

EXECUTIVE SUMMARY

Introduction

The South Florida ecosystem is an 18,000-square-mile region of subtropical uplands, wetlands, and coral reefs that extends from the Chain of Lakes south of Orlando through the reefs southwest of the Florida Keys. This ecosystem not only supports the economy and the quality of life of the Floridians and the Native American Indians who live there, but also enriches the legacy of all Americans. It encompasses many nationally significant conservation areas, including Everglades and Biscayne National Parks, Big Cypress National Preserve, the Arthur R. Marshall Loxahatchee National Wildlife Refuge, and the Florida Keys National Marine Sanctuary.

This ecosystem is sustained by water, and it has been seriously degraded by disruptions to the natural hydrology. Engineered flood control and water distribution systems for agriculture and urban development have dewatered large areas and greatly altered the quantity, timing, and distribution of water flows in other locations. Agricultural runoff and urban stormwater have introduced phosphorus and other contaminants into the water systems, polluting lakes, rivers, and wetlands. Discharges of stormwater into estuaries and coastal waters have severely degraded aquatic habitats. Groundwater is threatened by saltwater intrusion and other pollutants. These impacts have stressed the natural system, as evidenced by

- Fifty percent reduction in the original extent of the Everglades
- Ninety percent reduction in wading bird populations
- Sixty-nine species on the federal endangered or threatened list
- Declines in commercial fisheries in Biscayne and Florida Bays
- Nineteen percent decline in living corals in the last decade

Purpose

The purpose of this document is to describe the existing federal and nonfederal programs designed to restore and sustain the imperiled South Florida ecosystem. Many federal, state, tribal, and local entities are working to address the deteriorating ecological conditions in South Florida. The South Florida Ecosystem Restoration Task Force (the task force) coordinates and tracks the work. Congress directed the task force to produce a restoration strategy. This document provides the information needed to coordinate and integrate the restoration effort.

Congress identified four elements to be included in this document. They wanted it to outline how the restoration effort will occur, identify the resources needed, establish responsibility for accomplishing actions, and link the strategic goals established by the participants to outcome-oriented goals (see appendix A). This document describes how the restoration effort is being coordinated: The task force members have agreed upon a vision for the results; they have established three broad goals and measurable objectives for the work that needs to be accomplished to achieve that vision; they have identified the projects needed to achieve the objectives; they are coordinating those projects so that they are mutually supportive and nonduplicative; and they are tracking progress toward both the work-oriented goals and the results-oriented vision. This strategy, along with the vision, goals, objectives, performance measures, and individual project data (including cost, responsible agency, and targeted completion dates) are all included in this document.

This strategy document is for planning purposes only, is subject to modification, and is not legally binding on any of the task force members. Each task force member and the interests they represent retain all of their sovereign rights, authorities, and jurisdiction for implementation of the projects contained within this document.

The integrated federal and nonfederal effort to restore, preserve, and protect the ecosystem will take many decades. This document and funding needs may be revised over time based on information gained through monitoring and study.

The authorization of the *Comprehensive Everglades Restoration Plan* (CERP), a major component of the restoration effort, is currently pending before the Congress. The estimated \$7.8 billion cost of the CERP will be split 50-50 between the federal government and nonfederal sponsors.

Who Is Involved

The task force provides a forum for consensus building and issue engagement among the entities involved in restoring the South Florida ecosystem. This is a collaborative role, not one in which the task force can dictate to its members. Because on-the-ground restoration is accomplished through the efforts of the individual task force member agencies, they are the ones that are ultimately responsible for their particular programs, projects, and associated funding. This is an important distinction. The task force has no overriding authority to edit its members. Instead, the members are accountable individually to their appropriate authorities and to each other for the success of the restoration.

Six federal departments (twelve agencies), seven Florida state agencies or commissions, two American Indian tribes, sixteen counties, scores of municipal governments, and interested groups and businesses from throughout South Florida are participating in the restoration effort. Four sovereign entities (federal, state, and two tribes) are represented. The task force sought extensive involvement from local agencies, citizen groups, nonprofit organizations, and other interested parties as part of its assessment for this strategy.

The task force was created in 1993 as a federal interagency partnership, with informal partici-

pation by the State of Florida, the Seminole Tribe of Florida, and the Miccosukee Tribe of Indians of Florida. The Water Resources Development Act of 1996 authorized the operation of the task force and provided for specific membership and duties. Pursuant to its statutory duties, a task force working group of agency and tribal representatives (the working group) works to resolve conflicts among participants, coordinate research, assist participants, prepare an integrated financial plan, and report to Congress. The task force does not have any oversight or project authority, and participating agencies are responsible for meeting their own targeted accomplishments. The task force's role as a forum in which ideas are shared and consensus is sought enhances the productivity of each member government or agency effort.

Vision and Goals

The participants in the task force share the vision of a healthy South Florida ecosystem that supports diverse and sustainable communities of plants, animals, and people. To this end, hundreds of different entities have been working for over a decade to restore and preserve more natural hydrology in the ecosystem, to protect the spatial extent and quality of remaining habitat, to promote the return of abundant populations of native plants and animals, and to foster human development compatible with sustaining a healthy ecosystem. The past, current, and future efforts of governmental entities in South Florida involve more than 200 projects related to three primary work goals. Subgoals and objectives have been established for the first two work goals and will be reported for the third goal in future updates to this document.

The task force members believe through accomplishing these objectives they will achieve the restoration of the ecosystem. The region's rich and varied habitats will become healthy and productive. Imperiled species will recover, and the large nesting rookeries of wading birds will return.

Goal 1: Get the water right

Subgoal 1-A: Get the hydrology right

Objective 1-A.1: Provide 1.6 million acre-feet of surface water storage by 2037

Objective 1-A.2: Develop aquifer storage and recovery systems capable of storing 1.7 billion gallons per day by 2020

Objective 1-A.3: Modify 279 miles of impediments to flow by 2019

Subgoal 1-B: Get the water quality right

Objective 1-B.1: Construct 122,000 acres of stormwater treatment areas by 2036

Objective 1-B.2: Prepare plans, with strategies and schedules for implementation, to comply with TMDLs (total maximum daily loads) for 100 percent of impaired water bodies by 2011

Goal 2: Restore, preserve, and protect natural habitats and species

Subgoal 2-A: Restore, preserve, and protect natural habitats

Objective 2-A.1: Acquire 1.95 million acres of land for habitat protection by 2015

Objective 2-B.2: Protect 20 percent of the coral reefs by 2020

Subgoal 2-B: Control invasive exotic plants

Objective 2-B.1: Prepare management plans for the top twenty South Florida invasive exotic plant species by 2010

Objective 2-B.2: Achieve maintenance control status for Brazilian pepper, melaleuca, Australian pine, and Old World climbing fern in all natural areas in the region by 2020

Objective 2-B.3: Complete an Invasive Exotic Plant Prevention, Early Detection, and Eradication Plan by 2005

Goal 3: Foster compatibility of the built and natural systems

The appropriate agencies will track progress toward restoring the ecosystem through approximately 200 performance measures developed as part of the *Comprehensive Everglades Restoration Plan* plus additional measures for areas not covered by the CERP, such as the *South Florida Multi-Species Recovery Plan*. These measures, which range from the number of acres of periphyton in Everglades marshes to the frequency of water supply restrictions in urban and agricultural areas, represent the myriad physical, biological, and human elements that interrelate as parts of the ecosystem and are important to ecosystem health. The agencies will provide data to the task force, which will update this document for transmittal to Congress, the state legislature, and the councils of the tribes.

The following measures are a representative subset of a broader list of indicators for tracking success. Many of these represent end

results that may take up to fifty years to realize. Interim targets, which focus on earlier indications of successional change, will allow assessment of incremental progress.

- Improved status for fourteen federally listed threatened or endangered species, and no declines in status for those additional species listed by the state, by 2020
- A 90 percent recovery of the acreage and number of tree islands existing in 1940, and a health index of 0.90 (where 0 = death is imminent, 1 = completely stress free) (Interim target: A 20 percent improvement in the general health index of the tree islands, and no further loss in the total number of tree islands by 2020)
- Healthy oyster beds in the major estuaries, such as the St. Lucie Estuary and those in Biscayne Bay
- Four thousand nesting pairs of wood storks in the Everglades and Big Cypress basins (Interim target: Fifteen hundred nesting pairs by 2010)

- Water quality within the Everglades ecosystem that meets federal, state, and tribal water quality standards
- A lakewide average phosphorus concentration of 40 parts per billion (ppb) total in the open-water regions of Lake Okeechobee
- Water provided to all users during droughts up to the level of certainty of a one-in-ten-year frequency of occurrence
- Nesting roseate spoonbills in the coastal zone of the southwestern Gulf Coast between Lostman's River and the Caloosahatchee River; and 1,000 nesting pairs in Florida Bay, including 250 nesting pairs in northeast Florida Bay
- A 65-75 percent coverage of Florida Bay with high-quality seagrass beds
- A long-term commercial harvest of pink shrimp on the Dry Tortugas fishing grounds that equals or exceeds the rate that occurred during the years 1961-1962 to 1982-1983; and an amount of large shrimp in the long-term average catch exceeding 500 pounds per vessel-day
- An average annual loading to the St. Lucie Estuary of no more than 400 pounds of phosphorus per 1,000 acre-feet of discharge
- The capture and storage of most of the excess freshwater currently lost to the ocean and the gulf, and delivery of the water when and where it is needed

Restoration Strategy

The task force provides a forum for consensus building and issue engagement among the entities involved in restoring the South Florida ecosystem. This is a collaborative role, not one in which the task force can dictate to its members. Because on-the-ground restoration is accomplished through the efforts of the individual task force member agencies, they are the ones that are ultimately responsible for their

particular programs, projects, and associated funding. This is an important distinction. The task force has no overriding authority to direct its members. Instead, the members are accountable individually to their appropriate authorities and to each other for the success of the restoration.

The task force and its members coordinate and track the restoration effort as follows:

FOCUS ON GOALS. This document establishes specific goals and measures that define the scope of the restoration initiative and answer these fundamental questions: What will the restoration partners accomplish? When will the restoration effort be done? What key indicators will signal progress and success?

COORDINATE PROJECTS. To be effective, individual projects should contribute to the vision and goals, be timely, and support rather than duplicate other efforts. This document includes a master list of restoration projects and includes information about goals and objectives, start and finish dates, lead agencies, and funding.

TRACK AND ASSESS PROGRESS. The task force will facilitate the implementation of the individual entities' *adaptive assessment* processes to track and assess progress. Adaptive assessment involves constantly monitoring project contributions and indicators of success to determine the actual versus expected results of various actions. This process acknowledges that not all the data needed to restore the South Florida ecosystem are available now. As project managers track incremental progress in achieving objectives they may raise "red flags" alerting the task force members that a project (1) is not on schedule or (2) is not producing the projected outputs or anticipated results. The ability to anticipate problems early helps to minimize their effect on the total restoration effort. Management responses may involve revising the project design, evaluating changing resource needs, or working collaboratively on projects that fall behind. Projects that are not

proving effective may be replaced with new projects. Because each participating agency is responsible for its particular programs, projects, and funding, such decisions are made by the entities involved.

FACILITATE THE RESOLUTION OF ISSUES AND CONFLICTS. Disagreements and conflict are to be expected given the scope, complexity, and large number of sponsors and interests involved in ecosystem restoration. In particular, the ability to resolve existing conflicts is complicated by (1) the large number of governmental entities involved at the federal, state, tribal, and local levels; (2) the differing, and sometimes conflicting, legal mandates and agency missions among the entities involved; and (3) the diverse stakeholder interests represented by the member agencies, which include environmental, agricultural, Native American, urban, and commercial values.

The task force will facilitate the prevention and resolution of conflict to the extent possible by clarifying the issue(s), identifying stakeholder concerns, obtaining and analyzing relevant information, and identifying solutions. The working group will regularly track issues in dispute and report to the task force when there are unresolved issues. Although these efforts are intended to facilitate conflict resolution, opportunities will always exist for parties to pursue conflicts through litigation, although litigation is time consuming, costly, and uncertain. Further, litigation diverts resources from restoration efforts. Unfortunately, judicial resolution of legal claims does not always resolve the underlying conflict to the satisfaction of every party.

The task force will meet regularly to report on progress, coordinate consensus, and identify opportunities for improvement.