



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

September 9, 2015

MEMORANDUM

TO: THE ENVIRONMENTAL REVIEW COMMISSION
The Honorable Mike Hager, Co-Chair
The Honorable Brent Jackson, Co-Chair

FROM: Matthew Dockham, Director of Legislative Affairs

SUBJECT: State Water Supply Plan Implementation Report and Basinwide Water Quality Management Plans

DATE: September 9, 2015

Pursuant to G.S. 143-355(n), the Department of Environment and Natural Resources shall report to the Environmental Review Commission on the implementation of this section and the development of the State water supply plan on or before 1 September of each year. In addition, pursuant to G.S. 143-215.8B(2)(d), the Commission and the Department shall each report on or before 1 October of each year on an annual basis to the Environmental Review Commission on the progress in developing and implementing basinwide water quality management plans and on increasing public involvement and public education in connection with basinwide water quality management planning.

Please consider the attached as the formal submission of this report. If you have any questions or need additional information, please contact me by phone at (919) 707-8618 or via e-mail at matthew.dockham@ncdenr.gov.

cc: Tom Reeder, Assistant Secretary of the Environment, NCDENR
Jay Zimmerman, Director of Water Resources, NCDENR
Jennifer McGinnis, Commission Counsel
Jeff Hudson, Commission Counsel
Mariah Matheson, ERC Committee Assistant

**North Carolina Department of
Environment and Natural Resources**

Division of Water Resources

**Annual report to the General Assembly
Environmental Review Commission
Water Supply Planning and Basinwide Water Quality
Management Planning
August 1, 2014 to July 31, 2015**

This report is submitted to meet the requirements of G.S. 143-215.8B(2)(d), which requires annual reporting on the development of basinwide water quality management plans, and G.S. 143-355(n), which requires annual reporting on the development of the North Carolina Water Supply Plan (NCWSP).

The responsibilities formerly administered by the Division of Water Quality were reassigned to the Division of Water Resources (DWR) by Session Law 2013-413. Employees from the two former basin planning groups have been combined into one division and are developing data management schemes and planning templates supporting creation of integrated river basin plans that address water quality and quantity issues. DWR is expanding the capacity to present integrated basin plans electronically, increasing the availability to the public and enhancing the public's ability to explore the data on which the plans are based. A draft of an integrated Tar-Pamlico River Basin Plan is available for review on the division's website at: <http://www.ncwater.org/basins/Tar-Pamlico/index.php>. The Tar-Pamlico River Basin Plan is complete pending approval of the water quality evaluations and recommendations by the Environmental Management Commission. An evaluation of water supply issues associated with allocating water supply storage in B. Everett Jordan Lake has been developed to support recommendations for new and revised allocations to be presented to the Environmental Management Commission in late 2015, or early 2016. Information in this evaluation will be combined with other data to develop the Cape Fear River Basin Water Resources Plan.

The Division of Water Resources basin planning programs take advantage of stakeholders' input, which enhances public participation by maintaining electronic communications. Stakeholders provide information pertinent to protecting and enhancing watershed water quality and issues associated with reliability of water supplies. Partnering stakeholders typically include watershed associations, land trusts, water quality monitoring coalitions, soil and water conservation districts, public water systems, and other federal, state, and local agencies. DWR staff members regularly assist local government water systems with developing and updating local water supply plans that provide data on current and future water use, and support hydrologic modeling and the river basin water resources plans. River basin water resources plans provide detailed assessments of water quality conditions for watersheds within each river basin. This information supports a variety of state and local programs aimed at protecting and improving water quality in North Carolina's streams, rivers, and water bodies. For instance, water quality issues documented in basinwide water quality management plans provide support for local governments, natural resource groups, researchers, soil and water agencies, and others when applying for grant or loan funding to address issues important to them. Former basinwide water quality management plans are available at: <http://portal.ncdenr.org/web/wq/ps/bpu/basin>.

There are approximately 321 miles of Atlantic coastline, 2,127,356 acres of estuarine classified waters, 249,984 acres of reservoirs and lakes and 38,206 miles of freshwater creeks, streams and rivers. All water quality parameters collected in a waterbody or assessment unit (a defined portion of a waterbody) are assessed independently of each other so a single assessment unit can have multiple assessments that are meeting, exceeding, or inconclusive. Assessment criteria are based on frequency of exceedance of numeric and narrative water quality standards. There are 13,344 assessment units that vary in size based on the specific characteristics of the water body being evaluated. Because the characteristics of assessment units vary, some units are only monitored for a subset of the parameters shown on the graph below.

Water quality impairments are formally identified every other year based on the “use support” assessment process for surface waters. The impairments are compiled and submitted to U.S. EPA for review and approval pursuant to Section 303(d) of the Clean Water Act. The results of the impairment evaluations are based on a five-year compilation of data that has been quality assured and quality controlled. For example, the 2014 impairments assessment is based on data collected from 2008-2012. The following graph illustrates the number of assessment units impaired for the most recent approved assessments based on the water quality parameters shown on the bottom of the graph.

