%

RAMP DESIGN

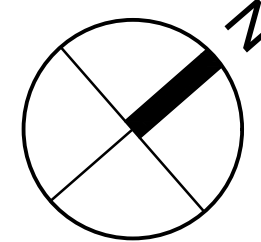
- CONTROLLING FEATURE SPEED: 20 MPH
- LANE WIDTH: 20'
- RIGHT SHOULDER WIDTH: 8'
- LEFT SHOULDER WIDTH: 4'

LOCAL ROADS

- LANE WIDTH: 11'
- SHOULDER WIDTH: 6'

ROUNDABOUTS

- ICD: 130'
- LANE WIDTH: 20' (CURB-TO-CURB)



500 LEE STREET EAST
SUITE 750
CHARLESTON, WV 25301

B&N
BURGESS & NIPLE

NEW RIVER GORGE NATIONAL PARK
ENTRANCE INTERSECTION
IMPROVEMENTS
FOR
FAYETTE RALEIGH MPO

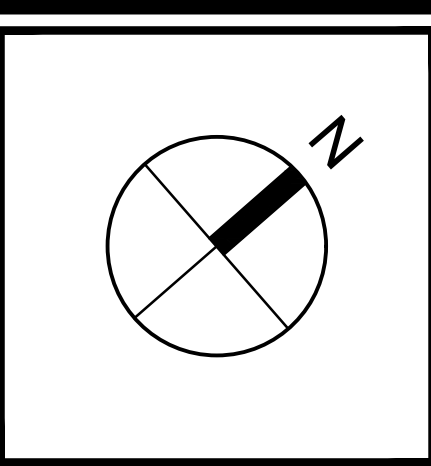
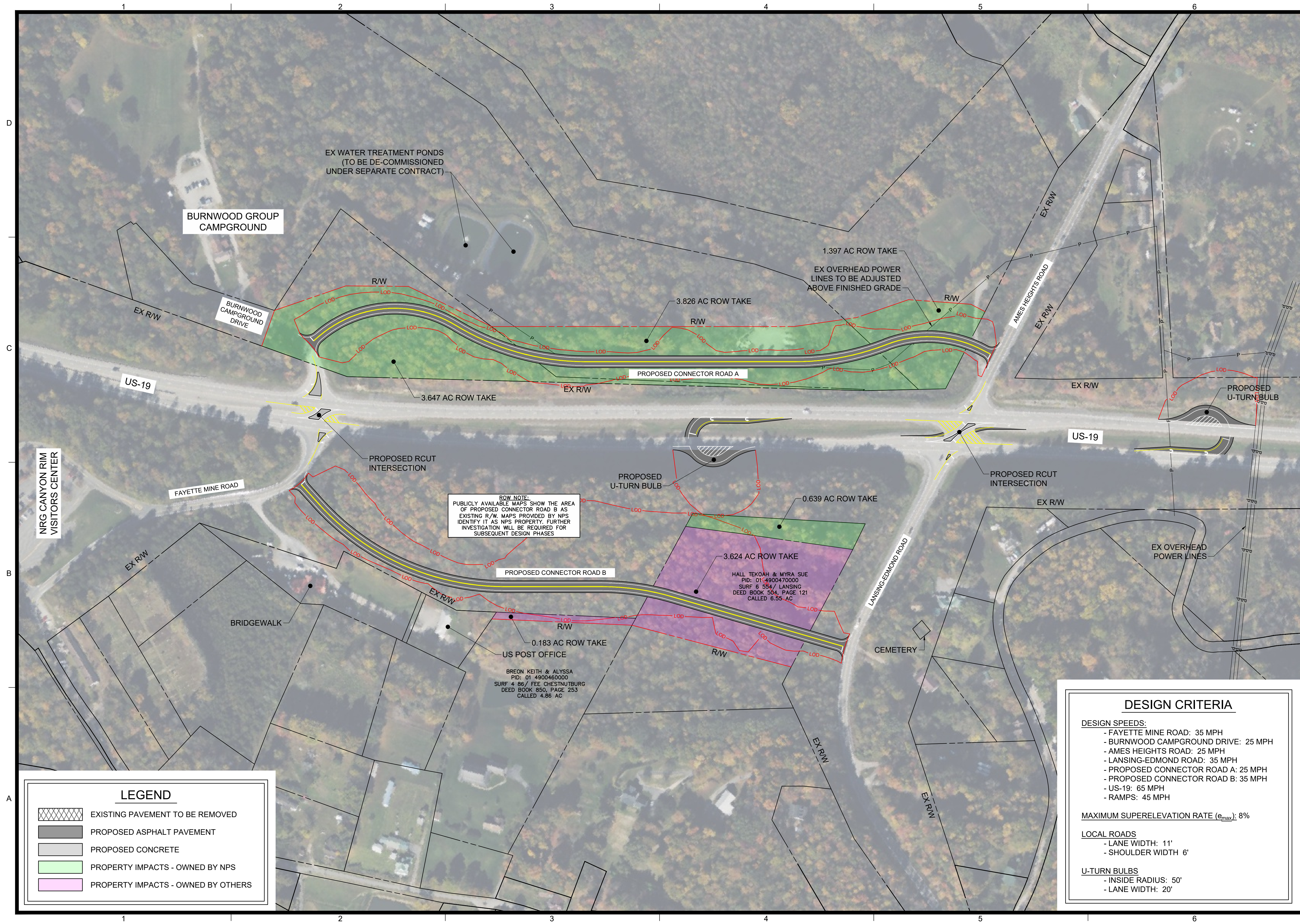
REVISIONS	DESCRIPTION	DATE
NO.		

JOB NO:	64027
DATE:	06/30/2026
DESIGNED BY:	SHA
DRAWN BY:	SHA
CHECKED BY:	MWL
APPROVED BY:	
SCALE:	1" = 125'

NOT FOR CONSTRUCTION

SHEET IDENTIFICATION
ALTERNATIVE 1

SHEET: 1 OF 1



500 LEE STREET EAST
SUITE 750
CHARLESTON, WV 25301

B&N
BURGESS & NIPLE

NEW RIVER GORGE NATIONAL PARK
ENTRANCE INTERSECTION
IMPROVEMENTS
FOR
FAYETTE RALEIGH MPO

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APPROVED BY:	
SCALE:	1" = 125'

NOT FOR CONSTRUCTION

SHEET IDENTIFICATION OPTION 2

Appendix C –

Preliminary Construction Cost Estimates

NEW RIVER GORGE ENTRANCE INTERSECTIONS STUDY - ALTERNATIVE 1
CONSTRUCTION COST ESTIMATE
FAYETTE RALEIGH METROPOLITAN PLANNING ORGANIZATION

SUMMARY OF ESTIMATED QUANTITIES					COST INFORMATION	
ITEM	ALT	DESCRIPTION	UNITS	QUANTITY	UNIT COST	ITEM COST
ROADWAY						
201001-000		CLEARING AND GRUBBING	LS	1	\$1,165,000.00	\$1,165,000
204001-000		MOBILIZATION	LS	1	\$2,700,000.00	\$2,700,000
207001-001		UNCLASSIFIED EXCAVATION	CY	313,887	\$18.00	\$5,649,961
207002-000		SUBGRADE	CY	9,888	\$100.00	\$988,780
207034-000		FABRIC FOR SEPARATION	SY	52,456	\$2.50	\$131,140
311006-001		OPEN GRADED FREE DRAINING BASE COURSE	CY	7,394	\$240.00	\$1,774,597
401 ITEMS		ASPHALT PAVEMENT	TN	27,700	\$175.00	\$4,847,563
605 ITEMS		DRAINAGE ALLOWANCE (10% OF ROADWAY ITEMS w/o BRIDGE & MOB)	LS	1	\$1,537,000.00	\$1,537,000
607001-001		TYPE 1 GUARDRAIL, CLASS I	LF	422	\$50.00	\$21,100
610003-001		COMBINATION CONCRETE CURB AND GUTTER, TYPE I	LF	6,265	\$75.00	\$469,880
610007-001		RAISED CONCRETE TRAFFIC ISLAND	SY	3,136	\$85.00	\$266,551
636 ITEMS		TEMPORARY TRAFFIC CONTROL	LS	1	\$375,000.00	\$375,000
642 ITEMS		TEMPORARY POLLUTION CONTROL	LS	1	\$285,000.00	\$285,000
652 ITEMS		PERMANENT SEEDING AND MULCHING	LS	1	\$105,000.00	\$105,000
663 ITEMS		SIGNING AND PAVEMENT MARKINGS	LS	1	\$450,000.00	\$450,000
BRIDGE						
		STRUCTURE	SF	11,830	\$750.00	\$8,872,500
RIGHT OF WAY						
		5 PARCELS	LS	1	\$55,000.00	\$55,000

ROADWAY COSTS	\$20,767,000
BRIDGE COSTS	\$8,872,500
RIGHT OF WAY COSTS	\$55,000
UTILITY RELOCATIONS	\$100,000
E&C (13%)	\$2,720,000
COMBINED CONSTRUCTION COSTS	\$32,515,000
FEASIBILITY STUDY	\$675,000
ENGINEERING AND DESIGN SERVICES (10%)	\$3,252,000
ENVIRONMENTAL & PERMITTING (3%)	\$976,000
PROFESSIONAL & LEGAL SERVICES (1%)	\$326,000
ADMINISTRATION (5%)	\$1,626,000
COMBINED PROJECT COSTS	\$39,370,000
PROJECT CONTINGENCY (20%)	\$7,874,000
TOTAL ESTIMATED PROJECT COST	\$47,244,000

NEW RIVER GORGE ENTRANCE INTERSECTIONS STUDY - ALTERNATIVE 2
CONSTRUCTION COST ESTIMATE
FAYETTE RALEIGH METROPOLITAN PLANNING ORGANIZATION

SUMMARY OF ESTIMATED QUANTITIES					COST INFORMATION	
ITEM	ALT	DESCRIPTION	UNITS	QUANTITY	UNIT COST	ITEM COST
ROADWAY						
201001-000		CLEARING AND GRUBBING	LS	1	\$520,000.00	\$520,000
204001-000		MOBILIZATION	LS	1	\$751,000.00	\$751,000
207001-001		UNCLASSIFIED EXCAVATION	CY	216,001	\$18.00	\$3,888,023
207002-000		SUBGRADE	CY	2,750	\$100.00	\$275,012
207034-000		FABRIC FOR SEPARATION	SY	17,397	\$2.50	\$43,492
311006-001		OPEN GRADED FREE DRAINING BASE COURSE	CY	2,750	\$240.00	\$660,029
401 ITEMS		ASPHALT PAVEMENT	TN	6,257	\$175.00	\$1,094,892
602 ITEMS		DRAINAGE ALLOWANCE (10% OF ROADWAY ITEMS w/o MOB.)	LS	1	\$134,000.00	\$134,000
610003-001		COMBINATION CONCRETE CURB AND GUTTER, TYPE I	LF	694	\$75.00	\$52,055
610007-001		RAISED CONCRETE TRAFFIC ISLAND	SY	335	\$85.00	\$28,446
636 ITEMS		TEMPORARY TRAFFIC CONTROL	LS	1	\$150,000.00	\$150,000
642 ITEMS		TEMPORARY POLLUTION CONTROL	LS	1	\$170,000.00	\$170,000
652 ITEMS		PERMANENT SEEDING AND MULCHING	LS	1	\$45,000.00	\$45,000
660 ITEMS		TRAFFIC SIGNALS	LS	1	\$400,000.00	\$400,000
663 ITEMS		SIGNING AND PAVEMENT MARKINGS	LS	1	\$45,000.00	\$45,000
RIGHT OF WAY						
		6 PARCELS	LS	1	\$49,000.00	\$49,000

ROADWAY COSTS	\$8,257,000
RIGHT OF WAY COSTS	\$49,000
UTILITY RELOCATIONS	\$100,000
E&C (13%)	\$1,093,000
COMBINED CONSTRUCTION COSTS	\$9,499,000
FEASIBILITY STUDY	\$675,000
ENGINEERING AND DESIGN SERVICES (10%)	\$950,000
ENVIRONMENTAL & PERMITTING (3%)	\$285,000
PROFESSIONAL & LEGAL SERVICES (1%)	\$95,000
ADMINISTRATION (5%)	\$475,000
COMBINED PROJECT COSTS	\$11,979,000
PROJECT CONTINGENCY (20%)	\$2,396,000
TOTAL ESTIMATED PROJECT COST	\$14,375,000

Appendix D –

Environmental Desktop Screening

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Environmental Screening Document

US 19 New River Gorge National Park Entrance Intersections Study

This Environmental Screening for the US 19 New River Gorge National Park Entrance Intersections Study project was completed by Burgess & Niple (B&N) on June 30, 2026. The desktop reconnaissance utilized aerial imagery, USGS topographic mapping, USFWS National Wetland Inventory (NWI) mapping, USFWS Threatened & Endangered Species IPAC, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), and NEPAassist. Mapping and data from these various agencies are located as attachments. Resources identified during the desktop reconnaissance are discussed below. For this project, two possible alternatives, identified as Alternative 1 and 2, will be analyzed.

Alternative 1

Aerial imagery was assessed using Google Imagery. Alternative 1 of the US 19 New River Gorge National Park Entrance Intersections Study is located within Fayette County, West Virginia. The project study area is located along US Highway 19, beginning approximately 0.5 miles west of the New River. It continues northeast along US Highway 19, ending approximately 0.1 miles northeast of the intersection of US Highway 19 and Lansing Edmond Road. The study area includes a buffer north and south of US Highway 19, ranging from 0.15 miles to 0.3 miles. The study area is located on the Fayetteville, WV USGS 7.5-minute quadrangle, and is moderately hilly, ranging from 1740 to 1822 feet above mean sea level.

According to the Environmental Protection Agency (EPA) Waters GeoViewer tool, the study area is within the 12-digit hydrologic unit codes (HUC) 0505 0004 0305 (Mill Creek- New River), and 0505 0004 0304 (Wolf Creek-New River). The United States Geological Survey (USGS) StreamStats depicts two (2) streams within the study area. Unnamed Tributary (UNT) 1 begins near the United States Postal Office, continues under Visitor Center Road, and runs parallel to US Highway 19 before exiting the study area. UNT 1 has a drainage area of 0.06 square miles in the project study area and drains directly into the New River. UNT 2 is located in the northwest portion of the study area, running along the northern border for approximately 800 feet before exiting the study area. UNT 2 has a drainage area of 0.05 square miles within the study area and drains directly into the New River. "Waters of the U.S." (WOTUS) are subject to federal permitting requirements administered by the USACE and the West Virginia Department of Environmental Protection (DEP) under the Clean

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Water Act (CWA) Sections 404 and 401 as well as Sections 9 and 10 of the Rivers & Harbors Act. WOTUS is currently defined in 33 CFR 328.2 and 40 CFR 120.2 and includes tributaries of Traditionally Navigable Waters (TNW) that are relatively permanent, standing or continuously flowing bodies of water. As UNT 1 and 2 likely fall under this category, associated permitting will likely be required.

The USFWS National Wetland Inventory (NWI) mapping depicts two freshwater pond features classified as PUBFx located in the northwestern portion of the study area, north of Burnwood Campground Drive. These features have been identified as the Burnwood Treatment Ponds, which serve as water treatment ponds and would not be regulated waterbodies under the Clean Water Act. An additional freshwater pond feature classified as PUBFh is located in the southern portion of the study area, directly east of the United States Postal Office. Aerial imagery depicts the area as being primarily forested, with US Highway 19 and its maintained right of way running through the center. Prior to construction within the study area, a waters delineation will need to be performed in order to determine presence/absence of regulated water bodies such as streams and wetlands. In addition to federally regulated waters, non-federally regulated waters are subject to state permitting requirements in West Virginia. Any impacts to federally non-jurisdictional streams or wetlands are subject to a West Virginia State Waters Permit through the WVDEP as authorized by WV Code §22-11-8(b)(3). Projects must comply with State Water Quality Standards (§47CSR2) and Antidegradation Implementation Rule (§60CSR5). In addition, any impacts to regulated streams requires a Stream Activity Permit through the WVDNR – Office of Land and Streams. The study area is within the FEMA FIRM panel 54019C0200D effective 9/3/2010. According to FEMA's National Flood Hazard Layer map, the study area is not mapped within a flood hazard zone, indicating minimal flood hazard. Coordination with the local floodplain administrator will not be required.

In May 2026, the Information for Planning and Consultation (IPaC) tool was utilized to obtain a list of species within range of the project area. The project area is within range of the following threatened and endangered species.

- Indiana Bat (*Myotis sodalist*): Endangered
- Gray Bat (*Myotis grisescens*): Endangered
- Northern Long-eared Bat (*Myotis septentrionalis*): Endangered
- Tricolored Bat (*Perimyotis subflavus*): Proposed Endangered

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- Virginia Big-eared Bat (*Corynorhinus townsendii virginianus*): Endangered
- Pink Mucket (*Lampsilis abrupta*): Endangered
- Sheepnose Mussel (*Plethobasus cyphus*): Endangered
- Snuffbox Mussel (*Epioblasma triquetra*): Endangered
- Spectaclecase (mussel) (*Cumberlandia monodonta*): Endangered
- Monarch Butterfly (*Danaus Plexippus*): Proposed Threatened
- Virginia Spiraea (*Spiraea virginiana*): Threatened

The project is within known Indiana Bat habitat, which may include spring staging, fall swarming, and winter hibernacula, and summer roosting. A bat survey may be required. Coordination with the WVFO (West Virginia Field Office) and USFWS will be necessary. In addition, to protect bat species, the USFWS and WVFO will likely recommend seasonal tree clearing from October 1 to March 31.

No impacts to mussel species are anticipated because there are no mussel streams or rivers mapped within proposed project boundary. However, the project is located within a watershed that is known to support mussel species. Coordination with WVFO is required to conduct a more detailed project specific review to ensure no adverse effects to this species are anticipated.

Hazardous materials were assessed using USEPA's NEPAAssist tool and the West Virginia Department of Environmental Protection's (WVDEP) GIS Viewer V2.1. One water discharger is within the project study area, located at the Burnwood Treatment Ponds. Additional hazardous materials may be present within or adjacent to the study area. A Phase I Environmental Site Assessment may be necessary prior to construction. There are no current compliance violations identified within the study area.

The West Virginia State Historic Preservation Office (WV SHPO) cites a historical survey performed in 1991 prepared by the Institute of Tech & Industrial Archaeology. Two historical sites are listed in the project study area, located in the northwestern corner of the study area. Both sites are labeled as recreational and cultural buildings. Because the project area is located in a relatively undisturbed area, an archaeological survey will likely be required.

WV SHPO does not list any cultural resources within the project study area. However, due to the proximity of the New River Gorge Bridge and other adjacent historical sites, a Phase I Cultural Resources Survey will be required.

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The Burnwood Group Campground, Burnwood Trail, and Mountain State Campground are located within the project study area and are owned by the National Park Service. These properties may qualify as 4(f) resources. Based on the proposed project limits, the project will incorporate land from the Burnwood Group campground and NRG National Park, an Individual 4(f) resource evaluation is likely required. No use 4(f) coordination is likely required for Burnwood Trail and Mountain State Park. Additional trails, scenic overlooks, and campgrounds are located adjacent to the study area.

The New River Gorge National Park and Preserve is a 6(f) resource and has received investments from the Land and Water Conservation Fund (LWCF) over many years totaling more than \$56 million. Conversion of the New River Gorge National Park and Preserve into private or non-recreational use receives a Conversion 6(f) impact determination. Coordination with the West Virginia Department of Commerce, which acts as the LWCF State Liaison Office, is required and a conversion determination is likely.

The study area is located within the unincorporated area of Lansing, WV and is subject to development codes. The project is located entirely within Fayette County, which is in attainment for all criteria air pollutants. If the project moves a through lane more than 50% closer to a Noise Sensitive Receptor such as one of the neighboring campgrounds, a noise survey may be required.

Alternative 2

Alternative 2 of the US 19 New River Gorge National Park Entrance Intersections Study, encompasses the same study area and environmental considerations described for Alternative 1, but extends an additional 0.4 miles northeast along US Highway 19. The buffer for this extension is approximately 600 feet, tapering to approximately 400 feet.

According to the Environmental Protection Agency (EPA) Waters GeoViewer tool, the study area is within the 12-digit hydrologic unit codes (HUC) 0505 0004 0305 (Mill Creek- New River), and 0505 0004 0304 (Wolf Creek-New River). The United States Geological Survey (USGS) StreamStats depicts three (3) streams within the study area. Unnamed Tributary (UNT) begins near the United States Postal Office, continues under Visitor Center Road, and runs parallel to US Highway 19 before exiting the study area. UNT 1 has a drainage area of 0.06 square miles in the study area and drains directly into the New River. UNT 2 is located in the northwest portion of the study area, running along the northern border for approximately 800 feet before exiting the study area. UNT 2 has a drainage area of 0.05 square miles within the study area and drains directly into the New River. UNT 3 is located in the northeast corner of the study area, south of US Highway 19. UNT 3 has a drainage

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area of 0.04 square miles within the study area, and drains into Mill Creek, which connects to the New River. “Waters of the U.S.” (WOTUS) are subject to federal permitting requirements administered by the USACE and the West Virginia Department of Environmental Protection (DEP) under the Clean Water Act (CWA) Sections 404 and 401 as well as Sections 9 and 10 of the Rivers & Harbors Act. WOTUS is currently defined in 33 CFR 328.2 and 40 CFR 120.2 and includes tributaries of Traditionally Navigable Waters (TNW) that are relatively permanent, standing or continuously flowing bodies of water. As UNT 1, 2, and 3 likely fall under this category, associated permitting will be required.

The USFWS National Wetland Inventory (NWI) mapping depicts two freshwater pond features classified as PUBFx located in the northwestern portion of the study area, north of Burnwood Campground Drive. These features have been identified as the Burnwood Treatment Ponds, which serve as water treatment ponds and would not be regulated waterbodies under the Clean Water Act. Two additional freshwater pond features classified as PUBFh are located in study area, one in the southern portion of the study area, directly east of the United States Postal Office and the other is in the northeastern portion of the study area, south of Oscar White Drive. Aerial imagery depicts the area as being primarily forested, with US Highway 19 and its maintained right of way running through the center. Prior to construction within the study area, a waters delineation will need to be performed in order to determine presence/absence of regulated water bodies such as streams and wetlands. In addition to federally regulated waters, non-federally regulated waters are subject to state permitting requirements in West Virginia. Any impacts to federally non-jurisdictional streams or wetlands are subject to a West Virginia State Waters Permit through the WVDEP as authorized by WV Code §22-11-8(b)(3). Projects must comply with State Water Quality Standards (§47CSR2) and Antidegradation Implementation Rule (§60CSR5). In addition, any impacts to regulated streams requires a Stream Activity Permit through the WVDNR – Office of Land and Streams.

In May 2026, the Information for Planning and Consultation (IPaC) tool was utilized to obtain a list of species within range of the project area. The project area is within range of the following threatened and endangered species.

- Indiana Bat (*Myotis sodalist*): Endangered
- Gray Bat (*Myotis grisescens*): Endangered
- Northern Long-eared Bat (*Myotis septentrionalis*): Endangered

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- Tricolored Bat (*Perimyotis subflavus*): Proposed Endangered
- Virginia Big-eared Bat (*Corynorhinus townsendii virginianus*): Endangered
- Pink Mucket (*Lampsilis abrupta*): Endangered
- Sheepnose Mussel (*Plethobasus cyphus*): Endangered
- Snuffbox Mussel (*Epioblasma triquetra*): Endangered
- Spectaclecase (mussel) (*Cumberlandia monodonta*): Endangered
- Monarch Butterfly (*Danaus Plexippus*): Proposed Threatened
- Virginia Spiraea (*Spiraea virginiana*): Threatened

The project is within known Indiana Bat habitat, which may include spring staging, fall swarming, and winter hibernacula, and summer roosting. A bat survey may be required. Coordination with the WVFO (West Virginia Field Office) and USFWS will be necessary. In addition, to protect bat species, the USFWS and WVFO will likely recommend seasonal tree clearing from October 1 to March 31.

No impacts to mussel species are anticipated because there are no mussel streams or rivers mapped within proposed project boundary. However, the project is located within a watershed that is known to support mussel species. Coordination with WVFO is required to conduct a more detailed project specific review to ensure no adverse effects to this species are anticipated.

Hazardous materials were assessed using USEPA's NEPAAssist tool and the West Virginia Department of Environmental Protection's (WVDEP) GIS Viewer V2.1. One water discharger is within the project study area, located at the Burnwood Treatment Ponds. Additional hazardous materials may be present within or adjacent to the study area. A Phase I Environmental Site Assessment may be necessary prior to construction. There are no current compliance violations identified within the study area.

The West Virginia State Historic Preservation Office (WV SHPO) cites an architecture survey performed in 1991 prepared by the Institute of Tech & Industrial Archaeology. Two architecture sites are listed in the project study area, located in the northwestern corner of the study area. Both sites are labeled as recreational and cultural buildings. Because the project area is located in a relatively undisturbed area, an archaeological survey will likely be required.

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WV SHPO does not list any cultural resources within the project study area. However, due to the proximity of the New River Gorge Bridge and other adjacent historical sites, a Phase I Cultural Resources Survey will be required.

The Burnwood Group Campground, Burnwood Trail, and Mountain State Campground are located within the project study area and are owned by the National Park Service. Based on the proposed project limits, the project will incorporate land from the Burnwood Group campground, an Individual 4(f) resource evaluation is likely required. No use 4(f) coordination is likely required for Burnwood Trail and Mountain State Park. Additional trails, scenic overlooks, and campgrounds are located adjacent to the study area. The study area also includes the access road to Chestnut Creek Campground. No use 4(f) resource coordination is likely required.

The New River Gorge National Park and Preserve is a 6(f) resource and has received investments from the Land and Water Conservation Fund (LWCF) over many years totaling more than \$56 million. Conversion of the New River Gorge National Park and Preserve into private or non-recreational use receives a Conversion 6(f) impact determination. Coordination with the West Virginia Department of Commerce, which acts as the LWCF State Liaison Office, is required and a conversion determination is likely.

The study area is located within the unincorporated area of Lansing, WV and is subject to development codes. The project is located entirely within Fayette County, which is in attainment for all criteria air pollutants. If the project moves a through lane more than 50% closer to a Noise Sensitive Receptor such as one of the neighboring campgrounds, a noise survey may be required.

The above information was obtained from public agency records and reflects the information contained in their databases. A detailed environmental review including additional field investigations will likely be required during preliminary and detailed design to determine if any undocumented environmental resources are present within the study area.

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If you have any questions, please contact the undersigned.

Respectfully submitted,

Burgess & Niple, Inc.

A handwritten signature in cursive script that reads "Baelyn Carey". The signature is written in black ink and is positioned above a horizontal line.

Baelyn Carey

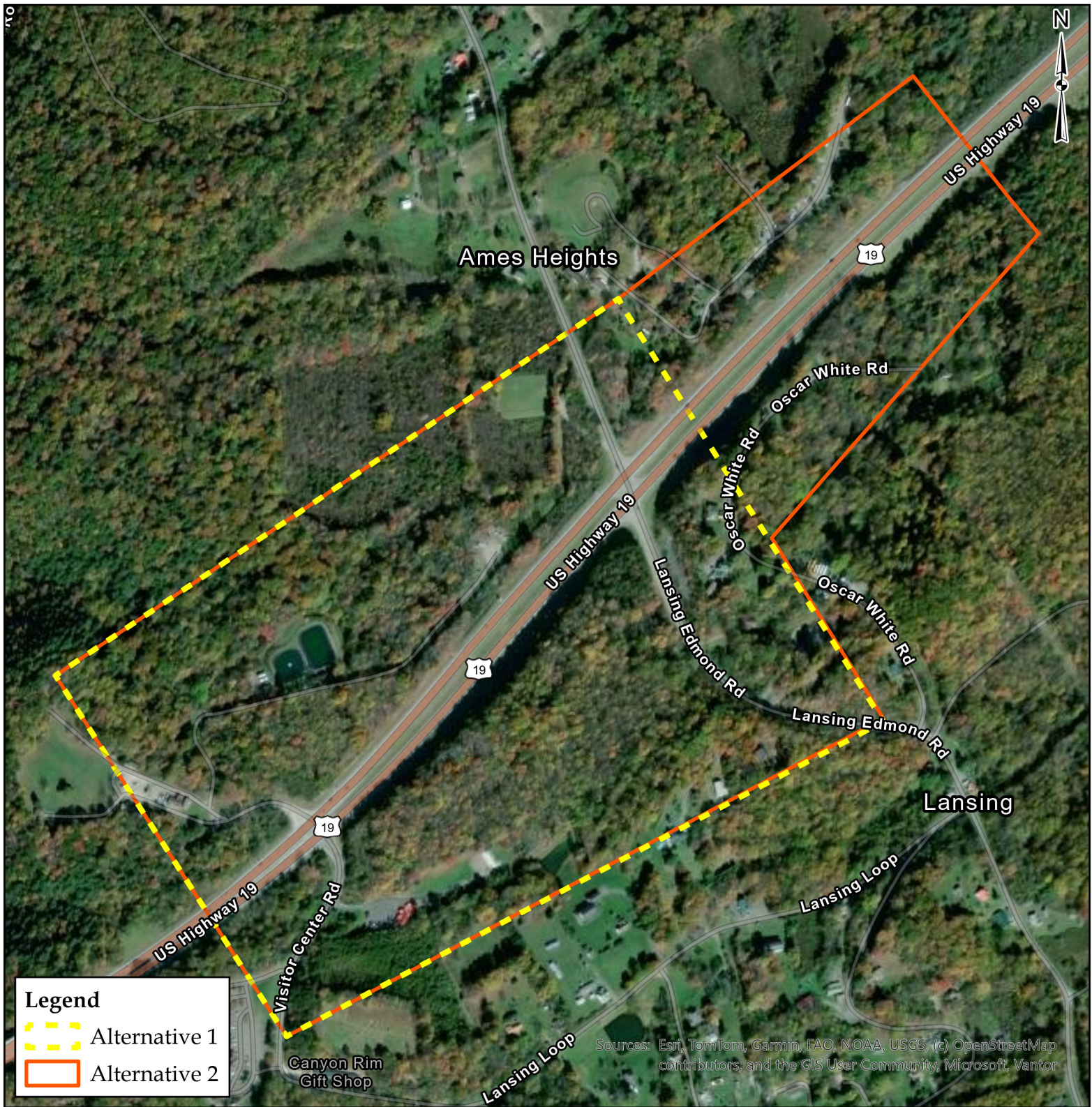
Environmental Scientist

(614) 459-7272 ext. 7791

Baelyn.Carey@burgessniple.com

Appendix E –

Environmental Desktop Screening Attachments



US 19 New River Gorge National Park Entrance Intersections Study Fayette County, West Virginia

Sources:

Orthophotography: West Virginia GIS Data & Services

Map Projection: WGS 1984 Web Mercator

Map Datum: WGS 1984

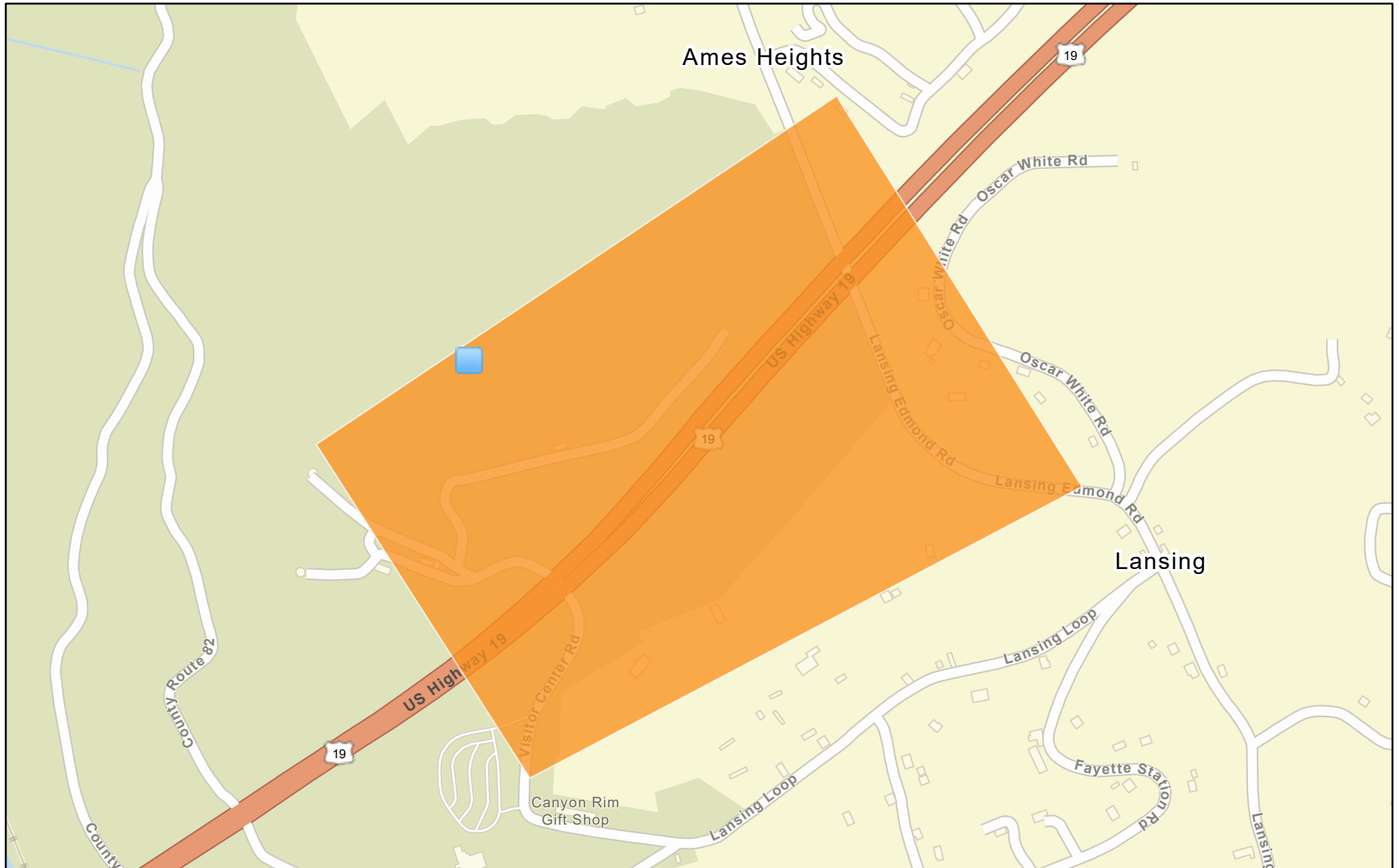
Aerial Map

BURGESS & NIPL

Engineers ■ Planners ■ Environmental Scientists

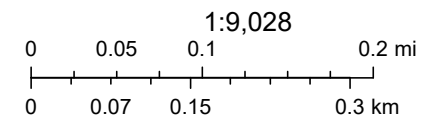
May 2026

New River Gorge Entrance Intersection Study- Alt 1



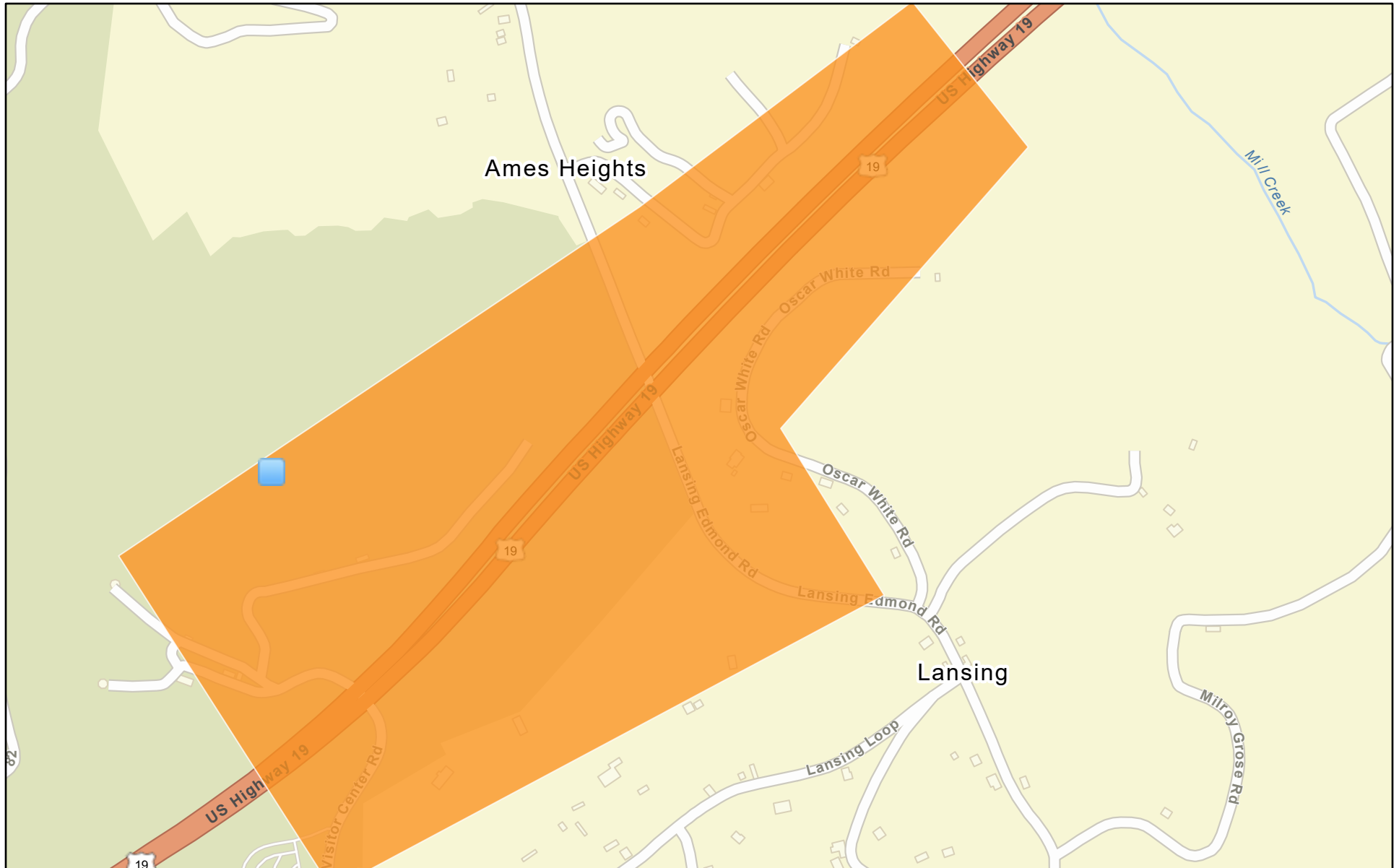
May 27, 2026

-  Water Dischargers (NPDES)
-  alt 1 study area



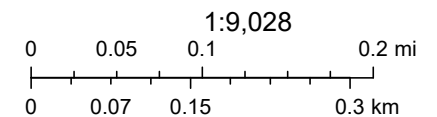
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

New River Gorge Entrance Intersection Study- Alt 2



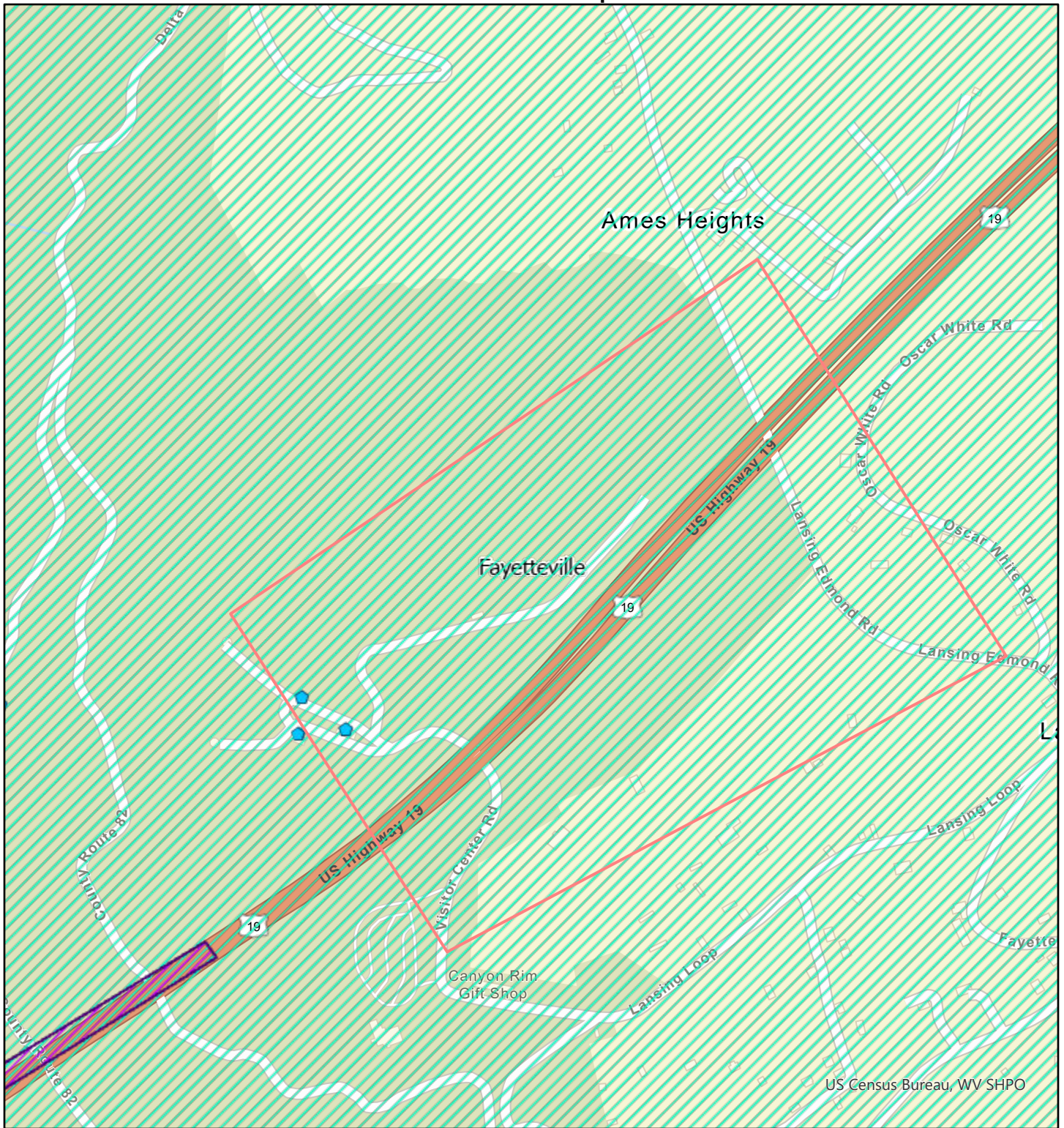
May 27, 2026

-  Water Dischargers (NPDES)
-  alt 2 study area



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

WV SHPO Map Alt 1



June 1, 2026

1:9,028

0 0.05 0.1 0.2 mi

U.S. 250th Anniversary – Predates 1800 (National Register Polygon)

Year
 Pre-1730
 1730-1739
 1740-1749
 1750-1759
 1760-1769
 1770-1779
 1780-1789
 1790-1800

U.S. 250th Anniversary – Predates 1800 (National Register Point)

Year
 Pre-1730
 1730-1739
 1740-1749
 1750-1759
 1760-1769
 1770-1779
 1780-1789
 1790-1800

Architecture Survey - Area

Cemeteries - Area

National Register - Area

Condition

Demolished

Active

Architecture Sites - Area

Condition

Demolished

Active

Cemeteries - Point

National Register - Point

Condition

Demolished

Active

Architecture Sites - Point

Condition

Demolished

Active

Notes:

WVGISTC, WVSHPO



United States Department of the Interior

FISH AND WILDLIFE SERVICE
West Virginia Ecological Services Field Office
6263 Appalachian Highway
Davis, WV 26260-8061
Phone: (304) 866-3858 Fax: (304) 866-3852



In Reply Refer To:

05/27/2026 12:50:42 UTC

Project Code: 2026-0094886

Project Name: New River Gorge Entrance Intersection Study

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). If you determine that other federally protected species not listed in this Official Species List are present in your action area, you are still responsible to analyze your potential effects to those species and consult with the U.S. Fish and Wildlife Service if consultation is required.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of

this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

West Virginia Ecological Services Field Office

6263 Appalachian Highway

Davis, WV 26260-8061

(304) 866-3858

PROJECT SUMMARY

Project Code: 2026-0094886
Project Name: New River Gorge Entrance Intersection Study
Project Type: Road/Hwy - Maintenance/Modification
Project Description: Alt 1
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.076924149999996,-81.07161807728727,14z>



Counties: Fayette County, West Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 5 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: All activities in this location should consider potential effects to this species. This project is within known Indiana bat habitat, which may include spring staging, fall swarming, winter hibernacula, and summer roosting. Please contact the WVFO. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered
Virginia Big-eared Bat <i>Corynorhinus (=Plecotus) townsendii virginianus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8369	Endangered

CLAMS

NAME	STATUS
Pink Mucket (pearlymussel) <i>Lampsilis abrupta</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: This project is in close proximity of a stream known to support this species; all activities in this location should consider potential effects to the species. Review the project design guidelines for information about next steps and contacting the WVFO. Species profile: https://ecos.fws.gov/ecp/species/7829 General project design guidelines: https://ipac.ecosphere.fws.gov/project/IW5MQBV4CRGX7KONGYBU3PYZXU/documents/generated/6463.pdf	Endangered
Sheepnose Mussel <i>Plethobasus cyphus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: This project occurs within a watershed known to support this species. Review the project design guidelines for more information about next steps and contacting the WVFO. Species profile: https://ecos.fws.gov/ecp/species/6903 General project design guidelines: https://ipac.ecosphere.fws.gov/project/IW5MQBV4CRGX7KONGYBU3PYZXU/documents/generated/6465.pdf	Endangered

NAME	STATUS
Snuffbox Mussel <i>Epioblasma triquetra</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: This project is in close proximity of a stream known to support this species; all activities in this location should consider potential effects to the species. Review the project design guidelines for information about next steps and contacting the WVFO. Species profile: https://ecos.fws.gov/ecp/species/4135 General project design guidelines: https://ipac.ecosphere.fws.gov/project/IW5MQBV4CRGX7KONGYBU3PYZXU/documents/generated/6466.pdf	Endangered
Spectaclecase (mussel) <i>Cumberlandia monodonta</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: This project occurs within a watershed known to support this species. Review the project design guidelines for more information about next steps and contacting the WVFO. Species profile: https://ecos.fws.gov/ecp/species/7867 General project design guidelines: https://ipac.ecosphere.fws.gov/project/IW5MQBV4CRGX7KONGYBU3PYZXU/documents/generated/6467.pdf	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Virginia Spiraea <i>Spiraea virginiana</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1728	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

-
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information](#)

[on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

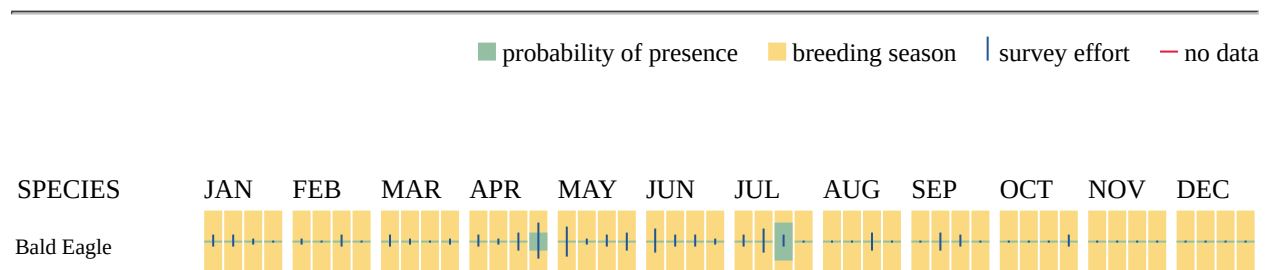
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Non-BCC
Vulnerable

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

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1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10

NAME	BREEDING SEASON
Black-capped Chickadee <i>Poecile atricapillus praticus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10645	Breeds Apr 10 to Jul 31
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9643	Breeds May 20 to Aug 10
Cerulean Warbler <i>Setophaga cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 27 to Jul 20
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Golden-winged Warbler <i>Vermivora chrysoptera</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745	Breeds May 1 to Jul 20
Kentucky Warbler <i>Geothlypis formosa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9443	Breeds Apr 20 to Aug 20
Prairie Warbler <i>Setophaga discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9513	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31

NAME	BREEDING SEASON
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

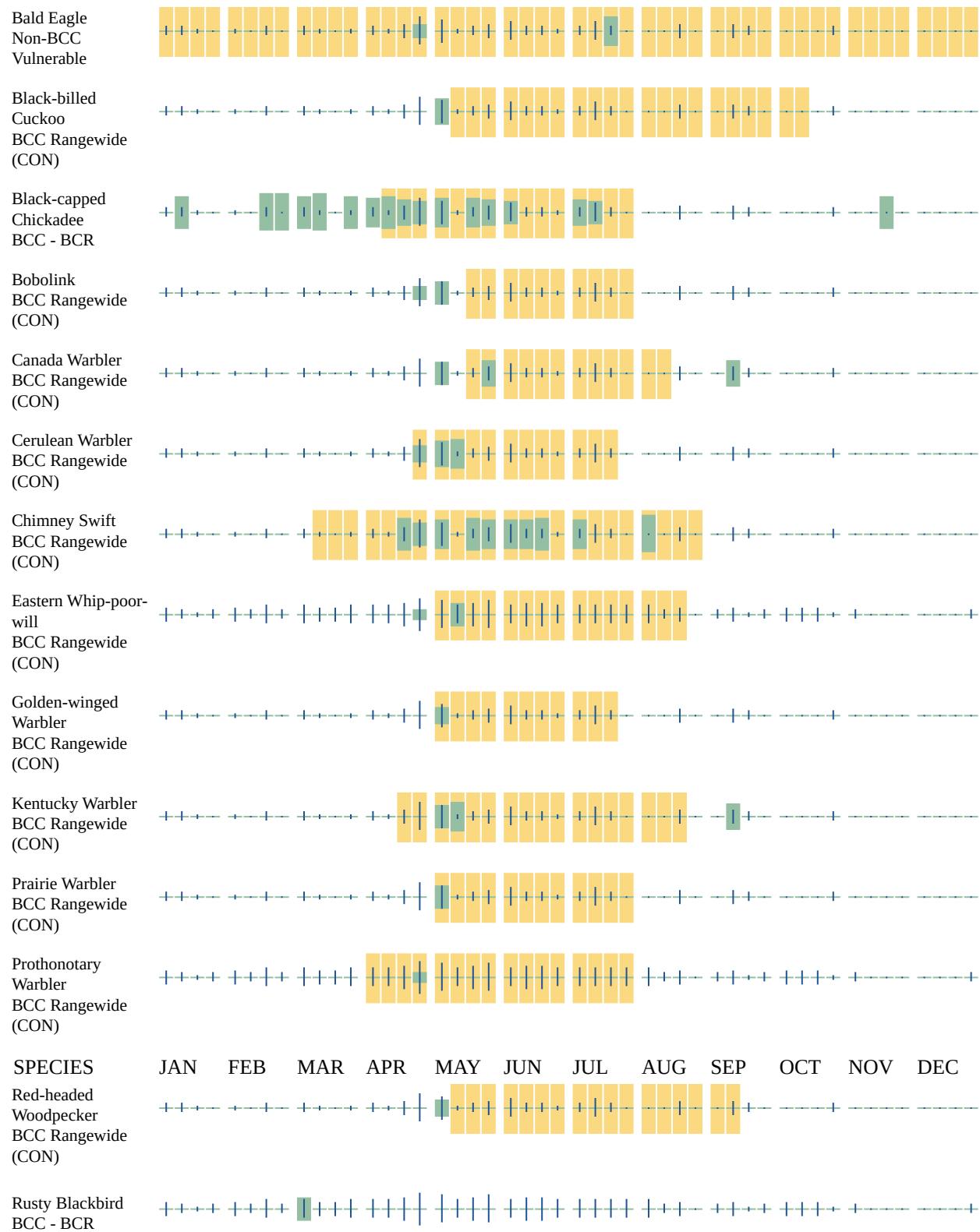
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort — no data

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



Wood Thrush
BCC Rangewide
(CON)



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.
PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Baelyn Carey
Address: 330 Rush Alley, Suite 700
City: Columbus
State: OH
Zip: 43215
Email: baelyn.carey@burgessniple.com
Phone: 6144592050



United States Department of the Interior

FISH AND WILDLIFE SERVICE
West Virginia Ecological Services Field Office
6263 Appalachian Highway
Davis, WV 26260-8061
Phone: (304) 866-3858 Fax: (304) 866-3852



In Reply Refer To:

05/27/2026 13:00:52 UTC

Project Code: 2026-0094900

Project Name: New River Gorge Entrance Intersection Study

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). If you determine that other federally protected species not listed in this Official Species List are present in your action area, you are still responsible to analyze your potential effects to those species and consult with the U.S. Fish and Wildlife Service if consultation is required.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of

this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

West Virginia Ecological Services Field Office

6263 Appalachian Highway

Davis, WV 26260-8061

(304) 866-3858

PROJECT SUMMARY

Project Code: 2026-0094900
Project Name: New River Gorge Entrance Intersection Study
Project Type: Road/Hwy - Maintenance/Modification
Project Description: Alt 2
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.07582645,-81.07219856918341,14z>



Counties: Fayette County, West Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 5 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: All activities in this location should consider potential effects to this species. This project is within known Indiana bat habitat, which may include spring staging, fall swarming, winter hibernacula, and summer roosting. Please contact the WVFO. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered
Virginia Big-eared Bat <i>Corynorhinus (=Plecotus) townsendii virginianus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8369	Endangered

CLAMS

NAME	STATUS
Pink Mucket (pearlymussel) <i>Lampsilis abrupta</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: This project is in close proximity of a stream known to support this species; all activities in this location should consider potential effects to the species. Review the project design guidelines for information about next steps and contacting the WVFO. Species profile: https://ecos.fws.gov/ecp/species/7829 General project design guidelines: https://ipac.ecosphere.fws.gov/project/RAIT2BIU6FDPJA5KWFZ2Y6BZMI/documents/generated/6463.pdf	Endangered
Sheepnose Mussel <i>Plethobasus cyphus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: This project occurs within a watershed known to support this species. Review the project design guidelines for more information about next steps and contacting the WVFO. Species profile: https://ecos.fws.gov/ecp/species/6903 General project design guidelines: https://ipac.ecosphere.fws.gov/project/RAIT2BIU6FDPJA5KWFZ2Y6BZMI/documents/generated/6465.pdf	Endangered

NAME	STATUS
Snuffbox Mussel <i>Epioblasma triquetra</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: This project is in close proximity of a stream known to support this species; all activities in this location should consider potential effects to the species. Review the project design guidelines for information about next steps and contacting the WVFO. Species profile: https://ecos.fws.gov/ecp/species/4135 General project design guidelines: https://ipac.ecosphere.fws.gov/project/RAIT2BIU6FDPJA5KWFZ2Y6BZMI/documents/generated/6466.pdf	Endangered
Spectaclecase (mussel) <i>Cumberlandia monodonta</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: This project occurs within a watershed known to support this species. Review the project design guidelines for more information about next steps and contacting the WVFO. Species profile: https://ecos.fws.gov/ecp/species/7867 General project design guidelines: https://ipac.ecosphere.fws.gov/project/RAIT2BIU6FDPJA5KWFZ2Y6BZMI/documents/generated/6467.pdf	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Virginia Spiraea <i>Spiraea virginiana</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1728	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

-
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information](#)

[on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

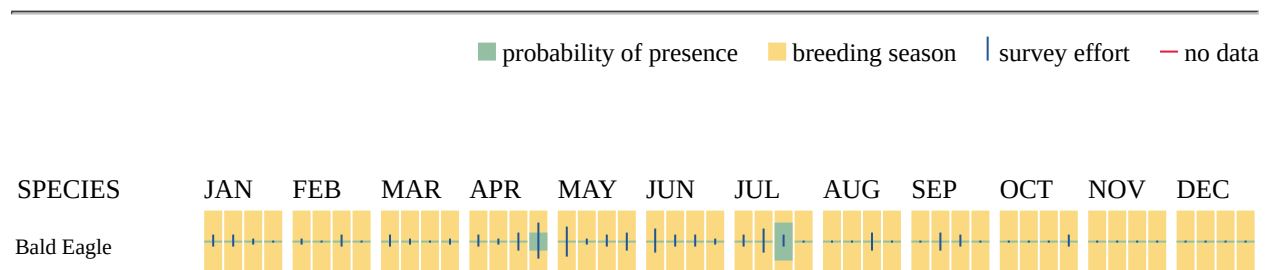
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Non-BCC
Vulnerable

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10

NAME	BREEDING SEASON
Black-capped Chickadee <i>Poecile atricapillus praticus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10645	Breeds Apr 10 to Jul 31
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9643	Breeds May 20 to Aug 10
Cerulean Warbler <i>Setophaga cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 27 to Jul 20
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Golden-winged Warbler <i>Vermivora chrysoptera</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745	Breeds May 1 to Jul 20
Kentucky Warbler <i>Geothlypis formosa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9443	Breeds Apr 20 to Aug 20
Prairie Warbler <i>Setophaga discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9513	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31

NAME	BREEDING SEASON
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

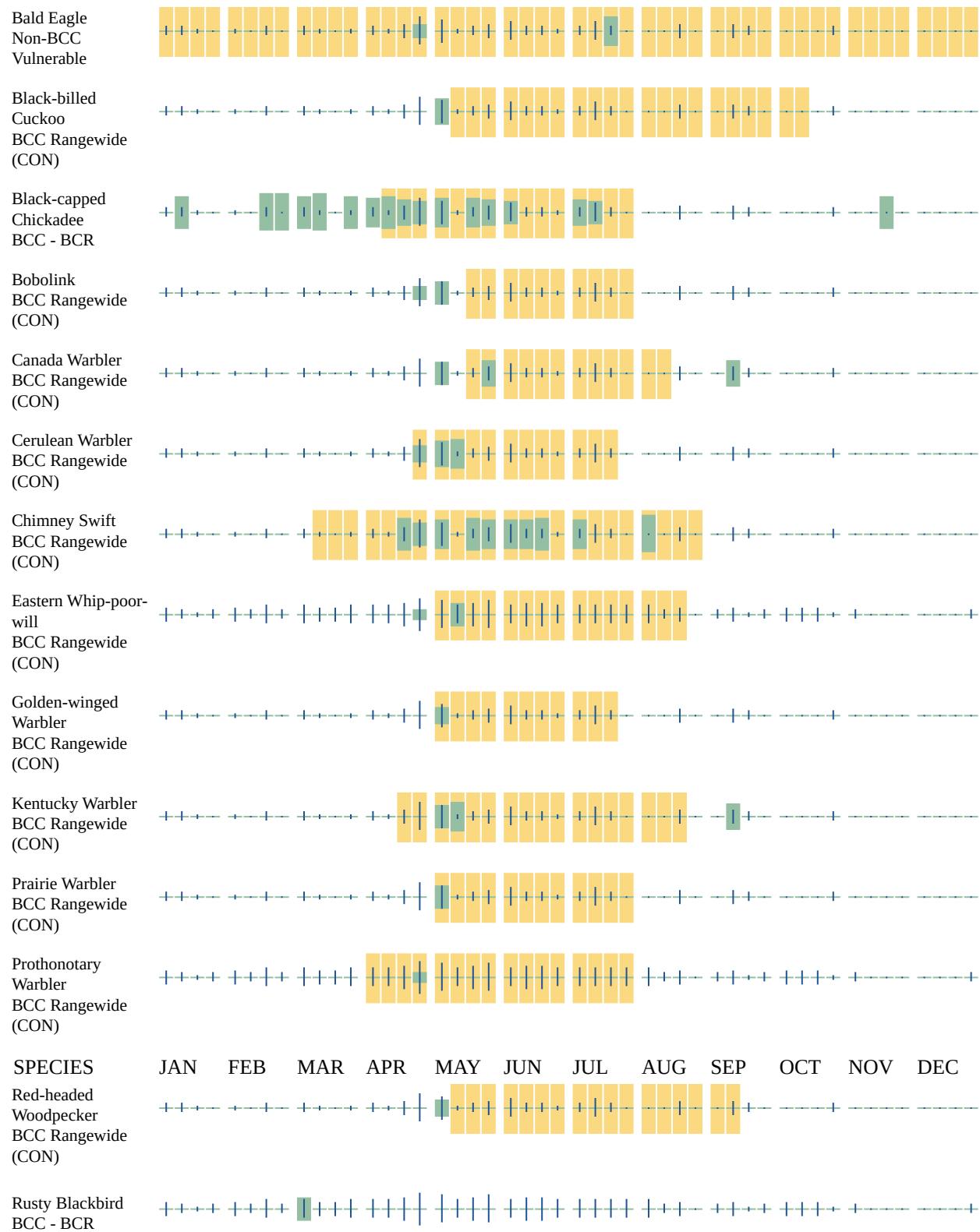
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort — no data

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



Wood Thrush
BCC Rangewide
(CON)



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

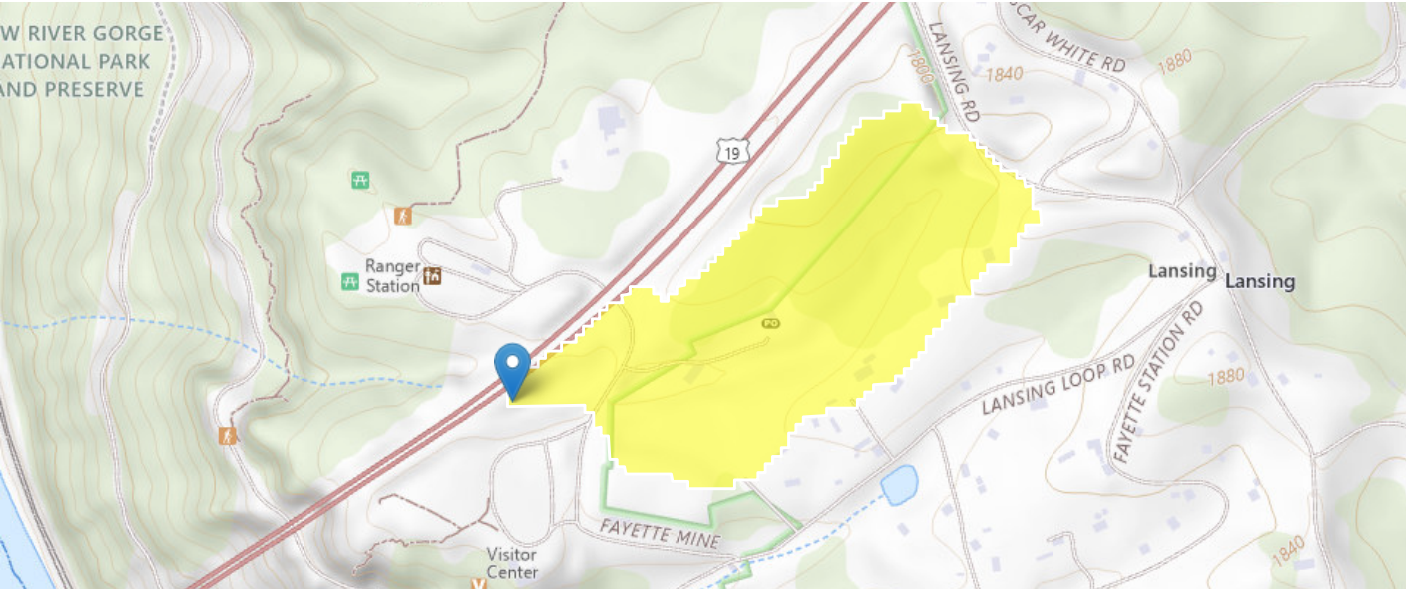
WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.
PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Baelyn Carey
Address: 330 Rush Alley, Suite 700
City: Columbus
State: OH
Zip: 43215
Email: baelyn.carey@burgessniple.com
Phone: 6144592050

StreamStats Report

Region ID: WV
Clicked Point (Latitude, Longitude): 38.07204, -81.07609
Time: 2026-06-01 08:50:30 -0400



UNT 1

StreamStats Update

Starting with version 4.30.0, the StreamStats application uses services that were redeveloped with open-source software components. Users may observe minor variations in computed results when compared to those from previous versions. These differences are expected and do not reflect errors in the underlying data or analytical methods. Users are advised to consider these potential variations when interpreting or comparing results generated across different versions of StreamStats. Please email streamstats@usgs.gov with any questions or concerns. A full list of changes can be found at <https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release> (<https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release>).

+ Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.06	square miles

Peak-Flow Statistics

Peak-Flow Statistics Parameters [WV Northern Highlands Peakflow SIR 2025 5110]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.06	square miles	0.4793835	1327.651856

Peak-Flow Statistics Disclaimers [WV Northern Highlands Peakflow SIR 2025 5110]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Peak-Flow Statistics Flow Report [WV Northern Highlands Peakflow SIR 2025 5110]

Statistic	Value	Unit
50-percent AEP flood	7.92	ft^3/s
20-percent AEP flood	13.9	ft^3/s
10-percent AEP flood	18.8	ft^3/s
4-percent AEP flood	25	ft^3/s
2-percent AEP flood	30.2	ft^3/s
1-percent AEP flood	35.4	ft^3/s
0.5-percent AEP flood	41.6	ft^3/s
0.2-percent AEP flood	49.6	ft^3/s

Peak-Flow Statistics Citations

Messinger, T., Duda, J.M., Wagner, D.M., O'Shea, P.S., Scott, J.D., and Kandel, C.2026, Estimation of magnitude and frequency of floods for rural, unregulated streams in and near Virginia and West Virginia: U.S. Geological Survey Scientific Investigations Report 2025–5110, 85 p. (<https://doi.org/10.3133/sir20255110>)

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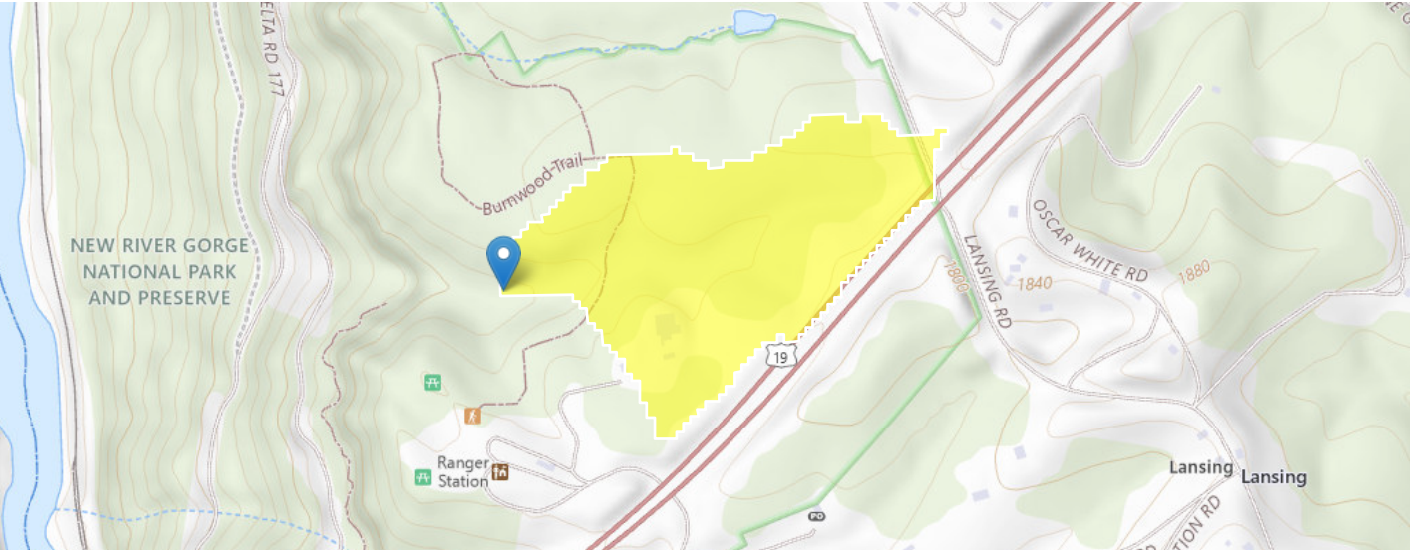
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USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.33.0
SSHydro Services Version: 1.3.0
SSDelineate Services Version: 1.2.0
NSS Services Version: 2.2.1
GageStats Services Version: 1.2.1
Pourpoint Services Version: 1.2.0
Batch Processor Version: 1.6.1

StreamStats Report

Region ID: WV
Clicked Point (Latitude, Longitude): 38.07573, -81.07713
Time: 2026-06-01 09:06:00 -0400



UNT 2

StreamStats Update

Starting with version 4.30.0, the StreamStats application uses services that were redeveloped with open-source software components. Users may observe minor variations in computed results when compared to those from previous versions. These differences are expected and do not reflect errors in the underlying data or analytical methods. Users are advised to consider these potential variations when interpreting or comparing results generated across different versions of StreamStats. Please email streamstats@usgs.gov with any questions or concerns. A full list of changes can be found at <https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release> (<https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release>).

+ Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.05	square miles

Peak-Flow Statistics

Peak-Flow Statistics Parameters [WV Northern Highlands Peakflow SIR 2025 5110]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.05	square miles	0.4793835	1327.651856

Peak-Flow Statistics Disclaimers [WV Northern Highlands Peakflow SIR 2025 5110]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Peak-Flow Statistics Flow Report [WV Northern Highlands Peakflow SIR 2025 5110]

Statistic	Value	Unit
50-percent AEP flood	6.78	ft^3/s
20-percent AEP flood	12	ft^3/s
10-percent AEP flood	16.1	ft^3/s
4-percent AEP flood	21.5	ft^3/s
2-percent AEP flood	26	ft^3/s
1-percent AEP flood	30.5	ft^3/s
0.5-percent AEP flood	35.8	ft^3/s
0.2-percent AEP flood	42.7	ft^3/s

Peak-Flow Statistics Citations

Messinger, T., Duda, J.M., Wagner, D.M., O'Shea, P.S., Scott, J.D., and Kandel, C.2026, Estimation of magnitude and frequency of floods for rural, unregulated streams in and near Virginia and West Virginia: U.S. Geological Survey Scientific Investigations Report 2025–5110, 85 p. (<https://doi.org/10.3133/sir20255110>)

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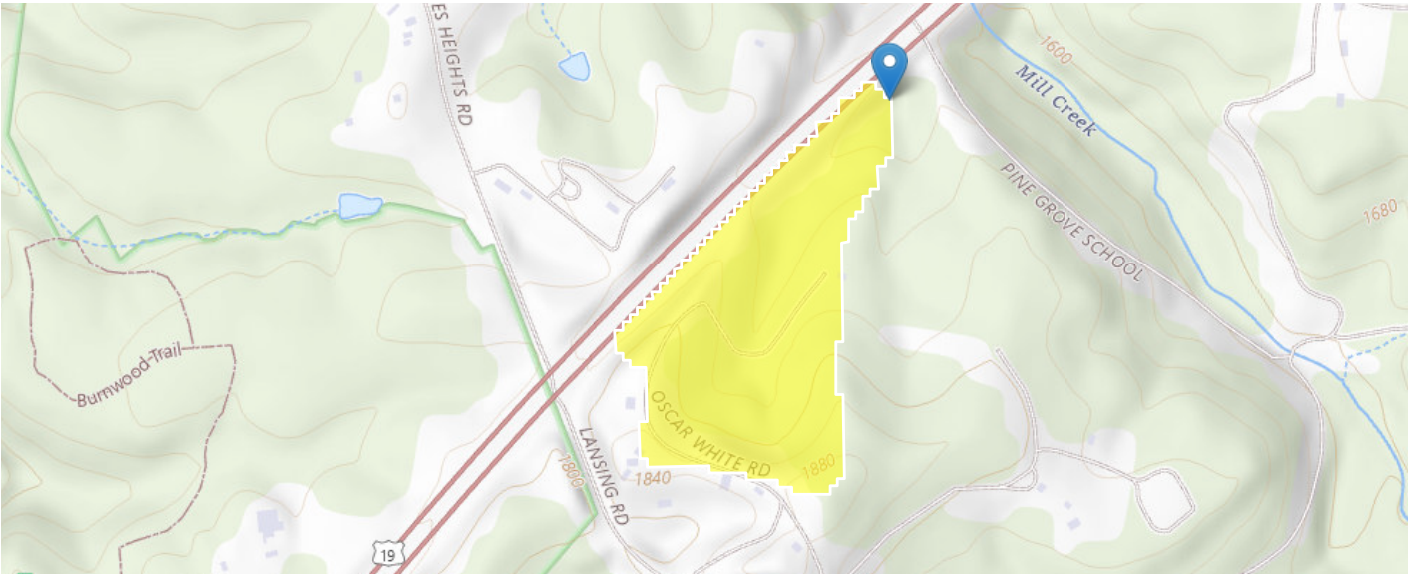
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SSDelineate Services Version: 1.2.0
NSS Services Version: 2.2.1
GageStats Services Version: 1.2.1
Pourpoint Services Version: 1.2.0
Batch Processor Version: 1.6.1

StreamStats Report

Region ID: WV
Clicked Point (Latitude, Longitude): 38.08031, -81.06529
Time: 2026-06-01 09:46:50 -0400



UNT 3

StreamStats Update

Starting with version 4.30.0, the StreamStats application uses services that were redeveloped with open-source software components. Users may observe minor variations in computed results when compared to those from previous versions. These differences are expected and do not reflect errors in the underlying data or analytical methods. Users are advised to consider these potential variations when interpreting or comparing results generated across different versions of StreamStats. Please email streamstats@usgs.gov with any questions or concerns. A full list of changes can be found at <https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release> (<https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release>).

Collapse All

> Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.04	square miles

> Peak-Flow Statistics

Peak-Flow Statistics Parameters [WV Northern Highlands Peakflow SIR 2025 5110]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.04	square miles	0.4793835	1327.651856

Peak-Flow Statistics Disclaimers [WV Northern Highlands Peakflow SIR 2025 5110]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Peak-Flow Statistics Flow Report [WV Northern Highlands Peakflow SIR 2025 5110]

Statistic	Value	Unit
50-percent AEP flood	5.61	ft^3/s
20-percent AEP flood	9.93	ft^3/s
10-percent AEP flood	13.4	ft^3/s
4-percent AEP flood	17.9	ft^3/s
2-percent AEP flood	21.7	ft^3/s
1-percent AEP flood	25.4	ft^3/s
0.5-percent AEP flood	29.9	ft^3/s
0.2-percent AEP flood	35.6	ft^3/s

Peak-Flow Statistics Citations

Messinger, T., Duda, J.M., Wagner, D.M., O'Shea, P.S., Scott, J.D., and Kandel, C.2026, Estimation of magnitude and frequency of floods for rural, unregulated streams in and near Virginia and West Virginia: U.S. Geological Survey Scientific Investigations Report 2025-5110, 85 p. (<https://doi.org/10.3133/sir20255110>)

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