

RESTORATION STRATEGY

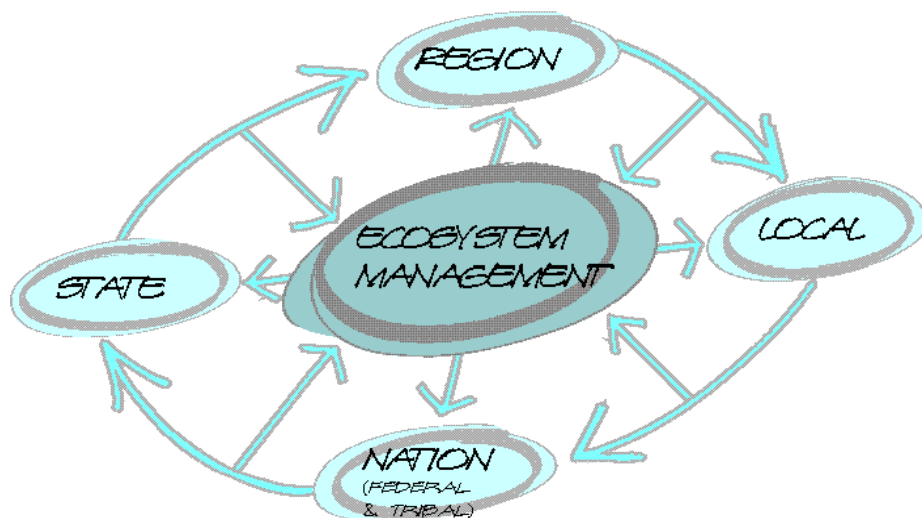
GUIDING PRINCIPLES

The following principles will guide all aspects of ecosystem restoration and management:

THE NATURAL AND BUILT ENVIRONMENTS ARE INEXTRICABLY LINKED IN THE ECOSYSTEM. This is the overall premise that must drive ecosystem planning and management. Until recently the term ecosystem meant the natural environment. However, the ecosystem is also home to people and their built environment. All of these aspects are inextricably linked. Not only can the built environment have catastrophic consequences in the natural environment, such as the destruction of wetlands when they are drained for development, but disruptions in the natural environment can have catastrophic consequences in the built environment, such as the unnaturally severe flooding that occurs when natural wetlands are gone. Because the natural and the built environments are two sides of the same coin, attempting to deal with the problems of one and not the other is never successful. This link between the natural and built environments supports the involvement of the many entities with authority to make the land use decisions affecting each. Equally important is the development of public understanding and support of ecosystem restoration issues.

The task force recognizes that the restoration of a healthy hydrologic regime and the improvement of habitat will not be enough to achieve the long-term sustainability of the South Florida ecosystem if subsequent decisions about the built environment are not consistent with ecosystem health. The billions of dollars spent to restore the South Florida ecosystem could be wasted if, in 100 years, the built environment was once again allowed to dominate the natural environment. At the same time, the solutions to restore ecosystem health must be supportive of human needs for water supply, flood control, and recreation. Therefore, strategies and actions must be directed at the totality of the relationships that exist between the natural and built environments and among all the inhabitants of the ecosystem.

THE ECOSYSTEM MUST BE MANAGED AS A WHOLE. Understanding the complexities of the South Florida ecosystem is daunting. It forces managers, scientists, and the public to view the natural and the built environments and the resources needed to support them as parts of a single larger system. Rather than dealing with issues independently, the challenge is to seek out the interrelationships and mutual dependencies that exist between the components of the ecosystem.



AUTHORITIES AND RESPONSIBILITIES REMAIN INTACT; REVISIONS MADE TO THE PROCESS

INTERGOVERNMENTAL COORDINATION IMPROVED

PLANNING AND IMPLEMENTATION BECOME AN INTEGRATED PROCESS

The challenges faced in South Florida must be solved collaboratively and be based on a sound understanding of the interconnected variables. The task force advocates a systemwide approach that fosters coordination and addresses issues holistically. This approach requires broad-based partnerships, coordinated management, and public outreach and communication.

BROAD-BASED PARTNERSHIPS: It is critical that federal, state, local, and tribal governments and other interested and affected parties work together in broad-based partnerships. Maintaining open communications and examining their different views and needs will form the basis for the respect and trust needed to work together.

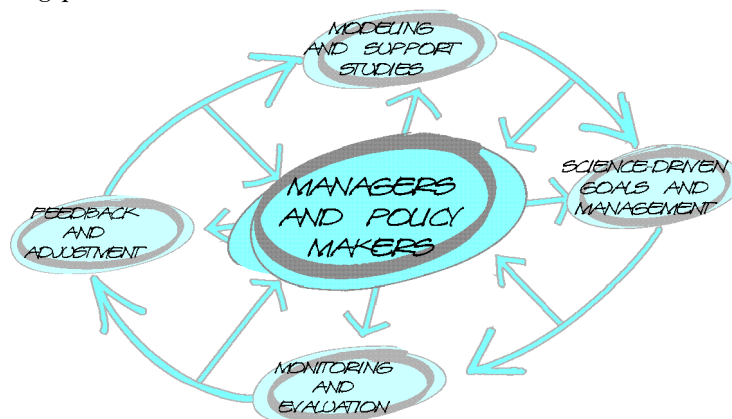
COORDINATED MANAGEMENT: To be successful, governmental entities will need to coordinate their ecosystem restoration activities and to develop cooperative programs. The task force will foster this cooperation and facilitate the resolution of conflicts and disputes among the diverse participants.

PUBLIC OUTREACH AND COMMUNICATION: Innovative partnerships and coordinated management will not be possible without the understanding, trust, and support of the public. Therefore, public outreach and communication will be an important part of the ecosystem restoration efforts. Outreach strategies will seek two-way communication with the public to broaden understanding and to instill a sense of stewardship among all parties involved, including private citizens.

DECISIONS MUST BE BASED ON SOUND SCIENCE. Science plays two major roles in the restoration process. One is to facilitate and promote the application of existing scientific information to planning and decision making. The other is to acquire critical missing information that can improve the probability that restoration objectives will be met.

The task force members have adopted an adaptive assessment process to continuously provide managers with updated scientific information, which they can use to guide critical decisions. In this process, scientific models provide a conceptual framework and identify critical support studies. Support studies provide data and interpretation that lead to a better understanding of the problem and then to the development of a series of alternative solutions. Once an alternative is selected and implemented, monitoring is used to assess the effectiveness of the action and to provide feedback on ways to modify it (if warranted). Similarly, monitoring data can be used to revise and refine the original model, thereby completing and continuing the interactive feedback loop of decision-making, implementation, and assessment.

A framework for promoting the application of sound science is included in appendix E in volume 2 of this report. The framework describes the tools and methods for building scientific knowledge and applying it to ecosystem restoration.



COORDINATION OF THE RESTORATION EFFORT

The role of the task force is not to manage the South Florida restoration, but to coordinate the restoration, provide a forum for the managing agencies to share information on their restoration projects, and report on progress. Congress and other stakeholders are particularly interested in how each individual agency's efforts contribute to the larger framework of total ecosystem restoration. This document provides that information.

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 members coordinate and track the restoration efforts 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 dis-

pute 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.

OVERVIEW OF MAJOR PROGRAMS AND COSTS

The best estimate for the total cost to restore the South Florida ecosystem is \$14.8 billion, as reported in the letter to Congress dated March 8, 2000 (see appendix C). Of the total restoration cost, \$7.8 billion represents the cost of implementing the *Comprehensive Everglades Restoration Plan* which will be shared equally by the federal government and nonfederal sponsors. The CERP outlines 68 projects that will take more than 30 years to construct. The CERP was submitted to Congress on July 1, 1999, and is integral to achieving two of the three goals of restoration: get the water right (restore more natural flows to the ecosystem while guaranteeing regional water supplies and flood control), and restore, preserve, and protect natural habitats and species. Because congressional authorization is required for the proposed projects included in the CERP, and because individual projects must undergo additional site-specific studies and analyses, the overall cost to implement this significant component of the restoration effort could be lower or higher depending upon future analyses and site-specific studies.

The CERP builds on other plans and projects that were authorized by Congress or the Florida Legislature prior to and independent of the CERP. These include the Everglades Construction Project, the C-111 Project, the Modified Water Deliveries to Everglades National Park Project, the Kissimmee River Restoration Project, a number of smaller 'Critical Projects' authorized by the Water Resources Development Act of 1996, the *South Florida Multi-Species Recovery Plan*, state water quality plans, state land acquisitions authorized for Save Our Rivers (SOR) and Conservation and Recreation Lands (CARL) programs, and federal land acquisitions for national parks, preserves, and wildlife refuges. Taken together, these projects represent an additional \$7 billion investment. The costs for these measures have been included because they actively promote overall restoration goals and establish the baseline conditions for the CERP. Table 5 on page 35 is a tracking matrix which identifies individual projects, responsible agencies, targets, and costs.

The projections and project schedules in this report span multiple decades and depend upon certain assumptions about state and federal budget requests and funding levels, optimized construction schedules, willing sellers, and other contingencies. These assumptions are likely to change as the project progresses, and appropriate revisions to this document will be necessary. Therefore, this document does not represent a commitment by the federal, state, or local governments or the tribes to seek appropriations for specific projects and activities at the funding levels laid out in this document.

State and federal agencies have already acquired 4.7 million acres of land for ecosystem restoration purposes (4.55 million for habitat and 0.15 million for water storage). As of September 1999 the state alone had acquired 3.2 million acres of habitat conservation land in South Florida at a cost of over \$1 billion.