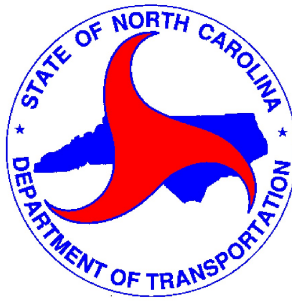


NATURAL RESOURCES TECHNICAL REPORT

**Replace Bridge No. 800239 on SR 1325 (Nanneytown Rd.) over Catheys Creek
Rutherford County, North Carolina**

WBS Element No. BP13.R052.3



**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Environmental Coordination and Permitting**

July 2026

1.0 INTRODUCTION

The North Carolina Department of Transportation (NCDOT) proposes to replace bridge No. 800239 on SR 1325 (Nanneytown Rd.) over Catheys Creek (WBS Element No. BP13.052.1) in Rutherford County. The following Natural Resources Technical Report (NRTR) has been prepared to assist in the preparation of the appropriate environmental documentation. All work was conducted in accordance with the NCDOT Environmental Coordination and Permitting Group's *Preparing Natural Resources Technical Reports* procedure and the latest *NRTR Template* and *NRTR Guidance* (Last Updated January 2026) documents. A list of the principal personnel contributing to fieldwork and document preparation is provided in the appendix.

2.0 TERRESTRIAL COMMUNITIES

Terrestrial communities encompass the various vegetation types, habitats, and ecological systems present within the study area. The composition and distribution of terrestrial communities are influenced by factors such as topography, soils, land use, and disturbance history. The table below presents the existing terrestrial communities identified within the study area, characterizes their dominant vegetation, and presents their total area of coverage.

Coverage of terrestrial communities in the Study Area

Community	Dominant Species	Coverage (ac.)
Maintained / Disturbed	Sawtooth blackberry (<i>Rubus argutus</i>) Multiflora rose (<i>Rosa multiflora</i>) Chinese privet (<i>Ligustrum sinense</i>)	0.9
Piedmont Alluvial Forest	Sycamore (<i>Platanus occidentalis</i> var. <i>occidentalis</i>) Sugarberry (<i>Celtis laevigata</i>) River birch (<i>Betula nigra</i>)	0.2

3.0 PROTECTED SPECIES AND HABITATS

3.1 Endangered Species Act Protected Species

As of May 27, 2026, the United States Fish and Wildlife Service (USFWS) lists the following federally protected species under the Endangered Species Act (ESA) as potentially occurring within the study area. For each species, a discussion of the presence or absence of suitable habitat is included along with a Biological Conclusion rendered based on the results of habitat assessments and surveys conducted within the study area.

ESA federally protected species listed within the Study Area

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion
<i>Myotis grisescens</i>	Gray bat	E	Yes	Unresolved
<i>Myotis sodalis</i>	Indiana bat	E	Yes	Unresolved
<i>Perimyotis subflavus</i>	Tricolored bat	PE	Yes	Unresolved
<i>Glyptemys muhlenbergii</i>	Bog turtle	SAT	No	Not Required
<i>Danaus plexippus</i>	Monarch butterfly	PT	Yes	Not Required
<i>Isotria medeoloides</i>	Small whorled pogonia	T	No	No Effect

P – Proposed; E - Endangered; T – Threatened; SAT - Similarity of Appearance (Threatened)

Biological Conclusions

Gray bat / Indiana bat / Tricolored bat

USFWS optimal survey window: Bridge surveys: May 1- October 1, concrete/metal, culvert surveys (3'Hx60'L min): hibernation range = Dec 15 - Feb 15, year round range = no culvert surveys

Biological Conclusion: Unresolved

As of May 27, 2026, the following federally protected bat species are listed in Information for Planning and Consultation (IPaC; <https://ecos.fws.gov/ipac/>) as occurring in the action area: gray bat, Indiana bat, and tricolored bat. Construction activities for this project are unknown at this stage in project planning, NCDOT will resolve Section 7 prior to let as appropriate.

The bridge was inspected for evidence of bats on May 6, 2026 using the NCDOT Preliminary Bat Habitat Assessments (Structures, Caves & Mines) Standard Operating Procedure. No evidence of bats was found. A review of the North Carolina Natural Heritage Program (NHP) records on May 27, 2026, indicates no known occurrences of these species within 1.0 mile of the study area.

Bog turtle

USFWS optimal survey window: April 1 - October 1 (visual surveys)

Biological Conclusion: Not Required

Suitable habitat for the bog turtle is not present within the study area. However, the bog turtle is listed as threatened due to similarity of appearance with another species listed as threatened and is not biologically endangered and not subject to Section 7 consultation, unless a survey for this species is specifically requested by the USFWS.

A review of NHP records on or updated May 27, 2026, indicates no known occurrences within 1.0 mile of the study area.

Monarch butterfly

USFWS optimal survey window: No survey window established at this time

Biological Conclusion: Not Required

The USFWS proposed to list the monarch butterfly as a threatened species under the ESA in December 2024. However, as of December 2025 the final decision has been delayed, and the status has been moved to "long-term action," meaning no final ruling is expected for at least another year. No regulatory protections will take effect until the listing is finalized. Until that time, proposed species do not receive formal ESA protections, though federal action agencies are still required to ensure that their actions do not jeopardize the continued existence of the species. Action agencies may initiate consultation with the USFWS to obtain a conference opinion. If and when the listing is finalized, and at the agency's request, the Service may adopt the conference opinion as a biological opinion—provided no relevant new information has emerged and no substantial changes to the proposed action have occurred

A review of NHP records on May 27, 2026, indicates no known occurrences within 1.0 mile of the study area.

Small whorled pogonia

USFWS optimal survey window: mid May - early July

Biological Conclusion: No Effect

Small whorled pogonia occurs in young as well as maturing (second to third successional growth) mixed-deciduous or mixed-deciduous/coniferous forests. In North Carolina, the perennial orchid is typically found in open, dry deciduous woods and is often associated with white pine and rhododendron. Habitat for this species is not present within the study area. Canopy gaps are present in limited locations and understory vegetation is very thick in these areas. Debris, including medium to large rocks, are located along the bank.

A review of NHP records on or updated May 27, 2026, indicates no known occurrences within 1.0 mile of the study area.

3.2 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) is enforced by the USFWS. Golden eagles do not nest in North Carolina. Habitat for the bald eagle primarily consists of mature forests in proximity to large bodies of open water for foraging. Large dominant trees are utilized for nesting sites, typically within 1.0 mile of open water.

A desktop-GIS assessment of the study area, as well as the area within a 1.13-mile radius of the project limits, was performed on April 28, 2026 using 2025 color aerials. One water body large enough or sufficiently open to be considered potential feeding sources was identified approximately 0.5 miles to the northwest of the study area. Therefore, a survey of the study area and the area within 660 feet of the project limits was conducted on May 6, 2026. No nests or individuals were observed. Additionally, a review of the NHP database on May 27, 2026, revealed no known occurrences of this species within 1.13 miles of the study area.

Should project activities have the potential to disturb eagles, their nests, or important foraging or roosting areas, consultation with the USFWS may be required to ensure compliance with BGEPA permit and avoidance requirements.

4.0 AQUATIC RESOURCES

Field investigations were performed on May 6, 2026 to evaluate the presence of potentially jurisdictional streams, wetlands, and other waters of the United States within the study area. Additional information, including delineation methodologies and resource identification/data forms, for the proceeding aquatic resources is available in the project's *Aquatic Resources Delineation Report*.

4.1 Streams within the Study Area

Stream Identification and Classifications

Stream Name or Label	NCDWR		Flow Regime	NCSAM Rating
	Index Number	Classification		
Catheys Creek	9-41-13-(0.5)	WS-V	Perennial	-

^NCSAM not performed. Stream is perennial and not sufficiently degraded to require a rating assessment.

4.1.1 Stream Designations and Surface Water Quality

Watershed Identification

Aquatic resources found in the study area are part of the Broad River Basin (United States Geological Survey (USGS) Hydrologic Unit 03050105).

Regulatory Classifications and Designations

No stream within the study area has been designated as an Outstanding Resource Water (ORW). There are no designated High Quality Waters (HQW) or water supply watersheds (WS-I or WS-II) present in, or located within 1.0 mile downstream of, the study area.

The USACE and the North Carolina Division of Water Resources (NCDWR) have not identified streams in the study area as a trout, anadromous fish, or primary nursery waters.

Impaired Water Classification

The North Carolina 2022 Final 303(d) list of impaired waters has not identified any stream within the study area, or any stream located within 1.0 mile downstream of the study area, as an impaired water.

Stream Temperature Regime

All streams in the study area have been designated as cool water streams for the purposes of stream mitigation.

4.2 Wetlands within the Study Area

No wetlands are present within the study area.

4.3 Other Surface Waters within the Study Area

No other surface waters are present within the study area.

5.0 REGULATORY CONSIDERATIONS

5.1 Clean Water Act

Aquatic resources identified within the study area, including streams, wetlands, and other surface waters, may be subject to federal and state jurisdiction under Sections 404 and 401 of the Clean Water Act. The jurisdictional status of these features has not been confirmed at the time of this report and would require verification through coordination with the USACE and NCDWR, as appropriate, during the permitting process.

5.2 Endangered Species Act

The presence and potential occurrence of federally listed threatened and endangered species within the study area has been evaluated using available desktop resources and field observations. However, the need for further consultation under Section 7 of the Endangered Species Act has not yet been determined. Any future permitting or funding actions associated with the project may require coordination with the USFWS to assess potential effects on listed species and designated critical habitats.

5.3 N.C River Basin Riparian Buffer Rules

The study area is located within the Broad River Basin and therefore does not have riparian buffer protections administered by NCDWR.

5.4 Rivers and Harbors Act Section 10

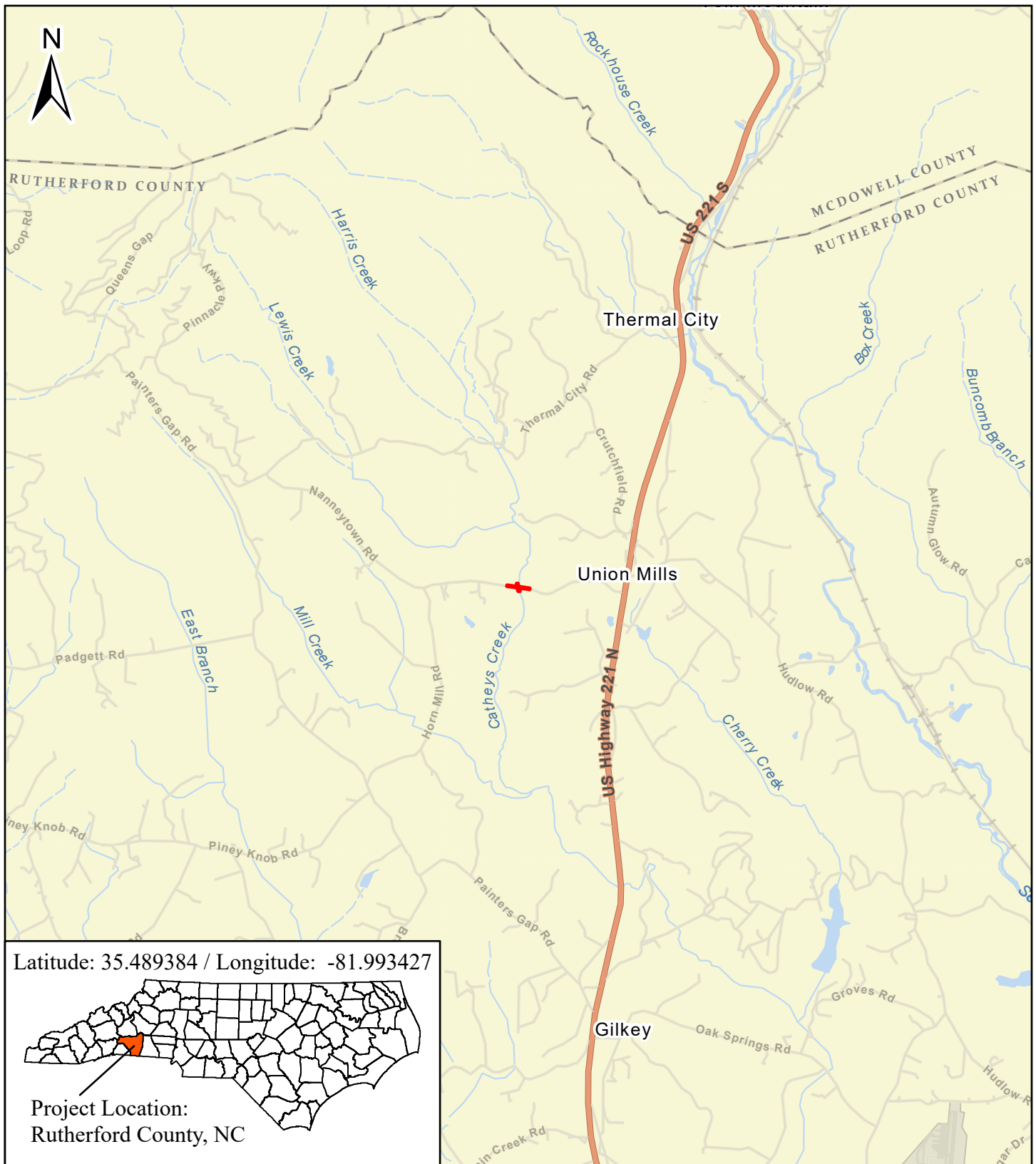
No stream within the study area has been designated by the USACE as a Navigable Water under Section 10 of the Rivers and Harbors Act.

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Latitude: 35.489384 / Longitude: -81.993427

Project Location:
Rutherford County, NC

0 0.5 1 Miles

Coordinate System:
NAD 1983 2011 StatePlane North Carolina FIPS 3200 Ft US

Study Area

ESRI World Street Map Basemap

Rutherford Bridge 239
WBS# BP13.052.1
Rutherford County, NC

Figure 1:
Vicinity Map

Date Produced: 6/2/2026



0 50 100 Feet

Coordinate System: NAD 1983 2011 StatePlane North Carolina FIPS 3200 Ft US



Study Area

Open Water

Maintained / Disturbed

Piedmont Alluvial Forest

NC Collaboratory at UNCCH - 2025 Post Helene Aerials

Rutherford Bridge 239
WBS# BP13.052.1
Rutherford County, NC

Figure 2: Terrestrial Communities Map

Date Produced: 6/3/2026



0 50 100 Feet

Coordinate System: NAD 1983 2011 StatePlane North Carolina FIPS 3200 Ft US



 Study Area

 Perennial Stream

Rutherford Bridge 239
WBS# BP13.052.1
Rutherford County, NC

Figure 3: Aquatic
Resources Map

Date Produced: 6/3/2026

NC Collaboratory at UNCCH - 2025 Post Helene Aerials

RESPONSIBILITIES OF CONTRIBUTORS

Contributor		Stream Determinations	Wetland Delineations	Terrestrial Community ID	ESA Assessments	Document Preparation	GIS / Figure Creation	QA/QC Review
Name	Role							
Preston Butler, PWS	Project Manager	✓	✓	✓	✓	✓	✓	
Chris Sheats	Sr. Env. Scientist	✓	✓	✓	✓			
Brittnie Fleming	Env. Scientist							✓
Tina Sekula, PWS, AICP	Section Head							✓