

CHAPTER 7

FUTURE INITIATIVES

7.1 OVERVIEW OF HIWASSEE RIVER BASINWIDE GOALS AND OBJECTIVES

Near-term objectives, or those achievable at least in part during the next five years, include coordinating with various agencies to implement the control strategies outlined in Chapter 6 to reduce point and nonpoint source loadings of sedimentation, nutrients and other pollutants. These steps are necessary to progress towards restoring impaired waters, protecting threatened waters from further degradation, protecting high resource value and biologically sensitive waters and maintaining the quality of other waters currently supporting their uses.

The long-term goal of basinwide management is to protect the water quality standards and uses of the basin's surface waters while accommodating reasonable economic growth.

Attainment of these goals and objectives will require determined, widespread public support; the combined cooperation of state, local and federal agencies, agriculture, forestry, industry and development interests; and considerable financial expenditure on the parts of all involved. However, with the needed support and cooperation, DWQ believes that these goals are attainable through the basinwide water quality management approach.

7.2 FUTURE ACTIVITIES IN THE HIWASSEE RIVER BASIN

7.2.1 Nonpoint Source Control Strategies and Priorities/Nutrient Reduction Efforts

Improving our knowledge of and controlling nonpoint source pollution will be a high priority over the next five years. Nonpoint source pollution accounts for the some of the threatened waters in the Hiwassee River Basin. The following initiatives (described in Section 7.2.2, 7.2.3 and 7.2.4) are underway to address the protection of surface waters from nonpoint sources of pollution.

7.2.2 The Hiwassee River Basin Nonpoint Source Team

In early 1996, DWQ contacted potential team members for the Hiwassee Basin NPS Team. Potential NPS team members met in April 1996 to describe what is known about nonpoint sources in the basin and to obtain local input on issues and recommendations for addressing nonpoint source pollution. The team will develop Action Plans consisting of voluntary commitments made by the various agencies and individuals to address nonpoint source pollution.

The Action Plans will be evaluated and updated every five years as part of the basinwide planning process. The responsibilities of the NPS Team members can be summarized as follows. A complete description of the NPS Team process can be found in Appendix VI.

- Describe existing programs for nonpoint source pollutant control.
- Prioritize impaired waters for development and implementation of restoration strategies.
- Prioritize NPS issues for remedial action.
- Develop five-year Action Plan for improving water quality in targeted watersheds.
- Determine what is needed to address the priority waters and NPS issues.

- Implement Action Plans.
- Monitor effectiveness of management strategies.

The team has submitted a proposal for Section 319 funding for two watersheds in the basin, Town Creek and Little Brasstown Creek. These watersheds are the focus of the Action Plan for this planning cycle. Town Creek is a predominantly urban stream and Little Brasstown Creek is predominantly rural. A primary objective of the proposal is to involve many local individuals and agencies to promote effective and permanent conservation solutions for these watersheds of the Hiwassee River. A whole watershed approach for implementing Best Management Practices (BMPs) aimed at minimizing erosion and the resulting sedimentation will be used. BMPs will include various streambank stabilization efforts, livestock exclusion and urban runoff control structures. Given the high visibility of the Town Creek watershed, education and increased awareness are expected to be an outcome of the project. A list of agencies which are currently active in the NPS Team is presented in Table 7.1.

Table 7.1 Current Hiwassee River Basin NPS Team Members

Category	Agency/Group
Agriculture	Clay Soil and Water Conservation District Cherokee Soil and Water Conservation District Farm Services Agency USDA - Natural Resources Conservation Service NC Division of Soil and Water Conservation
Construction/Mining	NC Division of Land Resources
Forestry	NC Division of Forest Resources
Surface water	NC Division of Water Quality NC Wildlife Resources Commission
Urban	NC Division of Water Quality NC Department of Transportation
Local Government	Town of Hayesville Clay County
Additional	Tri-County Community College Tennessee Valley Authority Hayesville Merchants Hiwassee River Watershed Coalition Clay County Schools Clay County Water & Sewer Authority

7.2.3 Improved Monitoring Coverage and Coordination with Other Agencies

Monitoring of the chemical and biological status of receiving waters will provide critical feedback on the success of the basin management strategy. As discussed in Chapter 4, monitoring data will be collected from (1) ambient water chemistry, (2) sediment chemistry, (3) biological communities, (4) contaminant concentrations in fish and other biota, (5) ambient toxicity, and (6) facility self-monitoring data. The specific parameters measured will relate directly to the long-term water quality goals and objectives defined within the basinwide management strategy.

In addition to this, DWQ and other environmental agencies have been discussing the potential for coordination of field resources. If individuals from another environmental agency are visiting certain waterbodies to investigate fish populations or wetland areas, they could also collect water quality data from these areas. The coordination of these activities should help to better blend the activities of the various agencies.

7.2.4 Use Restoration Waters (URW) Program

Throughout North Carolina, there are waters that have pollution problems that prevent them from supporting their designated uses. Designated uses include aquatic life support, swimming and commercial shellfish harvest. These waters are often very difficult to restore due to the multitude of nonpoint sources contributing pollutants to the waterbody. Point source dischargers may also be a source of the impairment.

To address waters that have a persistent loss (full or partial) of designated uses, the Division of Water Quality is developing a Use Restoration Waters (URW) Program. If approved, this program would include voluntary and regulatory management strategies to control the specific parameters of concern in selected impaired watersheds. These voluntary and mandatory management strategies could include:

- site-specific best management practices for nonpoint sources,
- source reduction strategies such as education and land use planning,
- ecosystem restoration,
- wastewater treatment requirements, and
- other waste treatment management requirements.

The restoration strategies developed under the URW program would be site-specific to the watershed of the impaired waterbody. DWQ and stakeholders would coordinate each URW strategy with other agencies' programs to create a holistic approach to address the array of pollution problems in the watersheds

7.3 PROGRAMMATIC INITIATIVES

7.3.1 NPDES Program Initiatives

In the next five years, efforts will be continued to:

- improve compliance with permitted limits;
- improve pretreatment of industrial wastes to municipal wastewater treatment plants so as to reduce the toxicity in effluent wastes;
- encourage pollution prevention at industrial facilities in order to reduce the need for pollution control;
- require dechlorination of chlorinated effluents or use of alternative disinfectants;
- require multiple treatment trains at wastewater facilities; and
- require plants to begin plans for enlargement well before they reach capacity.

Longer-term objectives will include refining overall management strategies after obtaining feedback on current management efforts during the next round of water quality monitoring. Long-term point source control efforts will stress reduction of wastes entering wastewater treatment plants, seeking more efficient and creative ways of recycling byproducts of the treatment process (including nonpotable reuse of treated wastewater), and keeping abreast of and recommending the most advanced wastewater treatment technologies.