Chapter 1 -Introduction to Basinwide Water Quality Planning

1.1 What is Basinwide Water Quality Planning?

Basinwide water quality planning is a nonregulatory, watershed-based approach to restoring and protecting the quality of North Carolina's surface waters. Basinwide water quality plans are prepared by the NC Division of Water Quality (DWQ) for each of the 17 major river basins in the state, as shown in Figure A-1 and Table A-1. Preparation of an individual basinwide water quality plan is a five-year process, which is broken down into three major phases as presented in Table A-2. While these plans are prepared by the Division of Water Quality, their implementation and the protection of water quality entail the coordinated efforts of many agencies, local governments and stakeholder groups in the state. The first cycle of plans was completed in 1998, but each plan is updated at five-year intervals.



Figure A-1 Basinwide Planning Schedule (2002 to 2007)

1.2 Goals of Basinwide Water Quality Planning

The goals of basinwide planning are to:

- identify water quality problems and restore full use to impaired waters;
- identify and protect high value resource waters;
- protect unimpaired waters while allowing for reasonable economic growth;
- develop appropriate management strategies to protect and restore water quality;
- assure equitable distribution of waste assimilative capacity for dischargers; and
- improve public awareness and involvement in the management of the state's surface waters.

Basin	DWQ Biological Data Collection	River Basin Public Workshops	Public Mtgs. and Draft Out For Review	Final Plan Receives EMC Approval	Begin NPDES Permit Issuance
Chowan	Summer 2000	3/2001	5/2002	7/2002	11/2002
Pasquotank	Summer 2000	3/2001	5/2002	7/2002	12/2002
Neuse	Summer 2000	6/2001	5/2002	7/2002	1/2003
Broad	Summer 2000	11/2001	11/2002	2/2003	7/2003
Yadkin-Pee Dee	Summer 2001	4/2002	1/2003	3/2003	9/2003
Lumber	Summer 2001	12/2002	9/2003	12/2003	7/2004
Tar-Pamlico	Summer 2002	3/2003	12/2003	3/2004	9/2004
Catawba	Summer 2002	6/2003	3/2004	6/2004	12/2004
French Broad	Summer 2002	11/2003	11/2004	2/2005	9/2005
New	Summer 2003	4/2004	5/2005	9/2005	3/2006
Cape Fear	Summer 2003	5/2004	4/2005	8/2005	4/2006
Roanoke	Summer 2004	4/2005	4/2006	8/2006	2/2007
White Oak	Summer 2004	10/2005	7/2006	9/2006	7/2007
Savannah	Summer 2004	10/2005	12/2006	2/2007	8/2007
Watauga	Summer 2004	10/2005	12/2006	2/2007	9/2007
Hiwassee	Summer 2004	10/2005	12/2006	2/2007	8/2007
Little Tennessee	Summer 2004	3/2006	12/2006	2/2007	10/2007
Note: A basinwide plan was completed for all 17 basins during the first cycle (1993 to 1998).					

Table A-1Basinwide Planning Schedule (2000 to 2007)

Table A-2 F	Five-Year Process for Devel	lopment of an Individual	Basinwide Plan
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Years 1 - 2 Water Quality Data Collection and Identification of Goals and Issues	 Identify sampling needs Conduct biological monitoring activities Conduct special studies and other water quality sampling activities Coordinate with local stakeholders and other agencies to continue to implement goals within current basinwide plan
Years 2 - 3 Data Analysis and Public Workshops	 Gather and analyze data from sampling activities Develop use support ratings Conduct special studies and other water quality sampling activities Conduct public workshops to establish goals and objectives and identify and prioritize issues for the next basin cycle Develop preliminary pollution control strategies Coordinate with local stakeholders and other agencies
Years 3 - 5 Preparation of Draft Basinwide Plan, Public Review, Approval of Plan, Issue NPDES Permits and Begin Implementation of Plan	 Develop draft basinwide plan based on water quality data, use support ratings, and recommended pollution control strategies Circulate draft basinwide plan for review and present draft plan at public meetings Revise plan after public review period Submit plan to Environmental Management Commission for approval Issue NPDES permits Coordinate with other agencies and local interest groups to prioritize implementation actions Conduct special studies and other water quality sampling activities

1.3 Major Components of the Basinwide Plan

The second cycle of basinwide plans uses a different format from the earlier basinwide plans. Each plan is subdivided into three major sections. The intent of the format change is to make the plans easier to read and understand, but still comprehensive in content.

Section A: Basinwide Information

- Introduces the basinwide planning approach used by the state.
- Provides an overview of the river basin including: hydrology, land use, local government jurisdictions, population and growth trends, natural resources, wastewater discharges, animal operations and water usage.
- Presents general water quality information including summaries of water quality monitoring programs and use support ratings in the basin.

Section B: Subbasin Information

• Summarizes recommendations from first basin plan, achievements made, what wasn't achieved and why, current priority issues and concerns, and goals and recommendations for the next five years by subbasin.

Section C: Current and Future Initiatives

- Presents current and future water quality initiatives and success stories by federal, state and local agencies, and corporate, citizen and academic efforts.
- Describes DWQ goals and initiatives beyond the five-year planning cycle for the basin.

1.4 Benefits of Basinwide Water Quality Planning

Several benefits of basinwide planning and management to water quality include:

- *Improved efficiency*. The state's efforts and resources are focused on one river basin at a time.
- *Increased effectiveness*. The basinwide approach is in agreement with basic ecological principles.
- *Better consistency and equitability*. By clearly defining the program's long-term goals and approaches, basinwide plans encourage *consistent* decision-making on permits and water quality improvement strategies.
- *Increased public participation in the state's water quality protection programs.* The basinwide plans are an educational tool for increasing public involvement and awareness of water quality issues.
- Increased integration of point and nonpoint source pollution assessment and controls. Once waste loadings from both point and nonpoint sources are established, management strategies can be developed to ensure compliance with water quality standards.

1.5 How to Get Involved

To assure that basinwide plans are accurately written and effectively implemented, it is important for citizens and other local stakeholders to participate in the planning process. DWQ offers three opportunities for the public to participate in the planning process:

- <u>Public Workshops</u>: Held prior to writing the basinwide plans. DWQ staff present information about basinwide planning and the water quality of the basin. Participants then break into smaller groups where they can ask questions, share their concerns, and discuss potential solutions to water quality issues in the basin.
- <u>Public Meetings</u>: Held after the draft basinwide plan has been approved by the Water Quality Committee of the Environmental Management Commission. DWQ staff present more detailed information about the draft basinwide plan and its major recommendations. Then, the public is invited to comment and ask questions.
- <u>Public Comment Period</u>: Held after the draft plan has been approved by the Water Quality Committee of the Environmental Management Commission. The comment period is at least 30 days in length from the date of the first public meeting.

Citizens seeking involvement in efforts to restore and protect water quality can call the DWQ Planning Branch at (919) 733-5083 and ask to speak to the basin planner for your river basin.

1.6 Other References

There are several reference documents and websites that provide additional information about basinwide planning and the basin's water quality:

- *Broad River Basinwide Assessment Report*. December 2001. This technical report presents physical, chemical and biological data collected in the Broad River basin. 57 pages.
- *Broad River Basinwide Water Quality Management Plan.* July 1998. This first basinwide plan for the Broad River basin presents water quality data, information and recommended management strategies for the first five-year cycle. 290 pages.
- A Citizen's Guide to Water Quality Management in North Carolina. August 2000. This document includes general information about water quality issues and programs to address these issues. It is intended to be an informational document on water quality. 156 pages.
- *NC Basinwide Wetlands and Riparian Restoration Plan for the Broad River Basin.* August 1998. DWQ NC Wetlands Restoration Program. 60 pages.
- North Carolina's Basinwide Approach to Water Quality Management: Program Description. Creager, C.S. and J.P. Baker. 1991. DWQ Water Quality Section. Raleigh, NC.
- NC Division of Water Quality Basinwide Planning website at http://h2o.enr.state.nc.us/. Click on Water Quality Section and then, under Programs, click on Basinwide Planning Program.
- NC Division of Water Quality Environmental Sciences Branch website at http://www.esb.enr.state.nc.us/.

Anyone interested in receiving these documents can contact the DWQ Planning Branch at (919) 733-5083 or by internet <u>http://h2o.enr.state.nc.us/basinwide/</u>.

1.7 Division of Water Quality Functions and Locations

The major activities coordinated by DWQ through basinwide planning are listed in Figure A-2. Information on the location, address and phone numbers for each branch and regional office are also shown in Figure A-2 and Figure A-3. Additional information can be found on the Division of Water Quality website at http://h2o.enr.state.nc.us/.



Figure A-2 Water Quality Section Organization Structure

