



Division of Water Resources

# **COMPREHENSIVE BASIN PLANNING**

The Integration of Water Quality Planning  
and  
Water Quantity Planning

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# DWR's Vision

- The new basin plans integrate the State's water quality and water quantity into a single plan.
- The plans will be web based in application.
- Data data will be updated dynamically using the most current data available in DWR's databases.

# COMPREHENSIVE BASIN PLANNING

## **Integration of water quality and water quantity, because:**

- Knowing the location and quantity of North Carolina's surface and groundwater resources, as contrasted with surface and groundwater quality, will aid the state in applying best conservation management practices at a local, regional and state level.
- The integrated approach helps logically bridge the work of other DWR Sections with each other so that water resources evaluation and assessment within North Carolina is much, much more seamless, and water resource operations more efficient.
- The new relationship between water quality and NPDES facilities and water quantity and NPDES facilities, will expedite consideration of water reuse applications as part of a comprehensive water resources conservation package.
- This integration provides DWR end users with “better, faster, cheaper” data and answers to water resources questions, and will help to establish North Carolina's water security which will only help the state's economy grow.

# Federal and State Regulations

- Federal Energy Regulatory Commission
- Clean Water Act (CWA)
  - 303(d)
  - 303(e)
  - 319
- NC General Statute Chapter 143, Article 21
- NC Administrative Code Sections 2B .0100, 2B .0200 and 2B .0300

# Clean Water Act Section 303(e)

## Continuing Planning Process Nine Required Elements

1. Development of effluent limitations and schedules of compliance;
2. Incorporation of the elements of areawide 208 plans and 209 basin plans in water quality planning;
3. Developing of total maximum daily loads (TMDLs) and individual water quality based effluent limits;
4. Maintenance of Water Quality Management (WQM) plans;
5. Assurance of adequate authority for intergovernmental cooperation in the implementation of the State WQM plans;
6. Implementation of new or revised water quality standards, including schedules of compliance;
7. The process for assuring adequate controls over the disposition of all residual waste from any water treatment processing.
8. Development of an inventory and ranking, in order of priority of needs for construction of waste treatment works required to meet the applicable requirements of sections 301 and 302 of the Clean Water Act; and
9. Determination of priorities for permit issuance.

# NC General Statute Chapter 143, Article 21

- **§ 143-215.8A Planning.**

- a. **Policy, Purpose and Intent** - The Commission and Department **shall** undertake a continuing planning process to develop and adopt plans ...
- b. **Goals** - The goals of the continuing planning process **shall** be the enhancement of the quality of life and protection of the environment ....

- **§ 143-215.8B**

- a. The Commission **shall** develop and implement a basinwide water quality management plan for each of the 17 major river basins in the State. ...
- c. The Commission **shall** review and revise its 17 basinwide water quality management plans at least every 10 years ...
- e. A basinwide water quality management plan is not a rule and Article 2A of Chapter 150B of the General Statutes does not apply to the development of basinwide water quality management plans. ...
- m. In order to assure the availability of adequate supplies of good quality water to protect the public health and to support desirable economic growth, the Department **shall** develop a State water supply plan. ...

# DWR's Vision

- The new basin plans integrate the State's water quality and water quantity into a single plan.
- The plans are web based in application.
  - *No longer printed documents.*
- The data will be updated dynamically using the most current data available in DWR's databases.
  - *To fully revise a dynamic data driven plan will evolve over time. DWR's databases need to be retooled.*

# EMC's Role

- How to approve a dynamic plan?
  - The principle requirements of § 143-215.8A and § 143-215.8B will always be addressed in the online, comprehensive, integrated and dynamic basin plans. However, the delivery will be expanded, more robust, and more efficient. Ongoing maintenance and updating of the comprehensive basin plans will be a feature of the online plans. Any major additions or modifications to a basin plan will be presented to the EMC. Finally, basin plan presentations will be provided to the EMC for approval at a minimum of every 10 years per statute, but may be presented to the EMC for approval earlier, if requested.



**Combined Basin Plan Checklist**

State Regulation			Requirements of Basinwide Water Quality Plans & State Water Supply Plan	Required for EMC Approval
1	§143-215.8B(a)	(1) All activities across a river basin and all point sources and nonpoint sources of pollutants		
2	§143-215.8B(a)	§143-215.8B(a)(1) municipal wastewater facilities	Yes	Yes
3	§143-215.8B(a)	§143-215.8B(a)(1) industrial wastewater systems	Yes	Yes
4	§143-215.8B(a)	§143-215.8B(a)(1) septic tank systems	Yes	Yes
5	§143-215.8B(a)	§143-215.8B(a)(1) stormwater management systems	Yes	Yes
6	§143-215.8B(a)	§143-215.8B(a)(1) golf courses	Yes	Yes
7	§143-215.8B(a)	§143-215.8B(a)(1) farms that use fertilizers and pesticides for crops	Yes	Yes
8	§143-215.8B(a)	§143-215.8B(a)(1) public and commercial lawns and gardens	Yes	Yes
9	§143-215.8B(a)	§143-215.8B(a)(1) atmospheric deposition	Yes	Yes
10	§143-215.8B(a)	§143-215.8B(a)(1) animal operations	Yes	Yes
11	§143-215.8B(a)(2)	All transfers into and from a river basin that are required to be registered under G.S. 143-215.22H.	Yes	Yes
12	§143-215.8B(b)(1)	Provide that all point sources and nonpoint sources of pollutants jointly share the responsibility of reducing the pollutants in the State's waters in a fair, reasonable, and proportionate manner, using computer modeling and the best science and technology reasonably available and considering future anticipated population growth and economic development.	Yes	Yes
13	§143-215.8B(b)(2)	If any of the waters located within the river basin are designated as nutrient sensitive waters, then the basinwide water quality management plan shall establish a goal to reduce the average annual mass load of nutrients that are delivered to surface waters within the river basin from point and nonpoint sources. ...	Yes	Yes
14	§143-355(m)	information and projections required to be included in local plans (§143-355(l))		
15	§143-355(m)	§143-355(l) present and projected population, industrial development, and water use within the service area	Yes	No
16	§143-355(m)	§143-355(l) present and future water supplies	Yes	No
17	§143-355(m)	§143-355(l) an estimate of the technical assistance that may be needed at the local level to address projected water needs	Yes	No
18	§143-355(m)	§143-355(l) current and future water conservation and water reuse programs, including a plan for the reduction of long-term per capita demand for potable water	Yes	No
19	§143-355(m)	§143-355(l) a description of how the local government or large community water system will respond to drought and other water shortage emergencies and continue to meet essential public water supply needs during the emergency	Yes	No
20	§143-355(m)	§143-355(l) any other related information as the Department may require in the preparation of a State water supply plan.	Yes	No
21	§143-355(m)	a summary of water conservation and water reuse programs described in local plans	Yes	No
22	§143-355(m)	a summary of the technical assistance needs indicated by local plans	Yes	No
23	§143-355(m)	shall indicate the extent to which the various local plans are compatible	Yes	No
24	§143-355(m)	shall identify potential conflicts among the various local plans	Yes	No
25	§143-355(m)	ways in which local water supply programs could be better coordinated.	Yes	No

# Tar-Pamlico River Basin Pilot Water Resources Plan

<http://www.ncwater.org/basins/Tar-Pamlico/index.php>

## Tar-Pamlico River Basin

2014 DRAFT Tar-Pamlico River Basin Plan Public Review Period 12/9/2014 - 1/30/2015

### Quick Facts

Drainage Area (mi <sup>2</sup> ):	~6,148
Population (2010):	~449,164
River Miles:	~2,543
Coastal Miles:	~36
Lake Acreage:	~3,977
Estuary Acreage:	~663,504
Counties:	19
Municipalities:	53
Planner:	Heather Patt

### Subbasin Info

- 03020101 - Upper Tar River
- 03020102 - Fishing Creek
- 03020103 - Lower Tar River
- 03020104 - Pamlico River
- 03020105 - Pamlico Sound

- Basin Description
- ▾ 2014 Tar-Pamlico River Basin Water Resources Plan

**PUBLIC REVIEW DRAFT**  
(Public Review: December 9, 2014 - January 30, 2015)

2014 Executive Summary

- Water Quantity
- Water Quality
- Subbasin Assessments
- General Basin Information

# Questions?

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