

U.S. Department of the Interior  
National Park Service  
Water Resources Division



## The Water Resources Planning Program

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### Introduction

Water resources, are a particularly important and sensitive ecosystem component. Their physical availability and quality are critical determinants not only of aquatic resources, but also of a park's overall natural resource condition. Water resources also provide important linkages within ecosystems, connecting park resources with resources outside park boundaries. Because of the important role of water in maintaining resource condition, it is the policy of the National Park Service to maintain, rehabilitate, and perpetuate the inherent natural integrity of water resources and water-dependent environments occurring within units of the national park system.

The preservation, conservation, and protection of water resources within units of the National Park Service is strongly supported in federal legislation, such as the National Park Service Organic Act, Clean Water Act, Safe Drinking Water Act, National Environmental Policy Act, Endangered Species Act, and several executive orders. Additional protection for water resources is found within state-specific water resource statutes, and may also be found in a park's enabling legislation. Proper management of water resources within national park system units is becoming more complex and challenging as threats to this precious resource, both internal and external to park boundaries, increase. In response, the Water Resources Division of the National Park Service provides park units with planning and assessment support necessary for protection and management of water resources and water-dependent environments.

### Water Resources Planning Program

More than 75 percent of the units of the national park system have expressed concern about water resource issues that potentially degrade park resources. Planning is an essential step in comprehensively understanding the hydrologic environment and addressing complex water resource issues faced by many of these park units. A growing program, initiated by the Water Resources Division in 1991, involves assisting units of the national park system with their water resources planning needs. This program offers several products, depending on the specific needs of parks. These products include Water Resource Issues Overviews, Water Resources Scoping Reports, and Water Resources Management Plans.

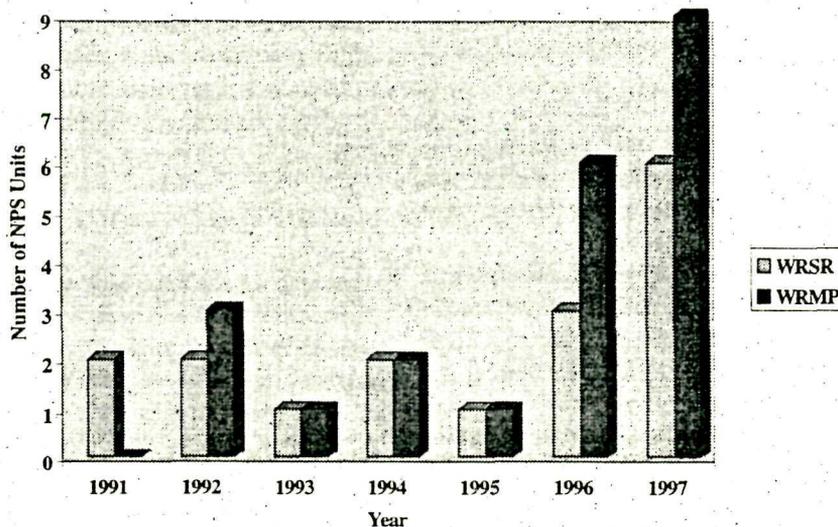
Water Resource Issues Overviews, Scoping Reports, and Management Plans are guided by a park's General Management Plan, the overarching plan for a park unit,

and complement a park's Resources Management Plan by expanding on the water resource information, objectives, and issues. In addition, the program offers basic procedural assistance and review of draft General Management Plans and Resources Management Plans. This planning program is implemented via project funding and technical assistance from the Service's Water Resources Division.

### Water Resource Issues Overviews

Water Resource Issues Overviews provide a preliminary identification of major water resource issues and management concerns. They are often done to support other, ongoing planning efforts such as the development of General Management Plans and Resources Management Plans. Typically, Water Resource Issues Overviews are quick response documents requiring a minimal, turn-around time.

Annual Production of Water Resources Management Plans (WRMPs) and Water Resources Scoping Reports (WRSRs) for National Park Service Units



### **Water Resources Scoping Reports**

Water Resources Scoping Reports typically identify and analyze major water resource issues and management concerns; summarize existing hydrological information; and, determine if the National Park Service unit warrants the preparation of a more comprehensive Water Resources Management Plan. If a Water Resources Management Plan is needed, its cost is estimated and mechanisms for its completion are recommended. Otherwise, water resource management actions, called project statements, are developed to address the major water resource issues/concerns. In certain cases, when already known water resource issues/concerns are complex and/or numerous, a National Park Service unit may default to the development of a Water Resources Management Plan. Water Resources Scoping Reports usually require approximately six months to complete.

### **Water Resources Management Plans**

Water Resources Management Plans structure and use information about a National Park Service unit's water resources and water-related environments to: 1) identify and thoroughly analyze water resource issues and management concerns; 2) provide a detailed description of the hydrologic environment and summary of existing water resource information and data; 3) assist management in developing and evaluating alternative actions, as appropriate, concerning the issues; and, 4) select a preferred course of action. The Water Resources Management Plan defines a programmatic approach for addressing complex water-related issues, and, as such, is a blueprint for the resolution of water resource issues over a 5 to 10 year period.

As with Water Resources Scoping Reports, the recommended management actions in a Water Resources Management Plan are project statements. Each project statement identifies the water resource problem, provides a detailed explanation of the proposed action needed to address the problem, and develops funding and personnel estimates necessary to accomplish the proposed action. These project statements then become part of the Re-

sources Management Plan. One to two years are required to complete a Water Resources Management Plan.

### **Interagency Coordination**

Water Resources Scoping Reports and Management Plans typically pave the way for cooperative efforts between the National Park Service and other stakeholders, including federal, state, and local agencies, and Native Americans. During the development of these documents, emphasis is placed on multi-agency participation and review. This has produced local and regional endorsement of National Park Service's management direction for addressing water resource issues at several park units. For example, federal, state, and local agencies, and two local Native American Tribes were actively involved in the review of the 1996 Water Resources Management Plan for Big Cypress National Preserve, Florida. Many of their comments were incorporated into the final plan, resulting in a common agreement toward preserving and protecting South Florida's water resources. This effort has directly contributed toward several interagency and Native American cooperative agreements, coordination projects, and proposals for the Preserve, including:

- a cooperative effort between Monroe County, the Water Resources Division, and the Preserve to complete a wetlands restoration project along a county road in the Preserve;
- the contribution of field equipment and water quality analyses by the South Florida Water Management District to the Preserve's water monitoring program; and,
- cooperation by the Preserve and the Seminole Tribe of Florida on a regional water quality monitoring network.

Colonial National Historical Park was established to preserve the site of the first permanent English settlement in North America and the scene of the culminating battle of the American Revolution. However, water and water resources are important landscape features in this park that need protection. Wetlands cover approximately 27 percent of the 9,327-acre park.

More than 33 miles of shoreline along the James and York rivers bounds the park, and 55 miles of perennial and intermittent streams flow through the park.

The park's 1994 Water Resources Management Plan was the first step towards a holistic approach to protection of these important water resources. This plan has:

- increased cooperation between the park and local governments in addressing erosion/sedimentation and stormwater issues;
- introduced the park to new expertise that has assisted in addressing the remediation of ground water issues associated with adjacent land use; and,
- resulted in several cooperative agreements with state and federal agencies and universities on such projects as mapping and analysis of springs and seeps, developing a regional geohydrological framework, and understanding sinkholes.

### **Public Awareness and Education**

A logical step after completion of a Water Resources Scoping Report or Management Plan is the transfer of the technology to the general public. This process requires active involvement between a park unit's resource management and interpretive staff. A summary is completed that captures the primary water resource issues and management objectives for the park unit. This informative summary should assist the public in better understanding the management direction of the park unit.

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