



AGENDA
N.C. WILDLIFE RESOURCES COMMISSION
July 30, 2026, 9:00 a.m.
1751 Varsity Drive
NCWRC Conference Room, 5th Floor
Raleigh, North Carolina

CALL TO ORDER – *Chairman Mark Craig*

This meeting is being streamed live for the public to attend and recorded as a public record. The recording of the meeting will be available at www.ncwildlife.gov.

PLEDGE OF ALLEGIANCE – *Commissioner Monty Crump*

INVOCATION – *Commissioner Mike Alford*

ROLL CALL OF COMMISSIONERS PRESENT – *Margo Minkler, Commission Liaison*

MANDATORY ETHICS INQUIRY – North Carolina General Statute §138A-15 mandates that the Commission Chair shall remind all Commissioners of their duty to avoid conflicts of interest and appearances of conflict under this Chapter, and that the chair also inquires as to whether there is any known conflict of interest or appearance of conflict with respect to any matters coming before the Commission at this time. It is the duty of each Commissioner who is aware of such personal conflict of interest or of an appearance of a conflict to notify the Chair of the same. *Chairman Craig*

APPROVAL OF JUNE 18, 2026 MEETING MINUTES – Take action on the June 18, 2026 Wildlife Resources Commission meeting minutes as written in the exhibit. **(EXHIBIT A)**

FINANCIAL STATUS REPORT – Receive Financial Status Report on the Wildlife Resources Commission General Fund, Capital Improvement Fund, and the Endowment Fund. – *Jason Cottle, Chief Financial Officer (EXHIBIT B)*

COMMITTEE MEETING REPORTS

Finance, Audit & Compliance Committee – July 29, 2026 – *Monty Crump, Chair*

Boating Safety Committee – July 29, 2026 – *J. C. Cole, Chair*

Land Acquisitions & Property Committee – July 29, 2026 – *Tom Berry, Chair*

Habitat Nongame & Endangered Species Committee – July 29, 2026 – *Brad Stanback, Chair*

Big Game Committee – July 29, 2026 – *David Hoyle, Chair*

Wild Turkey Committee – July 29, 2026 – *Steve Windham, Chair*

Executive Committee – July 29, 2026 – *Mark Craig, Chair*

Committee of the Whole – July 29, 2026 – *Mark Craig, Chair*

AGENCY SPOTLIGHT – Coastal Game Land Waterfowl Impoundments – *Nick Shaver, Coastal Ecoregion Supervisor*

MEMORIAL REQUEST – Consider a memorial request for former staff member Doug Howell – *Brad Howard, Wildlife Management Division Chief (EXHIBIT C)*

2027 WILDLIFE RESOURCES COMMISSION MEETING SCHEDULE – Consider approval of the proposed 2027 Wildlife Resources Commission meeting schedule – *Kyle Briggs, Executive Director (EXHIBIT D)*

LAND ACQUISITIONS AND PROPERTY MATTERS

Phase II Land Acquisition – Consider final approval to proceed with acquisition of the following properties – *Ben Solomon, Land and Water Access Division Assistant Chief and Land Acquisition Manager*

- Jones Tract – Bladen County **(EXHIBIT E-1)**
- Thoroughfare Island - Currituck County **(EXHIBIT E-2)**
- Low Tract – Yancey County **(EXHIBIT E-3)**
- Mile 106 – Macon County **(EXHIBIT E-4)**
- Mason Branch – Cherokee County **(EXHIBIT E-5)**
- Queen Bog – Wilkes County **(EXHIBIT E-6)**
- Friedberg Marsh – Forsyth County **(EXHIBIT E-7)**

Other Property Matters – Consider approval of the following other property matter - *Ben Solomon*

- Easement Request - Perquimans County **(EXHIBIT F-1)**
- Easement Request – Bertie County **(EXHIBIT F-2)**
- Easement Request – Henderson County **(EXHIBIT F-3)**
- Holly Shelter Game Land Articles of Dedication – Pender County **(EXHIBIT F-4)**

Butner-Falls of Neuse Game Land – Review and consider approval of the proposed archery zone at Butner-Falls of Neuse Game Land – *Daron Barnes, Land and Water Access Division Chief (EXHIBIT G)*

RULEMAKING

Petition for Rulemaking – 10D .0211 Butner-Falls of Neuse Game Land – Review public comments and consider request to adopt amendments to 10D .0211 – *Will Casola, Policy Analyst (EXHIBITS H-1, H-2)*

Permanent Rulemaking Notice of Text – Endangered, Threatened, and Special Concern Species Rules – Consider request to notice proposed rule text with an open comment period and public hearings for amendments to 15A NCAC 10I .0103-.0105. Review and consider approval of fiscal note – *Will Casola (EXHIBITS I-1, I-2)*

WATER SAFETY RULEMAKING

Emergency & Temporary Rulemaking – 10F .0303 Beaufort County – Consider emergency and temporary rulemaking for a request to expand the no-wake zone in the waters of Blounts Creek as part of N.C. Department of Transportation’s bridge replacement project – *Will Casola (EXHIBIT J)*

Permanent Rulemaking Notice of Text – 15A NCAC 10F .0354 Pitt County – Consider request to publish Notice of Text with an open comment period and public hearing for proposed amendments to 15A NCAC 10F .0354 – *Will Casola (EXHIBIT K)*

COMMENTS BY THE CHAIRMAN – *Chairman Craig*

COMMENTS BY THE EXECUTIVE DIRECTOR – *Executive Director Briggs*

ADJOURN

EXHIBIT A



MINUTES June 18, 2026 N.C. Wildlife Resources Commission Meeting Raleigh, North Carolina

Chairman Mark Craig called the June 18, 2026, N.C. Wildlife Resources Commission meeting to order at 9:00 a.m. in the Commission Room at the agency's headquarters in Raleigh. Craig reminded everyone that the meeting is being audio streamed live and will be available at www.ncwildlife.gov.

Commissioner Wes Seegars led the Pledge of Allegiance.

Commissioner Tom Berry gave the invocation.

ROLL CALL

Margo Minkler, Commission Liaison, called the roll. David Hoyle, John Coley, Jim Ruffin, Steve Windham, John Alexander, Mike Alford, and Justin Boyd were absent.

COMMISSIONER ATTENDANCE

Mark Craig	Tom Berry	John Stone	Joe Budd
Landon Zimmer	Brad Stanback	Hayden Rogers	Reid Smith
Wes Seegars	Ray Clifton	Tom Haislip	
Tommy Fonville	Monty Crump	J.C. Cole	

MANDATORY ETHICS INQUIRY

Chairman Craig advised the Commission of the mandatory ethics inquiry as mandated in NCGS §138A-15.

MINUTES OF APRIL 16, 2026, MEETING

On a motion by Landon Zimmer and second by Monty Crump, the Minutes of the April 16, 2026, meeting were approved as presented in **EXHIBIT A**.

EXHIBIT A is incorporated into the official record of this meeting.

ADMINISTRATION

Jason Cottle, Chief Financial Officer, presented a status report in **EXHIBIT B** on the Wildlife Resources Commission General Fund, Capital Improvement Fund, and the Endowment Fund.

EXHIBIT B is incorporated into the official record of this meeting.

COMMITTEE MEETING REPORTS

Rules Committee – April 23, 2026 – *Wes Seegars, Chair*, reported that the Rules Committee met virtually on April 23, 2026, to review the 2027-2028 annual cycle rule proposals for Inland Fish, Land and Water Access, Wildlife Management, and Wildlife Education. Twenty-eight proposals were discussed and reviewed by the committee for clarity, impact, implementation, and stakeholder interest. With only one clarifying change to rule language for the proposal to prohibit shining artificial light in search of coyotes or feral swine from a motorized conveyance, all proposals will move forward, as presented, for approval to notice text. With no further business, the meeting adjourned.

Fisheries Committee – June 17, 2026 – *John Stone, Chair*, reported that the Fisheries Committee met on June 17, 2026. Inland Fisheries Division staff delivered four presentations. Staff summarized Chowan River creel and trap net data to assess the Chowan River Black Crappie population. Results from this effort indicate that the Black Crappie population in the Chowan River is robust, and anglers are satisfied with the crappie fishing opportunities. Staff discussed habitat use of Bodie Bass in Lake Norman. Bodie Bass uses different habitats during summer months to avoid low oxygen unlike Striped Bass. Staff reviewed the Division's Aquatic Plant Program and the new Sykes Depot Aquatic Plant Nursery. Finally, staff discussed ongoing renovations of the Bobby N. Setzer State Fish Hatchery and current spring trout stockings. The renovation is on schedule and purchasing fish this spring helped boost stocking numbers above what was anticipated. With no further business, the meeting adjourned.

Small Game Committee – June 17, 2026 – *Ray Clifton, Committee Member*, reported that the Small Game Committee met on June 17, 2026, and staff presented several topics related to the agency's efforts to develop habitat on private land. First, the Committee received an overview and update on the Wildlife Conservation Lands Program which continues to be successful in allowing private landowners to keep and manage their land for wildlife benefits. Next staff presented the results from a survey of private landowners that have worked with the agency to develop wildlife habitat on their properties. Results from the survey will help guide the agency's

efforts on private land habitat work into the future. Finally, the Committee received a presentation from retiring *John Isenhour, Wildlife Habitat Coordinator* who shared his perspective of working with private landowners for over 20 years helping them develop wildlife habitat on their properties. Having no further business, the meeting adjourned.

Committee of the Whole – June 17, 2026 – *Mark Craig, Chair* reported that the Committee of the Whole met on June 17, 2026, and began with review and approval of the Phase I land acquisition for the Rhodes Pond Depot relocation in Harnett County. The committee then considered temporary rulemaking adoption related to chronic wasting disease management areas. Following that, the committee reviewed permanent rulemaking notices of text for the 2027–2028 annual cycle, including proposals for Wildlife Management Rules, Inland Fisheries Rules, Land and Water Access Rules, Wildlife Education Rules, and Endangered, Threatened, and Special Concern Species Rules. The committee also received the final determinations for the periodic rules review. An update was then provided on the Holly Shelter Game Land Restoration Project. There being no further business, the committee adjourned.

AGENCY SPOTLIGHT – Blazing the Trail: NC BearWise® – *Ashley Hobbs, District 9 Special Projects Biologist*, gave a presentation outlining her role as Statewide BearWise Coordinator and the current status of human-bear interactions in Buncombe County. She provided an overview of how Commission staff across all departments use the resources from the NC and national BearWise programs to provide education and technical guidance to the public. Ashley emphasized the importance of BearWise education for addressing human-bear interactions statewide, especially in urban and suburban communities. NC’s BearWise program is gaining national and international attention and is used by the national BearWise program as a model for other state wildlife agencies.

RULEMAKING

Temporary Rulemaking Adoption – CWD Management Areas – On a motion by Wes Seegars and a second by Tom Berry, the Commission reviewed public comments presented in **EXHIBIT C-1** and adopted temporary amendments to 10B .0203 & 10B .0502 presented in **EXHIBIT C-2** by *Will Casola, Policy Analyst*

EXHIBITS C-1 and C-2 are incorporated into the official record of this meeting.

Notice of Text – 2027-2028 Annual Cycle Wildlife Management Rules – On a motion by Landon Zimmer and a second by Brad Stanback, the Commission approved publishing the Notice of Text in the *NC Register* with an open comment period and a public hearing for amendments to Wildlife Management rules (**EXHIBIT D-1**) and approved the fiscal note for the proposed rules (**EXHIBIT D-2**) presented by *Will Casola*

EXHIBITS D-1 and D-2 are incorporated into the official record of this meeting.

Notice of Text – 2027-2028 Annual Cycle Inland Fisheries Rules – On a motion by John Stone and a second by Hayden Rogers, the Commission approved publishing the Notice of Text in the *NC Register* with an open comment period and a public hearing for amendments to Inland Fisheries rules (**EXHIBIT E-1**) and approved the fiscal note for the proposed rules (**EXHIBIT E-2**) presented by *Will Casola*

EXHIBITS E-1 and E-2 are incorporated into the official record of this meeting.

Notice of Text – 2027-2028 Annual Cycle Land and Water Access Rules – On a motion by Landon Zimmer and a second by Brad Stanback, the Commission approved publishing the Notice of Text in the *NC Register* with an open comment period and a public hearing for amendments to Land and Water Access rules (**EXHIBIT F-1**) and approved the fiscal note for the proposed rules (**EXHIBIT F-2**) presented by *Will Casola*

EXHIBITS F-1 and F-2 are incorporated into the official record of this meeting.

Notice of Text – 2027-2028 Annual Cycle Wildlife Education Rules – On a motion by Tom Berry and a second by Tommy Fonville, the Commission approved publishing the Notice of Text in the *NC Register* with an open comment period and a public hearing for amendments to shooting range rules (**EXHIBIT G-1**) and approved the fiscal note for the proposed rules (**EXHIBIT G-2**) presented by *Will Casola*

EXHIBITS G-1 and G-2 are incorporated into the official record of this meeting.

Notice of Text – 2027-2028 Annual Cycle Endangered, Threatened, and Special Concern Species Rules – On a motion by Hayden Rogers and a second by Wes Seegars, the Commission approved publishing the Notice of Text in the *NC Register* with an open comment period and a public hearing for amendments to 15A NCAC 10I .0102 (**EXHIBIT H-1**) and approved the fiscal note for the proposed rules (**EXHIBIT H-2**) presented by *Will Casola*

EXHIBITS H-1 and H-2 are incorporated into the official record of this meeting.

Periodic Rules Review – Final Determinations – On a motion by Monty Crump and a second by Brad Stanback, the Commission approved the final determinations on all WRC rules and joint WRC/MFC rules (**EXHIBIT I**) presented by *Will Casola*

EXHIBIT I is incorporated into the official record of this meeting.

COMMENTS FROM THE CHAIRMAN – Chairman Craig opened by expressing appreciation to staff for their diligent work in preparing the meeting and then thanked all involved in keeping the Setzer Fish Hatchery renovations on schedule, noting the project's complexity and the importance of staying on track. He also acknowledged the significance of the Good Neighbor Agreement with the U.S. Forest Service. He then invited Commissioner Smith to comment on the new commissioner orientation. Commissioner Smith commended staff for the thorough and helpful presentations, particularly the section on rulemaking, and recommended that the orientation be recorded for future reference by new and current commissioners. Chairman Craig concurred, noting that he also gained new insights, and then concluded his remarks.

COMMENTS FROM THE EXECUTIVE DIRECTOR – Executive Director Briggs opened by thanking the Commissioners for their attendance and for their support during the recent orientation, noting that the agency’s staff are exceptionally dedicated and truly love the work they do. He wished everyone a safe Fourth of July and 250th anniversary celebration, and briefly addressed ongoing drought conditions, explaining how staff, much like the state’s farmers, are adapting to the challenges, from planting dove fields to maintaining fish at the hatcheries. He concluded by congratulating retiring Wildlife Habitat Coordinator John Isenhour and acknowledging his more than twenty years of valuable service working with private landowners.

ADJOURNMENT

There being no further business, the WRC meeting was adjourned at **9:32 a.m.**
All exhibits are incorporated into the official record of this meeting by reference and are filed with the minutes.

Mark Craig, Chairman

Date

Kyle Briggs, Executive Director

Date

Exhibit B

**NORTH CAROLINA WILDLIFE RESOURCES COMMISSION
CAFR 52G - STATEMENT OF REVENUES, EXPENDITURES and CHANGES in FUND BALANCES**

**GOVERNMENTAL FUNDS
AS OF JUNE 30, 2026**

	FY 2026 General Fund	FY 2026 Capital Improvement Fund
REVENUES		
Federal funds	\$ 36,903,276.04	\$ 7,136,110.00
Local funds	\$ 3,675.70	\$ -
Investment earnings	\$ 436,534.10	\$ -
Sales and services	\$ 11,027,590.81	\$ -
Rental and lease of property	\$ 76,222.20	\$ -
Fees, licenses and fines	\$ 39,497,581.76	\$ -
Contributions, gifts and grants	\$ 3,854,380.88	\$ 3,472,664.72
Miscellaneous	\$ 21,462.46	\$ 550.34
Unclassified/invalid accounts	\$ -	\$ -
Other Financing Sources - Sale of capital assets	\$ 624,222.21	\$ -
Other Financing Sources - Insurance recoveries	\$ 10,506.47	\$ -
Other Financing Sources - Transfers in	\$ 61,153,458.38	\$ 13,685,279.21
Other Financing Sources - Appropriations	\$ 16,987,928.00	\$ -
TOTAL REVENUES	\$ 170,596,839.01	\$ 24,294,604.27
EXPENDITURES		
Personal services	\$ 44,484,355.63	\$ -
Employee benefits	\$ 22,130,455.04	\$ -
Contracted personal services	\$ 13,224,226.19	\$ 37,696.77
Supplies and materials	\$ 9,612,357.81	\$ 35,023.20
Purchases for Resale	\$ 41,661.71	\$ -
Travel	\$ 739,124.75	\$ -
Communication	\$ 1,407,785.09	\$ -
Utilities	\$ 696,271.63	\$ -
Data processing services	\$ 438,313.96	\$ -
Other services	\$ 5,697,536.22	\$ 2,768,879.55
Principal Retirement	\$ 13,414.00	\$ -
Interest and Fees	\$ 4,317.67	\$ -
Claims and benefits	\$ 1,658,708.79	\$ -
Other fixed charges	\$ 667,588.78	\$ 264.70
Capital outlay	\$ 8,369,679.52	\$ 20,916,084.92
Grants, state aid and subsidies	\$ 2,239,181.54	\$ -
Insurance and bonding	\$ 194,052.00	\$ -
Other expenditures	\$ 5,010,861.49	\$ 34,350.95
Reimbursements	\$ (1,020,691.12)	\$ (75,000.00)
Unclassified/invalid accounts	\$ 561.10	\$ -
Other Financing (Uses) - Transfers out	\$ 54,321,322.89	\$ 51,198.29
TOTAL EXPENDITURES	\$ 169,931,084.69	\$ 23,768,498.38
EXCESS OF REVENUES OVER (UNDER) EXPENDITURES	\$ 665,754.32	\$ 526,105.89
FUND BALANCE - JULY 1, 2025	\$ 21,113,142.01	\$ 4,474,732.56
FUND BALANCE - JUNE 30, 2026	\$ 21,778,896.33	\$ 5,000,838.45

UNRESTRICTED FUND BALANCE

-

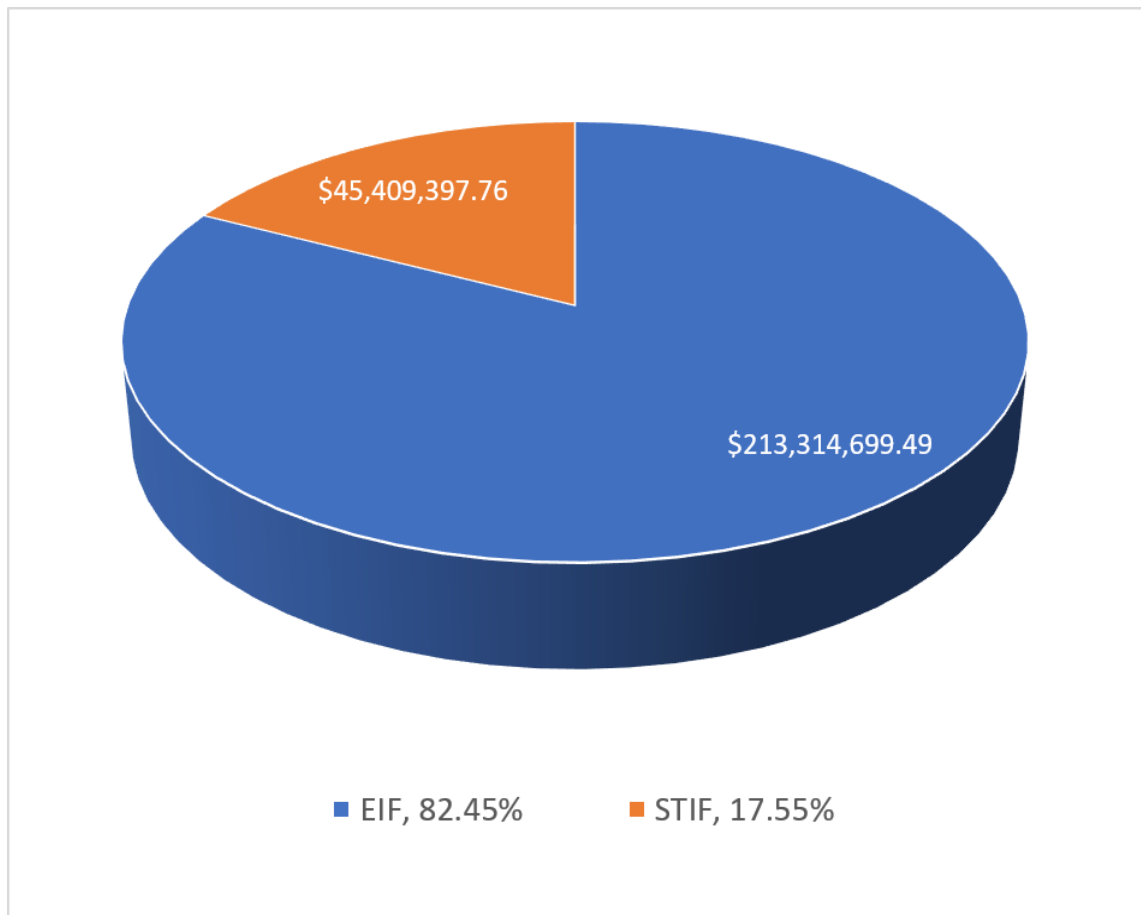
RESTRICTED FUND BALANCE

\$21,778,896.13

NORTH CAROLINA WILDLIFE RESOURCES COMMISSION ENDOWMENT PORTFOLIO

Fund Balance*: Jun 30, 2026: \$258,724,097.25

ASSET ALLOCATION



2026 June						
Status:		Principal	ANI Nonexpendable	ANI Expendable	Total	
	Adult	\$ 100,247,914.20		\$ 98,124,358.08	\$ 198,372,272.28	
	Magazine	\$ 1,573,477.50		\$ 1,626,819.66	\$ 3,200,297.16	
	Contributions	\$ 956,522.33		\$ 4,366,117.44	\$ 5,322,639.77	
	Diversity	\$ 1,520,678.77		\$ 301,971.50	\$ 1,822,650.27	
	Infant	\$ 24,187,912.00	\$ 19,481,109.88		\$ 43,669,021.88	
	Youth	\$ 3,275,922.00	\$ 1,912,294.22		\$ 5,188,216.22	
					\$ 257,575,097.58	
	Total	\$ 131,762,426.80	\$ 21,393,404.10	\$ 104,419,266.68	\$ 257,575,097.58	
					\$ -	
				Total from detail area >>	\$ 257,575,097.58	
					\$ -	

Of the amount noted above as expendable income, the figures below represent WRC's known obligations for Endowment income over the next three years:

Setzer Hatchery Renovation	\$27,100,000.00
Other Capital Projects	\$ 7,127,258.00
Other Agency Priorities	\$ 7,667,511.00
<u>Debt Service</u>	<u>\$ 2,191,444.00</u>

Remaining Available Expendable Income \$60,333,053.68

Exhibit C - Memorial Request

Name the Impoundment on the Willow Point Tract of Gull Rock Game Lands the Doug Howell Impoundment

- Doug served as waterfowl biologist and migratory bird coordinator for almost 20 years.
- His expertise in migratory bird management was well known and respected in North Carolina and nationally.
- Doug led research projects on numerous migratory birds, including multiple publications on Black Duck ecology and genetics.
- He received national recognition for his work on woodcock migration.
- One of Doug's final acts as a biologist was his tireless and ultimately successful efforts to adjust the Atlantic flyway pintail bag limits.
- He impacted the next generation of wildlife professionals through his mentorship of countless students, technicians and new staff.



EXHIBIT D

July 30, 2026



2027 WILDLIFE RESOURCES COMMISSION MEETINGS

DRAFT SCHEDULE

THURSDAY, FEBRUARY 18, 2027

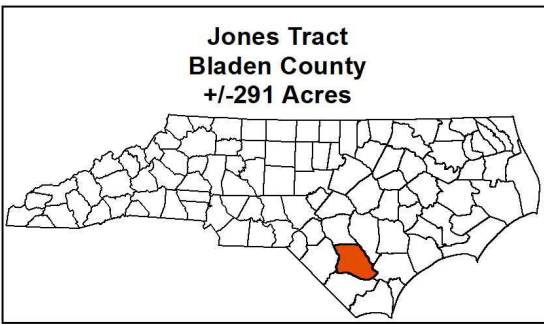
THURSDAY, APRIL 15, 2027

THURSDAY, JUNE 17, 2027

THURSDAY, JULY 29, 2027

WEDNESDAY, OCTOBER 20, 2027

THURSDAY, DECEMBER 9, 2027



Jones Tract (Exhibit E-1)

Acquisition Plan

- Appraisal: \$730,000.00

Wildlife Restoration Funds	\$438,000.00
Endowment Fund	\$292,000.00
Total	\$730,000.00

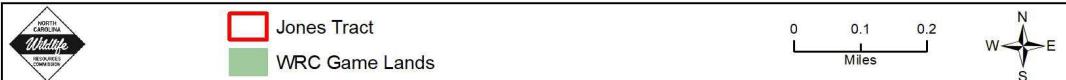
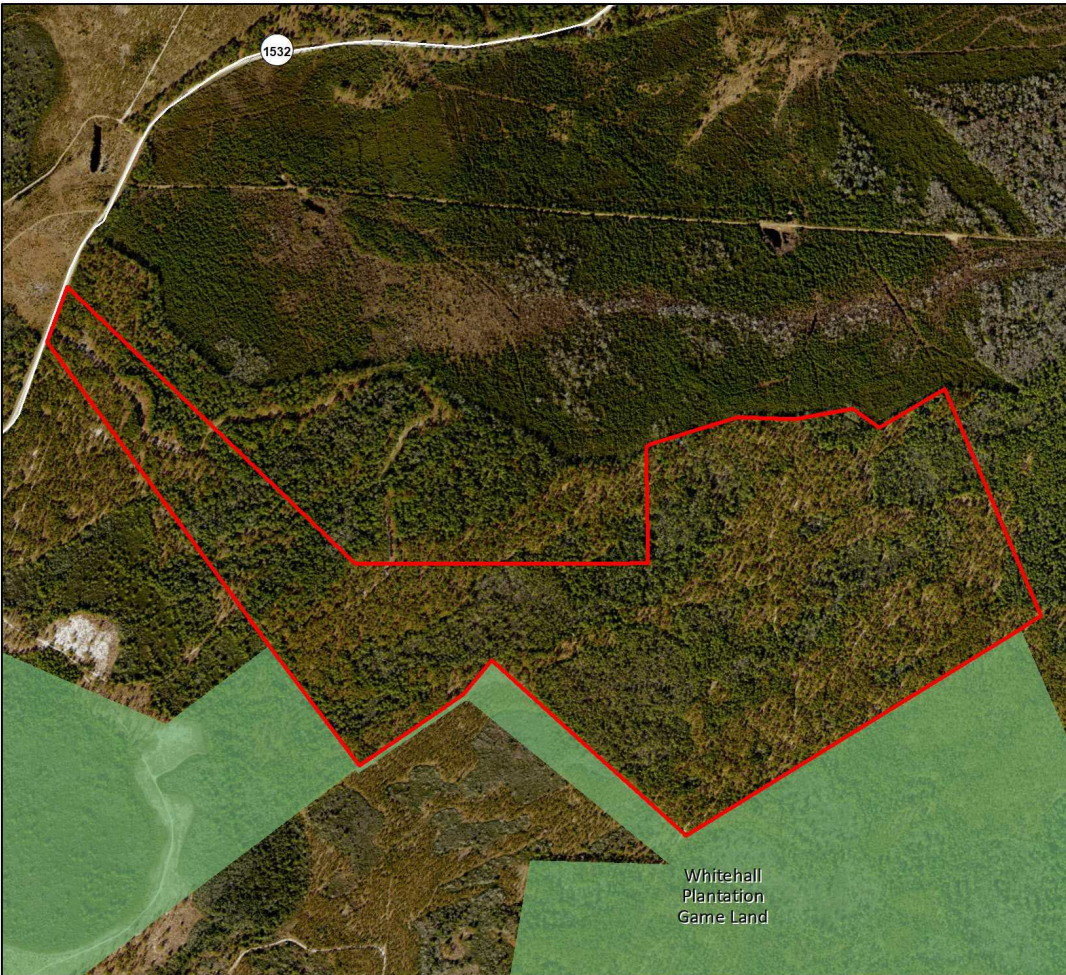
Five-Year Stewardship/Revenue Estimates

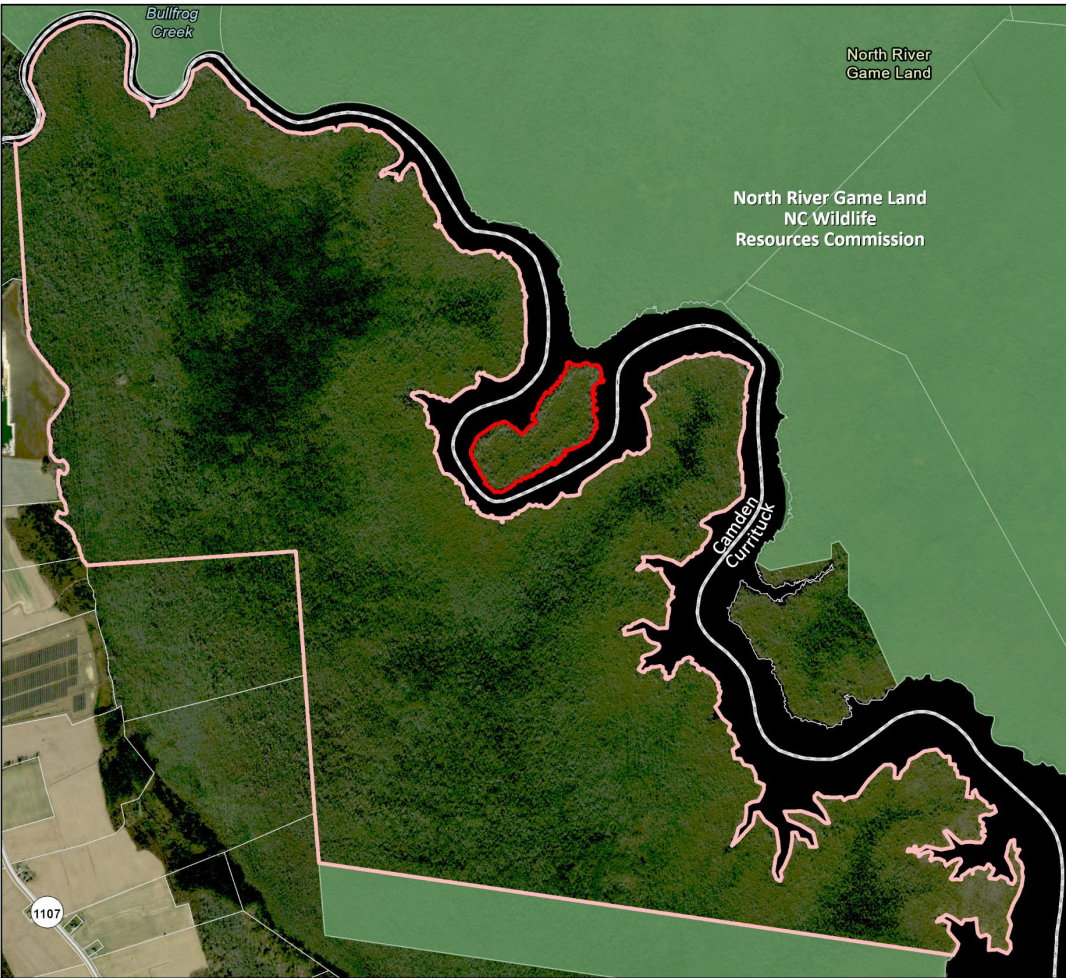
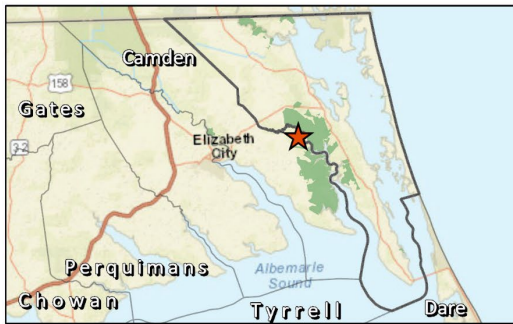
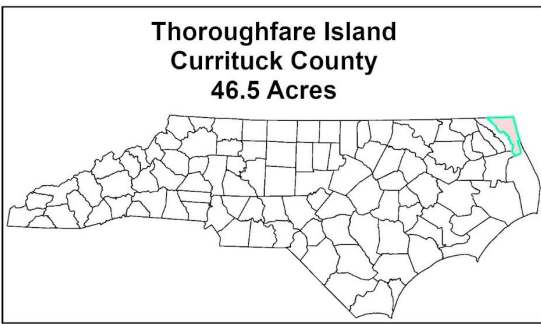
Total Stewardship Costs Estimate: \$17,000.00

- Boundary establishment
- Gates
- Establish Rx fire lines and Rx fire costs

Total Revenue Estimate: \$55,600.00

Staff recommend Phase II approval





Thoroughfare Island (Exhibit E-2)

Acquisition Plan

- Donation from The Nature Conservancy

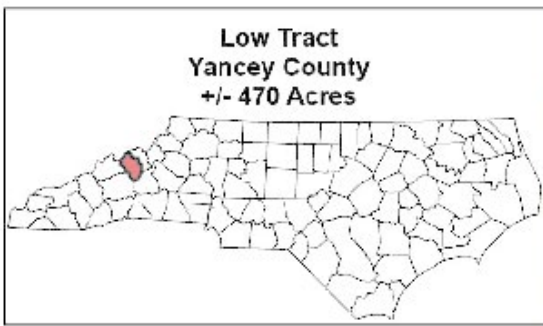
Five-Year Stewardship/Revenue Estimates

Total Stewardship Costs Estimate: \$900.00

- Boundary establishment

Total Revenue Estimate: \$0.00

Staff recommend Phase II approval



Low Tract (Exhibit E-3)

Acquisition Plan

- Donation from The Conservation Fund

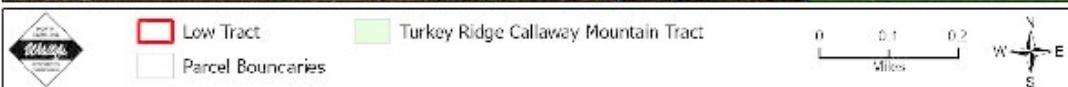
Five-Year Stewardship/Revenue Estimates

Total Stewardship Costs Estimate: \$27,700.00

- Boundary establishment
- Parking area and gate

Total Revenue Estimate: \$0.00

Staff recommend Phase II approval



Baliles/Mile 106 Wetland Tract
Macon County
+/- 24 Acres



Mile 106 Tract (Exhibit E-4)

Acquisition Plan

- Appraisal: \$410,000.00

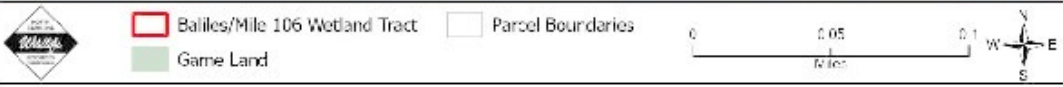
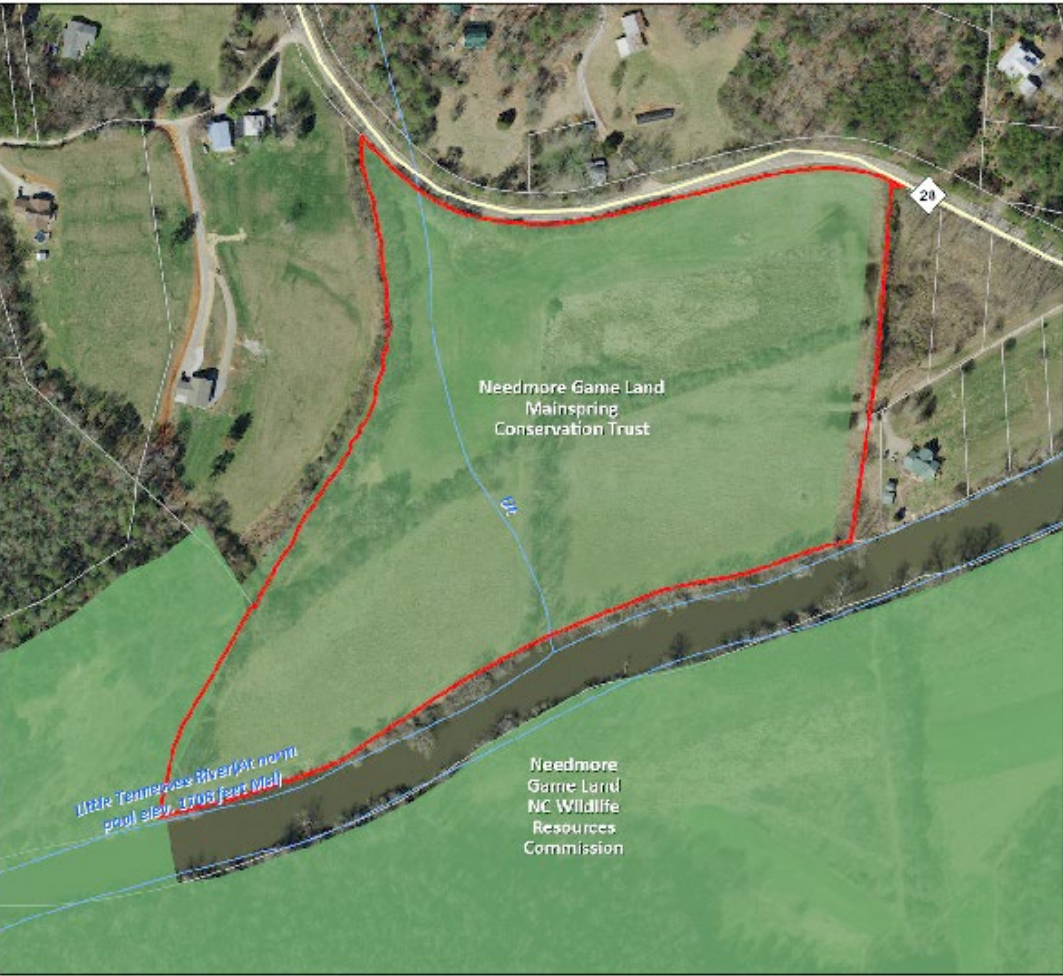
Mainspring LWF Grant	\$135,000.00
Wildlife Restoration Funds	\$34,500.00
Total	\$169,500.00

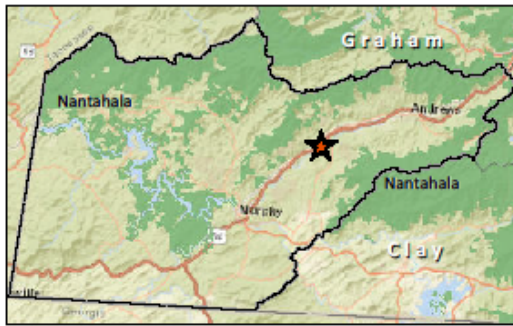
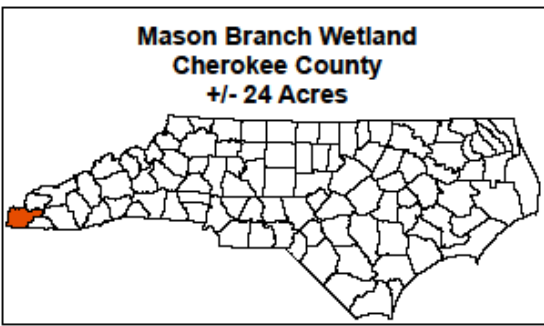
Five-Year Stewardship/Revenue Estimates

- Total Stewardship Costs Estimate: \$32,900.00
- Boundary establishment
 - Gates
 - Establish parking area

Total Revenue Estimate: \$0.00

Staff recommend Phase II approval





Mason Branch Tract (Exhibit E-5)

Acquisition Plan

- Appraisal: \$234,000

Mainspring LWF Grant	\$107,000.00
Wildlife Restoration Funds	\$70,000.00
Total	\$177,000.00

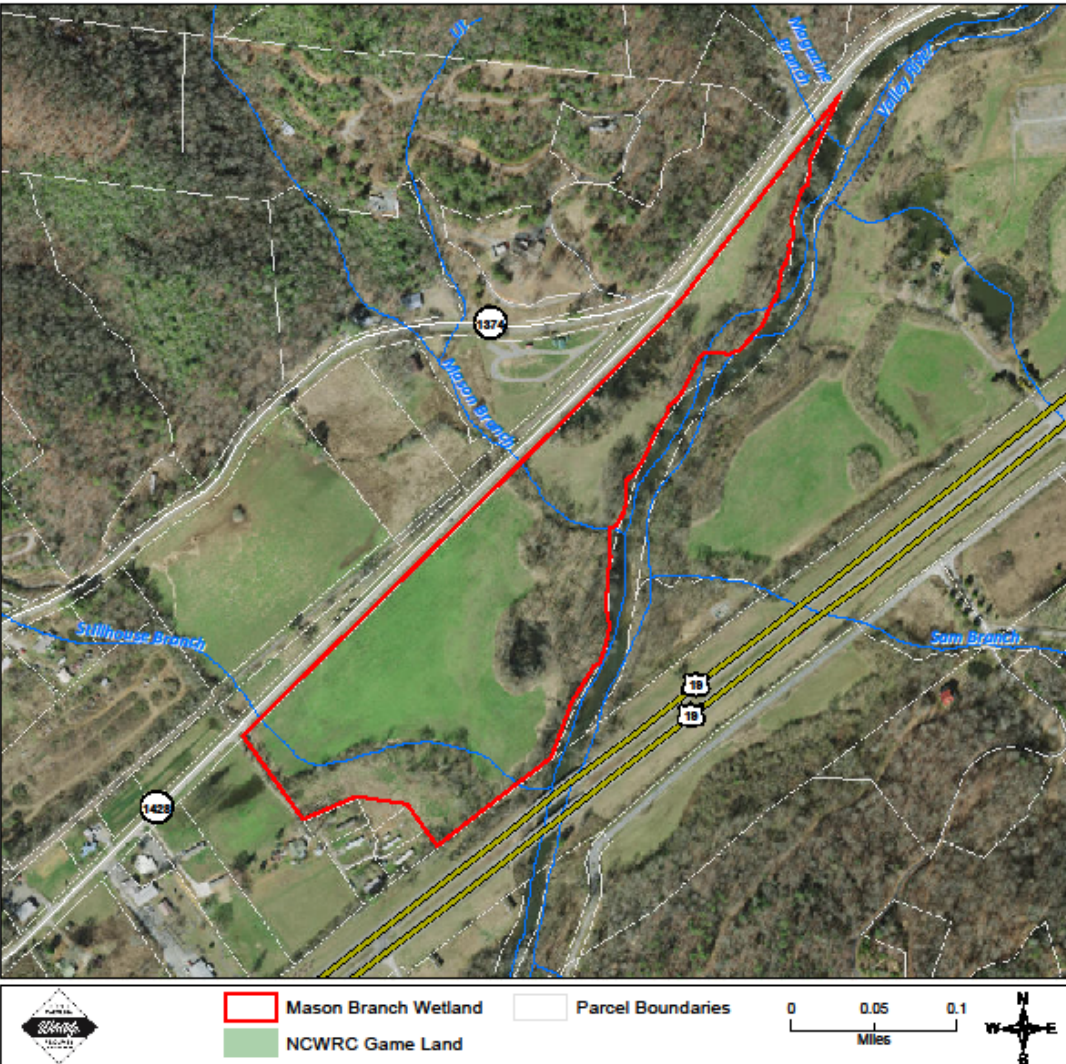
Five-Year Stewardship/Revenue Estimates

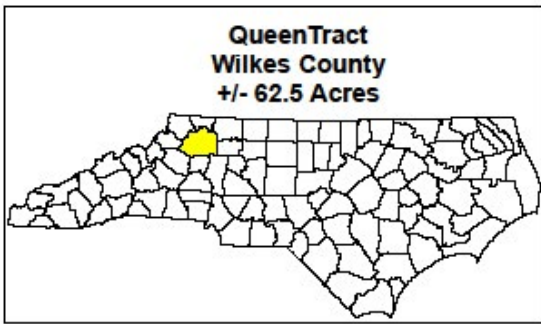
Total Stewardship Costs Estimate: \$32,900.00

- Boundary establishment
- Install gates
- Establish parking area
- Fence repair

Total Revenue Estimate: \$0.00

Staff recommend Phase II approval





Queen Bog (Exhibit E-6)

Acquisition Plan

- Tax Value: \$150,400

Endowment Funds	\$150,400.00
Total	\$150,400.00

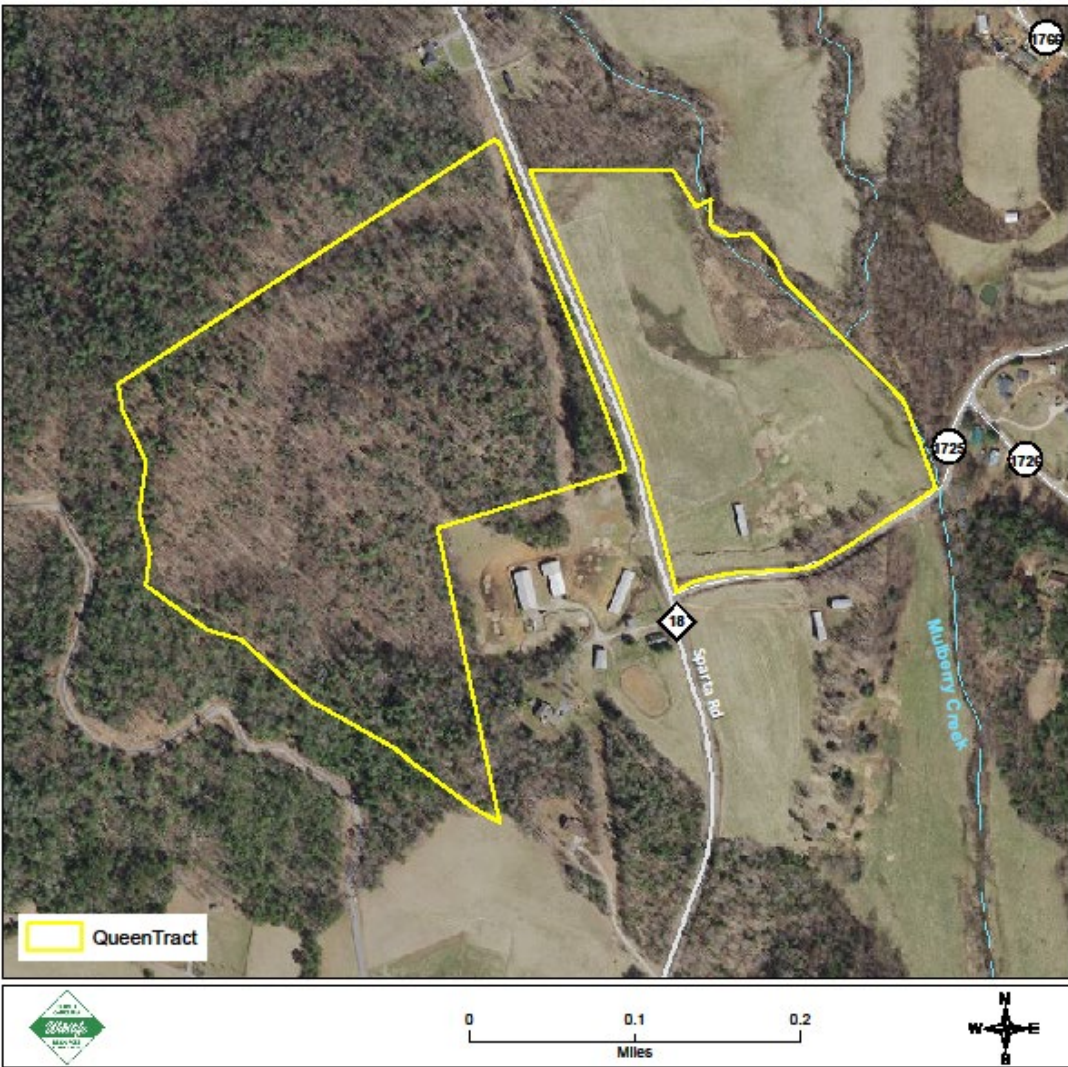
Five-Year Stewardship/Revenue Estimates

Total Stewardship Costs Estimate: \$29,750.00

- Boundary survey
- Boundary establishment
- Invasive plant treatment

Total Revenue Estimate: \$0.00

Staff recommend Phase II approval



Friedberg Marsh
Forsyth County
+/- 51 acre



Friedberg Marsh (Exhibit E-7)

Acquisition Plan

- Re-allocation from NC DOT

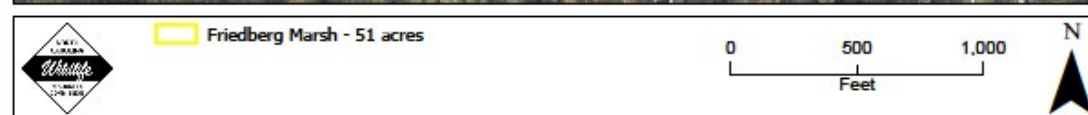
Five-Year Stewardship/Revenue Estimates

Total Stewardship Costs Estimate: \$340.00

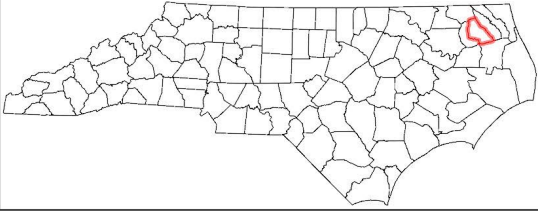
- Boundary establishment

Total Revenue Estimate: \$0.00

Staff recommend Phase II approval



Easement Request
Perquimans BAA, Perquimans County
60 feet

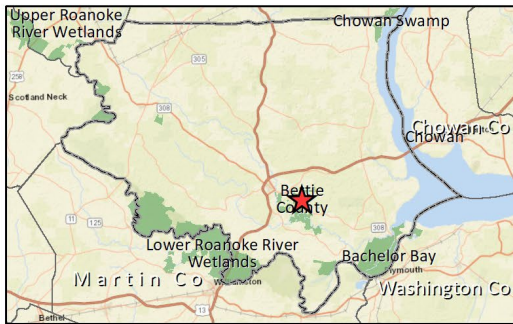
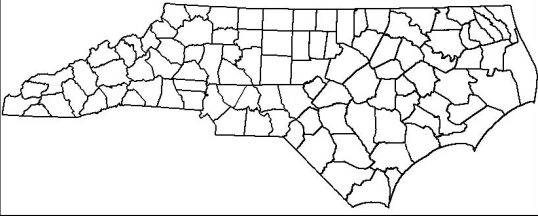


Easement Request – Perquimans County (Exhibit F-1)

- Easement request for ingress, egress, and utilities from a private landowner, Renewable Green, Inc.
- Perquimans Boating Access Area
- Value to be determined by the State Property Office through an appraisal

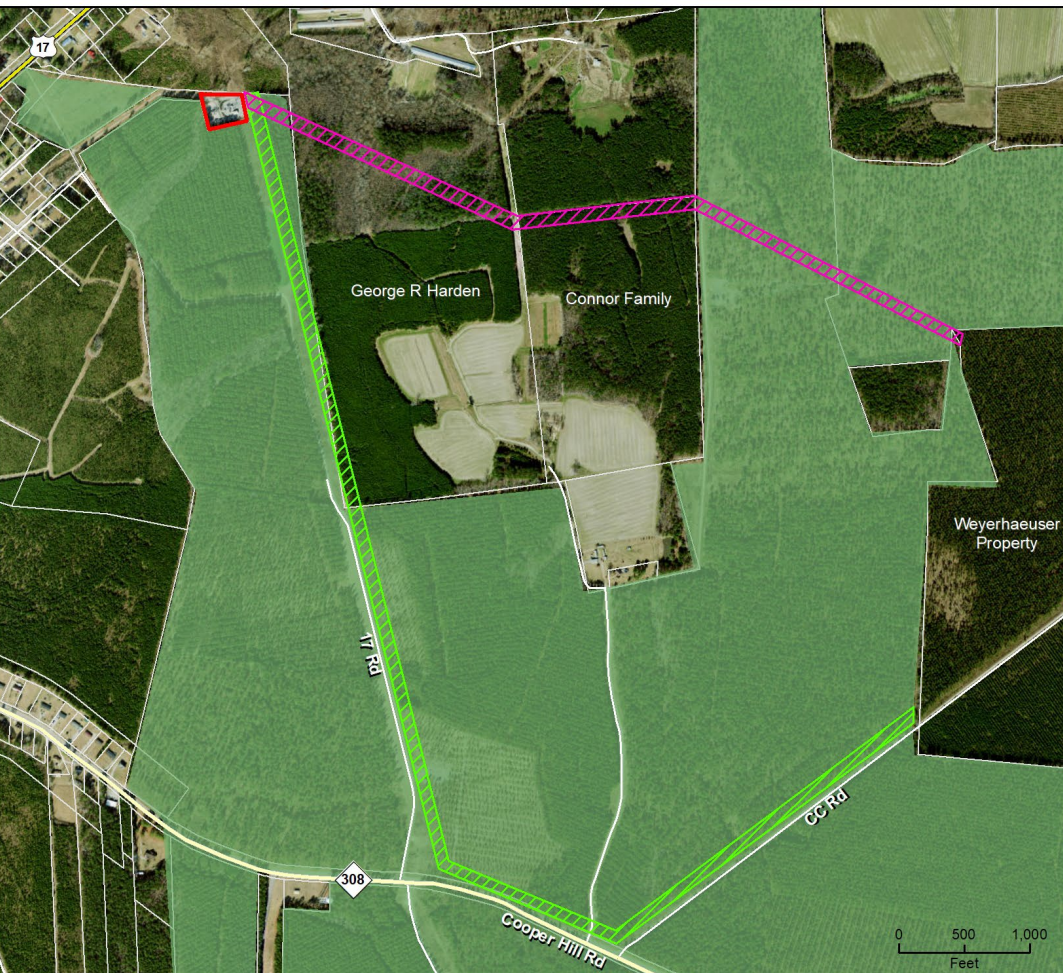


TED Renewables Easement Request Bertie County Game Land Bertie County



Easement Request – Bertie County Game Land (Exhibit F-2)

- TED Renewables requests a utility easement on Bertie County Game Land to supply a proposed solar energy generating facility (Merry Hill Solar Project).
- The easement path crosses two private landowners. TED Renewables has a LOI in place with both landowners.
- Proposed location of the solar farm is adjacent Weyerhaeuser forested land and the size of the project site is listed at 1,000 acres.
- Project due diligence and permitting is complete, except for the Interconnection Agreement. TED Renewables must show secured real estate before completing this step.
- Permanent easement contingent upon operation of the solar farm, with a reversion should TED Renewables cease solar power generation.
 - \$125,000 up front payment at start of project construction
- Lease option was not feasible due to lease term limitations, specifically the requirement to attain legislative approval for leases over 30 years. TED Renewables requires a lease term greater than 30 years for this solar project.



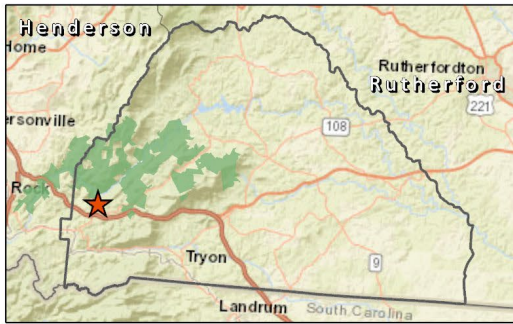
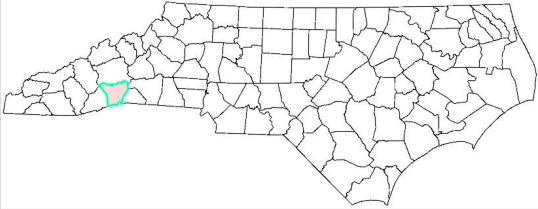
Transmission Easement - alt. route: ~6 ac. of game land

Transmission Easement - original route: ~20 ac. of game land

Dominion Substation

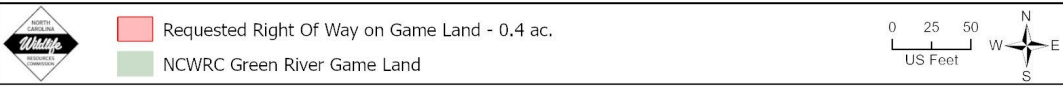
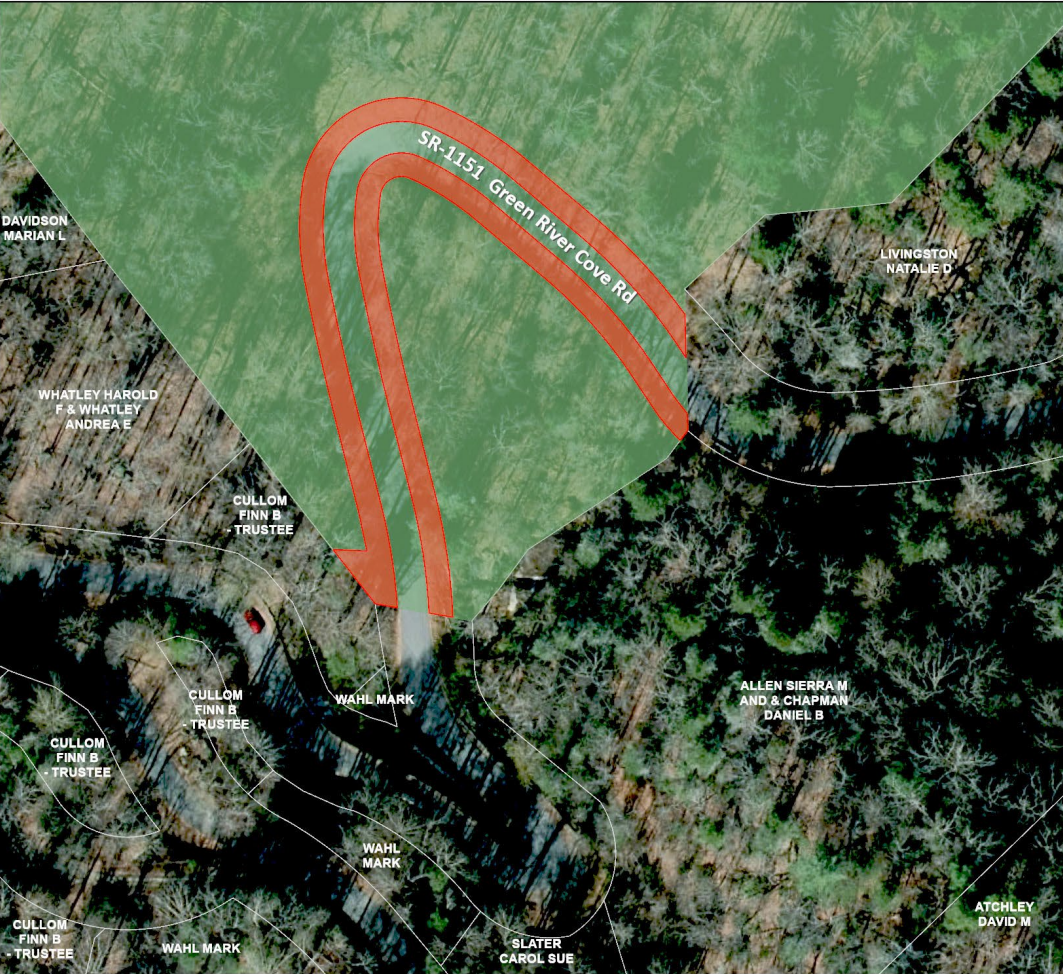
NCWRC Bertie County Game Land

**NCDOT Easement Request
Green River Game Land, Polk County
0.4 Acres**

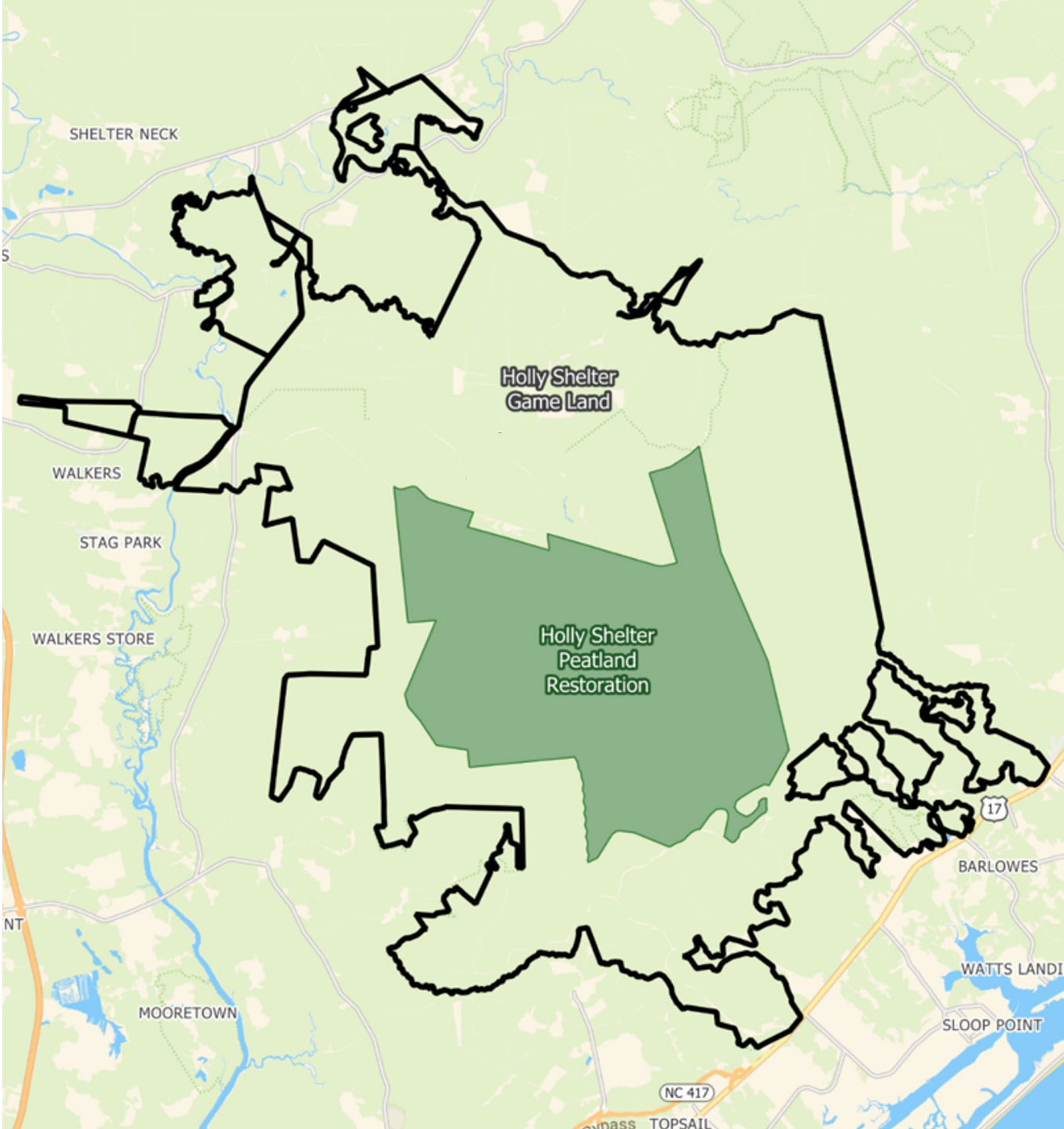


Easement Request – Green River Game Land (Exhibit F-3)

- Right of way request on Green River Cove Road at Green River Game Land in Polk County
- DOT requests a 0.40 acre right of way for this Helene damage repair project
- Value to be determined by State Property Office



Holly Shelter Game Land – Articles of Dedication (Exhibit F-4)



- Consider amending the Holly Shelter Articles of Dedication for Holly Shelter Peatland Restoration project.
- The restoration project is a partnership between The Nature Conservancy and the Department of Natural and Cultural Resources.
- The newly established NH primary zone will codify the restoration project and the \$5,125,000 stewardship endowment from the EPA Climate Pollution Reduction grant.
- This stewardship endowment will fund WRC's management and maintenance of the peatland restoration project between now and the year 2050.

EXHIBIT G

July 30, 2026



North Carolina Wildlife Resources Commission

MEMORANDUM

TO: Brian McRae, Deputy Director of Operations Daron

FROM: Barnes, Division Chief Land and Water Access

SUBJECT: Butner-Falls of Neuse Game Land, Proposed Archery Zone

DATE: July 24, 2026

Per 15A NCAC 10D .0102 (b)(1), establishment of an Archery Zone requires the Commission to “conduct a public input meeting in the area where the game land is located”. On portions of game lands posted as "Archery Zones" hunting is limited to archery equipment and falconry. During the open deer seasons for these areas, antlered and antlerless deer may be taken.

A 711-acre tract of Butner-Falls of Neuse Game Land that is owned by the N.C. Department of Agriculture will be converted from general use game land to an Archery Zone. The change in designation to archery zone reflects an increase in farm operations and expansion of the Department’s adjacent Umstead Beef Unit Research Station.

One public input meeting with 25 attendees was held on June 23, 2026, in Butner, NC. Twenty-one comments were received. Of those, six were questions, two were supportive of the Archery Zone designation and 13 did not support the Archery Zone designation. Those who did support the change in designation were pleased with the potential for additional archery-only hunting opportunities. Those who did not support the change in designation were primarily concerned with the loss of firearm hunting opportunities and loss of areas where they could hunt deer with dogs.

With Commission approval, we would like to post this boundary change before the beginning of the 2026 Deer Archery Season.

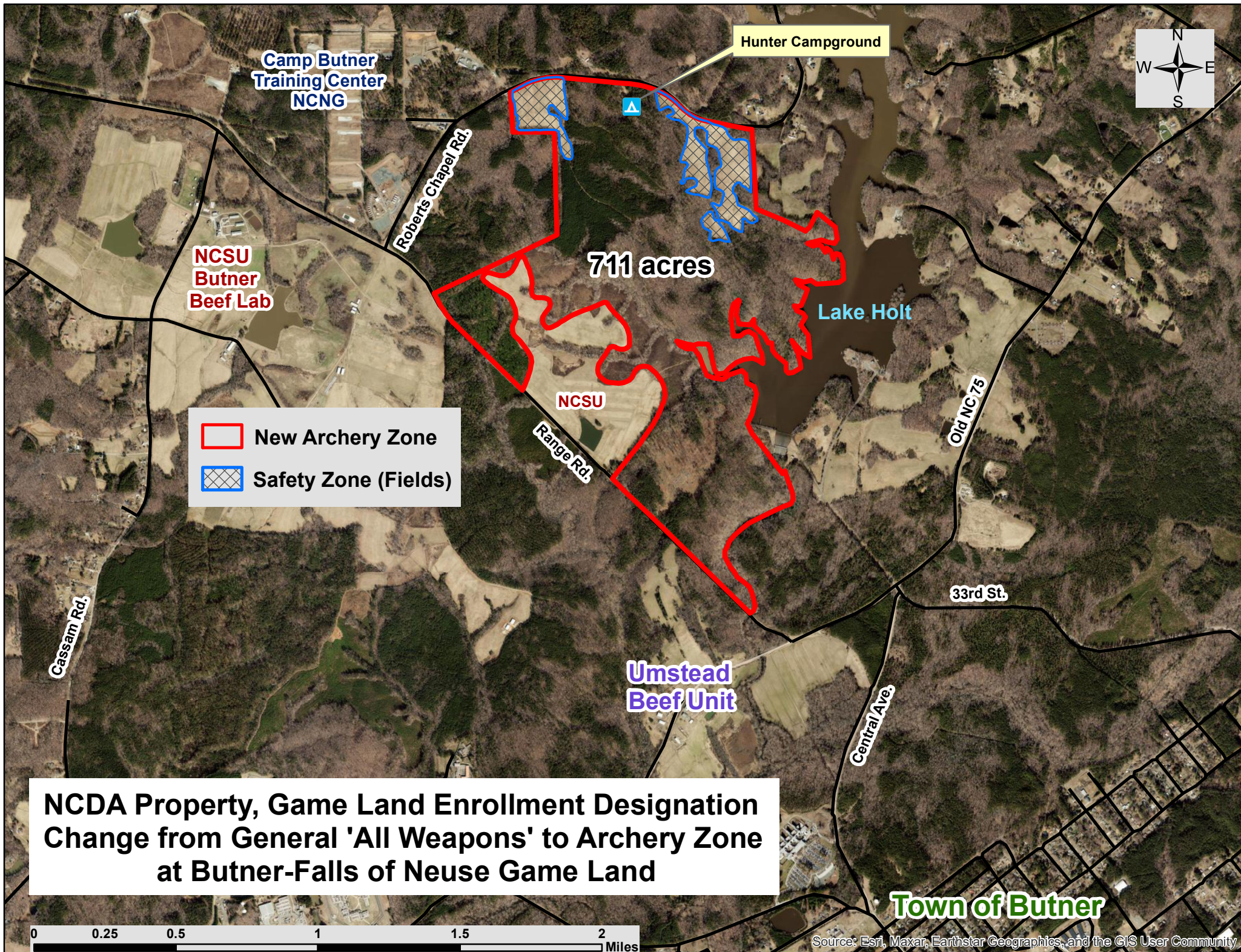


EXHIBIT H-1

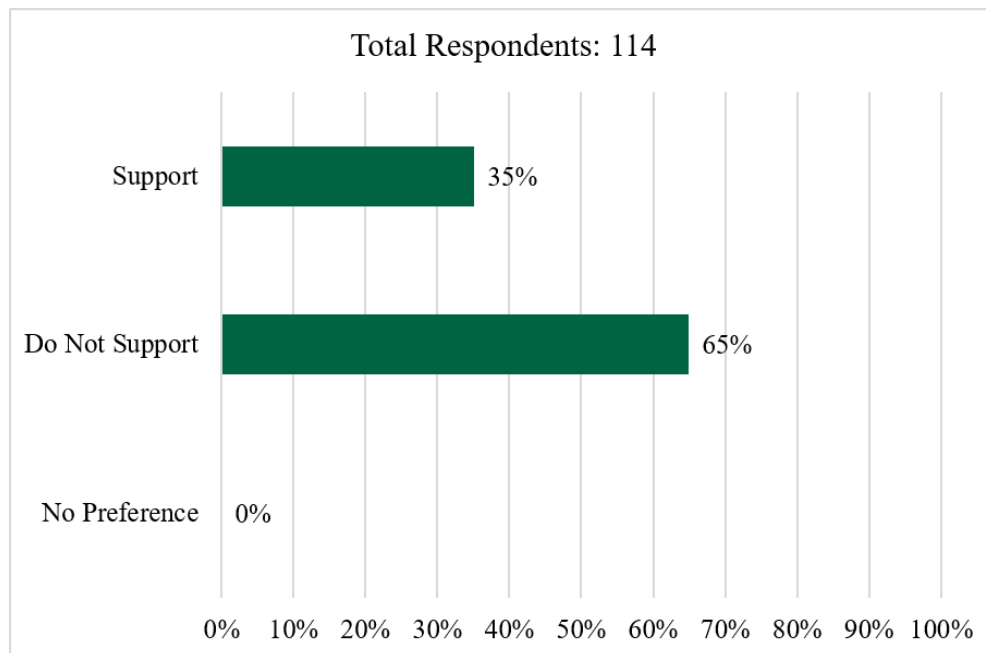
July 30, 2026



Petition for Rulemaking Summary of Public Comments on Butner-Falls of Neuse Game Land

One virtual public hearing was held on June 23, 2026, with ten attendees.

15A NCAC 10D .0211 BUTNER-FALLS OF NEUSE GAME LAND IN DURHAM, GRANVILLE, AND WAKE COUNTIES



District	1	2	3	4	5	6	7	8	9	NC - Not Specified	Out of State	Totals
Support	2	0	33	0	3	0	0	0	1	1	0	40
Do Not Support	1	4	22	2	20	8	4	3	6	2	2	74
No Preference	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	4	55	2	23	8	4	3	7	3	2	114

EXHIBIT H-2

July 30, 2026



Petition for Rulemaking Amendments to 15A NCAC 10D .0211 Butner-Falls of Neuse Game Land in Durham, Granville, and Wake Counties

The Executive Director received a Petition for Rulemaking on Feb. 2, 2026, in compliance with 15A NCAC 10A .0401, and distributed the information, via email, to all Commissioners for consideration on Feb. 3, 2026. The petition requests two amendments to 15A NCAC 10D .0211 Butner-Falls of Neuse Game Land in Durham, Granville, and Wake Counties. The first amendment would prohibit the use of dogs on the portion of the game land south of Purnell Road (SR1909), north of Bent Road, and east of New Light Creek/Falls Lake. The second amendment would designate the same geographic area as archery only.

The rule text submitted by the petitioner has been revised by staff to comply with the rulemaking style guidelines of the Office of Administrative Hearings.

15A NCAC 10D .0211 BUTNER-FALLS OF NEUSE GAME LAND IN DURHAM, GRANVILLE, AND WAKE COUNTIES

15A NCAC 10D .0211 BUTNER-FALLS OF NEUSE GAME LAND IN DURHAM, GRANVILLE, AND WAKE COUNTIES

Butner-Falls of Neuse ~~game-land~~ Game Land is a Six Days per Week Area, in which the following applies:

(1) Antlered or antlerless deer may be taken the first open day of the All Lawful Weapons Season for Deer With Visible Antlers through the second Friday thereafter.

(2) Waterfowl shall be taken only on:

(a) the opening and closing days of the waterfowl seasons;

(b) Thanksgiving, Christmas, New Year's, and Martin Luther King, Jr. Days; and

(c) Tuesdays, Thursdays, and Saturdays of the applicable waterfowl seasons.

On the posted waterfowl impoundments a special permit is required for all waterfowl hunting after November 1.

(3) Horseback riding is prohibited.

(4) Target shooting is prohibited.

(5) On that portion south of Purnell Road (SR1909), north of Bent Road, and east of New Light Creek, hunting with firearms is prohibited.

~~(5)(6)~~ Wild turkey hunting is by permit only, except on those areas posted as an archery zone.

~~(6)(7)~~ The use of dogs for hunting deer is prohibited on that portion west of NC 50 and south of Falls Lake, Lake, and on that portion south of Purnell Road (SR1909), north of Bent Road, and east of New Light Creek.

~~(7)(8)~~ The use of bicycles is restricted to designated areas, except that this restriction does not apply to hunters engaged in the act of hunting during the open days of the seasons for game birds and game animals. On designated bicycle riding areas, the use of bicycles is allowed from May 15 through August 31, and on Sundays only from September 1 through May ~~14~~ 15.

~~(8)(9)~~ Camping is restricted to September 1 through the last day of February and March 31 through May 14. allowed on areas posted for camping as specified in Rule .0102 of this Subchapter.

~~(9)(10)~~ Camping is allowed year-round in the designated Mountains-to-Sea Trail Camping Area and shall not exceed a maximum stay of two consecutive nights. Campfires are prohibited in this camping area.

History Note: Authority G.S. 113-134; 113-264; 113-291.2; 113-291.5; 113-296; 113-305;

Eff. November 1, 2022;

Amended Eff. August 1, 2023.

EXHIBIT I-1

July 30, 2026



Proposed Amendments to Endangered, Threatened, & Special Concern Species Rules Recommended by Agency Staff for Public Notice, Comment, and Presentation at Public Hearings

The proposed amendments to the state listing include four species to be listed as threatened, two species to be listed as special concern, and the removal of one species from the list. Overall, there are 19 changes proposed to the 15A NCAC 10I – Endangered and Threatened Species rules due to additions, removals, shifting of species between lists, technical corrections, and name changes. The goal of these changes is to provide active and appropriate conservation for these species including research, land conservation, monitoring, and habitat restoration.

15A NCAC 10I .0103 ENDANGERED SPECIES LISTED

15A NCAC 10I .0104 THREATENED SPECIES LISTED

15A NCAC 10I .0105 SPECIAL CONCERN SPECIES LISTED

1 15A NCAC 10I .0103 is proposed for amendment as follows:

3 **15A NCAC 10I .0103 ENDANGERED SPECIES LISTED**

4 (a) The following species of resident wildlife shall be designated as federally listed endangered species:

5 (1) Amphibians: None listed.

6 (2) Birds:

7 ~~(A) — Bachman's warbler (*Vermivora bachmanii*);~~

8 ~~(B)(A)~~ Ivory-billed woodpecker (*Campephilus principalis*);

9 ~~(C)(B)~~ Piping plover (*Charadrius melodus circumcinctus*); and

10 ~~(D) — Red-cockaded woodpecker (*Dryobates borealis*); and~~

11 ~~(E)(C)~~ Roseate tern (*Sterna dougallii dougallii*).

12 (3) Crustacea: None listed.

13 (4) Fish:

14 (A) Cape Fear shiner (*Miniellus mekistocholas*);

15 (B) Carolina madtom (*Noturus furiosus*);

16 ~~(C) — Roanoke logperch (*Percina rex*);~~

17 ~~(D)(C)~~ Shortnose sturgeon (*Acipenser brevirostrum*), when found in inland fishing waters as
18 defined in G.S. 113-129(9); and

19 ~~(E)(D)~~ Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), when found in inland fishing waters
20 as defined in G.S. 113-129(9).

21 (5) Mammals:

22 (A) Carolina northern flying squirrel (*Glaucomys sabrinus coloratus*);

23 (B) Eastern cougar (*Puma concolor*);

24 (C) Gray bat (*Myotis grisescens*);

25 (D) Indiana bat (*Myotis sodalis*);

26 (E) Northern long-eared bat (*Myotis septentrionalis*); and

27 (F) Virginia big-eared bat (*Corynorhinus townsendii virginianus*).

28 (6) Mollusks:

29 (A) Appalachian elktoe (*Alasmidonta raveneliana*);

30 (B) Carolina heelsplitter (~~*Lasmigona*~~ (*Platynaias decorata*);

31 (C) Dwarf wedgemussel (~~*Alasmidonta*~~ (*Prolasmidonta heterodon*);

32 (D) James spinymussel (*Parvaspina collina*);

33 (E) Littlewing pearlymussel (*Pegias fabula*);

34 ~~(F)~~ Magnificent ramshorn (*Planorbella magnifica*);

35 ~~(F)(G)~~ Tan riffleshell (*Epioblasma florentina walkeri*); and

36 ~~(G)(H)~~ Tar River spinymussel (*Parvaspina steinstansana*).

37 (7) Reptiles:

- 1 (A) Kemp's ridley sea turtle (*Lepidochelys kempii*);
2 (B) Hawksbill sea turtle (*Eretmochelys imbricata*); and
3 (C) Leatherback sea turtle (*Dermochelys coriacea*).
- 4 (b) The following species of resident wildlife shall be designated as State-listed endangered species:
- 5 (1) Amphibians:
- 6 (A) Gopher frog (*Rana* [=*Lithobates*] *capito*);
7 (B) Hickory Nut Gorge green salamander (*Aneides caryaensis*);
8 (C) Ornate chorus frog (*Pseudacris ornata*); and
9 (D) River frog (*Rana* [=*Lithobates*] *heckscheri*).
- 10 (2) Birds:
- 11 (A) American peregrine falcon (*Falco peregrinus anatum*);
12 (B) Common tern (*Sterna hirundo*);
13 (C) Henslow's sparrow (*Centronyx henslowii*); and
14 (D) Wayne's black-throated green warbler (*Setophaga virens waynei*).
- 15 (3) Crustacea:
- 16 (A) Bennett's Mill cave water slater (*Caecidotea carolinensis*); and
17 (B) ~~Waccamaw~~ Cedar Creek crayfish (*Procambarus* ~~*braswelli*~~ *chacei*).
- 18 (4) Fish:
- 19 (A) Blotchside logperch (*Percina burtoni*);
20 (B) Bridle shiner (*Notropis bifrenatus*);
21 (C) Orangefin madtom (*Noturus gilberti*);
22 (D) Paddlefish (*Polyodon spathula*);
23 (E) Robust redhorse (*Moxostoma robustum*);
24 (F) Rustyside sucker (*Thoburnia hamiltoni*);
25 (G) Sharpnose darter (*Percina oxyrhynchus*); and
26 (H) Stonecat (*Noturus flavus*).
- 27 (5) Mammals:
- 28 (A) Little brown bat (*Myotis lucifugus*); and
29 (B) Tricolored bat (*Perimyotis subflavus*).
- 30 (6) Mollusks:
- 31 (A) Barrel floater (*Utterbackiana couperiana*);
32 (B) Brook floater (*Alasmidonta varicosa*);
33 (C) Carolina creekshell (*Sagittunio vauhanianus*);
34 (D) Fragile glyph (*Pilsbryna clingmani*);
35 (E) Green floater (~~*Lasmigona*~~ *Platynaias* *subviridis*);
36 (F) Greenfield ramshorn (*Helisoma eucosmium*);
37 (G) Knotty elimia (*Elimia christyi*);

~~(H)~~ Longsolid (~~Fusconaia subrotunda~~);
~~(I)~~ Magnificent ramshorn (~~Planorbella magnifica~~);
~~(J)~~(H) Purple wartyback (Cyclonaias tuberculata);
~~(K)~~(I) Savannah lilliput (Toxolasma pullus);
~~(L)~~(J) Slippershell mussel (~~Alasmidonta~~ Pressodonata viridis);
~~(M)~~(K) Tennessee clubshell (Pleurobema oviforme);
~~(N)~~(L) Tennessee heelsplitter (~~Lasmigona~~ Alasminota holstonia);
~~(O)~~(M) Tennessee pigtoe (Pleuronaia barnesiana); and
~~(P)~~(N) Yellow lampmussel (Lampsilis cariosa).

(7) Reptiles:

- (A) Eastern coral snake (Micrurus fulvius fulvius);
- (B) Eastern diamondback rattlesnake (Crotalus adamanteus); and
- (C) Mimic glass lizard (Ophisaurus mimicus).

History Note: Authority G.S. 113-134; 113-333;
Eff. June 11, 1977;
Amended Eff. October 1, 2017; August 1, 2016; May 1, 2008; April 1, 2001; February 1, 1994;
November 1, 1991; April 1, 1991; June 1, 1990;
Readopted Eff. October 1, 2021;
Amended Eff. October 1, 2024; February 1, 2023.

1 15A NCAC 10I .0104 is proposed for amendment as follows:

3 **15A NCAC 10I .0104 THREATENED SPECIES LISTED**

4 (a) The following species of resident wildlife shall be designated as federally listed threatened species:

- 5 (1) Amphibians: Neuse River waterdog (*Necturus lewisi*).
- 6 (2) Birds:
 - 7 (A) Eastern black rail (*Laterallus jamaicensis jamaicensis*);
 - 8 (B) Piping plover (*Charadrius melodus melodus*);
 - 9 (C) Red-cockaded woodpecker (*Dryobates borealis*); and
 - 10 ~~(C)(D) Red knot (*Calidris canutus rufa*). (*Calidris canutus rufa*); and~~
 - 11 ~~(D) Wood stork (*Mycteria americana*).~~
- 12 (3) Crustacea: None listed.
- 13 (4) Fish:
 - 14 (A) Spotfin chub (*Erimonax monachus*); and
 - 15 (B) Waccamaw silverside (*Menidia extensa*).
- 16 (5) Mammals: West Indian Manatee (*Trichechus manatus*), when found in inland fishing waters as
- 17 defined in G.S. 113-129(9).
- 18 (6) Mollusks:
 - 19 (A) Atlantic pigtoe (*Fusconaia masoni*);
 - 20 (B) Longsolid (*Fusconaia subrotunda*);
 - 21 (C) Noonday globe (*Patera nantahala*); and
 - 22 (D) Yellow lance (*Elliptio lanceolata*).
- 23 (7) Reptiles:
 - 24 (A) Bog turtle (*Glyptemys muhlenbergii*);
 - 25 (B) American alligator (*Alligator mississippiensis*);
 - 26 (C) Green sea turtle (*Chelonia mydas*); and
 - 27 (D) Loggerhead sea turtle (*Caretta caretta*).

28 (b) The following species of resident wildlife are designated as State-listed ~~State-listed~~ threatened species:

- 29 (1) Amphibians:
 - 30 (A) Eastern tiger salamander (*Ambystoma tigrinum tigrinum*);
 - 31 (B) Green salamander (*Aneides aeneus*);
 - 32 (C) Junaluska salamander (*Eurycea junaluska*);
 - 33 (D) Eastern long-tailed salamander (*Eurycea longicauda longicauda*);
 - 34 (E) Mabee's salamander (*Ambystoma mabeei*);
 - 35 (F) Pine Barrens tree frog (*Hyla andersonii*); and
 - 36 (G) Wehrle's salamander (*Plethodon wehrlei*).
- 37 (2) Birds:

- 1 (A) Bald eagle (*Haliaeetus leucocephalus*);
- 2 (B) Black skimmer (*Rynchops niger*);
- 3 (C) Caspian tern (*Hydroprogne caspia*);
- 4 (D) Gull-billed tern (*Gelochelidon nilotica aranea*);
- 5 (E) Northern saw-whet owl (*Aegolius acadicus*); and
- 6 (F) Rusty blackbird (*Euphagus carolinus*).
- 7 (3) Crustacea:
- 8 (A) Broad River spiny crayfish (*Cambarus spicatus*);
- 9 (B) French Broad crayfish (*Cambarus reburus*);
- 10 (C) Pamlico crayfish (*Procambarus medialis*);
- 11 (D) Sandhills crayfish (*Procambarus pearsei*); and
- 12 (E) South Mountains crayfish (*Cambarus franklini*).
- 13 (4) Fish:
- 14 (A) Bigeye jumprock (*Moxostoma ariommum*);
- 15 (B) Blotched chub (*Erimystax insignis*);
- 16 (C) Carolina pygmy sunfish (*Elassoma boehlkei*);
- 17 (D) Carolina redhorse (*Moxostoma sp.*; carolina);
- 18 (E) Ironcolor shiner (*Alburnops chalybaeus*);
- 19 (F) Least brook lamprey (*Lampetra aepyptera*);
- 20 (G) Logperch (*Percina caprodes*);
- 21 (H) Mimic shiner (*Paranotropis volucellus*);
- 22 (I) River redhorse (*Moxostoma carinatum*);
- 23 (J) Roanoke logperch (*Percina rex*);
- 24 ~~(H)(K)~~ Rosyface chub (*Hybopsis rubrifrons*);
- 25 ~~(J)~~ ~~Sharphead darter (*Nothonotus acuticeps*)~~;
- 26 ~~(K)(L)~~ Santee chub (*Cyprinella zanema*);
- 27 (M) Sharphead darter (*Nothonotus acuticeps*);
- 28 ~~(L)(N)~~ Sicklefins redhorse or Ugidatli (*Moxostoma sp.*; *Moxostoma ugidatli*);
- 29 (O) Siouan thinlip chub (*Cyprinella zanema*);
- 30 ~~(M)(P)~~ Thicklip chub (*Cyprinella labrosa*);
- 31 ~~(N)(Q)~~ Turquoise darter (*Etheostoma inscriptum*); and
- 32 ~~(O)(R)~~ Waccamaw darter (*Etheostoma perlongum*).
- 33 (5) Mammals:
- 34 (A) Eastern woodrat (*Neotoma floridana floridana*);
- 35 (B) Rafinesque's big-eared bat (*Corynorhinus rafinesquii rafinesquii*); and
- 36 (C) Red wolf (*Canis rufus*).
- 37 (6) Mollusks:

- (A) Alewife floater (*Utterbackiana implicata*);
 - (B) Big-tooth covert (*Fumonelix jonesiana*);
 - (C) Cape Fear threetooth (*Triodopsis soelneri*);
 - (D) Eastern lampmussel (*Lampsilis radiata*);
 - (E) Eastern pondmussel (*Sagittunio nasutus*);
 - (F) Engraved covert (*Fumonelix orestes*);
 - (G) Mountain creekshell (*Leaunio vanuxemensis*);
 - (H) Notched rainbow (*Venustaconcha constricta*);
 - (I) Rainbow (*Cambarunio iris*);
 - (J) Roan supercoil (*Paravitrea varidens*);
 - (K) Sculpted supercoil (*Paravitrea ternaria*);
 - (L) Smoky Mountain covert (*Inflectarius ferrissi*);
 - (M) Creeper (*Strophitus undulatus*);
 - (N) Tidewater mucket (*Atlanticoncha ochracea*);
 - (O) Triangle floater (*Alasmidonta undulata*); ~~and~~
 - (P) Uwharrie elktoe (*Alasmidonta uwharriensis*); and
 - ~~(P)(Q)~~ Waccamaw ambersnail (*Catinella waccamawensis*).
- (7) Reptiles:
- (A) Northern pine snake (*Pituophis melanoleucus melanoleucus*); and
 - (B) Southern hognose snake (*Heterodon simus*).

History Note: Authority G.S. 113-134; 113-333;
Eff. March 17, 1978;
Amended Eff. June 1, 2008; April 1, 2001; November 1, 1991; April 1, 1991; June 1, 1990;
September 1, 1989;
Temporary Amendment Eff. February 27, 2015;
Amended Eff. October 1, 2017; July 1, 2016; August 1, 2016;
Readopted Eff. October 1, 2021;
Amended Eff. October 1, 2024; February 1, 2023.

1 15A NCAC 10I .0105 is proposed for amendment as follows:

3 **15A NCAC 10I .0105 SPECIAL CONCERN SPECIES LISTED**

4 The following species of resident wildlife shall be designated as State-listed ~~State-listed~~ special concern species:

5 (1) Amphibians:

- 6 (a) Collinses' mountain chorus frog (*Pseudacris collinsorum*);
- 7 (b) Crevice salamander (*Plethodon longicrus*);
- 8 (c) Dwarf salamander (*Eurycea quadridigitata*);
- 9 (d) Dwarf black-bellied salamander (*Desmognathus folkertsi*);
- 10 (e) Eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*);
- 11 (f) Four-toed salamander (*Hemidactylium scutatum*);
- 12 (g) Gray treefrog (*Hyla versicolor*);
- 13 (h) Mole salamander (*Ambystoma talpoideum*);
- 14 (i) Mudpuppy (*Necturus maculosus*);
- 15 (j) Southern chorus frog (*Pseudacris nigrita*);
- 16 (k) Southern zigzag salamander (*Plethodon ventralis*); and
- 17 (l) Weller's salamander (*Plethodon welleri*).

18 (2) Birds:

- 19 (a) American oystercatcher (*Haematopus palliatus*);
- 20 (b) Bachman's sparrow (*Peucaea aestivalis*);
- 21 (c) Barn owl (*Tyto alba*);
- 22 (d) Black-capped chickadee (*Poecile atricapillus*);
- 23 (e) Brown creeper (*Certhia americana nigrescens*);
- 24 (f) Cerulean warbler (*Setophaga cerulea*);
- 25 (g) Glossy ibis (*Plegadis falcinellus*);
- 26 (h) Golden-winged warbler (*Vermivora chrysoptera*);
- 27 (i) Least bittern (*Ixobrychus exilis*);
- 28 (j) Least tern (*Sternula antillarum*);
- 29 (k) Little blue heron (*Egretta caerulea*);
- 30 (l) Loggerhead shrike (*Lanius ludovicianus*);
- 31 (m) Painted bunting (*Passerina ciris*);
- 32 (n) Red crossbill (*Loxia curvirostra*);
- 33 (o) Snowy egret (*Egretta thula*);
- 34 (p) Swallow-tailed kite (*Elanoides forficatus*);
- 35 (q) Tricolored heron (*Egretta tricolor*);
- 36 (r) Vesper sparrow (*Pooecetes gramineus*); and
- 37 (s) Wilson's plover (*Charadrius wilsonia*).

- 1 (3) Crustacea:
 - 2 (a) Carolina skistodiaptomus (*Skistodiaptomus carolinensis*);
 - 3 (b) Carolina well diacyclops (*Diacyclops jeannelli putei*);
 - 4 (c) Chowanoke crayfish (*Faxonius virginensis*);
 - 5 (d) Falls crayfish (*Cambarus burchfielae*);
 - 6 ~~(d)~~(e) Graceful clam shrimp (*Lynceus gracilicornis*);
 - 7 ~~(e)~~(f) Greensboro burrowing crayfish (*Cambarus catagius*);
 - 8 ~~(f)~~(g) Hiwassee headwaters crayfish (*Cambarus parrishi*);
 - 9 ~~(g)~~(h) Little Tennessee River crayfish (*Cambarus georgiae*);
 - 10 ~~(h)~~(i) North Carolina spiny crayfish (*Faxonius carolinensis*); ~~and~~
 - 11 ~~(i)~~(j) Oconee stream crayfish (*Cambarus chaugaensis*); ~~and (*Cambarus chaugaensis*)~~.
 - 12 (k) Stony Fork crayfish (*Cambarus lapidosus*).
- 13 (4) Fish:
 - 14 (a) American brook lamprey (*Lethenteron appendix*);
 - 15 (b) "Atlantic" Highfin carpsucker (*Carpionodes sp. cf. velifer*);
 - 16 (c) Banded sculpin (*Cottus carolinae*);
 - 17 (d) Blue Ridge sculpin (*Cottus caeruleomentum*);
 - 18 (e) Blueside darter (*Etheostoma jessiae*);
 - 19 (f) Broadtail madtom (*Noturus sp.*);
 - 20 (g) Carolina darter (*Etheostoma collis*);
 - 21 (h) Cutlip minnow (*Exoglossum maxillingua*);
 - 22 (i) Freshwater drum (*Aplodinotus grunniens*);
 - 23 (j) Kanawha minnow (*Phenacobius teretulus*);
 - 24 (k) Lake sturgeon (*Acipenser fulvescens*);
 - 25 (l) Least killifish (*Heterandria formosa*);
 - 26 (m) Mooneye (*Hiodon tergisus*);
 - 27 (n) Mountain madtom (*Noturus eleutherus*);
 - 28 (o) Ohio lamprey (*Ichthyomyzon bdellium*);
 - 29 (p) Olive darter (*Percina squamata*);
 - 30 (q) Pinewoods darter (*Etheostoma mariaae*);
 - 31 (r) River carpsucker (*Carpionodes carpio*);
 - 32 (s) Sandhills chub (*Semotilus lumbee*);
 - 33 (t) Seagreen darter (*Etheostoma thalassinum*);
 - 34 (u) Sickle darter (*Percina williamsi*);
 - 35 (v) Smoky dace (*Clinostomus sp.*);
 - 36 (w) Sooty-banded darter (*Percina westfalli*);
 - 37 (x) Striped shiner (*Luxilus chrysocephalus*);

- (y) Snubnose darter (*Etheostoma simoterum*);
 - ~~(z) "Thinlip" chub (*Cyprinella sp. cf. zanema*);~~
 - ~~(aa)~~(z) Waccamaw killifish (*Fundulus waccamensis*);
 - ~~(bb)~~(aa) Wounded darter (*Nothonotus vulneratus*); and
 - ~~(cc)~~(bb) Yellowfin shiner (*Hydrophlox lutipinnis*).
- (5) Mammals:
- (a) Allegheny woodrat (*Neotoma magister*);
 - (b) Buxton Woods white-footed mouse (*Peromyscus leucopus buxtoni*);
 - (c) Coleman's oldfield mouse (*Peromyscus polionotus colemani*);
 - (d) Eastern big-eared bat (*Corynorhinus rafinesquii macrotis*);
 - (e) Eastern small-footed bat (*Myotis leibii leibii*);
 - (f) Florida yellow bat (*Lasiurus intermedius floridanus*);
 - (g) Southeastern bat (*Myotis austroriparius*);
 - (h) Southern rock vole (*Microtus chrotorrhinus carolinensis*); and
 - (i) Star-nosed mole (*Condylura cristata parva*).
- (6) Mollusks:
- (a) Appalachian gloss (*Zonitoides patuloides*);
 - (b) Bidentate dome (*Ventridens coelaxis*);
 - (c) Black mantleslug (*Pallifera hemphilli*);
 - (d) Blackwater ancylid (*Ferrissia hendersoni*);
 - (e) Blue-foot lancetooth (*Haplotrema kendeighi*);
 - (f) Cape Fear spike (*Elliptio marsupiobesa*);
 - (g) Clingman covert (*Fumonelix wheatleyi clingmanicus*);
 - (h) Dark glyph (*Glyphyalinia junaluskana*);
 - (i) Dwarf proud globe (*Patera clarki clarki*);
 - (j) Dwarf threetooth (*Triodopsis fulciden*);
 - (k) Fringed coil (*Helicodiscus fimbriatus*);
 - (l) Glossy supercoil (*Paravitrea placentula*);
 - (m) Great Smoky slitmouth (*Stenotrema depilatum*);
 - (n) High mountain supercoil (*Paravitrea andrewsae*);
 - (o) Honey glyph (*Glyphyalinia vanattai*);
 - (p) Lamellate supercoil (*Paravitrea lamellidens*);
 - (q) Mirey Ridge supercoil (*Paravitrea clappi*);
 - (r) Open supercoil (*Paravitrea umbilicaris*);
 - (s) Pink glyph (*Glyphyalinia pentadelphia*);
 - (t) Pink heelsplitter (*Potamilus alatus*);
 - (u) Pod lance (*Elliptio folliculata*);

- (v) Queen crater (*Appalachina chilhoweensis*);
- (w) Ramp Cove supercoil (*Paravitrea lacteodens*);
- (x) Ridged lioplax (*Lioplax subcarinata*);
- (y) Roanoke slabshell (*Elliptio roanokensis*);
- (z) Saw-tooth disc (*Discus bryanti*);
- (aa) Seep mudalia (*Leptoxis dilatata*);
- (bb) Spike (*Eurynia dilatata*);
- (cc) Spiral coil (*Helicodiscus bonamicus*);
- (dd) Velvet covert (*Inflectarius subpalliatu*s);
- (ee) Waccamaw amnicola (*Amnicola* sp.);
- (ff) Waccamaw siltsnail (*Cincinnatia* sp.); and
- (gg) Wavy-rayed lampmussel (*Lampsilis fasciola*).
- (7) Reptiles:
 - (a) Carolina pigmy rattlesnake (*Sistrurus miliarius miliarius*);
 - (b) Carolina swamp snake (*Liodytes pygaea paludis*);
 - (c) Carolina watersnake (*Nerodia sipedon williamengelsi*);
 - (d) Cumberland slider (*Trachemys scripta troostii*);
 - (e) Diamondback terrapin (*Malaclemys terrapin*);
 - (f) Eastern chicken turtle (*Deirochelys reticularia reticularia*);
 - (g) Eastern coachwhip (*Coluber* [=Masticophis] *flagellum flagellum*);
 - (h) Eastern slender glass lizard (*Ophisaurus attenuatus longicaudus*);
 - (i) Eastern spiny softshell (*Apalone spinifera spinifera*);
 - (j) Northern map turtle (*Graptemys geographica*);
 - (k) Outer Banks kingsnake (*Lampropeltis getula sticticeps*);
 - (l) Stripeneck musk turtle (*Sternotherus peltifer*); and
 - (m) Timber rattlesnake (*Crotalus horridus*).

History Note: Authority G.S. 113-134; 113-333;
Eff. September 1, 1989;
Amended Eff. October 1, 2017; August 1, 2016; May 1, 2008; July 18, 2002; April 1, 2001;
November 1, 1991; April 1, 1991; June 1, 1990;
Readopted Eff. October 1, 2021;
Amended Eff. October 1, 2024; February 1, 2023.

EXHIBIT I-2

July 30, 2026



Wildlife Resources Commission Fiscal Note for Proposed Endangered/Threatened/Special Concern Species Rule Amendments

Rule Amendments: 15A NCAC 10I .0103 ENDANGERED SPECIES LISTED
15A NCAC 10I .0104 THREATENED SPECIES LISTED
15A NCAC 10I .0105 SPECIAL CONCERN SPECIES LISTED

Agency Contact: William Casola
Policy Analyst
NC Wildlife Resources Commission
1751 Varsity Drive
Raleigh, NC 27606
(919) 707-0125
william.casola@ncwildlife.gov

Fiscal Impact: State Government: Yes
Local Government: Yes
Private Impact: Yes
Substantial Economic Impact: No

Authority: G.S. 113-134; 113-333

BACKGROUND

The wildlife resources of North Carolina belong to the public (G.S. 113-131(a)), and the Wildlife Resources Commission (WRC) is the agency tasked with the conservation of these resources (G.S. 143-239). This responsibility includes managing, as equitably as possible, the various competing interests regarding these resources, including the use and take of such resources (G.S. 113-131.1(a)). The statutes governing wildlife resources are found in Chapter 113, Subchapter IV of the General Statutes, and WRC has been granted rulemaking authority to implement the provisions of these statutes (G.S. 113-134).

As part of its mission, WRC adopts and publishes an endangered species list, a threatened species list, and a list of special concern species, as required by G.S. 113-333. Lists are amended from time to time, in response to public proposals or as the Commission deems necessary. The WRC conducts investigations of its wild animals, as defined in G.S. 113-331, to determine whether the state listings need to be adjusted to accomplish the objectives of managing wildlife resources through sound conservation. The WRC also adopts and implements conservation programs for endangered, threatened, and special concern species to limit, regulate, or prevent the taking, collection, or sale of protected species (G.S. 113-333). The management goal with any state listing is to ensure the stability of a species for long term viability. The permitting process ensures that species are protected, while allowing for reasonable, desirable, and permissible take and possession of these species.

The process for updating the state listing is a multi-year, transparent process defined by science-based decision making. Per G.S. 113-335, the Nongame Wildlife Advisory Committee (NWAC) is the panel of experts from scientific disciplines who review scientific evidence and submit their state-listing recommendations to the Commission. The Commission is required by G.S. 113-334 to consider the recommendations while examining relevant data and factual information. The proposed changes to the state listings are based on actual data and the status of each species population as proposed by the North Carolina Species Assessment Tool and detailed in the Wildlife Action Plan (<https://www.ncwildlife.gov/state-wildlife-action-plan>).

A summary of the proposed rule amendments is below, with the full text and species profiles included.

PURPOSE

The endangered, threatened and special concern species lists (hereinafter, referred to as the protected species list or state list), identify nongame wildlife resources in need of protection and conservation with the goal of increasing their population numbers. An endangered species is one whose continued existence has been determined to be in jeopardy in the state or one that is designated as an endangered species pursuant to the Endangered Species Act. A threatened species is one who is likely to become endangered within the foreseeable future throughout all, or at least a significant portion of its range, or one that is designated as a threatened species pursuant to the Endangered Species Act. And a special concern species has been determined to need monitoring (G.S. 113-331). All species on the protected species list are native or once-native species of North Carolina.

The proposed changes to the list are necessary to ensure the continued viability of North Carolina's nongame wildlife diversity by promoting conservation priorities. After a review of seven species in a report from the Scientific Council approved by NWAC, the WRC recommends adding four species (two threatened and two special concern), changing the status of four species, removing two species, and making common and/or scientific name changes for eight species on the protected species list. The proposed list highlights species that meet the definition of endangered, threatened, or special concern. A complete list of proposed changes and summarized data on each species can be found in appendices.

The proposed changes to the state listing include four species to be listed as threatened, two species to be listed as special concern, and the removal of one species from the list. Overall, there will be 19 changes to the 15A NCAC 10I – Endangered and Threatened Species Rules due to additions, removals, shifting of species between lists, technical corrections, and name changes. The goal of these changes is to provide active and appropriate conservation for these species including research, land conservation, monitoring, and habitat restoration. When a species is experiencing a threat and/or decline in population, the state listing status can provide additional funding opportunities and research priority to assist in the recovery and population viability.

Adding a species to the protected species list establishes protection from direct take, encourages partners to request funding for species-specific projects, assists in identifying quality habitat that the agency would like to conserve, and informs partners of ecologically significant habitats so they can work to minimize impacts and focus their conservation efforts. Additionally, this information plays a large role in identifying and prioritizing multi-state and regional conservation needs as well as long-term monitoring programs and minimizes the likelihood of federal listing for that species.

FISCAL IMPACTS - COSTS

State Impact

The proposed amendments to the 10I Rules are anticipated to have a minimal economic impact on the state. It is unlawful, unless granted specific authorization, for an individual to take, possess, sell, propagate, transport, import, export, transfer, barter, trade, or stock any species listed in 15A NCAC 10I .0103 - .0105. To enforce this law, WRC requires all new wildlife enforcement officers to participate in an agency training that includes a one-day review of regulations and field identification specifically for nongame and state listed species. This training includes eight hours of information on illegal pet trade, collection, and food market, and teaches officers accurate species identification. Additionally, routine refresher training is offered, which includes information on nongame species that may have had an increased number of unlawful activities, and any changes that have been made to the protected species lists. Though new training materials will need to be developed to incorporate the proposed changes to the 10I Rules, the materials are produced in-house, and staff time anticipated for completion of this task is at most, two hours. This expense will be a one-time cost to the agency of \$120 (\$60/hr. x 2 hrs. = \$120¹).

In the field, enforcement officers track their time spent patrolling for unlawful activity involving nongame species, including listed species. Based on officer activity logs from fiscal year FY 2019 and FY 2020, less than one percent of each officer's time is spent on nongame specific activities. These activities include routine patrols for violations, responding to wildlife/human interactions and complaints, assisting biologists with complaints, following leads from citizens, and investigating actual crimes. The proposed changes are anticipated to have little impact on law enforcement operations, and enforcement of the newly listed species will be carried out as part of normal law enforcement operations.

Once a species is added to the protected species list, a conservation plan must be developed (G.S. 113-333(b)). These plans detail the restoration and management actions that the agency recommends to secure recovery of the species. Many of these species co-exist in the same habitat and as such, will benefit from the conservation efforts of other species. The species added to the state list may be absorbed into current conservation efforts. For those species not cohabitating with currently listed species, new management plans will be developed. Based on the proposed amendments, a net of six species will require new management plans, at an estimated cost to the agency of \$43,200 (\$60/hr x 120 hrs/plan = \$7,200/plan; \$7,200/plan x 6 plans = \$43,200).

Recovery efforts for a species in decline may be implemented by the agency regardless of listing status. However, these management techniques will be included in a conservation plan (required if listed) and could range from monitoring to population augmentation. If a species requires

¹ Based on Conservation Biologist II [NC18] annual total compensation, including benefits [\$120,000]

monitoring and data collection, insignificant costs for staff time and supplies may be incurred at an estimated cost of \$200 to \$1000 per species. Monitoring costs would be low because, depending on the species, sampling efforts are not typically exclusive, and minimal time, effort, and supplies would be needed for collection of any additional data. On the other hand, if a more intensive management effort were required, for example the head-start restoration effort currently being implemented for the gopher frog, estimated costs could be close to \$850,000 over a 10-year period. Specifically for the newly added species, the propagation of mussels and fish for conservation purposes average \$36,000/yr and are accomplished through internal work at the Conservation Aquaculture Center or through an external contract. Monitoring and population augmentation are still needed for some of these species. The WRC is participating in the USFWS post delisting monitoring of the Roanoke Logperch for 5 years, required activities include survey and monitoring and propagation. However, we must note that these conservation actions would likely occur even if the species were not on the Protected Animal Lists. Although the Wildlife Action Plan summarizes recovery techniques for priority species, the conservation plans will provide more specific details by species.

Any individual who wishes to collect a nongame species for research purposes is required to obtain a collection license. Collection of a listed species also requires an endangered species permit. The agency's Regulated Activities and Permits Section currently processes and issues Endangered Species (ES) Permits with assistance from biologists. Approximately 100 ES Permits are issued annually². The proposed amendments have the potential to add a minor administrative burden on the agency in the form of additional permit paperwork and review. Permit application review and long-term tracking of these permit holders will be performed as part of the regular duties of agency staff.

Agency staff currently review development projects from other state and local agencies to determine the effects of those projects on state-listed species. Though four new species will be listed in Rule, no additional costs to the WRC or any other agencies are anticipated, as neither process, review protocol nor staffing will be changed. However, because new species are being added, agency staff will be asked for scientific expertise on proposed projects during the permit review process to assist in understanding any anticipated impact the project could have on these newly listed species. The number of projects impacted cannot be quantified; however, this review requires approximately four hours of staff time per project and would cost an estimated \$240 per project ($\$60\text{hr} \times 4 \text{ hrs/project} = \240/project)

The WRC jointly administers the Wildlife Conservation Lands Program with local County Tax Assessors. This program is a property tax deferral program for private landowners who manage their property to conserve identified priority wildlife habitats and listed species. Landowners

² The WRC issued 110 ES Permits in FY2025 and has issued or received 83 ES Permits/ES Permit Applications for FY2026 as on April 28, 2026.

who identify priority habitats or species on their land may voluntarily enter into a Wildlife Habitat Conservation Agreement with the WRC, if they have a minimum of 20 contiguous acres of qualifying habitat and have owned the property for a minimum of five years. The WRC provides free technical guidance and develops the required management plans free of charge for interested landowners to submit to their county offices. Additionally, the WRC is available to assist the County in site audits for those currently enrolled and answer questions. The number of new landowners who will be eligible and want to participate in the program cannot be quantified; however, the estimated cost to the agency is \$600 per project (\$50/hr x 12 hrs/project = \$600/project³).

Local Impact

The proposed amendments may create opportunities for landowners to participate in the Wildlife Conservation Lands Program for county tax deferral. This opportunity would only be available to individuals who own priority habitat that meets the minimum requirements for participation in the program and implement land management efforts that benefit species of concern. These landowners would receive a deferred tax break from county land taxes to implement land management efforts on their property. We are unable to estimate the number of landowners who may enroll in the program because of the proposed amendments, nor are we able to estimate the impact on local property tax revenues.

Private Impact

The proposed amendments to the 10I Rules are expected to have minimal private impacts. Per G.S. 113-337(a)(1), it is unlawful to take any animal on the protected species list. Because all the proposed species are nongame, the changes are not anticipated to impact hunting, fishing or trapping.

Any qualified private entity who wishes to collect a species on the protected animal list is required to obtain an endangered species permit. There is a \$12 fee for the endangered species permit, but the project scope must be submitted and approved by agency staff and requires that the applicant supply the following information: project description, dates for the project, list of expertise and names of any individuals who will be assisting in collection. Depending on the species, restrictions are often placed on the project to minimize stress to a listed species. Additionally, entities operating under endangered species permits are required to submit their project data annually if they wish to renew their collection permit(s). These data are valuable to the agency and assist in minimizing additional stress on the species.

The agency issued 110 endangered species permits in FY 2025. Though the agency is unable to predict the exact number of permits that will be issued for the newly listed species, private entities who wish to collect or study species on the protected list will incur a minimal cost of

³ Based on Conservation Biologist I [NC14] annual total compensation, including benefits [\$100,000]

\$12 (increasing to \$13 in July 2026) per year to do so. Of the species being added to the protected species list, all may be of scientific research interest, thus requiring an endangered species permit and a collection license for study. However, it is important to note that the agency has not received any wildlife collection permit request for these particular species to date (except for a statewide crayfish permit that would by default include the newly added crayfish). There is no way for the agency to estimate the potential cost without knowing what research will be conducted on these newly listed species. Additionally, the proposed amendments result in a minor increase in administrative burden for individuals holding and/or transferring parts of endangered species; however, this is expected to impact relatively few permit holders.

Though four new species will be added to the protected species list, these additions cannot affect the use or development of any private property per G.S. 113-333(c). However, developers will be required to assess projects for any potential impacts to listed species as part of the permit application process for development. All currently available species data are available from the North Carolina Natural Heritage Program website for a fee of \$100 per project or \$600 for unlimited use. Data are currently available for all four of these newly listed species, so the cost of obtaining the data would be up to the developer.

In cases where there are intended (illegal take) and/or unintended (environmental) impacts to wildlife, individuals may be cited for the disturbance and charged a replacement cost for the species lost. The replacement cost for an endangered, threatened, or special concern mammal, bird or reptile species is \$4,960, \$4,313, and \$3,000 respectively (15A NCAC 10A .1502). The replacement cost for an endangered, threatened, or special concern mussel is \$50.54/each, crayfish is \$50.00/each, and finfish is \$157.54 each. The penalty issued by the court could also include the cost of investigations and court fees. The agency has no way to estimate these costs because they vary by case and are uncommon.

FISCAL IMPACTS - BENEFITS

State Impact

With a mission of wildlife conservation, WRC biologists often work to predict decline of a species, as it is much easier to proactively put restoration and recovery management in place than it is when the species is close to extinction. Additionally, wildlife species have diverse life histories which can heavily influence recovery efforts. As such, efforts made in year one may not be apparent until several years later. Due to these factors, early recognition of a species in decline and tiered state listing can provide for proactive, biologically sound management that ensures the conservation and wise use of nongame resources, minimizes risk of federal listing, which can put restrictions on private land, and fosters partnerships with local, state, and federal entities to manage wildlife resources.

The protected animal list is the list for nongame species that need the highest level of conservation attention and is used to guide research priorities and prioritize grant awards. Individuals must obtain an endangered species permit for listed species. While the purchase of these licenses does minimally benefit the state, the greater benefit is that individuals with an endangered species permit for scientific collection are required to submit their data to the agency before they can apply for any additional permits. This requirement that all NC projects benefit from data collected for species that need the highest level of conservation can guide conservation and decision-making. As such, all logged data are to be accessible by the public for planning purposes, unless specifically restricted by law.

The U.S. Fish and Wildlife Service (USFWS) routinely receives petitions from the public to initiate a 90-day finding to consider a species for federal listing. If there is a positive finding, then a 12-month process is initiated by USFWS, which can solicit state agency input. USFWS relies on state agencies to provide state-specific information on these species. Oftentimes, these species have already been considered or are on the protected species list. Because North Carolina's state listing process involves the collection of data, surveys, and monitoring, the information is readily available to USFWS for their federal species status review, saving the state time and money when requested by the USFWS.

There can be significant economic benefits to avoiding federal listing of a species. The conservation value of North Carolina's state listing status may preclude the need for the species to become federally listed, which saves the state, local and private sectors both time and money. Based on FY24 endangered species state expenditure data for conservation projects specific to federally listed species, this could be a savings of anywhere from \$300 per year (piping plover) to \$70,500.00 per year (Appalachian Elktoe mussel) in state funds. Additionally, avoided federal listing may preclude the delay or cancellation of major construction projects. Any project with the potential to jeopardize the existence of a federally listed species must undergo a Section 7 consultation with the USFWS that could take anywhere from one to 10 years and cost a significant amount of money. For example, the research study required for a NCDOT highway maintenance project with potential impacts to the northern long-eared bat in the eastern USFWS region (60 NC counties) cost the state a total of \$4 million over five years. Data were collected to help understand the species and its use of habitat to guide future conservation decisions.

Local Impact

Research shows that wildlife watching benefits the economy. According to a 2023 NCWRC study, over 2.9 million NC residents spent over 63 million days watching wildlife in the State in 2022. This activity resulted in an estimated combined \$4.92 billion in trip expenditures and equipment-related expenditures, resulting in a total economic impact of \$7.52 billion. Thus, the

conservation and preservation of species can be assumed to yield substantial annual benefits to the state and local economies.

Private Impact

North Carolina residents value the opportunity to view and interact with nongame state-listed species. Individuals also value protecting these species for present and future generations, even if they will never interact with them. Together, the value of wildlife viewing and related recreation and the value of maintaining biodiversity are the “non-consumptive” benefits of species protection.

The non-consumptive values of wildlife species can be estimated by measuring residents’ willingness to pay for wildlife protection. Although economists and biologists have conducted many studies over the past 30 years to estimate the value of protecting threatened and endangered species, it is difficult to estimate the impact of the agency’s proposed listings because benefits are species-specific and location specific. The agency is unaware of any value studies involving the particular species that are the subject of this rulemaking.

Given the species specific nature of the value individuals place on wildlife protection, the agency is not able to quantify the total social benefit of the proposed listing. However, some benefits are discussed below:

Science and Land Conservation

- A variety of funding opportunities exist for conserving state listed species, and include but are not limited to, the Land and Water Conservation Fund and Natural Resources Conservation Service grants. If an animal is added to the protected species list, projects that incorporate and/or provide benefit to those species receive preferential consideration for funding. Projects can be submitted by state and local governments, private organizations, and nonprofits, but overall, the implementation of these projects are a conservation benefit to North Carolina residents.
- Due to priorities set by funding sources, many projects must propose benefits to listed species, state or federal, to qualify the project for funding. Because federally listed species often cohabitate with state listed species, the entire ecosystem benefits from these types of projects and the conservation actions that listing may provoke.
- Federally listed species are protected from “taking”, which includes habitat alteration resulting in harm to the species. It is estimated that approximately half of all federally listed species have at least 80 percent of their habitat on private land. Restrictions and special management considerations that may be costly to landowners are required if it is believed that a proposed development project could impact a listed species. Avoided federal listing may preclude the necessity of costly management.

Ecotourism

- Research shows that society enjoys biodiversity and there are many physical and mental benefits associated with spending time outdoors. Although the WRC does not actively collect data specific to ecotourism, the agency does partner and participate in surveys on willingness to pay. These surveys request participants to answer questions regarding their willingness to travel to see wildlife. Also, the NCWRC 2023 report indicated that North Carolina had 2,928,309 resident wildlife viewers ages 18 years and older in 2022.
- To the average recreationist, a more diverse and abundant wildlife population may increase the quantity and quality of recreation experiences in an area. Additionally, some recreationists may seek out opportunities to view rare species, such as those participating in the Blue Ridge Snorkel Trail which allows municipal landowners to enroll properties for viewing diverse aquatic species. There is no simple mechanism to estimate this benefit.
- Typically, when a species has been state listed it indicates rarity and difficulty for wildlife viewers to spot it. To wildlife enthusiasts like birders, this situation may excite challenge and increase interest in any opportunity to seek the species. The result may in turn be enhanced ecotourism to an area that has known habitat for the species.

Tax Benefit

- The proposed addition of four species to the protected species list may create opportunities for landowners to participate in the Wildlife Conservation Lands Program for county tax deferral. This opportunity would only be available to individuals who own priority habitat that meets the minimum requirements for participation in the program and implement land management efforts that benefit species of concern. These landowners would receive a deferred tax break from county land taxes to implement land management efforts on their property.

This program is driven by property owners' financial situations, which vary from county to county and from landowner to landowner. Typically, participation in the Program is requested when a property's tax value is reassessed. The Program largely serves as a back-up plan for property owners looking for a tax break on property taxes. Additionally, only 1,700 (approximately 6.8%) of the 25,000 acres registered in the program are species-specific. Participation is usually based on the management of a priority habitat or qualification as Wildlife Reserve Land.

Ecological Benefit

- Although unquantifiable, the overall value added by maintaining a functional food chain cannot be overstated. Many of these species also provide natural resource benefits such as improved water quality or invasive species curtailment. When the cycle of life gets interrupted, there are ecological concerns which result in management expenses. All living things need food to survive. If their food source is limited or no longer present, they may become unhealthy or may not survive. Unhealthy wildlife can be more susceptible to disease, illness, erratic behavior, and unsafe human and wildlife interactions. All these results weigh on agency resources and time. By listing species of concern, the agency is proactively managing wildlife needs and potentially mitigating more serious negative impacts.

UNCERTAINTIES

State Impact

If staff are asked to review a project with the potential to impact a listed species that has limited historical and habitat range data, staff may recommend a survey before commenting on that project. The cost of data collection is different for each species, and without knowing potential projects that will be proposed in the coming years, the agency has no way to estimate the costs to other agencies or individuals for data collection. However, the agency is able to mitigate those costs by sharing all data collected both in-house and through state endangered species permits via the Natural Heritage natural resource database (www.ncnhp.org/data).

Local Impact

The proposed changes to the protected species list have the potential to increase the number of landowners who are eligible to participate in the Wildlife Conservation Lands Program. Because this is a county property tax deferral program, landowners submit applications to the County for enrollment. The County determines the applicant's eligibility and acceptance into the program and participation is renewed annually. The proposed changes to the protected species list have the potential to increase the number of landowners who are eligible to participate in the program, thus increasing a participating county's deferred taxes if they decide to accept a new landowner's management efforts. Counties may also incur a slight increase to the cost of program auditing to ensure the landowner is in compliance with their management plan. Unfortunately, there is no way for the agency to quantify costs, as property taxes vary by county.

The agency also assumes that there could be an increase in the number of court cases dealing with illegal take of the four species being added to the protected species list. This would minimally impact the county court systems.

Private Impact

Lack of species-specific studies on North Carolina residents' willingness to pay for protection of listed species prevents WRC from estimating the total benefits of the proposed rules. However, a 2008 meta-analysis of studies valuing endangered, threatened, and rare species found that individuals value fish, marine mammals, and birds more highly than mammals and reptiles, as a group, and wildlife with consumption benefits are more highly valued than those with non-consumptive benefits alone. The total benefits are dependent upon the consumptive uses (i.e., hunting or fishing) or non-consumptive uses (i.e., viewing) of the wildlife, the relative "charisma" of each species, the level of species endangerment, and participation in the Wildlife Conservation Lands Program.

In their meta-analysis, Richardson and Loomis (2008) found that individuals are generally more willing to pay to prevent a species' extinction than they are to increase the population above the minimum viable level. This finding suggests protecting the most-threatened species could provide greater benefits than equivalent protections for less-threatened species, all else being equal. Downlisting or delisting species could indicate to North Carolina residents that the species is less threatened, therefore reducing the value of protection measures and their associated benefits. However, downlisting or delisting a species may also reduce development restrictions and state staff time costs.

The recreational and consumptive value of a listed species reflects only the economic, not the ecological, benefits of the species. The value that North Carolina residents place on species protection is limited by our incomplete understanding of the species' ecological role.

SUMMARY

Each species is different, as are the reasons attributing to their decline. However, WRC expects the public awareness, research, and conservation efforts associated with placing a species on the protected species list to bring about awareness and management efforts that will spur the public and private cooperation necessary to reverse the decline.

Private individuals will benefit from the proposed listings and associated conservation efforts because of the non-consumptive value of wildlife recreation opportunities and preserving biodiversity. Conservation efforts at a state level also reduce the probability of a species being federally listed, which could place restrictions on private land use and development. Private landowners may be eligible for the Wildlife Conservation Lands Program due to the newly listed species, which would make them eligible for county tax deferment. And researchers may be eligible for additional funding opportunities for these species.

Wildlife recreation benefits our state's economy. In addition, listing or uplisting a species draws additional research funding, which benefits the state in both fees collected for collection licenses necessary to study the species and scientific data from those individuals with collection licenses and endangered species permits. Data collected by the state on listed species also saves time and money associated with the required data collection for federally listed species and the potential avoidance of federal listing of state listed species. These benefits are also realized by local governments. Although these benefits are not quantifiable with available data, the agency expects the benefits of the proposed species listings to outweigh the costs.

1 15A NCAC 10I .0103 is proposed for amendment as follows:

3 **15A NCAC 10I .0103 ENDANGERED SPECIES LISTED**

4 (a) The following species of resident wildlife shall be designated as federally listed endangered species:

5 (1) Amphibians: None listed.

6 (2) Birds:

7 ~~(A) — Bachman's warbler (*Vermivora bachmanii*);~~

8 ~~(B)(A)~~ Ivory-billed woodpecker (*Campephilus principalis*);

9 ~~(C)(B)~~ Piping plover (*Charadrius melodus circumcinctus*); and

10 ~~(D) — Red-cockaded woodpecker (*Dryobates borealis*); and~~

11 ~~(E)(C)~~ Roseate tern (*Sterna dougallii dougallii*).

12 (3) Crustacea: None listed.

13 (4) Fish:

14 (A) Cape Fear shiner (*Miniellus mekistocholas*);

15 (B) Carolina madtom (*Noturus furiosus*);

16 ~~(C) — Roanoke logperch (*Percina rex*);~~

17 ~~(D)(C)~~ Shortnose sturgeon (*Acipenser brevirostrum*), when found in inland fishing waters as
18 defined in G.S. 113-129(9); and

19 ~~(E)(D)~~ Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), when found in inland fishing waters
20 as defined in G.S. 113-129(9).

21 (5) Mammals:

22 (A) Carolina northern flying squirrel (*Glaucomys sabrinus coloratus*);

23 (B) Eastern cougar (*Puma concolor*);

24 (C) Gray bat (*Myotis grisescens*);

25 (D) Indiana bat (*Myotis sodalis*);

26 (E) Northern long-eared bat (*Myotis septentrionalis*); and

27 (F) Virginia big-eared bat (*Corynorhinus townsendii virginianus*).

28 (6) Mollusks:

29 (A) Appalachian elktoe (*Alasmidonta raveneliana*);

30 (B) Carolina heelsplitter (~~*Lasmigona*~~ (*Platynaias decorata*);

31 (C) Dwarf wedgemussel (~~*Alasmidonta*~~ (*Prolasmidonta heterodon*);

32 (D) James spinymussel (*Parvaspina collina*);

33 (E) Littlewing pearlymussel (*Pegias fabula*);

34 ~~(F)~~ Magnificent ramshorn (*Planorbella magnifica*);

35 ~~(F)(G)~~ Tan riffleshell (*Epioblasma florentina walkeri*); and

36 ~~(G)(H)~~ Tar River spinymussel (*Parvaspina steinstansana*).

37 (7) Reptiles:

- (A) Kemp's ridley sea turtle (*Lepidochelys kempii*);
 - (B) Hawksbill sea turtle (*Eretmochelys imbricata*); and
 - (C) Leatherback sea turtle (*Dermochelys coriacea*).
- (b) The following species of resident wildlife shall be designated as State-listed endangered species:
- (1) Amphibians:
 - (A) Gopher frog (*Rana* [=*Lithobates*] *capito*);
 - (B) Hickory Nut Gorge green salamander (*Aneides caryaensis*);
 - (C) Ornate chorus frog (*Pseudacris ornata*); and
 - (D) River frog (*Rana* [=*Lithobates*] *heckscheri*).
 - (2) Birds:
 - (A) American peregrine falcon (*Falco peregrinus anatum*);
 - (B) Common tern (*Sterna hirundo*);
 - (C) Henslow's sparrow (*Centronyx henslowii*); and
 - (D) Wayne's black-throated green warbler (*Setophaga virens waynei*).
 - (3) Crustacea:
 - (A) Bennett's Mill cave water slater (*Caecidotea carolinensis*); and
 - (B) ~~Waccamaw~~ Cedar Creek crayfish (*Procambarus* ~~*braswelli*~~ *chacei*).
 - (4) Fish:
 - (A) Blotchside logperch (*Percina burtoni*);
 - (B) Bridle shiner (*Notropis bifrenatus*);
 - (C) Orange-fin madtom (*Noturus gilberti*);
 - (D) Paddlefish (*Polyodon spathula*);
 - (E) Robust redhorse (*Moxostoma robustum*);
 - (F) Rustyside sucker (*Thoburnia hamiltoni*);
 - (G) Sharpnose darter (*Percina oxyrhynchus*); and
 - (H) Stonecat (*Noturus flavus*).
 - (5) Mammals:
 - (A) Little brown bat (*Myotis lucifugus*); and
 - (B) Tricolored bat (*Perimyotis subflavus*).
 - (6) Mollusks:
 - (A) Barrel floater (*Utterbackiana couperiana*);
 - (B) Brook floater (*Alasmidonta varicosa*);
 - (C) Carolina creekshell (*Sagittunio vauhanianus*);
 - (D) Fragile glyph (*Pilsbryna clingmani*);
 - (E) Green floater (~~*Lasmigona*~~ *Platynaias* *subviridis*);
 - (F) Greenfield ramshorn (*Helisoma eucosmum*);
 - (G) Knotty elimia (*Elimia christyi*);

~~(H)~~ Longsolid (~~Fusconaia subrotunda~~);
~~(I)~~ Magnificent ramshorn (~~Planorbella magnifica~~);
~~(J)~~(H) Purple wartyback (~~Cyclonaias tuberculata~~);
~~(K)~~(I) Savannah lilliput (~~Toxolasma pullus~~);
~~(L)~~(J) Slippershell mussel (~~Alasmidonta~~ (Pressodonata viridis);
~~(M)~~(K) Tennessee clubshell (~~Pleurobema oviforme~~);
~~(N)~~(L) Tennessee heelsplitter (~~Lasmigona~~ (Alasminota holstonia);
~~(O)~~(M) Tennessee pigtoe (~~Pleuronaia barnesiana~~); and
~~(P)~~(N) Yellow lampmussel (~~Lampsilis cariosa~~).

(7) Reptiles:

- (A) Eastern coral snake (*Micrurus fulvius fulvius*);
- (B) Eastern diamondback rattlesnake (*Crotalus adamanteus*); and
- (C) Mimic glass lizard (*Ophisaurus mimicus*).

History Note: Authority G.S. 113-134; 113-333;
Eff. June 11, 1977;
Amended Eff. October 1, 2017; August 1, 2016; May 1, 2008; April 1, 2001; February 1, 1994;
November 1, 1991; April 1, 1991; June 1, 1990;
Readopted Eff. October 1, 2021;
Amended Eff. October 1, 2024; February 1, 2023.

1 15A NCAC 10I .0104 is proposed for amendment as follows:

2
3 **15A NCAC 10I .0104 THREATENED SPECIES LISTED**

4 (a) The following species of resident wildlife shall be designated as federally listed threatened species:

- 5 (1) Amphibians: Neuse River waterdog (*Necturus lewisi*).
- 6 (2) Birds:
- 7 (A) Eastern black rail (*Laterallus jamaicensis jamaicensis*);
- 8 (B) Piping plover (*Charadrius melodus melodus*);
- 9 (C) Red-cockaded woodpecker (*Dryobates borealis*); and
- 10 ~~(C)(D) Red knot (*Calidris canutus rufa*). (*Calidris canutus rufa*); and~~
- 11 ~~(D) Wood stork (*Mycteria americana*).~~
- 12 (3) Crustacea: None listed.
- 13 (4) Fish:
- 14 (A) Spotfin chub (*Erimonax monachus*); and
- 15 (B) Waccamaw silverside (*Menidia extensa*).
- 16 (5) Mammals: West Indian Manatee (*Trichechus manatus*), when found in inland fishing waters as
- 17 defined in G.S. 113-129(9).
- 18 (6) Mollusks:
- 19 (A) Atlantic pigtoe (*Fusconaia masoni*);
- 20 (B) Longsolid (*Fusconaia subrotunda*);
- 21 (C) Noonday globe (*Patera nantahala*); and
- 22 (D) Yellow lance (*Elliptio lanceolata*).
- 23 (7) Reptiles:
- 24 (A) Bog turtle (*Glyptemys muhlenbergii*);
- 25 (B) American alligator (*Alligator mississippiensis*);
- 26 (C) Green sea turtle (*Chelonia mydas*); and
- 27 (D) Loggerhead sea turtle (*Caretta caretta*).

28 (b) The following species of resident wildlife are designated as State-listed ~~State-listed~~ threatened species:

- 29 (1) Amphibians:
- 30 (A) Eastern tiger salamander (*Ambystoma tigrinum tigrinum*);
- 31 (B) Green salamander (*Aneides aeneus*);
- 32 (C) Junaluska salamander (*Eurycea junaluska*);
- 33 (D) Eastern long-tailed salamander (*Eurycea longicauda longicauda*);
- 34 (E) Mabee's salamander (*Ambystoma mabeei*);
- 35 (F) Pine Barrens tree frog (*Hyla andersonii*); and
- 36 (G) Wehrle's salamander (*Plethodon wehrlei*).
- 37 (2) Birds:

- (A) Bald eagle (*Haliaeetus leucocephalus*);
 - (B) Black skimmer (*Rynchops niger*);
 - (C) Caspian tern (*Hydroprogne caspia*);
 - (D) Gull-billed tern (*Gelochelidon nilotica aranea*);
 - (E) Northern saw-whet owl (*Aegolius acadicus*); and
 - (F) Rusty blackbird (*Euphagus carolinus*).
- (3) Crustacea:
- (A) Broad River spiny crayfish (*Cambarus spicatus*);
 - (B) French Broad crayfish (*Cambarus reburus*);
 - (C) Pamlico crayfish (*Procambarus medialis*);
 - (D) Sandhills crayfish (*Procambarus pearsei*); and
 - (E) South Mountains crayfish (*Cambarus franklini*).
- (4) Fish:
- (A) Bigeye jumprock (*Moxostoma ariommum*);
 - (B) Blotched chub (*Erimystax insignis*);
 - (C) Carolina pygmy sunfish (*Elassoma boehlkei*);
 - (D) Carolina redhorse (*Moxostoma sp.*; carolina);
 - (E) Ironcolor shiner (*Alburnops chalybaeus*);
 - (F) Least brook lamprey (*Lampetra aepyptera*);
 - (G) Logperch (*Percina caprodes*);
 - (H) Mimic shiner (*Paranotropis volucellus*);
 - (I) River redhorse (*Moxostoma carinatum*);
 - (J) Roanoke logperch (*Percina rex*);
 - ~~(H)(K)~~ Rosyface chub (*Hybopsis rubrifrons*);
 - ~~(J)~~ ~~Sharphead darter (*Nothonotus acuticeps*)~~;
 - ~~(K)(L)~~ Santee chub (*Cyprinella zanema*);
 - (M) Sharphead darter (*Nothonotus acuticeps*);
 - ~~(L)(N)~~ Sicklefins redhorse or Ugidatli (*Moxostoma sp.*; (*Moxostoma ugidatli*);
 - (O) Siouan thinlip chub (*Cyprinella zanema*);
 - ~~(M)(P)~~ Thicklip chub (*Cyprinella labrosa*);
 - ~~(N)(Q)~~ Turquoise darter (*Etheostoma inscriptum*); and
 - ~~(O)(R)~~ Waccamaw darter (*Etheostoma perlongum*).
- (5) Mammals:
- (A) Eastern woodrat (*Neotoma floridana floridana*);
 - (B) Rafinesque's big-eared bat (*Corynorhinus rafinesquii rafinesquii*); and
 - (C) Red wolf (*Canis rufus*).
- (6) Mollusks:

- 1 (A) Alewife floater (*Utterbackiana implicata*);
- 2 (B) Big-tooth covert (*Fumonelix jonesiana*);
- 3 (C) Cape Fear threetooth (*Triodopsis soelneri*);
- 4 (D) Eastern lampmussel (*Lampsilis radiata*);
- 5 (E) Eastern pondmussel (*Sagittunio nasutus*);
- 6 (F) Engraved covert (*Fumonelix orestes*);
- 7 (G) Mountain creekshell (*Leaunio vanuxemensis*);
- 8 (H) Notched rainbow (*Venustaconcha constricta*);
- 9 (I) Rainbow (*Cambarunio iris*);
- 10 (J) Roan supercoil (*Paravitrea varidens*);
- 11 (K) Sculpted supercoil (*Paravitrea ternaria*);
- 12 (L) Smoky Mountain covert (*Inflectarius ferrissi*);
- 13 (M) Creeper (*Strophitus undulatus*);
- 14 (N) Tidewater mucket (*Atlanticoncha ochracea*);
- 15 (O) Triangle floater (*Alasmidonta undulata*); ~~and~~
- 16 (P) Uwharrie elktoe (*Alasmidonta uwharriensis*); and
- 17 ~~(P)(Q)~~ Waccamaw ambersnail (*Catinella waccamawensis*).
- 18 (7) Reptiles:
- 19 (A) Northern pine snake (*Pituophis melanoleucus melanoleucus*); and
- 20 (B) Southern hognose snake (*Heterodon simus*).
- 21 *History Note: Authority G.S. 113-134; 113-333;*
- 22 *Eff. March 17, 1978;*
- 23 *Amended Eff. June 1, 2008; April 1, 2001; November 1, 1991; April 1, 1991; June 1, 1990;*
- 24 *September 1, 1989;*
- 25 *Temporary Amendment Eff. February 27, 2015;*
- 26 *Amended Eff. October 1, 2017; July 1, 2016; August 1, 2016;*
- 27 *Readopted Eff. October 1, 2021;*
- 28 *Amended Eff. October 1, 2024; February 1, 2023.*
- 29

1 15A NCAC 10I .0105 is proposed for amendment as follows:

2
3 **15A NCAC 10I .0105 SPECIAL CONCERN SPECIES LISTED**

4 The following species of resident wildlife shall be designated as State-listed ~~State-listed~~ special concern species:

5 (1) Amphibians:

- 6 (a) Collinses' mountain chorus frog (*Pseudacris collinsorum*);
- 7 (b) Crevice salamander (*Plethodon longicrus*);
- 8 (c) Dwarf salamander (*Eurycea quadridigitata*);
- 9 (d) Dwarf black-bellied salamander (*Desmognathus folkertsi*);
- 10 (e) Eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*);
- 11 (f) Four-toed salamander (*Hemidactylium scutatum*);
- 12 (g) Gray treefrog (*Hyla versicolor*);
- 13 (h) Mole salamander (*Ambystoma talpoideum*);
- 14 (i) Mudpuppy (*Necturus maculosus*);
- 15 (j) Southern chorus frog (*Pseudacris nigrita*);
- 16 (k) Southern zigzag salamander (*Plethodon ventralis*); and
- 17 (l) Weller's salamander (*Plethodon welleri*).

18 (2) Birds:

- 19 (a) American oystercatcher (*Haematopus palliatus*);
- 20 (b) Bachman's sparrow (*Peucaea aestivalis*);
- 21 (c) Barn owl (*Tyto alba*);
- 22 (d) Black-capped chickadee (*Poecile atricapillus*);
- 23 (e) Brown creeper (*Certhia americana nigrescens*);
- 24 (f) Cerulean warbler (*Setophaga cerulea*);
- 25 (g) Glossy ibis (*Plegadis falcinellus*);
- 26 (h) Golden-winged warbler (*Vermivora chrysoptera*);
- 27 (i) Least bittern (*Ixobrychus exilis*);
- 28 (j) Least tern (*Sternula antillarum*);
- 29 (k) Little blue heron (*Egretta caerulea*);
- 30 (l) Loggerhead shrike (*Lanius ludovicianus*);
- 31 (m) Painted bunting (*Passerina ciris*);
- 32 (n) Red crossbill (*Loxia curvirostra*);
- 33 (o) Snowy egret (*Egretta thula*);
- 34 (p) Swallow-tailed kite (*Elanoides forficatus*);
- 35 (q) Tricolored heron (*Egretta tricolor*);
- 36 (r) Vesper sparrow (*Pooecetes gramineus*); and
- 37 (s) Wilson's plover (*Charadrius wilsonia*).

- 1 (3) Crustacea:
 - 2 (a) Carolina skistodiaptomus (*Skistodiaptomus carolinensis*);
 - 3 (b) Carolina well diacyclops (*Diacyclops jeannelli putei*);
 - 4 (c) Chowanoke crayfish (*Faxonius virginensis*);
 - 5 (d) Falls crayfish (*Cambarus burchfieldae*);
 - 6 ~~(d)(e)~~ Graceful clam shrimp (*Lynceus gracilicornis*);
 - 7 ~~(e)(f)~~ Greensboro burrowing crayfish (*Cambarus catagius*);
 - 8 ~~(f)(g)~~ Hiwassee headwaters crayfish (*Cambarus parrishi*);
 - 9 ~~(g)(h)~~ Little Tennessee River crayfish (*Cambarus georgiae*);
 - 10 ~~(h)(i)~~ North Carolina spiny crayfish (*Faxonius carolinensis*); ~~and~~
 - 11 ~~(i)(j)~~ Oconee stream crayfish (*Cambarus chaugaensis*); ~~and (*Cambarus chaugaensis*)~~.
 - 12 (k) Stony Fork crayfish (*Cambarus lapidosus*).
- 13 (4) Fish:
 - 14 (a) American brook lamprey (*Lethenteron appendix*);
 - 15 (b) "Atlantic" Highfin carpsucker (*Carpionodes sp. cf. velifer*);
 - 16 (c) Banded sculpin (*Cottus carolinae*);
 - 17 (d) Blue Ridge sculpin (*Cottus caeruleomentum*);
 - 18 (e) Blueside darter (*Etheostoma jessiae*);
 - 19 (f) Broadtail madtom (*Noturus sp.*);
 - 20 (g) Carolina darter (*Etheostoma collis*);
 - 21 (h) Cutlip minnow (*Exoglossum maxillingua*);
 - 22 (i) Freshwater drum (*Aplodinotus grunniens*);
 - 23 (j) Kanawha minnow (*Phenacobius teretulus*);
 - 24 (k) Lake sturgeon (*Acipenser fulvescens*);
 - 25 (l) Least killifish (*Heterandria formosa*);
 - 26 (m) Mooneye (*Hiodon tergisus*);
 - 27 (n) Mountain madtom (*Noturus eleutherus*);
 - 28 (o) Ohio lamprey (*Ichthyomyzon bdellium*);
 - 29 (p) Olive darter (*Percina squamata*);
 - 30 (q) Pinewoods darter (*Etheostoma mariaae*);
 - 31 (r) River carpsucker (*Carpionodes carpio*);
 - 32 (s) Sandhills chub (*Semotilus lumbee*);
 - 33 (t) Seagreen darter (*Etheostoma thalassinum*);
 - 34 (u) Sickle darter (*Percina williamsi*);
 - 35 (v) Smoky dace (*Clinostomus sp.*);
 - 36 (w) Sooty-banded darter (*Percina westfalli*);
 - 37 (x) Striped shiner (*Luxilus chrysocephalus*);

- (y) Snubnose darter (*Etheostoma simoterum*);
 - ~~(z) "Thinlip" chub (*Cyprinella sp. cf. zanema*);~~
 - ~~(aa)~~(z) Waccamaw killifish (*Fundulus waccamensis*);
 - ~~(bb)~~(aa) Wounded darter (*Nothonotus vulneratus*); and
 - ~~(cc)~~(bb) Yellowfin shiner (*Hydrophlox lutipinnis*).
- (5) Mammals:
- (a) Allegheny woodrat (*Neotoma magister*);
 - (b) Buxton Woods white-footed mouse (*Peromyscus leucopus buxtoni*);
 - (c) Coleman's oldfield mouse (*Peromyscus polionotus colemani*);
 - (d) Eastern big-eared bat (*Corynorhinus rafinesquii macrotis*);
 - (e) Eastern small-footed bat (*Myotis leibii leibii*);
 - (f) Florida yellow bat (*Lasiurus intermedius floridanus*);
 - (g) Southeastern bat (*Myotis austroriparius*);
 - (h) Southern rock vole (*Microtus chrotorrhinus carolinensis*); and
 - (i) Star-nosed mole (*Condylura cristata parva*).
- (6) Mollusks:
- (a) Appalachian gloss (*Zonitoides patuloides*);
 - (b) Bidentate dome (*Ventridens coelaxis*);
 - (c) Black mantleslug (*Pallifera hemphilli*);
 - (d) Blackwater ancylid (*Ferrissia hendersoni*);
 - (e) Blue-foot lancetooth (*Haplotrema kendeighi*);
 - (f) Cape Fear spike (*Elliptio marsupiobesa*);
 - (g) Clingman covert (*Fumonelix wheatleyi clingmanicus*);
 - (h) Dark glyph (*Glyphyalinia junaluskana*);
 - (i) Dwarf proud globe (*Patera clarki clarki*);
 - (j) Dwarf threetooth (*Triodopsis fulciden*);
 - (k) Fringed coil (*Helicodiscus fimbriatus*);
 - (l) Glossy supercoil (*Paravitrea placentula*);
 - (m) Great Smoky slitmouth (*Stenotrema depilatum*);
 - (n) High mountain supercoil (*Paravitrea andrewsae*);
 - (o) Honey glyph (*Glyphyalinia vanattai*);
 - (p) Lamellate supercoil (*Paravitrea lamellidens*);
 - (q) Mirey Ridge supercoil (*Paravitrea clappi*);
 - (r) Open supercoil (*Paravitrea umbilicaris*);
 - (s) Pink glyph (*Glyphyalinia pentadelphia*);
 - (t) Pink heelsplitter (*Potamilus alatus*);
 - (u) Pod lance (*Elliptio folliculata*);

- (v) Queen crater (*Appalachina chilhoweensis*);
 - (w) Ramp Cove supercoil (*Paravitrea lacteodens*);
 - (x) Ridged lioplax (*Lioplax subcarinata*);
 - (y) Roanoke slabshell (*Elliptio roanokensis*);
 - (z) Saw-tooth disc (*Discus bryanti*);
 - (aa) Seep mudalia (*Leptoxis dilatata*);
 - (bb) Spike (*Eurynia dilatata*);
 - (cc) Spiral coil (*Helicodiscus bonamicus*);
 - (dd) Velvet covert (*Inflectarius subpalliatu*);
 - (ee) Waccamaw amnicola (*Amnicola* sp.);
 - (ff) Waccamaw siltsnail (*Cincinnatia* sp.); and
 - (gg) Wavy-rayed lampmussel (*Lampsilis fasciola*).
- (7) Reptiles:
- (a) Carolina pigmy rattlesnake (*Sistrurus miliarius miliarius*);
 - (b) Carolina swamp snake (*Liodytes pygaea paludis*);
 - (c) Carolina watersnake (*Nerodia sipedon williamengelsi*);
 - (d) Cumberland slider (*Trachemys scripta troostii*);
 - (e) Diamondback terrapin (*Malaclemys terrapin*);
 - (f) Eastern chicken turtle (*Deirochelys reticularia reticularia*);
 - (g) Eastern coachwhip (*Coluber [=Masticophis] flagellum flagellum*);
 - (h) Eastern slender glass lizard (*Ophisaurus attenuatus longicaudus*);
 - (i) Eastern spiny softshell (*Apalone spinifera spinifera*);
 - (j) Northern map turtle (*Graptemys geographica*);
 - (k) Outer Banks kingsnake (*Lampropeltis getula sticticeps*);
 - (l) Stripeneck musk turtle (*Sternotherus peltifer*); and
 - (m) Timber rattlesnake (*Crotalus horridus*).

History Note: Authority G.S. 113-134; 113-333;
Eff. September 1, 1989;
Amended Eff. October 1, 2017; August 1, 2016; May 1, 2008; July 18, 2002; April 1, 2001;
November 1, 1991; April 1, 1991; June 1, 1990;
Readopted Eff. October 1, 2021;
Amended Eff. October 1, 2024; February 1, 2023.

Proposed Changes to Protected Animal List for Fishes, Crustaceans, and Mollusks

April 15, 2026

Revised

North Carolina Wildlife Resources Commission

Table of Contents

Table 1. Summary of Criteria Used to Determine a Species' Recommended Listing Status	4
River Redhorse.....	5
National Status	5
Range	5
Rationale for Status Change.....	6
Species Status Assessment Summary (River Redhorse).....	7
GS 113-334 (c) Relevant Data and Factual Information	8
Siouan Thinlip Chub.....	10
National Status	10
Range	10
Rationale for Status Change.....	11
Species Status Assessment Summary (Siouan Thinlip Chub)	12
GS 113-334 (c) Relevant Data and Factual Information	13
Roanoke Logperch	15
National Status	15
Range	15
Rationale for Status Change.....	16
Species Status Assessment Summary (Roanoke Logperch)	17
GS 113-334 (c) Relevant Data and Factual Information	18
Stony Fork Crayfish.....	20
National Status	20
Range	20
Rationale for Status Change.....	21
Species Status Assessment Summary (Stony Fork Crayfish)	22
GS 113-334 (c) Relevant Data and Factual Information	23
References.....	24
Falls Crayfish.....	25
National Status	25
Range	25
Rationale for Status Change.....	26
Species Status Assessment Summary (Falls Crayfish)	27
GS 113-334 (c) Relevant Data and Factual Information	28
References.....	29
Uwharrie Elktoe	30

National Status 30

Range 30

Rationale for Status Change..... 31

Species Status Assessment Summary (Uwharrie Elktoe) 32

GS 113-334 (c) Relevant Data and Factual Information 33

Table 1. Summary of Criteria Used to Determine a Species' Recommended Listing Status

	Endangered	Threatened	Special Concern	Results	Listing Status	Overall Listing Status
A: Population Size Reduction						
A1	≥ 90%	≥ 70%	≥ 50%			
A2	≥ 80%	≥ 50%	≥ 30%			
A3	≥ 80%	≥ 50%	≥ 30%			
A4	≥ 80%	≥ 50%	≥ 30%			
B: Geographic Range						
B1	< 100 km ²	< 5,000 km ²	< 20,000 km ²			
B2	< 10 km ²	< 500 km ²	< 2,000 km ²			
AND both of the following:						
(a)	Locations = 1	≤ 5	≤ 10			
(b)	Continuing decline in any of: (i) Extent of Occurrence; (ii) Area of Occupancy; (iii) extent and/or quality of habitat; (iv) number of locations or subpopulations; (v) number of mature individuals.					
C: Small Population Size and Decline						
C	< 750	< 3,500	< 10,000			
AND either C1 OR C2:						
C1	25% in 3 y or 1 generation	20% in 5 y or 2 generations	10% in 10 y or 3 generations			
C2	≤ 150	≤ 700	≤ 1,400			
D: Very Small or Restricted Population						
D1	< 150	< 700	< 1,400			
OR						
D2	AOO < 20 km ² or number of locations ≤ 5					
E: Quantitative Analysis – Probability of Extinction						
E	≥ 50% in 10 years or 3 generations	≥ 20% in 20 years or 3 generations	≥ 10% in 100 years			
Regional Correction						
Assesses uplisting or downlisting when emigration or immigration affects North Carolina populations.						
Final Result						

River Redhorse

Species Name: River Redhorse, <i>Moxostoma carinatum</i>	
Current N.C. Status: Not Listed	
Proposed N.C. Status: Threatened	

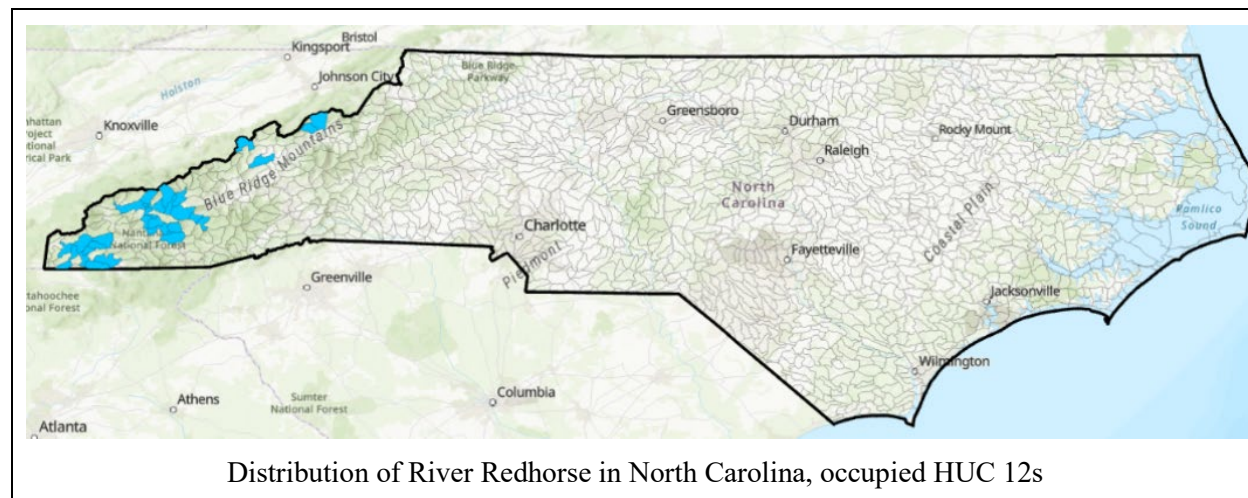
River Redhorse, *Moxostoma carinatum*
Photo courtesy of NCFishes.com

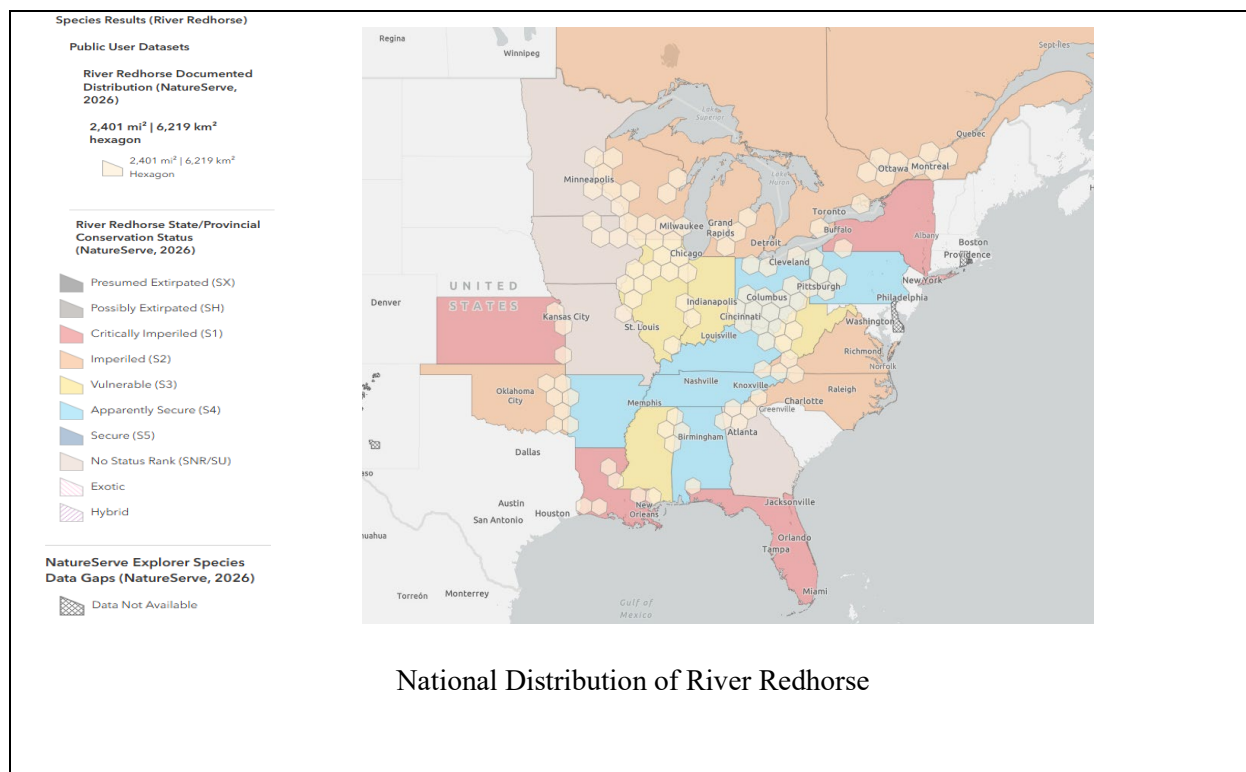
National Status

Entity	Status
USFWS	Not Listed
NatureServe	G4 (Apparently Secure)
IUCN	Least Concern

Range

The River Redhorse range includes the St. Lawrence River, Great Lakes watersheds, throughout most of the Mississippi River Basin, and Gulf Slope river basins from the Escambia River in Florida to the Pearl River in Louisiana and Mississippi (Froese & Pauly, 2024). In North Carolina, the species is found in the Hiwassee, Little Tennessee, and French Broad river basins (Tracy et al. 2020).





Rationale for Status Change

The River Redhorse range in North Carolina has decreased substantially since 2000, with measurable decreases in Area of Occupancy (AOO) (48% decline) and Extent of Occurrence (EOO), 2,287 km² (= 883.12 mi²) in 2000 to 1,222 km² (= 471.82 mi²) in the last 10 years. Currently, River Redhorse occurs in 5 HUC8s. Although this is a wide-ranging species spanning the SE United States to Canada, the majority of the species' distribution is in decline. In North Carolina, the recent declines in AOO and EOO over the last 10-year period and the restriction of the species distribution by numerous dams across the range qualifies the species to be listed as **Threatened** under Criterion B.

Species Status Assessment Summary (River Redhorse)

Criterion	Score	Final Score
A1	Data Deficient	Special Concern
A2	Special Concern	
A3	Data Deficient	
A4	Data Deficient	
B1	Threatened	Threatened
B2	Threatened	
B(a)	Threatened	
B(b)	True	
C	Data Deficient	Data Deficient
C1	Data Deficient	
C2	Data Deficient	
D1	Data Deficient	Special Concern
D2	Special Concern	
E	Data Deficient	Data Deficient
Regional Correction	None	None
Final Result		Threatened

GS 113-334 (c) Relevant Data and Factual Information

River Redhorse (*Moxostoma carinatum*)

1. Are any other State or Federal agencies or Private Entities taking steps to protect the wild animal which is the subject of the proposal?

Agency/Private Entity	Agency/Entity Type (Fed., State, Private)	Protection
NCWRC	State	Nantahala Game Lands protects portion of headwaters of the Nottely and Hiwassee River sub-basins. Needmore Game Lands protect portion of Little Tennessee River sub-basin. Pisgah Game Lands protects portions of the lower French Broad River watershed.
NC Department of Environmental Quality	State	Outstanding Resource Water (ORW) designation exists for portions of Hiwassee River including Fires Creek and Tusquitee Creek watersheds. In the Little Tennessee River Basin, ORW designation exists for the following watersheds Forney Creek, Lower Fontana, Hazel Creek, and Eagle Creek, and Alarka Creek. In the French Broad River Basin, ORW designation exists for portions of Meadow Fork, Spring Creek, Big Laurel Creek, and lower Cane River watersheds.
NC Clean Water Trust Fund	State	Conservation easements and land ownership along small portions of streams.
US Forest Service and US National Park Service	Federal	Great Smoky Mountains NP protects portions of the Little Tennessee River basin. Nantahala and Pisgah National Forests protect portions of the Hiwassee, Little Tennessee, and French Broad river basins.
Various (e.g., Mainspring Conservation Trust, Conserving Carolina, Southern Appalachian Highlands Conservancy, Blue Ridge Conservancy)	Private	Conservation easements and land ownership along small portions of streams in French Broad River, Little Tennessee, and Hiwassee river basins.

2. Is there present or threatened destruction, modification, or curtailment of its habitat?

Type of Impact (Destruction, Modification, Curtailment)	Occurrence (Present, Threatened)	Description
Destruction, Modification, Curtailment	Present, Threatened	Water quality degradation from chemical and excess nutrient pollution, agriculture, logging, residential and commercial development, and road construction and maintenance.

Destruction, Modification, Curtailment	Present, Threatened	Siltation and physical habitat degradation from agriculture, logging, residential and commercial development, channel clearing and snagging, and road construction and maintenance. Alteration and destruction of habitat occurred during Hurricane Helene in 2025.
Modification, Curtailment	Present, Threatened	Flow reduction or alteration from agriculture and water supply withdrawals. Could be exacerbated by climate change.
Modification, Curtailment	Present	Habitat fragmentation by dams and culverts.

3. Is there the potential for over-utilization for commercial, recreational, scientific, or educational purposes?

Type of Over-Use (Commercial, Recreational, Scientific, Educational)	Potential (Low, High)	Description
None known		

4. Is there the potential for critical population depletion from disease, predation, or other mortality factors?

Type of Depletion (Disease, Predation, Other)	Potential (Low, High)	Description
None known		

5. Are there alternative regulatory mechanisms?

Agency	Agency Type (Federal, State)	Regulatory Mechanism
None known		

6. Are there other man-made factors that can affect continued viability of the animal in the State?

Other Man-Made Factor
None known

References

Froese, R. and D. Pauly. Editors. 2024. FishBase. World Wide Web electronic publication. www.fishbase.org

Tracy, B.H., F.C. Rohde, G.M. Hogue. 2020 "An Annotated Atlas of the Freshwater Fishes of North Carolina," Southeastern Fishes Council Proceedings: No. 60.

Siouan Thinlip Chub

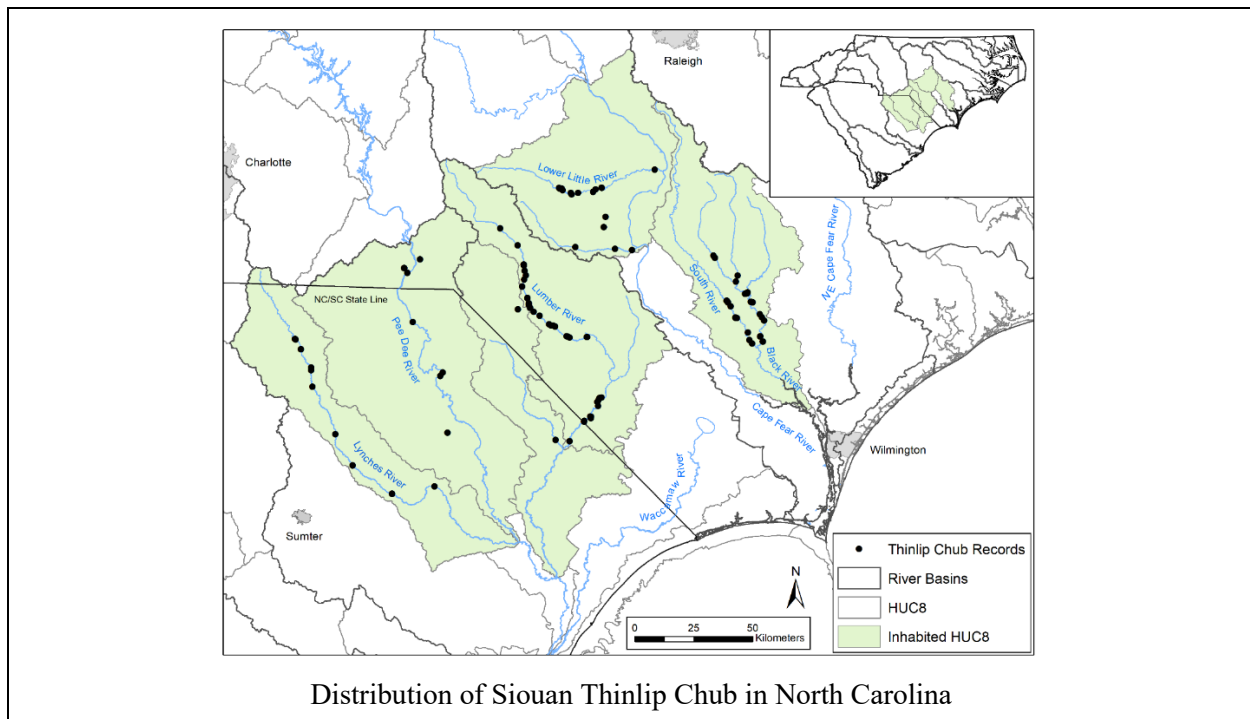
Species Name: Siouan Thinlip Chub <i>Cyprinella zanema</i>	
Current N.C. Status: Special Concern	
Proposed N.C. Status: Threatened	

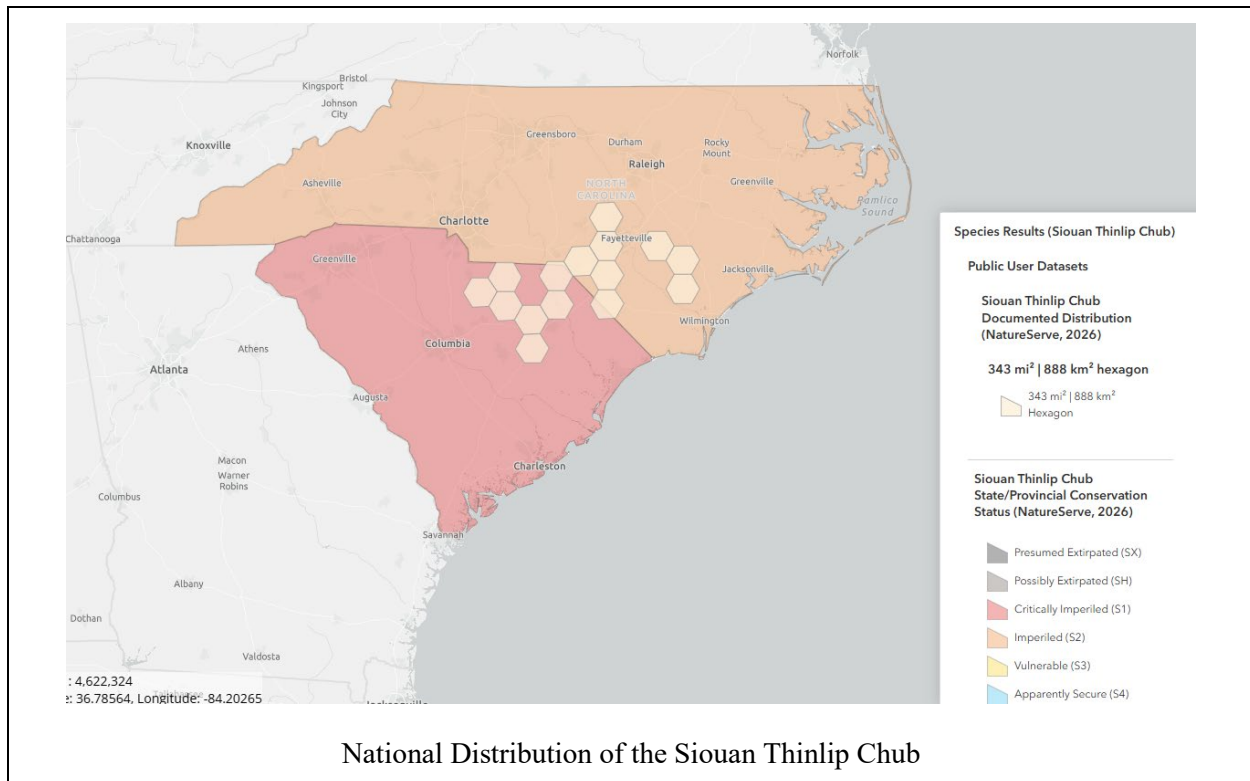
National Status

Entity	Status
USFWS	Not Listed
NatureServe	G2 (Imperiled)
IUCN	Least Concern

Range

Siouan Thinlip Chub are endemic to the Sandhills and Coastal Plain streams of North and South Carolina. In North Carolina, they are found below the Fall Line in the Cape Fear, Pee Dee, and Lumber river basins.





Rationale for Status Change

Siouan Thinlip Chub prior to 1998, occupied 5 HUC8s with an Extent of Occurrence of 2,032 km² (=785 mi²). From 1998 to 2023, it occupied 5 HUC8s with an Extent of Occurrence of 1,746 km² (=674 mi²). The Extent of Occurrence declined 14% and the Area of Occupancy declined 16% in the last 25 years. With an Extent of Occurrence less than 5,000 km² and a 16% decline in Area of Occupancy, the species meets the designated criteria under Geographic Range (Criterion B) using the North Carolina Species Assessment protocol to be uplisted to state Threatened. Threats include habitat fragmentation and predation from invasive species.

Species Status Assessment Summary (Siouan Thinlip Chub)

Criterion	Score	Final Score
A1	Data Deficient	No Finding
A2	No Finding	
A3	Data Deficient	
A4	Data Deficient	
B1	Threatened	Threatened
B2	Threatened	
B(a)	Threatened	
B(b)	True	
C	Data Deficient	Data Deficient
C1	Data Deficient	
C2	Data Deficient	
D1	Data Deficient	Special Concern
D2	Special Concern	
E	Data Deficient	Data Deficient
Regional Correction	None	None
Final Result		Threatened

GS 113-334 (c) Relevant Data and Factual Information

Siouan Thinlip Chub (*Cyprinella leptocheilus*)

1. Are any other State or Federal agencies or Private Entities taking steps to protect the wild animal which is the subject of the proposal?

Agency/Private Entity	Agency/Entity Type (Fed., State, Private)	Protection
US Fish and Wildlife Service	Federal	Small riparian easements along portions of the upper Black River and upper Lumber River.
US National Park Service	Federal	Portions of the Lumber River are designated as the Lumber National Wild and Scenic River.
US Dept of Defense	Federal	Sentinel Landscapes for Fort Bragg and Camp Mackall
NCWRC	State	Sandhills Game Lands protects portions of upper Lumber River.
NC Division of Parks and Recreation	State	Lumber River State Park and Warwick Mill Bay State Natural Area protect portions of the Lumber River.
NC Dept of Agriculture	State	Upper portion of the South River designated as Pondberry Bay Plant Conservation Preserve. Farmland Preservation Trust Fund easements along upper portions of the Lumber River.
NC Department of Environmental Quality	State	Outstanding Resource Water designation for large portions of the Lumber River, South River, and Black River.
Municipalities (City of Lumberton, Sampson County)	State/Local Government	Portions of the Lumber River part of the City of Lumberton Open Space program. Portions of the upper South River part of the Sampson County Open Space program.
NC Clean Water Trust Fund	State	Conservation easements and land ownership along small portions of streams in the Black River, South River, and Lumber River.
Various (e.g., The Conservation Fund, Lumber River Conservancy, The Nature Conservancy, NC Coastal Land Trust)	Private	Conservation easements and land ownership along small portions of streams in Lumber River, Black River, and South River.

2. Is there present or threatened destruction, modification, or curtailment of its habitat?

Type of Impact (Destruction, Modification, Curtailment)	Occurrence (Present, Threatened)	Description
Destruction, Modification, Curtailment	Present, Threatened	Water quality degradation from chemical and excess nutrient pollution, agriculture, logging, residential and commercial development, and road construction and maintenance.

Destruction, Modification, Curtailment	Present, Threatened	Siltation and physical habitat degradation from agriculture, logging, residential and commercial development, channel clearing and snagging, and road construction and maintenance.
Modification, Curtailment	Present, Threatened	Flow reduction or alteration from agriculture and water supply withdrawals. Could be exacerbated by climate change.
Modification, Curtailment	Present	Habitat fragmentation by dams and culverts.

3. Is there the potential for over-utilization for commercial, recreational, scientific, or educational purposes?

Type of Over-Use (Commercial, Recreational, Scientific, Educational)	Potential (Low, High)	Description
None known		

4. Is there the potential for critical population depletion from disease, predation, or other mortality factors?

Type of Depletion (Disease, Predation, Other)	Potential (Low, High)	Description
Predation	High	Invasive predators (invasive catfish)

5. Are there alternative regulatory mechanisms?

Agency	Agency Type (Federal, State)	Regulatory Mechanism
None known		

6. Are there other man-made factors that can affect continued viability of the animal in the State?

Other Man-Made Factor
None known

Roanoke Logperch

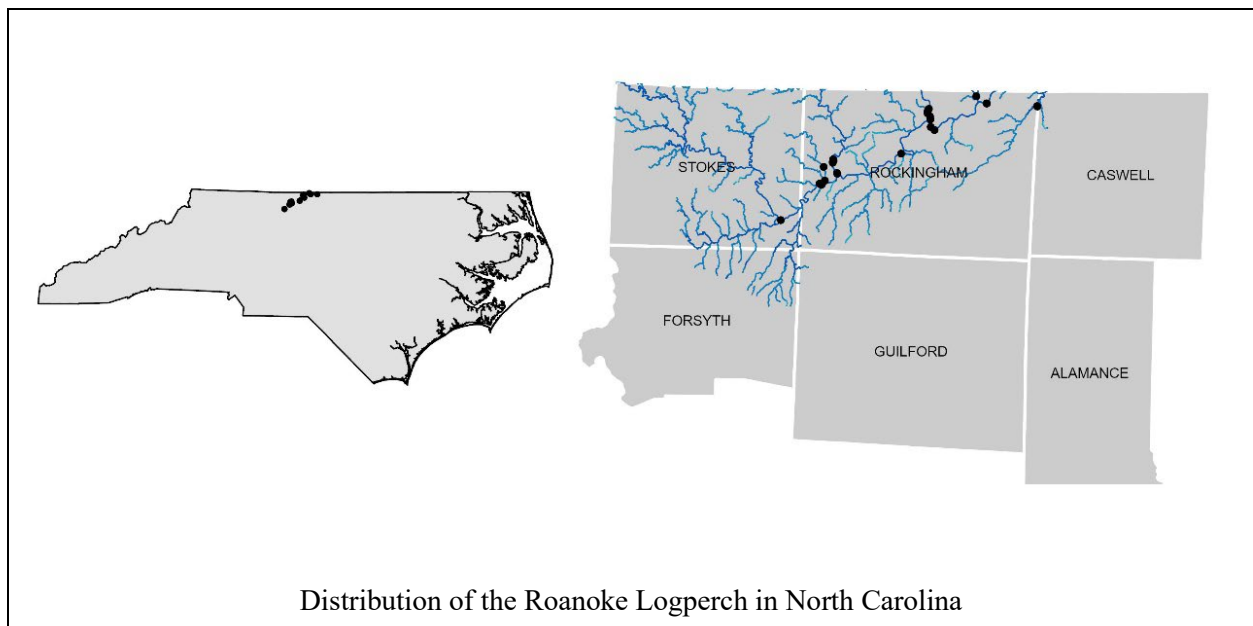
Species Name: Roanoke Logperch, <i>Percina Rex</i>	
Current N.C. Status: Endangered	
Proposed N.C. Status: Threatened	

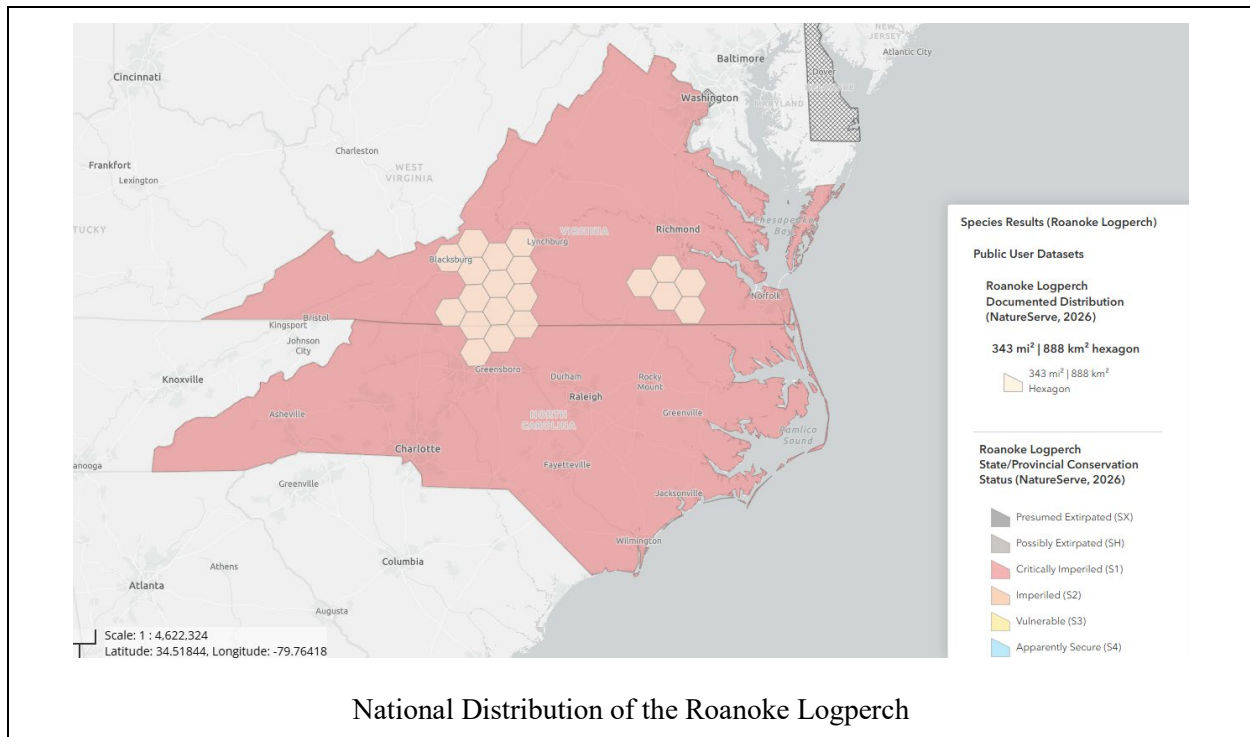
National Status

Entity	Status
USFWS	Not Listed
NatureServe	G2 (Imperiled)
IUCN	Vulnerable

Range

Roanoke Logperch are endemic to the Roanoke, Pigg, Smith, Chowan, and Nottoway River basins in Virginia and in the Dan, Smith, and Mayo River basins within the Roanoke River Basin in North Carolina. In North Carolina, the species occurs in the Dan, Mayo, and Smith Rivers and Big Beaver Island, Cascade, and Wolf Island creeks.





Rationale for Status Change

Roanoke Logperch was previously placed on the State Protected Animal List due to federal protection under the Endangered Species Act. On July 22, 2025, Roanoke Logperch was federally delisted. Roanoke Logperch met the designated criteria under Geographic Range (Criterion B) using the North Carolina Species Assessment protocol to be downlisted to Threatened. Historically (1979 to present), the Extent of Occurrence was 678 km² (= 262 mi²). When comparing historic distribution (pre-2014) and current distribution (2014-2024), the species has undergone a 19% reduction in Extent of Occurrence with known current localities comprising 548 km² (= 212 mi²). Recent surveys (post 2014) of the Wolf Island and Cascade Creek watersheds using eDNA, seining, and backpack electroshocking have not detected the species contributing to decline in EOO and AOO. Restoration activities for the species include stocking in upper Dan River basin, in the Mayo River above Avalon and Washington Mills dams through a Safe Harbor Agreement and augmentation in the Big Beaver Island Creek and Dan River near the Lindsey Bridge dam site. Post monitoring surveys have detected stocked individuals; however, additional time and surveys are needed to evaluate if these populations have fully established. Genetic techniques like eDNA surveys have detected DNA almost 30 river miles above the lowered Lindsey Bridge Dam site, however, surveys in these areas have not produced animals in hand. The reduction in Extent of Occurrence, along with decline in occupancy, and fragmentation of habitat across the species range meets the criteria to be listed as **Threatened**. Continued restoration activities, like surveys, stockings, and dam removals, will aid in the species reaching a stable and secure state.

Species Status Assessment Summary (Roanoke Logperch)

Criterion	Score	Final Score
A1	Data Deficient	Data Deficient
A2	Data Deficient	
A3	Data Deficient	
A4	Data Deficient	
B1	Threatened	Threatened
B2	Threatened	
B(a)	Endangered	
B(b)	True	
C	Data Deficient	Data Deficient
C1	Data Deficient	
C2	Data Deficient	
D1	Data Deficient	Special Concern
D2	Special Concern	
E	Data Deficient	Data Deficient
Regional Correction	None	None
Final Result		Threatened

GS 113-334 (c) Relevant Data and Factual Information

Roanoke Logperch (*Percina rex*)

1. Are any other State or Federal agencies or Private Entities taking steps to protect the wild animal which is the subject of the proposal?

Agency/Private Entity	Agency/Entity Type (Fed., State, Private)	Protection
NC Dept of Cultural and Natural Resources	State	Mayo River State Park protects large portion of the Upper Mayo River watershed. Hanging Rock State Park protects upper portions of the Dan River
US Fish and Wildlife Service	Federal	Properties enrolled in NC Programmatic Safe Harbor Agreement for Roanoke Logperch in the upper Mayo River with NCWRC and land trusts.
NCWRC	State	Dan River Game Lands protect lower portions of the Dan River watershed.
NC Dept of Transportation	State	Mitigation sites owned by the NCDOT potentially protect portions of the upper Dan River watershed.
NC Department of Environmental Quality	State	Outstanding Resource and High Quality Water in Cascade Creek and Indian Creek in Hanging Rock State Park protect water quality for Upper Dan River watershed.
NC Clean Water Trust Fund	State	Conservation easements and land ownership along small portions of streams.
Municipalities (Town of Mayodan, Stokes County, City of Eden, Rockingham County)	State	Various land ownership for open spaces programs protect riparian areas in the upper and lower Dan River, Smith River, and upper Mayo River watersheds.
Various (e.g., Piedmont Land Conservancy)	Private	Conservation easements and land ownership along Dan and Mayo Rivers.

2. Is there present or threatened destruction, modification, or curtailment of its habitat?

Type of Impact (Destruction, Modification, Curtailment)	Occurrence (Present, Threatened)	Description
Destruction, Modification, Curtailment	Present, Threatened	Water quality degradation from chemical and excess nutrient pollution, agriculture, logging, residential and commercial development, and road construction and maintenance.
Destruction, Modification, Curtailment	Present, Threatened	Siltation and physical habitat degradation from agriculture, logging, residential and commercial development, channel clearing and snagging, and road construction and maintenance.
Modification, Curtailment	Present, Threatened	Flow reduction or alteration from agriculture and water supply withdrawals. Could be exacerbated by climate change.
Modification, Curtailment	Present	Habitat fragmentation by dams and culverts.

3. Is there the potential for over-utilization for commercial, recreational, scientific, or educational purposes?

Type of Over-Use (Commercial, Recreational, Scientific, Educational)	Potential (Low, High)	Description
None known		

4. Is there the potential for critical population depletion from disease, predation, or other mortality factors?

Type of Depletion (Disease, Predation, Other)	Potential (Low, High)	Description
None known		

5. Are there alternative regulatory mechanisms?

Agency	Agency Type (Federal, State)	Regulatory Mechanism
None known		

6. Are there other man-made factors that can affect continued viability of the animal in the State?

Other Man-Made Factor
None known

Stony Fork Crayfish

Species Name: Stony Fork Crayfish <i>Cambarus lapidosus</i>	
Current N.C. Status: Not Listed	
Proposed N.C. Status: Special Concern	

National Status

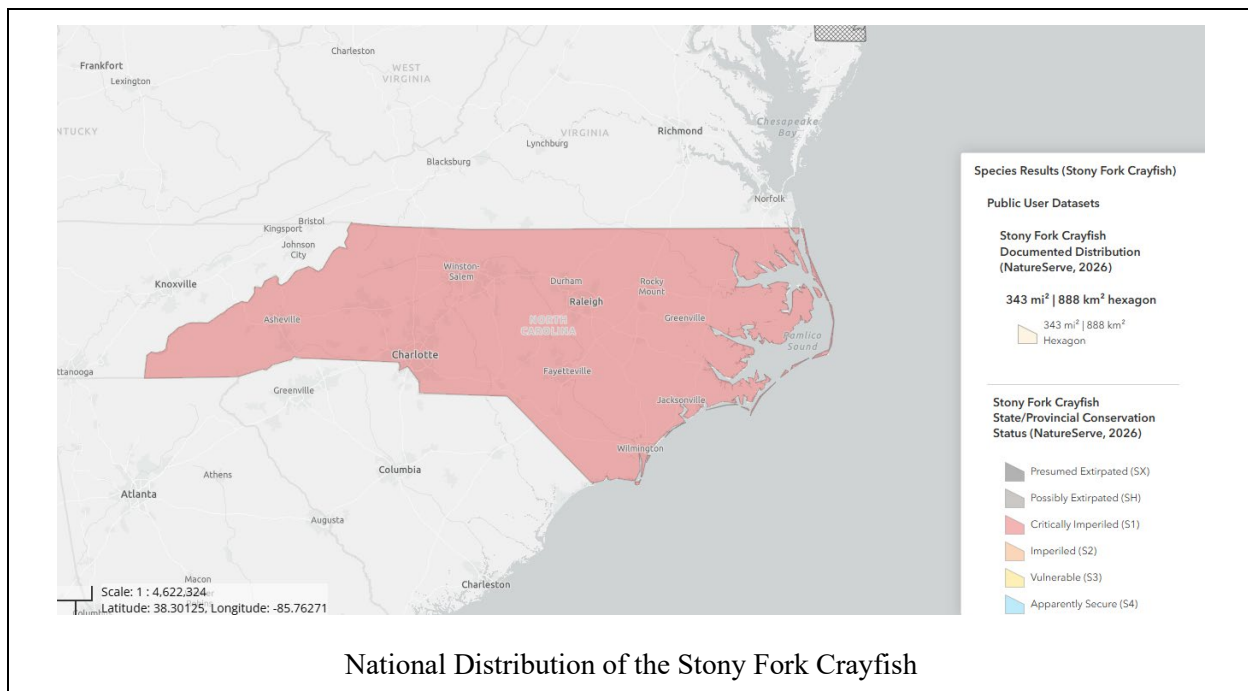
Entity	Status
USFWS	Not Listed
NatureServe	Not Ranked
IUCN	None

Range

The Stony Fork Crayfish is a narrow-ranged species endemic to the upper Yadkin River Basin of western North Carolina and is only known from the upper Stony Fork watershed in Watauga and Wilkes counties. There are no other known extant or historic populations. The species was recently described in 2023 (Perkins et al. 2023).



Distribution of the Stony Fork Crayfish in North Carolina



Rationale for Status Change

The Stony Fork Crayfish is a recently described North Carolina endemic species with a documented distribution of only a few streams in the Blue Ridge mountains. The Extent of Occupancy and Area of Occupancy of this species are both less than 10 km² (=3.9 mi²). The distribution of the species meets the criteria for a listing status of **Special Concern** based on Criterion D: Very Small or Restricted Population with a restricted AOO of less than 20 km² and only one known location. The species appears stable where present. However, given the highly restricted range of the Stony Fork Crayfish, current and emerging threats identified during sampling efforts (i.e., logging operations in the headwater areas of Stony Fork) pose substantial risks to persistence of the species over even a short time span. A state listing status of Special Concern supports continued monitoring of the taxon to fill any remaining data gaps and monitor the limited habitat within the species range.

Species Status Assessment Summary (Stony Fork Crayfish)

Criterion	Score	Final Score
A1	Data Deficient	Data Deficient
A2	Data Deficient	
A3	Data Deficient	
A4	Data Deficient	
B1	Endangered	Data Deficient
B2	Endangered	
B(a)	Endangered	
B(b)	Data Deficient	
C	Data Deficient	Data Deficient
C1	Data Deficient	
C2	Data Deficient	
D1	Data Deficient	Special Concern
D2	Special Concern	
E	Data Deficient	Data Deficient
Regional Correction	None	None
Final Result		Special Concern

GS 113-334 (c) Relevant Data and Factual Information

Stony Fork Crayfish (*Cambarus lapidosus*)

1. Are any other State or Federal agencies or Private Entities taking steps to protect the wild animal which is the subject of the proposal?

Agency/Private Entity	Agency/Entity Type (Fed., State, Private)	Protection
None known.		

2. Is there present or threatened destruction, modification, or curtailment of its habitat?

Type of Impact (Destruction, Modification, Curtailment)	Occurrence (Present, Threatened)	Description
Destruction, Modification, Curtailment	Present, Threatened	Water quality degradation from chemical and excess nutrient pollution, agriculture, logging, residential and commercial development, and road construction, use, and maintenance.
Destruction, Modification, Curtailment	Present, Threatened	Siltation and physical habitat degradation from agriculture, logging, residential and commercial development, channel clearing and snagging, and road construction and maintenance.
Modification, Curtailment	Present, Threatened	Flow reduction or alteration from agriculture and water supply withdrawals. Could be exacerbated by climate change.

3. Is there the potential for over-utilization for commercial, recreational, scientific, or educational purposes?

Type of Over-Use (Commercial, Recreational, Scientific, Educational)	Potential (Low, High)	Description
None known		

4. Is there the potential for critical population depletion from disease, predation, or other mortality factors?

Type of Depletion (Disease, Predation, Other)	Potential (Low, High)	Description
Disease	Low	Porcelain Disease and Crayfish Plague

5. Are there alternative regulatory mechanisms?

Agency	Agency Type (Federal, State)	Regulatory Mechanism
None known		

6. Are there other man-made factors that can affect continued viability of the animal in the State?

Other Man-Made Factor
None known

References

Perkins MA, Williams BW, and Russ WT. 2023. Integrative taxonomy reveals two new narrowly-endemic crayfish species (Decapoda: Cambaridae) from the Yadkin River Basin in western North Carolina, USA. *Zootaxa* 5270 (2): 207–230.

Falls Crayfish

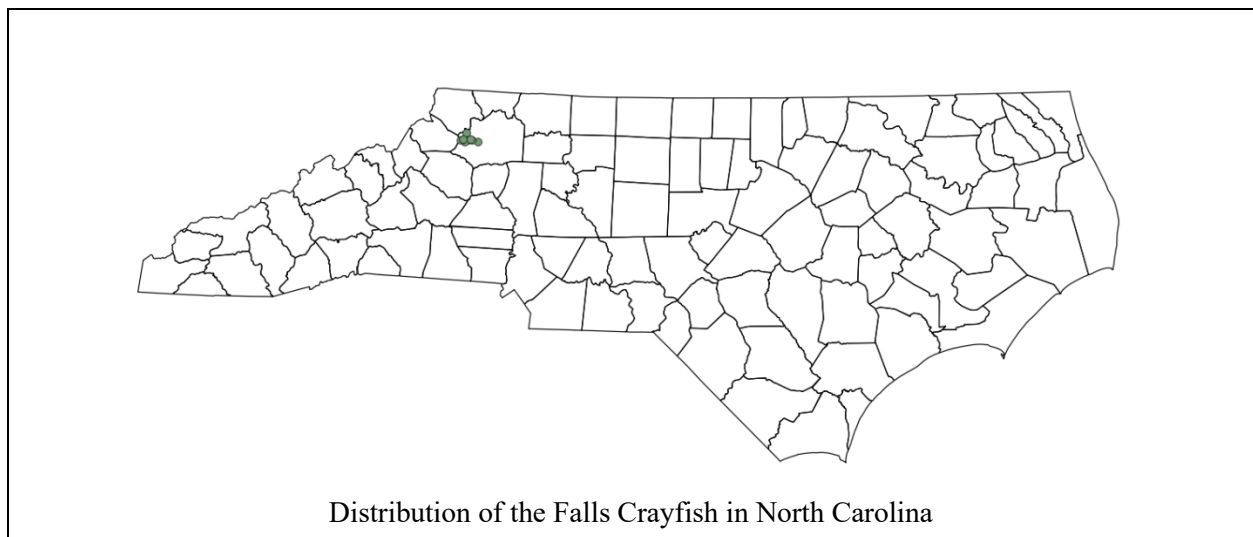
Species Name: Falls Crayfish <i>Cambarus burchfielae</i>	
Current N.C. Status: Not Listed	
Proposed N.C. Status: Special Concern	

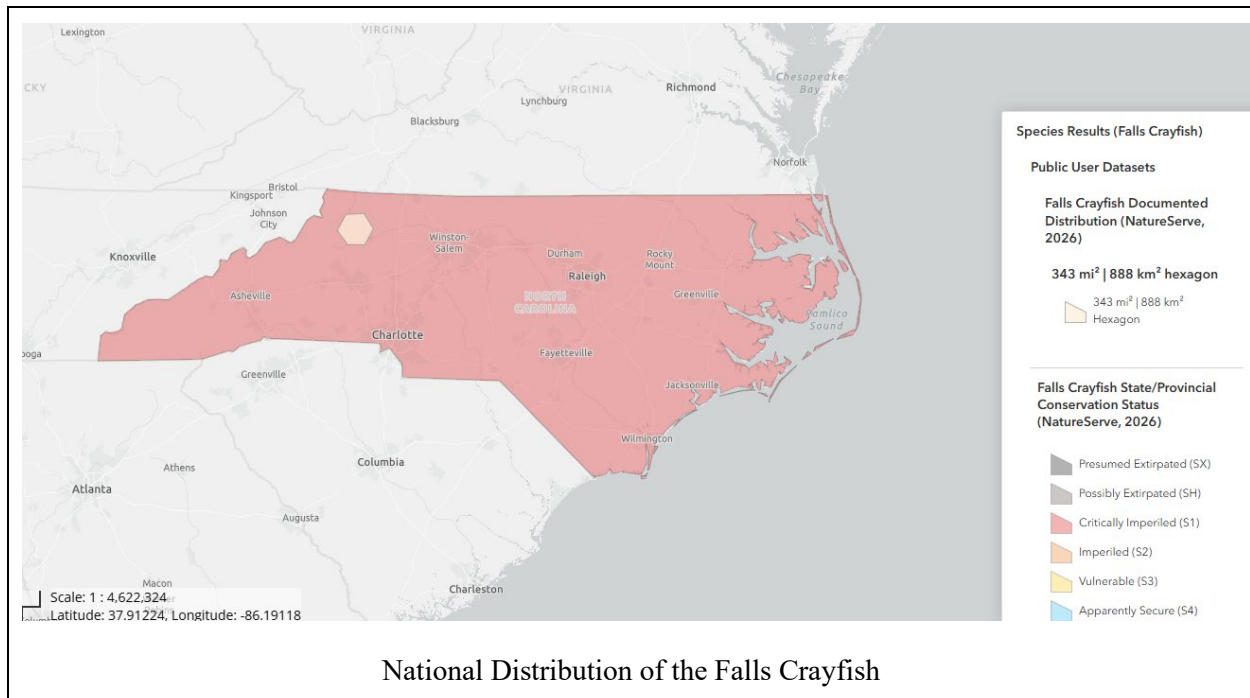
National Status

Entity	Status
USFWS	Not Listed
NatureServe	Not Ranked
IUCN	None

Range

The Falls Crayfish is endemic to the upper Yadkin River Basin of western North Carolina and is only known from the upper Lewis Fork watershed in Wilkes County. There are no other known extant or historic populations. The species was recently described in 2023 (Perkins et al 2023).





Rationale for Status Change

The Falls Crayfish is a recently described North Carolina endemic species with a documented distribution of only a few streams in the Blue Ridge mountains. The Extent of Occupancy and Area of Occupancy of this species are both less than 100 km² (=38.6 mi²). The distribution of the species meets the criteria for a listing status of **Special Concern** based on Criterion D: Very Small or Restricted Population with a restricted AOO of less than 20 km² and only one known location. The species appears stable where present. However, given the highly restricted range of the Falls Crayfish, current and emerging threats identified during sampling efforts (i.e., increased agriculture and logging operations) pose substantial risk to persistence of the species over even a short time span. A state listing status of Special Concern supports continued monitoring of the taxon to fill any remaining data gaps and monitor the limited habitat within the species range.

Species Status Assessment Summary (Falls Crayfish)

Criterion	Score	Final Score
A1	Data Deficient	Data Deficient
A2	Data Deficient	
A3	Data Deficient	
A4	Data Deficient	
B1	Endangered	Data Deficient
B2	Endangered	
B(a)	Endangered	
B(b)	Data Deficient	
C	Data Deficient	Data Deficient
C1	Data Deficient	
C2	Data Deficient	
D1	Data Deficient	Special Concern
D2	Special Concern	
E	Data Deficient	Data Deficient
Regional Correction	None	None
Final Result		Special Concern

GS 113-334 (c) Relevant Data and Factual Information

Falls Crayfish (*Cambarus burchfieldae*)

1. Are any other State or Federal agencies or Private Entities taking steps to protect the wild animal which is the subject of the proposal?

Agency/Private Entity	Agency/Entity Type (Fed., State, Private)	Protection
US National Park Service	Federal	The Blue Ridge Parkway protects a very small portion of the upper most section of the Falls Creek watershed.
NC Clean Water Trust Fund	State	Land ownership of a small tract protect a portion of the upper section of the Falls Creek watershed
NC Forest Service	State	Rendezvous State Forest protects headwater reaches of Little Fork and Purlar Creeks of the North Prong Lewis Fork.

2. Is there present or threatened destruction, modification, or curtailment of its habitat?

Type of Impact (Destruction, Modification, Curtailment)	Occurrence (Present, Threatened)	Description
Destruction, Modification, Curtailment	Present, Threatened	Water quality degradation from chemical and excess nutrient pollution, agriculture, logging, residential and commercial development, and road construction and maintenance.
Destruction, Modification, Curtailment	Present, Threatened	Siltation and physical habitat degradation from agriculture, logging, residential and commercial development, channel clearing and snagging, and road construction and maintenance.
Modification, Curtailment	Present, Threatened	Flow reduction or alteration from agriculture and water supply withdrawals. Could be exacerbated by climate change.

3. Is there the potential for over-utilization for commercial, recreational, scientific, or educational purposes?

Type of Over-Use (Commercial, Recreational, Scientific, Educational)	Potential (Low, High)	Description
None known		

4. Is there the potential for critical population depletion from disease, predation, or other mortality factors?

Type of Depletion (Disease, Predation, Other)	Potential (Low, High)	Description
Disease	Low	Porcelain Disease and Crayfish Plague

5. Are there alternative regulatory mechanisms?

Agency	Agency Type (Federal, State)	Regulatory Mechanism
None known		

6. Are there other man-made factors that can affect continued viability of the animal in the State?

Other Man-Made Factor
None known

References

Perkins MA, Williams BW, and Russ WT. 2023. Integrative taxonomy reveals two new narrowly-endemic crayfish species (Decapoda: Cambaridae) from the Yadkin River Basin in western North Carolina, USA. *Zootaxa* 5270 (2): 207–230.

Uwharrie Elktoe

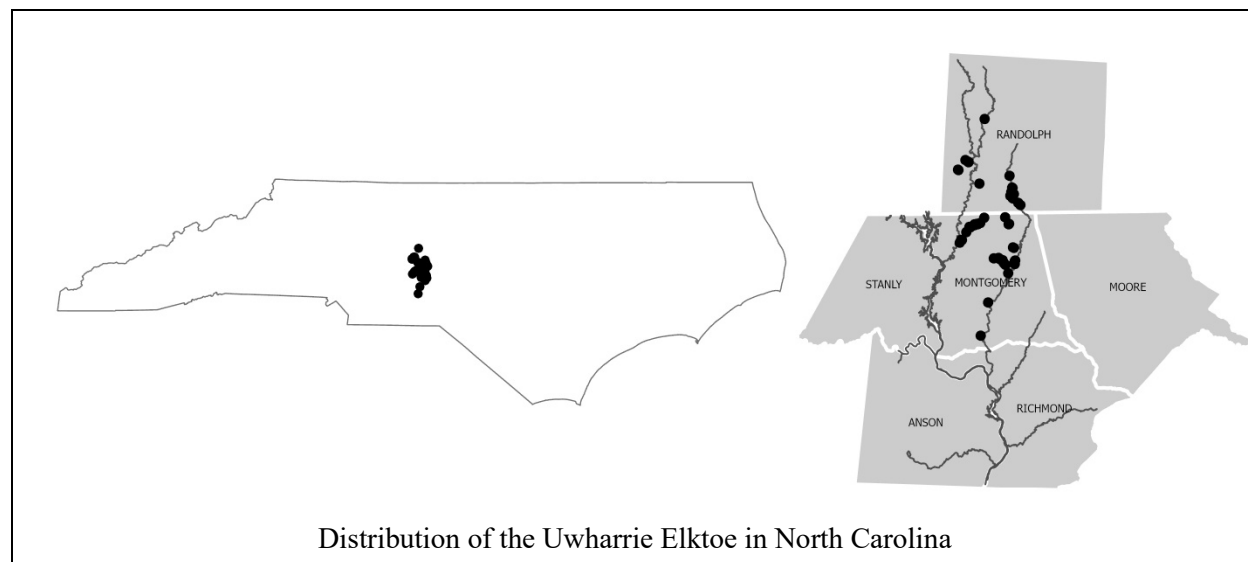
Species Name: Uwharrie Elktoe, <i>Alasmidonta uwharriensis</i>	
Current N.C. Status: Not Listed	
Proposed N.C. Status: Threatened	

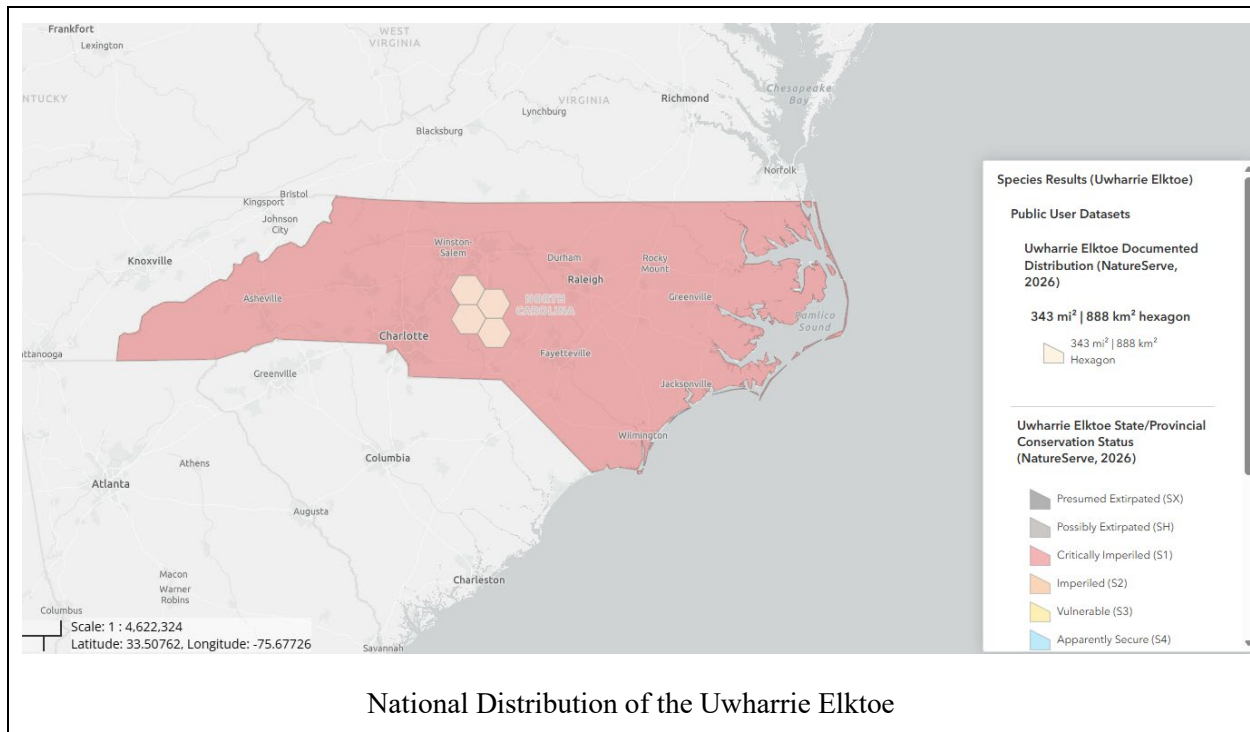
National Status

Entity	Status
USFWS	Not Listed
NatureServe	G1 (Critically Imperiled)
IUCN	None

Range

The Uwharrie Elktoe, *Alasmidonta uwharriensis*, is endemic to the Uwharrie River watershed in Montgomery and Randolph counties in North Carolina. The Uwharrie River is a tributary to the Yadkin-Pee Dee River basin. The species was recently described in 2023 (Whelan et al. 2023). The current range is in tributaries of the Uwharrie River including Barnes, Toms, Poison, Hannahs, Carraway, Second, and South Fork Second creeks. The species also occurs in the the Little River, and its tributaries including Densons, Dumas, Reed, and Rocky creeks as well as West Fork Little River.





Rationale for Status Change

The Uwharrie Elktoe was recently described in 2023. Previously the species was presumed to be another species, Brook Floater, within the Uwharrie watershed. Analysis of the historical records of the species in the Uwharrie watershed using museum shell records, life history studies, and genetics revealed that records within the Uwharrie River basin watershed are the newly described species and the Brook Floater is no longer considered to be in the Uwharrie River watersheds. The species meets the criteria for **Threatened** under Criteria B. The Extent of Occurrence (EOO) for the species is less than 5,000 km² and the Area of Occupancy is less than 500 km², with fewer than 5 known locations in the state. Historically (pre-2014), the EOO of the species was 1,140 km² (= 440 mi²) and the Area of Occupancy (AOO) was 34 km² (= 13 mi²). Recent data (2014-2024) show the EOO has declined to 826 km² (= 319 mi²) and 30 km² (= 12 mi²), a 20% and 9% reduction in EOO and AOO respectively. Given the highly restricted range of the Uwharrie Elktoe, current and emerging threats of land-use changes associated with rapid population growth and urban sprawl, particularly in the upper reaches of the watershed, pose substantial risk to persistence of the species over even a short time span.

Species Status Assessment Summary (Uwharrie Elktoe)

Criterion	Score	Final Score
A1	Data Deficient	No Finding
A2	No Finding	
A3	Data Deficient	
A4	Data Deficient	
B1	Threatened	Threatened
B2	Threatened	
B(a)	Threatened	
B(b)	True	
C	Data Deficient	Data Deficient
C1	Data Deficient	
C2	Data Deficient	
D1	Data Deficient	Special Concern
D2	Special Concern	
E	Data Deficient	Data Deficient
Regional Correction	None	None
Final Result		Threatened

GS 113-334 (c) Relevant Data and Factual Information

Uwharrie Elktoe (*Alasmodonta uwharriensis*)

1. Are any other State or Federal agencies or Private Entities taking steps to protect the wild animal which is the subject of the proposal?

Agency/Private Entity	Agency/Entity Type (Fed., State, Private)	Protection
U.S. Forest Service	Federal	Uwharrie National Forest protects portions of Uwharrie River and its tributaries.
NC Dept of Cultural and Natural Resources	State	Morrow Mountain State Park protects portions of the Uwharrie River watershed.
US Fish and Wildlife Service	Federal	Critical habitat for the Atlantic Pigtoe Mussel protects portions of the West Fork Little River watershed.
NCWRC	State	Uwharrie Game Lands protect upper portions of the Uwharrie River watershed.
NC Dept of Agriculture	State	Various land ownership for plant conservation preserves that protect riparian areas and Farmland Preservation Trust Fund Easements.
NC Department of Environmental Quality	State	Outstanding Resource Water designation in portions of the Little River, Rocky, Densons, and Barnes creek watersheds protect water quality for portion of the species range. Easements and land ownership as part of the Stewardship Program protect riparian areas in the Densons and Barnes Creek watershed and upper Uwharrie River.
NC Clean Water Trust Fund	State	Conservation easements and land ownership along small portions of streams.
Municipalities (Montgomery County, Town of Troy, City of Asheboro)	State	Various land ownership for open spaces programs protect some riparian areas in Little River watershed
Various (e.g., Three Rivers Land Trust, Piedmont Land Conservancy)	Private	Conservation easements and land ownership along small portions of Uwharrie River watershed and tributaries.

2. Is there present or threatened destruction, modification, or curtailment of its habitat?

Type of Impact (Destruction, Modification, Curtailment)	Occurrence (Present, Threatened)	Description
Destruction, Modification, Curtailment	Present, Threatened	Water quality degradation from chemical and excess nutrient pollution, agriculture, logging, residential and commercial development, and road construction and maintenance.
Destruction, Modification, Curtailment	Present, Threatened	Siltation and physical habitat degradation from stormwater, agriculture, logging, residential and commercial development, channel clearing and snagging, and road construction and maintenance.

Modification, Curtailment	Present, Threatened	Flow reduction or alteration from agriculture and water supply withdrawals. Could be exacerbated by climate change.
Modification, Curtailment	Present	Habitat fragmentation by dams and culverts.

3. Is there the potential for over-utilization for commercial, recreational, scientific, or educational purposes?

Type of Over-Use (Commercial, Recreational, Scientific, Educational)	Potential (Low, High)	Description
None known		

4. Is there the potential for critical population depletion from disease, predation, or other mortality factors?

Type of Depletion (Disease, Predation, Other)	Potential (Low, High)	Description
Unknown		

5. Are there alternative regulatory mechanisms?

Agency	Agency Type (Federal, State)	Regulatory Mechanism
None known		

6. Are there other man-made factors that can affect continued viability of the animal in the State?

Other Man-Made Factor
None known

References:

Whelan, N. V., N. A. Johnson, A. Williams, M. A. Perkins, C. E. Beaver, and J. W. Mays. 2023. Hidden in the hills: phylogeny of the freshwater mussel genus *Alasmodonta* (Bivalvia: Unionidae) and description of a new species. *Zoological Journal of the Linnean Society* 2023:1–17.

EXHIBIT J

July 30, 2026



Emergency/Temporary Amendment to 15A NCAC 10F .0303 Beaufort County Recommended by Agency Staff for Adoption

The proposed amendment expands the no-wake zone in the waters of Blount Creek in Beaufort County, 140 yards south-southeast of the Mouth of the Creek Bridge on Mouth of the Creek Road.

The NC Department of Transportation (NCDOT) has contracted for the replacement and realignment of the Mouth of the Creek Bridge. The new permanent bridge, along with a temporary construction bridge, will be built just south of the current bridge. Once complete, the existing bridge will be demolished.

In-water work on the replacement bridge began on July 1, 2026, and involves pile driving operations where personnel will be rigging, standing, and setting piles in the hammer leads on a floating work platform, all of which are difficult and dangerous tasks, but even more so on an oscillating platform.

Vessels moving under and around the bridge above no-wake speed endanger the safety of operators on the work platforms. Platform stability is critical to ensure that operators are not thrown from the platform, thrown into moving equipment, or crushed under falling equipment. A stable platform is critical to ensure operator safety.

Additionally, NCDOT inspection staff will be on the water conducting structural checks and vessels moving above no-wake speed may negatively affect their assessment, or worst case, send them overboard. Both the contractor and NCDOT are required under permit to not disturb the bottom of the waterway, engineering controls and field staff can only plan for foreseeable events (tide, storms, etc.), not for the variable wake that any given boat can cast.

The Board of Commissioners of Beaufort County is the designated agency for this no-wake zone; however, NCDOT and their contractor will be responsible for placing regulatory markers under this emergency/temporary rule. A permanent amendment to this no-wake zone is expected to be implemented once the existing bridge is demolished.

15A NCAC 10F .0303 BEAUFORT COUNTY

1 15A NCAC 10F .0303 amended under emergency procedures as follows:

3 **15A NCAC 10F .0303 BEAUFORT COUNTY**

4 (a) Regulated Areas. This Rule applies to the following waters in Beaufort County:

5 (1) Aurora.

6 (A) the waters within 50 yards of Smith Creek Boating Access Area on Smith Creek, 3484 NC
7 Highway 33 E; and

8 (B) the waters within 50 yards of Aurora Boating Access Area on South Creek, 1 Main Street.

9 (2) Belhaven.

10 (A) the waters within 50 yards of Belhaven Boating Access Area on Pantego Creek, 135 West
11 Water Street; and

12 (B) the waters within 50 yards of Wrights Creek Boating Access Area on Pungo Creek, 1922
13 Wilkins Road.

14 (3) Chocowinity.

15 (A) the portion of Blounts Creek north of a line ~~35~~ 175 yards south-southeast of the Mouth of
16 the Creek Bridge from a point on the east shore at 35.43187 N, 76.96823 W ~~35.43333 N,~~
17 ~~76.96985 W~~ to a point on the west shore at 35.43212 N, 76.97193 W ~~35.43267 N, 76.97196~~
18 ~~W~~ and south of a line 350 yards north-northeast of the Mouth of the Creek Bridge from a
19 point on the east shore at 35.43553 N, 76.96962 W to a point on the west shore at 35.43679
20 N, 76.97011 W;

21 (B) the canals at the eastern end of the peninsula between Chocowinity Bay and the Pamlico
22 River at Fork Point and Whichard Beach, beginning at the canal entrance off Chocowinity
23 Bay at a point a 35.50296 N, 77.03043 W and beginning at the canal entrance off the
24 Pamlico River at a point at 35.50340 N, 77.02364 W; and

25 (C) Blounts Creek south of a line 100 yards north of the Blounts Creek Boating Access Area
26 at 350 Crisp Landing Road, from a point on the east shore at 35.40846 N, 76.96091 W to
27 a point on the west shore at 35.40834 N, 76.96355 W, and north of a line 100 yards south
28 of Cotton Patch Landing, from a point on the east shore at 35.40211 N, 76.96573 W to a
29 point on the west shore at 35.40231 N, 76.96702 W.

30 (4) Washington.

31 (A) the portion of Broad Creek south of a line from a point on the east shore at 35.49472 N,
32 76.95693 W to a point on the west shore at 35.49477 N, 76.96014 W and north of a line
33 from a point on the east shore at 35.48894 N, 76.95052 W to a point on the west shore at
34 35.48660 N, 76.95879 W;

35 (B) the waters within 50 yards of Masons Landing Boating Access Area on Tranters Creek,
36 625 Clarks Neck Road; and

1 (C) the waters within 50 yards of Havens Garden Boating Access Area on Runyon Creek, 1053
2 East Main Street.

3 (5) the navigable portion of Nevil Creek extending upstream from its mouth at the Pamlico River;

4 (b) Speed Limit. No person shall operate a vessel at greater than no-wake speed within the regulated areas identified
5 in Paragraph (a) of this Rule.

6 (c) Placement of Markers.

7 (1) the Board of Commissioners of Beaufort County shall be the designated agency implementing the
8 portion of Parts (a)(3)(C) south of the Blounts Creek Boating Access Area; and Parts (a)(2)(A) and
9 (B), (a)(3)(A) and (B), and (a)(5) of this Rule;

10 (2) the City of Washington shall be the designated agency implementing Parts (a)(4)(A) through
11 (a)(4)(C) of this Rule; and

12 (3) the North Carolina Wildlife Resources Commission shall be the designated agency implementing
13 the portion of Part (a)(3)(C), the waters of Blounts Creek shore to shore from 100 yards north of the
14 Blounts Creek Boating Access Area to 100 yards south of the Boating Access Area; and Parts
15 (a)(1)(A) and (B) of this Rule.

16
17 *History Note: Authority G.S. 75A-3; 75A-15;*

18 *Eff. February 1, 1976;*

19 *Amended Eff. September 1, 2013; September 1, 2010; June 1, 1998; April 1, 1997; June 1, 1989;*
20 *March 1, 1987; April 1, 1986; March 4, 1979;*

21 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. December*
22 *6, 2016;*

23 *Amended Eff. April 1, 2026; May 1, 2019; October 1, 2018; November 1, 2017.*

24 *Emergency Amendment Effective August 7, 2026.*

**15A NCAC 10F .0303 - Proposed Emergency &
Temporary No-Wake Zone Expansion
Blounts Creek, Beaufort County**

-  Expanded No-Wake Zone  New Bridge Alignment
-  Existing No-Wake Zone



0 50 100
Yards

EXHIBIT K

July 30, 2026



Proposed Permanent Amendments to 15A NCAC 10F .0354 Pitt County Recommended by Agency Staff for Public Notice, Comment, and Presentation at Public Hearing

The proposed amendments correct the name of the Grifton Boating Access Area on Contentnea Creek and add the Masons Landing Boating Access Area no-wake zone on Tranter's Creek to the Pitt County rule. Currently the Masons Landing Boating Access Area no-wake zone is only listed in 10F .0303 Beaufort County; however, the no-wake zone crosses the county line and is in both Beaufort and Pitt Counties. The correction closes a potential loophole when it comes to enforcing the no-wake zone.

15A NCAC 10F .0354 PITT COUNTY

1 15A NCAC 10F .0354 is proposed for amendment as follows:

3 **15A NCAC 10F .0354 PITT COUNTY**

4 (a) Regulated Areas. This Rule applies to the following waters in Pitt County:

- 5 (1) the waters of Hardee Creek in the City of Greenville, surrounding the waters within 50 yards of the
6 Greenville Boating Access Area at 940 Port Terminal Road, shore to shore, west of a line at its
7 confluence with the main course of Tar River from a point on the north shore at 35.59878 N,
8 77.31168 W to a point on the south shore at 35.59813 N, 77.31157 W;
- 9 (2) the waters of Barber Creek at Wildwood Park in the City of Greenville shore to shore, north of its
10 confluence with Tar River at a point at 35.60719 N, 77.32890 W;
- 11 (3) the waters within 50 yards of the Falkland Boating Access Area on Tar River, 3013 NC Highway
12 222, Falkland; ~~and~~
- 13 (4) the waters within 50 yards of the ~~Contentnea Creek~~ Grifton Boating Access Area on Contentnea
14 Creek, 510 Water Street, Grifton; ~~and Grifton~~.
- 15 (5) the waters within 50 yards of Masons Landing Boating Access Area on Tranters Creek, 625 Clark
16 Neck Road, Washington.

17 (b) Speed Limit. No person shall operate a vessel at greater than no-wake speed within the regulated areas described
18 in Paragraph (a) of this Rule.

19 (c) Placement of Markers.

- 20 (1) ~~The the~~ City Council of the City of Greenville shall be the designated agency implementing the
21 portion of Subparagraph (a)(1) of this Rule excluding the Greenville Boating Access Area, and
22 Subparagraph (a)(2) of this Rule. ~~Rule; and~~
- 23 (2) ~~The the~~ North Carolina Wildlife Resources Commission shall be the designated agency
24 implementing the portion of Subparagraph (a)(1) of this Rule the waters of Hardee Creek
25 surrounding the Greenville Boating Access Area, and Subparagraphs (a)(3) and (4) of this Rule.
- 26 (3) The City of Washington shall be the designated agency implementing Subparagraph (a)(5) of this
27 Rule.

29 *History Note: Authority G.S. 75A-3; 75A-15;*

30 *Eff. May 1, 1988;*

31 *Amended Eff. May 1, 2014; September 1, 2010; July 1, 1995; April 1, 1992;*

32 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. December*
33 *6, 2016;*

34 *Amended Eff. April 1, 2026; June 1, 2022; October 1, 2018.*