

CHAPTER 3 OBJECTIVES

Nine objectives are being implemented to achieve the wetlands goal. The action items identified to achieve these objectives are outlined in Chapter 6. Most of the Objectives and Action Items have remained the same since the First and Second Editions of the Strategy because the Interagency Wetlands Committee recognized the validity of these objectives and the need for their continued implementation. Two goals were combined in this edition based on their shared focus on information gathering. Several action items were removed from this edition as they have been completed. Removed action items are summarized in Appendix K.

The nine objectives currently being implemented are below.

1. Characterize the state's wetlands resource base more completely and identify the critical functions of the major types of wetlands in each physiographic province.

Planning, regulatory and restoration program managers need to understand the critical functions of major types of wetlands in order to better understand the need for and methods of maintaining and enhancing these critical functions.

In order to allocate scarce program and financial resources intelligently, the

State must consolidate existing information and collect additional information to complete an accurately located and characterized inventory of its wetland resources.

Furthermore, planning, regulatory and restoration program managers need to identify and understand the critical functions of major types of wetlands, in order to maintain and enhance these critical functions.

2. Identify and prioritize unique, exceptionally high quality, or scarce wetland community types and sites for acquisition or other equally effective protection.

Certain unique, high-quality wetlands deserve a higher level of protection because of the public benefits and ecological functions they provide. Examples of exceptional wetlands include wetlands that provide habitat for a threatened or endangered species or ecosystem; wetlands that represent a rare type in Tennessee; and wetlands that are of special value because of their function. As a result of implementation of the Strategy, unique wetlands are now being identified, acquired or otherwise protected *before* development, conversion, or other adverse changes in land use are proposed.

A systematic review and analysis of existing data and literature on Tennessee wetlands has yielded a database of candidate acquisition sites. The acquired information can now be used by several state, federal, and non-profit programs to establish priorities and allocate available resources for acquisition, or less than fee protection.

3. Identify priority wetlands restoration sites in each river corridor and explore appropriate restoration methods for each wetland type, including the restoration of “natural” flood plain hydrology.

This objective is intended not only to target suitable sites for restoration, but to identify opportunities to restore the biological integrity of river corridors at the landscape level, including consideration of corridors, continuity, and patch size. Identification should be site specific and representative of landscape types. The candidate sites should be organized according to hydrologic units, watersheds, or existing basin authorities.

The process should also identify prime farmland, recognize its value for agricultural production, and consider this factor in assigning priority as a restoration site.

The behavior of water, the hydrologic regime, is the engine that drives wetlands function. Our understanding of the “natural” hydrology of floodplains and the interactions of rivers, lakes, and aquifers with associated wetlands is incomplete, and should be systematically addressed by a cooperative research program tailored to meet state wetlands information needs. Projects including demonstration of techniques for

restoring or maintaining natural floodplain hydrology should also include sufficient monitoring and follow up work to permit an assessment of the effectiveness and transferability of these techniques. A demonstration restoration project will begin in 1998 at Stokes Creek to evaluate the effectiveness of current restoration techniques. Both baseline and post-project monitoring data will be used to evaluate the success of this demonstration.

As our understanding grows, every opportunity to restore natural meandering waterways without artificial levees should be pursued. It is not the intent of this objective to fill in existing canals, or to dredge all streams to historic elevations.

Restoration work should be targeted to those instances where a river system is attempting to reestablish a stable equilibrium, and a relatively small intervention would reinforce or enhance the natural process and restore hydrology.

4. Restore 70,000 acres of wetlands by the year 2000.

This objective calls for the restoration of approximately 10,000 acres/year from 1993 through 2000, or about a 10% gain in the acreage reported by Hefner and Brown (1984).

It should be clearly understood that the objective targets restoration of *marginal* cropland to a functional wetland; it does not seek to affect prime agricultural land.

Prime candidate restoration sites overlap, but do not coincide with, priority acquisition sites. Restoration projects should be designed and carried out by each agency, according to its mission.

Information will be shared, and work coordinated by TEPO and IWC-TWG.

5. Achieve no overall net loss of wetlands acreage and functions in each USGS hydrologic unit.

While individual projects may result in gains in some wetlands and offset losses in others, the result of the full array of programs will be no further loss of function in any hydrologic unit. Priority is given during this edition of the Strategy to collecting adequate data to measure progress toward achieving this goal.

Many state agencies generate or collect data on wetlands functions related to their specific programs, such as waterfowl habitat or water quality. However, there is currently no single state agency or program specifically charged with the continuing responsibility to compile *all* available qualitative and quantitative data on Tennessee wetlands or to collect new data where it is lacking. Nor is any agency directed to establish a clearinghouse and archive to assess the status of the state's wetlands resources, and monitor trends over time.

An additional permanent staff member will be needed to develop and administer a permanent program to receive, compile, collect and correlate wetlands data, to carry out periodic status trends analyses, and to prepare reports.

6. Increase the level of benefits to landowners.

The majority of Tennessee wetlands occur on private land. It is critical that landowners understand and benefit from the functions wetlands provide on their

land. Enhancing these benefits will encourage voluntary wetland protection. Education, technical assistance, and incentive programs may achieve this objective. The sound and productive management of wetlands by private landowners will also assure that the public benefits of wetlands will be sustained.

7. Create more urban riparian areas, wetland greenbelts, and wildlife corridors.

The primary threats to wetlands in and near urban areas are land development, construction and associated road building. As an alternative to development, wetlands can become a community asset if they are incorporated into an urban green belt plan, park, or wildlife corridor and dedicated to low-impact recreational use and/or storm water management.

7. Increase wetlands information delivery to local governments, the public, and schools.

Many critical wetlands decisions are made by local planning commissions and elected officials; these decisions are subject to public scrutiny. It is important to provide current information on the local wetlands resources to these communities to ensure informed resource management decisions. This will be especially important during this implementation phase as local governments work to meet new planning requirements set by the Tennessee General Assembly.

The State should encourage local communities to protect wetlands functions, or to incorporate wetlands and floodplains into conservation

programs that monitor and enhance natural wetlands functions, with emphasis on water quality, flood flow attenuation, wildlife habitat, open space and greenway continuity, recreation and education.

It is also important for young people to understand the characteristics and functions of wetlands as an element of a sound environment.

9. Establish meaningful state wetlands use classifications and water quality standards.

TDEC must develop and promulgate wetlands water quality standards as required by EPA. TDEC-WPC received a grant to support this work and has undertaken development of these classifications. Tennessee's classification and standards are based on wetlands types and functions as described in the Wetlands Conservation Strategy.