FISCAL NOTE

Rule Citation Number: 15A NCAC 2B .0306 Broad River Basin

Rule Topic: Proposed Reclassification of Portion of the Green River from Class C to Class Water Supply-IV (WS-IV) Critical Area (CA) and WS-IV (Protected Area or PA)

DENR Division: Division of Water Resources

Staff Contact: Elizabeth Kountis, Environmental Senior Specialist, Division of Water Resources (DWR)
(919) 807-6418
elizabeth.kountis@ncdenr.gov

Impact Summary:

State government:	Yes
Local government:	Yes
Substantial impact:	No
Federal government:	No

Authority: G.S. 143-214.5

Necessity: This proposed reclassification is necessary to ensure the supply of drinking water for Polk County, North Carolina. Under North Carolina 15A NCAC 18C .0202, "any surface water which is to receive treatment…in order to be used for a public water system shall be obtained from a source which meets the water supply stream classification standards established by the EMC...".

Summary

Polk County has requested that a portion of the Green River and its associated watershed in Polk County (Broad River Basin) be reclassified for public water supply use. The WS-IV Critical Area[1] (CA) and WS-IV [Protected Area[2] (PA)] designations would be suitable classifications for this use and these waters (see Appendix 1 for the proposed rule change text). This proposal would permit Polk County to put a new water intake in Lake Adger for use as a permanent water supply and to meet future local water demands. Lake Adger is a dammed portion of the Green River, and serves as a reservoir.

There are no current or planned wastewater discharges, landfills, land application sites, or development activities that would be affected by this proposed rule change. Polk County is the sole local government with jurisdiction in the proposed reclassification area and is willing to incur costs due to the rule change. The one-time cost to Polk County and DENR for this proposal is estimated at $1,600 and $800, respectively. The fiscal analysis of the proposed rule does not indicate that estimated annual economic impacts would meet or exceed $1,000,000 threshold for substantial economic impact. The expected effective reclassification date is September 1, 2014.

[1] Critical Area: The lands and waters 0.5 mile and draining to water supplies as measured from the normal pool elevation of a reservoir.

[2] Protected Area: The lands and waters 5 miles and draining to water supplies as measured from the normal pool elevation of a reservoir, not including the Critical Area.

I. Purpose of Rules and Background

The purpose of this rule change is to provide Polk County with a permanent source of drinking water that meets future local water demands. The waters to be reclassified meet water supply standards according to 2011 studies. A Finding of No Significant Impact (FONSI) for this project has not yet been issued but is being pursued, which would indicate that the project will not result in significant impacts to the environment. In order to obtain this finding, an Environmental Assessment (EA) (the description of direct, secondary, cumulative, long-range, and short-term impacts of projects) has been generated that presents the preferred alternative[3] (a new water supply intake in Lake Adger) to allow resource agencies and the public to determine if the preferred alternative would have significant impacts to the environment. Multiple project factors are considered in the EA, and multiple state and federal agencies are reviewing the project to determine if it can move ahead as proposed with their feedback.

The Division of Water Resources assigns all surface waters a primary classification to designate their best uses. Class C is the most basic classification for freshwater and is intended to protect the following uses: secondary recreation, fishing, wildlife, fish and aquatic life propagation and survival, and agriculture. Secondary recreation includes wading, boating, and other uses involving human body contact with water where such activities take place in an infrequent, unorganized, or incidental manner. Other primary classifications are assigned to protect waters for such uses as shellfishing (Class SA), drinking water supply (WS-I through WS-V), and primary recreation (B). Supplemental classifications afford additional protections and include Nutrient Sensitive Waters (NSW) and High Quality Waters (HQW).

The five drinking water supply classifications, WS-I through WS-V, reflect the variability in the types of water supply watersheds across the state. The Water Supply Watershed Protection Act (North Carolina General Statute 143-214.5) requires the Environmental Management Commission to adopt rules to protect the state's surface drinking water supply watersheds.

In order to proceed with Polk County's preferred water-supply alternative, Polk County has requested that a portion of the Green River and its associated watershed in Polk County (Broad River Basin) be reclassified for public water supply use. The WS-IV CA and WS-IV PA designations would be suitable classifications for this use and these waters (see Appendix 1 for the proposed rule change text). The CA would extend approximately 0.5 mile from and draining to Lake Adger as measured from the normal pool elevation of that reservoir. The PA would extend approximately 5 miles from and draining to Lake Adger as measured from the normal pool elevation of that reservoir. See the Guide to Freshwater Classifications Chart (PDF) for WS-IV regulations at the following website: http://portal.ncdenr.org/web/wq/ps/csu/classifications.

The costs and benefits estimated in this fiscal note represent the direct benefits and costs of the proposed reclassification, as required by North Carolina General Statutes. However, the EA for the proposed project includes many of the potential environmental impacts, financial aspects, and other relevant features and impacts of the preferred project as well as the "no-action" project alternative. This report, including relevant amendments and supporting documents, can be provided electronically upon request.

[3] The other available alternative discussed in the EA is that of taking no action, which was deemed undesirable as it leaves the County without a reliable additional water source.

II. Costs

Regulated Parties

(a) New and Existing Wastewater Discharges, Landfills and Land Application Sites

There are no existing or planned landfills, wastewater discharges, or land application sites that would be impacted by the proposed reclassification. Under state regulations, as a result of this reclassification, no new landfills or new land application sites would be allowed within a WS-IV CA, and future new wastewater discharges throughout the proposed watershed would need to meet water supply water quality standards as noted in 15A NCAC 02B .0104 (Considerations/ Assigning/ Implementing Water Supply Classifications) and .0216 (Fresh Surface Water Quality Standards for WS-IV Waters).

(b) New Development

According to NC DWR Regional office staff, as well as Cathy Ruth (County Planner/Zoning Administrator for Polk County), there are no known plans for new development in either the proposed CA or PA. Although there are no known plans for new development, future development in the proposed WS-IV area would be subject to WS-IV development restrictions (as required in rules 15A NCAC 02B .0104 and .0216), including density and stream setback requirements that are to be implemented via local ordinances.

(c) Local Governments

Polk County would be required to modify its water supply watershed ordinance within 270 days after the effective date of the proposed rule to reflect the changes in surface water classifications and resulting changes in land management requirements (i.e. density and stream setback requirements).

There are one-time costs associated with the modification of water supply watershed ordinances. These expenditures include costs for creating or revising water supply watershed protection language in ordinances, creating or changing the water supply boundaries on maps, public notification, and hearing costs. A single local government or a paid consulting firm could perform these tasks. The estimated total cost of staff time and physical materials required for these activities to Polk County is approximately $1,600 according to Cathy Ruth, County Planner/Zoning Administrator for Polk County.

(d) Department of Transportation (DOT)

This reclassification would not affect any known DOT activities in the area according to Andrew McDaniel (NC DOT Highway Stormwater Program Engineer) and David Harris (NC DOT State Roadside Erosion Control and Vegetation Management Engineer).

Implementing Agencies

(a) Division of Water Resources

The NC DWR Central office and Regional office staff would oversee the processing of the proposed rule as well as the implementation and enforcement of the requirements. DWR staff would handle administrative procedures, educational and technical assistance and rule/policy evaluations. In addition, there are DWR staff that would specifically oversee and assist local governments with watershed planning and ordinances. The Division issues permits, conducts inspections and takes enforcement actions. DWR monitors and keep records of compliance associated with their inspections and enforcement activities.

The Division of Water Resources anticipates that if this rule becomes effective, there would be a one-time opportunity cost of $800 to the state from additional tasks assigned to existing staff. This cost is to

be incurred to support notification of Polk County, and review and approval of changes to its local ordinance and map.

The cost to the state varies depending on the particular staff required to review specific types of local programs as well as the complexity of the different local programs. The formula used to estimate the cost is the following:

> One-time Cost to State = [[#tasks] X [hrs/task] X [staff cost/hr]] + [25% overhead]
>
> "Tasks" include phone calls, letters, site visits, and meetings that would be performed by state staff, and "staff cost/hr," which is based on salary information from OSBM as of July 1, 2012, includes salary, payroll taxes, retirement, and health benefits.

The one-time cost estimate of $800 can be broken down into two subtotals:

1. $680 = Cost for notification, technical assistance, reviewing local ordinances
   This is comprised of the following: [12 tasks] X [average 1.25hrs/task] X [$36.10 staff cost/hr] + [$135.38 overhead] = [$676.88], rounded up to $680.

2. $120 = Cost for updating stormwater map and website
   This cost is comprised of the following: [1 task] X [2 hrs/task] X [$47.12 staff cost/hr] + [$23.56 overhead] = $117.80, rounded up to $120.

III. Benefits

(a) Humans

Polk County's citizens will benefit from the reclassification of this river segment for use as a source of permanent potable water. Reclassifying the waters would help protect the water supply for human consumption by decreasing the risk of potential contamination via implementation of wastewater discharge and stormwater management requirements for potential future developments and discharges.

After consideration of the proposed water supply intake and the lack of possible alternative sources, Polk County determined that an intake on Lake Adger is the most appropriate option to meet the potable water needs of its local residents while protecting the environment, adhering to applicable state and federal requirements, and wisely utilizing taxpayers' money.

(b) Environment/Ecosystem

Implementation of stormwater management strategies as well as narrative and numeric water quality standards protect environmental assets and ecosystem health. The protective management criteria associated with the WS-IV classification would help to mitigate potential impacts and reduce risk from potential future discharges and development and, thus could benefit fish and wildlife and their habitats. More specifically, portions of the area proposed to be reclassified may experience decreased stormwater runoff as well as decreased water pollution, which may increase and improve aquatic habitat and, in turn, may increase propagation and survival of wildlife and fish. DWR currently does not

have adequate data and models to quantify the potential benefits associated with reductions in water pollution and stormwater runoff or increases in wildlife habitat that this rule may create.

IV. Total Costs and Benefits

The one-time cost to Polk County is estimated at $1,600, and DENR anticipates approximately $800 in one-time costs for this reclassification. The analysis of the proposed rule indicates that estimated annual economic impacts would be significantly less than $1,000,000 for the foreseeable future.

APPENDIX 1

15A NCAC 02B .0306 is proposed for amendment as follows:

15A NCAC 02B .0306 BROAD RIVER BASIN

(a) Effective February 1, 1976, the adopted classifications assigned to the waters within the Broad River Basin are set forth in the~~The~~ Broad River Basin Schedule of Classifications and Water Quality ~~Standards~~Standards, which may be inspected at the following places:

(1) the Internet at http://portal.ncdenr.org/web/wq/ps/csu/classifications; andhttp://h2o.enr.state.nc.us/csu/;and~~Clerk of Court:~~

~~Buncombe County~~

~~Cleveland County~~

~~Gaston County~~

~~Henderson County~~

~~Lincoln County~~

~~McDowell County~~

~~Polk County~~

~~Rutherford County~~

(2) North Carolina Department of Environment and Natural Resources:

(A) Mooresville Regional Office
610 East Center Avenue
Suite 301
Mooresville, North Carolina

(B) Asheville Regional Office
2090 US Highway 70
Swannanoa, North Carolina.

(b) Unnamed Streams. Such streams entering South Carolina are classified "C."

(c) The Broad River Basin Schedule of Classifications and Water Quality Standards was amended effective:

(1) March 1, 1977;

(2) February 12, 1979;

(3) August 12, 1979;

(4) April 1, 1983;

(5) February 1, ~~1986;~~ 1986.

~~(6) August 3, 1992;~~

~~(7) September 1, 1994;~~

~~(8) August 1, 1998;~~

~~(9) August 1, 2000;~~

~~(10) April 1, 2001;~~

~~(11) March 1, 2007.~~

(d) The Schedule of Classifications and Water Quality Standards for the Broad River Basin was amended effective August 3, 1992 with the reclassification of all water supply waters (waters with a primary classification of WS-I, WS-II or WS-III). These waters were reclassified to WS-I, WS-II, WS-III, WS-IV or WS-V as defined in the revised water supply protection rules, (15A NCAC 02B .0100, .0200 and .0300) which became effective on August 3, 1992. In some cases, streams with primary classifications other than WS were reclassified to a WS classification due to their proximity and linkage to water supply waters. In other cases, waters were reclassified from a WS classification to an alternate appropriate primary classification after being identified as downstream of a water supply intake or identified as not being used for water supply purposes.

(e) The Schedule of Classifications and Water Quality Standards for the Broad River Basin was amended effective September 1, 1994 with the reclassification of the Second Broad River [Index No. 9-41-(0.5)] from its source to Roberson Creek including associated tributaries was reclassified from Class WS-V to Classes WS-V, WS-IV and WS-IV CA.

(f) The Schedule of Classifications and Water Quality Standards for the Broad River Basin was amended effective August 1, 1998 with the revision to the primary classification for portions of the Broad River [Index No. 9-(23.5)] from Class WS-IV to Class C and Second Broad River [Index Nos. 9-41-(10.5) and 9-41-(14.5)] and First Broad River [Index No. 9-50-(11)] from Class WS-IV to Class WS-V.

(g) The Schedule of Classifications and Water Quality Standards for the Broad River Basin was amended August 1, 2000 with the reclassification of the Green River [Index No. 9-29-(1)], including all tributaries, from its source to its mouth in Lake Summit at elevation 2011 from Class C Tr to Class B Tr.

(h) The Schedule of Classifications and Water Quality Standards for the Broad River Basin was amended effective August 1, 2000 with the reclassification of Lake Montonia [Index No. 9-54-1-(1)], and all tributaries, from Class B to Class B HQW.

(i) The Schedule of Classifications and Water Quality Standards for the Broad River Basin was amended effective April 1, 2001 with the reclassification of the Green River [Index No. 9-29-(1)], including all tributaries, from its source to the downstream side of the mouth of Rock Creek from Class B Tr to Class B Tr HQW.

(j) The Schedule of Classifications and Water Quality Standards for the Broad River Basin was amended effective March 1, 2007 with the reclassification of the North Fork First Broad River (Index No. 9-50-4), including all tributaries, from its source to the First Broad River from Class C Tr to Class C Tr ORW.

(k) The Schedule of Classifications and Water Quality Standards for the Broad River Basin was amended effective March 1, 2007 with the reclassification of a segment of the Broad River [Index No. 9-(25.5)] from a point 0.5 mile upstream of the City of Shelby proposed water supply intake to the City of Shelby proposed water supply intake from Class C to Class WS-IV CA, and from a point 0.5 mile upstream of the City of Shelby proposed water supply intake to a point approximately 0.3 mile downstream of its confluence with Cane Creek from Class C to Class WS-IV. The City of Shelby proposed water supply intake is to be placed on the Broad River at a point approximately one mile upstream of its confluence with the First Broad River.

(l) The Schedule of Classifications and Water Quality Standards for the Broad River Basin was amended effective March 1, 2007 with the reclassification of a segment of the Broad River [Index No. 9-(25.5)] from a point 0.5 mile

upstream of the Town of Forest City proposed water supply intake to the Town of Forest City proposed water supply intake from Class C to Class WS-IV CA, and from a point 0.5 mile upstream of the Town of Forest City proposed water supply intake to a point approximately 0.2 mile downstream of Rutherford County SR 1145 (Town of Rutherfordton water supply intake) from Class C to Class WS-IV. The Town of Forest City proposed water supply intake is to be placed on the Broad River at a point approximately 0.4 mile downstream of McKinney Creek.

(m) The Schedule of Classifications and Water Quality Standards for the Broad River Basin was amended effective September 1, 2014, in order to allow a water supply intake to be placed in Lake Adger by Polk County, as follows:

(1) a portion of the Green River [Index No. 9-29-(33)] (including tributaries) from the dam at Lake Adger to a point 0.35 mile downstream of Rash Creek from Class C to Class WS-IV CA. The CA extends 0.5 mile from and draining to the normal pool elevation of Lake Adger.

(2) a portion of the Green River [Index No. 9-29-(33)] (including tributaries) from a point 0.35 mile downstream of Rash Creek to a point 300 feet downstream of Laurel Branch from Class C to Class WS-IV. The PA extends 5.0 miles from and draining to the normal pool elevation of Lake Adger.

History Note: *Authority G.S. 143-214.1; 143-215.1; 143-215.3(a)(1);*
Eff. February 1, 1976;
Amended Eff. September 1, 2014; March 1, 2007; April 1, 2001; August 1, 2000; August 1, 1998; September 1, 1994; August 3, 1992; February 1, 1986; January 1, 1985.