North Carolina
Coastal Federation
*Working Together for a Healthy Coast*

July 20, 2018

Mr. Trey Glenn, Regional Administrator
Environmental Protection Agency, Region 4
61 Forsyth Street SW
Atlanta, GA 30303

**Re: North Carolina's April 9, 2018 Request for Approval of Modifications to the Water Quality Classification for the Lower Cape Fear River**

Dear Mr. Glenn:

It has recently come to our attention that the N.C. Department of Environmental Quality (DEQ) asked the United States Environmental Protection Agency (EPA) to approve a revised water-quality standard reclassifying the Lower Cape Fear River as "swamp water." The reclassification defies both federal law and observable facts. The North Carolina Coastal Federation urges EPA to deny this request.

The federation is a non-profit organization dedicated to protecting and enhancing coastal water quality and habitat. Our organization represents 16,000 supporters. For the past 36 years, the federation has been taking an active role in protecting coastal water quality, habitat and public beach access. Since 1982, the federation has worked with coastal communities and other partners to improve and protect coastal water quality and natural habitats, which are intricately tied to our coastal economy. By focusing primarily, but not exclusively on natural and productive estuarine shorelines, oyster and marsh restoration, coastal management and cleaning the estuaries of marine debris, we strive to support and enhance the natural environment. The reclassification of the Lower Cape Fear River poses impacts that are not compatible with the federation's priorities and efforts, and weakens existing legal protections and requirements for DEQ to address the existing water quality issues.

The federation represents North Carolinians who drink, fish, swim, and paddle the state's waters, including the Cape Fear River. These users place a high value on the quality of water resources, and will be adversely affected by the lowering of regulatory protections that will result from these proposed changes to the surface water quality standards, and the subsequent further degradation of water quality in the Cape Fear River. Earlier this year, the federation adopted the *Lower Cape Fear River Blueprint*, which is a collaborate effort to focus on the river's estuarine and riverine natural resources. Pressures from historic alterations, short-sighted development, unregulated industrial uses, conflicting water uses, and changes associated with climate alterations have affected drinking, surface and groundwater water supplies and quality, as well as ecosystem health. Through the unified approach outlined in the *Blueprint*, the federation aims to protect and restore the coastal Cape Fear River to maintain a healthy, productive, and resilient coast. The reclassification of the lower Cape Fear River as a "swamp water" is in direct conflict of these strategies and inconsistent with long-term restoration efforts.

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The state's reclassification decision ignores the very definition of "swamp waters." Under North Carolina law, "swamp waters" are those with "low velocities and other natural characteristics which are different from adjacent streams."[1] In granting the reclassification request, however, state officials made no mention of water velocities in the river.[2] In 2015, the EPA confirmed the importance of evaluating a waterbody's "flow regime, channel gradient, and…geomorphology" in a guidance document addressing "natural conditions" criteria."[3] In the words of the agency, "[a]n examination of natural geomorphic factors, such as lack of re-aeration due to the low channel gradient, as well as naturally high biological oxygen demand…from decomposition of riparian vegetation, should be documented to demonstrate that [a waterbody's] low DO is not due to eutrophication or other human-caused impacts." In reclassifying the lower Cape Fear River as a "swamp water," North Carolina officials failed to undertake this critical analysis.

North Carolina's reclassification of the lower Cape Fear River is also at odds with the "antidegradation" requirements of state and federal law.[4] As the EPA has emphasized in its regulations, the Clean Water Act requires that "[e]xisting instream water uses and the level of water quality necessary to protect such uses shall be maintained and protected."[5] North Carolina's antidegradation policy accordingly provides that "[e]xisting uses…and the water quality to protect such uses shall be protected by properly classifying surface waters and having standards sufficient to protect these uses."[6] In arbitrarily declaring that the lower Cape Fear is a "swamp water" with no need for dissolved-oxygen protections, state officials defied these requirements.

The ecological significance of this effort to ignore the water-quality problems on the lower Cape Fear River was recently confirmed by the National Marine Fisheries Service. On August 17, 2017, the Service designated the lower Cape Fear River as critical habitat for the endangered Carolina population of Atlantic sturgeon.[7] In doing so, the agency emphasized the importance of dissolved oxygen to the species, noting that "[t]he physical features essential for the conservation of Atlantic sturgeon" include "[w]ater quality conditions … with … oxygen values that support … [l]arval, juvenile, and subadult growth, development, and recruitment."[8] According to the agency, while "[a]ppropriate temperature and oxygen values will vary interdependently, and

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[1] 15A NCAC 02B .0101(e)(2) (states that "swamp waters mean those waters which are classified by the Environmental Management Commission and which are topographically located so as to generally have very low velocities and other characteristics which are different from adjacent streams draining steeper topography").
[2] *See* Report of Proceedings.
[3] *See* Framework for Defining and Documenting Natural Conditions for Development of Site-Specific Natural Background Aquatic Life Criteria for Temperature, Dissolved Oxygen, and pH: Interim Document (Feb. 2015), *available at* https://www.epa.gov/sites/production/files/2015-02/documents/natural-conditions-framework-2015.pdf (last visited July 20, 2018).
[4] *See* 15A NCAC 02B .0201 (North Carolina's antidegradation policy); 40 C.F.R. § 131.12(a) (establishing the minimum requirements for state antidegradation policies); *id.* § 131.6(d) (requiring the EPA to ensure that state water-quality standards include "an antidegradation policy consistent with § 131.12").
[5] 40 C.F.R. § 131.12(a)(1).
[6] 15A NCAC 02B .0201(b).
[7] Nat'l Marine Fisheries Serv., Final Rule, Designation of Critical Habitat for the Endangered New York Bight, Chesapeake Bay, Carolina and South Atlantic Distinct Population Segments of Atlantic Sturgeon and the Threatened Gulf of Maine Distinct Population Segment of Atlantic Sturgeon, 82 Fed. Reg. 39,160 (Aug. 17, 2017).
[8] 39,239-40 (codified at 50 C.F.R. § 226.225(b)).

depending on salinity in a particular habitat[,]" a concentration of "6.0 mg/L dissolved oxygen or greater likely supports juvenile rearing habitat, whereas dissolved oxygen less than 5.0 mg/L for longer than 30 days is less likely to support rearing when water temperature is greater than 25 °C."[9]

Because the reclassification of the lower Cape Fear River as swamp water is designed to allow dissolved-oxygen levels in the river to drop below 5.0 mg/L, it fails to provide for the "[m]aintenance and recovery of the water quality conditions required to sustain and recover" the region's Atlantic sturgeon population and therefore should be reversed.[10] In addition, the segment of the lower Cape Fear River in question has been designated as a Primary Nursery Area by the N,C. Division of Marine Fisheries.[11] State law requires that nursery areas be maintained, as much as possible, in their natural state, allowing fish populations "to develop in a normal manner with as little interference from man as possible."[12]

As a result of the recent critical-habitat designation, the EPA must consult with the National Marine Fisheries Service before taking action on the state's request.[13] The reclassification arbitrarily and unlawfully reclassifies the lower Cape Fear River as "swamp water," ignores the pollution caused by the region's industrial livestock operations, fails to protect an endangered population of Atlantic Sturgeon, and violates the antidegradation requirements of state and federal law.

The state's request should be denied since the reclassification will negatively impact water quality in the lower Cape Fear River.

Thank you for your attention to this matter.

Sincerely,

Todd Miller
Executive Director

Kerri Allen
Coastal Advocate

cc: Michael Regan, Secretary, DEQ

[9] *See* Report of Proceedings at a-102 (U.S. FWS comments on reclassification proposal) (citing "references demonstrating adverse effects to fish early lifestages at DO concentrations less than the standard of 5 mg/L").
[10] See 15A N.C. Admin. Code 02B .0110.
[11] See 15A N.C. Admin. Code 03R .0103.
[12] See 15A N.C. Admin. Code 10C .0501.
[13] *See* 16 U.S.C. § 1536(a)(2); *see also, e.g.,* National Marine Fisheries Service, Biological Opinion on EPA Approval of Water Quality Standards Under Section 303 of the Clean Water Act (July 29, 2016) (evaluating the impact of Florida's revised water-quality standards on listed species), *available at* http://repository.library.noaa.gov/view/noaa/14795 (last visited July 20, 2018).