

# **South Florida Ecosystem Restoration Land Acquisition Strategy**

# Draft

November 2002 DRAFT

South Florida Ecosystem Restoration Task Force  
Working Group Land Acquisition Task Team  
Staff support: Muller and Associates, Inc.

# South Florida Ecosystem Restoration Land Acquisition Strategy

## INTRODUCTION

The South Florida ecosystem is an 18,000 square mile region that includes all or part of 16 counties with more than 6 million human inhabitants. The watershed stretches from the Kissimmee River Basin-Lake Okeechobee system to the coral reefs in the Atlantic Ocean and from the Caloosahatchee to the St. Lucie estuaries. This water-dominated system encompasses a myriad of interconnected freshwater rivers, lakes, marshes, prairies, forests, and estuaries, and includes the natural systems of the Kissimmee River Basin, Lake Okeechobee, the Everglades, Big Cypress Swamp, Florida Bay, Biscayne Bay, the Florida Keys reef tract, Charlotte Harbor, the Caloosahatchee River and the Indian River Lagoon.

In 1948, the ongoing efforts to drain the Everglades, protect the region from hurricanes, and make the region habitable culminated in the Congressional authorizations of the Central & Southern Florida (C&SF) Project, a flood control project jointly built and managed by the U.S. Army Corps of Engineers (USACE) and the South Florida Water Management District (SFWMD). The primary project goal was to provide water and flood control for urban and agricultural lands. Other goals were to support fish and wildlife and ensure a water supply for Everglades National Park.

The C&SF Project significantly altered the region's hydrology (quantity, timing and distribution of water). Whereas historically most rainwater had soaked into the region's wetlands, the C&SF canal system, comprised of over 1,800 miles of canals and levees and 200 water control structures, drained an average of 1.7 billion gallons of water per day into the ocean and the gulf. As a result, not enough water was available for the natural functioning of the Everglades or for the growing human communities in the region. Water quality was also degraded.

Today, the Everglades is only about half of its original size, and the natural and man-made water systems providing life to the Everglades that remain are inadequate for the survival of this international treasure. The desirability of South Florida's climate, geographic location, cultural and social setting and thriving economic opportunities have contributed to a population explosion that is predicted to double in the region by the year 2050. The sustainability of the South Florida ecosystem is in jeopardy. In response to this situation, the federal, state, regional, and local governments and two American Indian Tribes have committed to the restoration of the South Florida ecosystem, which includes the Everglades.

Land acquisition is critical to South Florida ecosystem restoration efforts. Land is needed to preserve habitat for native plants and animals, to act as a buffer to existing natural areas, and provide opportunities for passive and active recreational pursuits. Land is also needed for water quality treatment areas, water storage reservoirs, and aquifer recharge areas that will help restore the natural hydrology.

## **Purpose**

The purpose of this South Florida Ecosystem Restoration Land Acquisition Strategy (Strategy) is to describe the strategy for land acquisition needed for ecosystem restoration projects that are either wholly federally funded or jointly funded by federal and non-federal agencies. The Strategy sets forth estimates of the lands needed for restoration, estimates of the cost of land acquisition for the restoration initiative and measures progress in acquiring lands for the restoration. The South Florida Ecosystem Restoration Task Force (Task Force) and Working Group (Working Group) member agencies responsible for land acquisition participated in the assessment of the lands needed to accomplish the ecosystem restoration goals of the Task Force.

The Strategy builds on the information in the July 2000 Task Force Strategy for Ecosystem Restoration, the 1999 Everglades Ecosystem Land Acquisition State-Federal Cost Share map, the Comprehensive Everglades Restoration Plan (CERP) and the Florida Forever work plan. This initial strategy addresses two of the South Florida Ecosystem Restoration goals: Goal 1: Get the Water Right and Goal 2: Restore, preserve and protect habitats and species.

The Task Force acknowledges that this document will continue to evolve. All lands needed for South Florida Ecosystem Restoration have not been identified. Also, lands conceptually identified for CERP projects may change as projects are further refined in the planning process. As the restoration proceeds and additional lands are identified, future editions of this plan will reflect these changes.

## **South Florida Ecosystem Restoration Task Force**

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 participate in the restoration effort. Four sovereign entities (federal, state, and two tribes) are involved in the Everglades and South Florida restoration effort. Given the large geographic area, the diverse missions of the agencies, and the need to maximize the resources available for this effort, coordination among these entities is essential to the restoration effort.

The Task Force coordinates and tracks the work of the restoration. The Water Resources Development Act of 1996 (WRDA 96) authorized the operation of the Task Force and provided for specific membership and duties. WRDA 96 directed the Task Force to establish a Florida-based working group. The Task Force and its Working Group facilitate resolution of conflicts among participants; coordinate scientific or other research; provide assistance and support to member agencies in their restoration activities; coordinate the development of consistent policies, strategic plans, programs, projects, activities and priorities for addressing the restoration; exchanges information among participants; prepare an integrated financial plan and recommendations for coordinated budget requests; and submit a biennial report to Congress summarizing restoration activities. However, the Task Force does not have oversight or project authority. Each member entity retains its authority, jurisdiction, and mission.

Task Force members share a vision of a healthy South Florida ecosystem that supports diverse and sustainable communities of plants, animals, and people. Three goals have been set to achieve this vision: Goal 1: Get the water right; Goal 2: Restore, preserve, and protect natural habitats and species; and Goal 3: Foster compatibility of the built and natural systems. Land acquisition is an essential part of achieving these goals. This strategy document reflects land acquisition necessary for achievement of Goals 1 and 2. The Task Force is developing objectives needed to achieve Goal 3 and future editions of the Land Acquisition Strategy will incorporate the lands needed for this goal.

### **General Accounting Office Report (GAO)**

In its April 2000 review of the South Florida Ecosystem Restoration Initiative, the General Accounting Office (GAO) recognized that the South Florida Ecosystem Restoration Initiative is a complex, long-term effort that covers over 18,000 square miles, and that that will take more than 20 years and require the continuous effort and commitment of all the agencies involved. The GAO report stated that the development of a land acquisition plan would be valuable in coordinating the member agencies' land acquisition activities. Such a plan would ensure that the lands needed to accomplish the goals of the Task Force are identified and acquired. The intent is to aid the Task Force to: (1) determine how much land will be needed to accomplish its goals; (2) estimate the full cost of acquiring these lands, (3) measure progress in acquiring lands for the restoration, and (4) increase the chance that the lands acquired are those most needed.

While the federal, state, and local land acquisition programs prepare annual and multi-year plans and coordinate acquisition efforts on a day-to-day and annual basis to ensure effective use of staff time and fiscal resources, the GAO believes that the coordination needs of the Task Force would be better served if this information was assembled into one document.

The GAO recommended that the members of the Task Force develop a land acquisition plan for the South Florida Ecosystem Restoration that would include:

1. an assessment of the lands needed to accomplish each of the goals of the restoration
2. a description of the purpose for which the lands will be acquired and how they will be managed
3. an estimate of the cost of these lands
4. an estimate of when the lands will be needed for related restoration projects
5. the agencies responsible for acquiring the lands

The GAO stated that the land acquisition plan should supplement the Task Force's July 2000 Strategic Plan and build on the land acquisition information and assessments already compiled by the federal and state agencies. It was suggested that the document would be useful to the funding entities, such as Congress and the State of Florida. The GAO envisioned the land acquisition plan as a dynamic document updated to reflect changes and additions to the restoration initiative's land acquisition needs.

## **South Florida Ecosystem Restoration Initiative Requires Significant Land Acquisition**

The Task Force member agencies have been engaged in the protection and restoration of the South Florida Ecosystem for many years prior to the formation of the Task Force. The Task Force tracks these projects and builds on the progress made to date. Acquisition of land to provide water for South Florida's human population and to protect the remaining natural ecosystems has been an ongoing priority in ecosystem restoration.

State and federal agencies already manage 4.9 million acres of land important to ecosystem restoration in South Florida. Approximately 4.8 million acres are managed for habitat purposes and 105,000 acres are used for water storage. The State of Florida alone has acquired 3.5 million acres of habitat conservation land in South Florida at a cost of \$1.5 billion. However, the condition of the ecosystem continues to deteriorate. This continued deterioration has necessitated a more comprehensive approach to protection, preservation and restoration.

Recognizing this need, Congress authorized the C&SF Comprehensive Review Study known as the Restudy in 1992 to determine "whether modifications to the existing project are advisable ...with particular reference to modifying the project or its operation for improving the quality of the environment, improving protections of the aquifer, and ...urban water supplies affected by the project or its operation." In 1996, the Water Resources Development Act (WRDA) further instructed the Secretary of the Army to develop a Comprehensive Plan for the purpose of restoring, preserving, and protecting the South Florida ecosystem. The Task Force was also directed by WRDA 96 to provide recommendations to the Secretary of the Army and the non-Federal project sponsor on the Restudy.

WRDA 2000 authorized the Comprehensive Everglades Restoration Plan (CERP). With an estimated cost of \$7.8 billion over 37 years, CERP is perhaps the most ambitious ecological restoration project ever undertaken. Comprised of more than 60 projects, CERP provides a framework for modifications and operational changes that are needed to restore, preserve and protect the South Florida ecosystem while providing for other water-related needs of the region, including water supply and flood protection. The goal is that the right quantity of water, of the right quality, gets delivered to the right places at the right times. CERP builds on restoration projects already underway.

The cost share for CERP is 50% federal and 50% non-federal with the non-federal sponsor responsible acquisition of all land, easements, right-of-way, and relocations necessary to implement the plan. Roughly 220,000 acres at an estimated cost of \$2.2 billion in 1999 dollars will be needed for the CERP. For example, the Indian River Lagoon and Water Preserve Feasibility Studies are further refining projects in those study areas. Land acquisition and related expenses will comprise about one-fourth of the total cost-of CERP. As mentioned earlier, these estimates will be modified as the CERP projects are further refined in the planning process.

In addition to lands needed for CERP and other restoration construction projects, lands needed for habitat restoration and protection are also included within the restoration

mosaic for South Florida. As of September 2002, about 5.8 million acres have been identified as necessary for habitat protection. About 4.9 million acres have been acquired, with 925,684 acres remaining to be purchased (See Appendix D).

## **South Florida Ecosystem Land Acquisition Strategy Development**

The Task Force also recognized the value of having a single document describing land acquisitions planned by the member agencies and relating these acquisitions to the goals of the restoration. The Task Force directed the Working Group to produce a Land Acquisition Strategy. On February 2, 2000, the Land Acquisition Task Team was chartered by the Working Group to develop the strategy. As defined in the guidance to the Task Team, "The purpose of the Task Team is to develop a strategy for land acquisition needed for [South Florida] ecosystem restoration projects, which are either federally or jointly funded by federal and non-federal agencies. When completed, this plan and its appendices should provide a broad picture of all current land acquisition initiatives that contribute to the restoration."

In developing this strategy, the Working Group identified land acquisition projects in one of two categories: the acquisition of additions and inholdings necessary for the ecological integrity of existing national parks, preserves, and wildlife refuges, and joint projects, such as CERP, that contribute to the overall environment and human habitability of South Florida.

The guidelines also focused the land acquisition planning efforts on Goal 1: Getting the Water Right, defined as restoring natural hydrologic functions and water quality in wetland, estuarine, marine, and groundwater systems, while also providing for the water resource needs of urban and agricultural landscapes and Goal 2: Restore, Preserve and Protect Natural Habitats and Species, defined as when the diversity, abundance, and behavior of native South Florida animals and plants in terrestrial and aquatic environs are characteristic of predrainage conditions. These ecosystem restoration goals include significant land acquisition in their implementation plans and were clearly defined in the Task Force's July 2000 *Coordinating Success* Strategy Document.

Related land acquisition projects without any federal funding are addressed in appendices. The Working Group stated that the Strategy and its appendices should provide a broad picture of all current land acquisition initiatives that contribute to the restoration. The Florida Department of Environmental Protection Division of State Lands and the Florida Natural Areas Inventory collaborated to update the 1999 Everglades Ecosystem Land Acquisition State-Federal Cost Share map known as the "Graham Map" to produce the South Florida Ecosystem Restoration Land Acquisition Update, Appendix D.

Member agencies of the Working Group responsible for acquiring lands to implement the Strategy served on the Land Acquisition Task Team. Federal agency representatives from the National Park Service, U.S. Department of Agriculture, the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers, and State of Florida agency representatives from the Florida Department of Environmental Protection (FDEP), the Executive Office of the Governor, the Fish and Wildlife Conservation Commission, the Southwest Florida Regional Planning Council, the South Florida Water Management District (SFWMD), joined by local government representatives from Palm Beach, Broward and Miami-Dade Counties produced this

document. Assistance was provided by the Florida Natural Areas Inventory and the Department of Community Affairs with staff support from Muller and Associates, Inc and the Task Force's Office of the Executive Director.

Member agencies identified lands needed to meet Goal 1 and Goal 2 and prepared project sheets that describe the purpose of the land acquisition, and discuss funding and acquisition status. The data on the project sheets are current as of September 30, 2002.

### **A Long History of Coordination on Land Acquisition Funding**

In 1947, the federal government acquired the lands necessary to establish Everglades National Park with the substantial contribution of 908,031 acres of land by the State of Florida. Federal and state holdings now include three other national parks or preserves, 30 state parks, 16 wildlife refuges, 14 state wildlife management areas, and 19 aquatic sanctuaries or preserves dedicated to protecting the South Florida Ecosystem. According to the April 2000 GAO report, the State of Florida has acquired 3.1 million acres—many of which were conveyed between 1947 and 1995 to the federal government to be managed as national parks and preserves. The federal government acquired another 1 million acres during the same period.

The Florida Department of Environmental Protection Division of State Lands continues to coordinate park and refuge land acquisitions with the federal government. Seventy percent (70%) of the acres remaining to be acquired for the National Key Deer Refuge are also on the state's Florida Forever acquisition list. The Division of State Lands is also cooperating with the National Park Service on the Big Cypress National Preserve Addition and the Everglades National Park Expansion.

The South Florida Water Management District (SFWMD), the Florida Department of Environmental Protection (FDEP) and the Department of the Interior (DOI) have a history of funding partnerships for land acquisition. Substantial federal funding for land acquisition is dependent on specific Congressional action. The Federal Agriculture Improvement and Reform Act (Farm Bill) of 1996 in Section 390 provided \$200,000,000 to the Secretary of the Interior to fund or conduct restoration activities in the Everglades ecosystem. To carry out the aforementioned activities, these Farm Bill monies, along with state monies, were utilized to purchase lands in the East Coast Buffer/Water Preserve Area, the Everglades Agricultural Area/Talisman property and Southern Golden Gate Estates (SGGE). Through Fiscal Year 2000, the SFWMD has received about \$120.5 million in grant monies for land acquisition from the DOI through the Land and Water Conservation Fund in addition to the \$154.4 million from the 1996 Farm Bill. FDEP has received over \$38 million from the 1996 Farm Bill to acquire lands in Southern Golden Gate Estates.

This Strategy includes only those acquisitions that are completely funded by the federal government or funded through a joint state/federal effort. These acquisitions are summarized in Appendix B.

The State of Florida is nationally recognized as a leader in state land acquisition funding. Preservation 2000 (P-2000) has been the most successful state land and water conservation program in the United States. Florida spent \$3 billion in the ten years of P-2000 to protect natural and historical resources, and to provide areas for

natural resource-based recreation. In 1999, the state enacted the Florida Forever Act, a new statewide environmental lands and resources protection funding program. Florida Forever replaces P-2000 and commits \$300 million per year from 2001-2010 to continue acquiring lands for the same purposes as Preservation 2000, but it gives additional emphasis on environmental systems restoration, water resource development, public lands management, recreation and public access, and public-private partnerships via conservation easements.

The State of Florida's Conservation and Recreation Land (CARL) programs and the Save Our Rivers (SOR) program have a long history of shared acquisition projects. In the period from February 1995 through January 2001 alone, these two programs cooperatively acquired 41,868 acres at a cost of more than \$84 million. Land acquisition projects may be on both the SOR and Florida Forever lists to maximize the opportunities to acquire these lands. State lands program managers coordinate funding decisions for land purchases to avoid duplication of effort. This Strategy includes only those acquisitions that are completely funded by the federal government or funded through a joint state/federal effort. Land acquisitions funded by the State of Florida are summarized in Appendix D.

This long history of cooperation and coordination between state and federal partners in restoration has maximized the resources available for land acquisition. The Task Force will build on these partnerships for future land purchases.

### **Degree of Land Ownership (Fee Simple vs. Less-Than-Fee Purchase of Land)**

The land cost estimates presented in the Land Acquisition Strategy Project Profile Sheets are based on a fee simple purchase, meaning purchase of the project lands and all rights associated with the land. Another type of land acquisition, less-than-fee, may be more cost-effective for some projects.

In a less-than-fee transaction, only some of the land rights are purchased. For instance, a project may require water storage on a parcel of land for only part of the year, and has no need for the land during the rest of the year. In this case, agencies may wish to purchase only a flowage easement for the land, rather than buying the land outright. During certain times of the year, the landowner has full use of the land.

Less-than-fee purchases are flexible, and can be shaped to meet the needs of a specific project, assuming the landowner is willing to sell the rights that match a project's needs. A conservation easement is another type of less-than-fee acquisition. In this case, the purpose of the easement is to ensure that the land remains in its current condition. In effect, the development rights for a parcel of land are purchased from the owner. This provides protection of on-site natural resources such as wetlands and animal habitat. A conservation easement may be purchased for a cattle ranch. This would allow continued use of the land for ranching at specified grazing levels and with defined amounts of habitat manipulation, but would preclude development of the land.

The cost of less-than-fee acquisition falls in the range of about 25% to 95% of the fee simple cost. The price depends on many factors, such as the number of rights purchased, how much the landowner's use of the land is curtailed, and the location of the land in relation to developing areas. A conservation easement that restricts

development of a piece of land will generally cost a higher percentage of the land's total value if the land is in a development corridor or close to an urban area, as compared to the same type of land in a rural setting with little development pressure.

In addition to the land cost savings, less-than-fee acquisition also keeps lands on the tax roll and allows those people working on the land to continue their traditional way of life. Less-than-fee acquisition, especially conservation easements, can also provide protection to lands that an owner is not willing to sell outright.

Agencies participating in the ecosystem of South Florida want to acquire only that interest in land needed to complete a project and make it successful. They are employing real estate acquisition strategies that fulfill the restoration needs on a least cost basis. For some ecosystem restoration projects, less-than-fee acquisition may provide enough control over the land to achieve project objectives.

Many factors are considered in deciding which method to use. While less-than-fee simple acquisition provides monetary savings, the amount saved may be negligible if the original landowner's use of the land is severely curtailed or the land is in an area of high development pressure. It also provides less control over a piece of land. In projects like the Everglades restoration, it is important to stay attuned to evolving needs and changing circumstances. A parcel bought by less-than-fee may later have to be purchased in fee simple, resulting in higher overall costs. Public access to less-than-fee lands is generally restricted or prohibited, so this is an additional consideration. While not suitable for every ecosystem restoration project, less-than-fee acquisition is an important technique worthy of consideration where restoration objectives can be fully achieved at a reduced overall cost for necessary land acquisition projects

# **SOUTH FLORIDA ECOSYSTEM RESTORATION LAND ACQUISITION-STRATEGY**

## **Project Profile Sheets**

The team prepared project profile sheets for each acquisition. The following information is on each project profile sheet:

- Project name
- Overlapping projects
- Project Name Synonym
- Project ID (Map Label)
- Primary SFER-related goal
- Project synopsis
- Project Sponsorship
- Land Acquisition Funding Type
- Land Acquisition Funds Source
- Agency Responsible for Acquiring the Land
- Land Acquisition Program
- Land Managing Agency
- Funding Partners (if applicable)
- Land Acquisition Schedule
- Project Acreage/Progress
- Project Cost
- Land Cost Estimation Method
- Degree of Ownership desired
- Comments
- Hyperlink
- Contact
- Update

The goals and objectives of the South Florida Ecosystem Restoration Task Force are listed in Appendix A. The following is a discussion of the land acquisitions necessary to accomplish the water and habitat goals of the Task Force that are either federally funded or jointly funded by federal and non-federal agencies.

### **Goal 1: Get the Water Right**

Goal 1 for the Task Force is to “Get the Water Right” with the subgoals of “Get the Hydrology Right” and “Get the Water Quality Right”. The Task Force will achieve Goal 1 through the implementation of the Comprehensive Everglades Restoration Project (CERP) and other authorized modifications to the C&SF System including the Kissimmee River Restoration and Headwaters Revitalization Project, the C-111 Project, the Critical Projects authorized in WRDA 96 and Modified Water Deliveries to Everglades National Park as well as other water quality improvement projects such as the SFWMD’s Everglades Construction Project (ECP). With the exception of STA1-E, the ECP is wholly state funded and is included in Appendix D.

The U.S. Army Corps of Engineers and the South Florida Water Management District prepared the project sheets for Goal 1.

## **Identification of Lands Needed**

Member agencies engaged in acquiring lands for restoration activities utilized comprehensive processes to identify those lands needed for restoration. The estimates on the project profile sheets in this strategy reflect the best available information developed through each agency's analysis. The processes may vary from agency to agency.

The following is an example of the processes used by the USACE and SFWMD for CERP projects. During the Central and Southern Florida Comprehensive Review Study (Restudy), initial acreage needs were estimated, and in some cases, conceptual footprints were developed for CERP projects based on preliminary designs. Identification of CERP lands needed for Goal 1 will be further refined through the Project Implementation Report, other more detailed design documents and the Feasibility Study. General characteristics of the needs are considered, such as the basin in which the project needs to be located and acre-feet of water storage capacity needed. Lands within the basin that conceptually meet the established criteria are identified for each alternative, and a gross appraisal is conducted for a selected alternative. A Real Estate Plan for the selected alternative is then completed. This Real Estate Plan provides updated land acquisition and associated cost estimates. Acquisition cost estimates were completed in 2001 for the Water Preserve Areas and Indian River Lagoon projects through the feasibility studies for those areas.

## **Land Acquisition Funding**

As discussed earlier in the section on the history of coordination on land acquisition funding, there are several land acquisition funding mechanisms available to secure Goal 1 lands. The project profile sheets list the potential funding sources for each project. The following is a discussion of the variety of prospective funding sources for Goal 1 lands.

The State of Florida is a full partner in CERP implementation having adopted the Everglades Restoration Investment Act in 2000 that provides \$100 million per year for 10 years. The amount will be matched with local sponsor funds (which may include SFWMD *ad valorem* tax revenue) and credits for a total of \$200 million of non-federal funds per year for 10 years. These monies are deposited in the Save Our Everglades Trust Fund.

Pursuant The Everglades Restoration Bond Act passed by the 2002 Florida Legislature, \$25 million of the annual Florida Forever allocation to the SFWMD is to be used exclusively for the acquisition of land needed to implement the CERP. Land acquired with these monies must be on the SFWMD's five-year work plan. Florida Forever is the successor to the state's P-2000 land acquisition program.

From 1980 until July 2001, the Conservation and Recreation Lands Trust Fund (CARL) was used primarily to acquire lands to conserve and protect unique natural areas, endangered species habitat, unusual geologic features, wetlands, significant archeological and historical sites. CARL funded acquisitions also provide for natural resource-based conservation and other outdoor recreation on any part of any site compatible with conservation purposes. Lands acquired under CARL are managed as

parks, recreation areas, wildlife management areas, wilderness areas, forests and greenways. The CARL land acquisition functions have largely been replaced by the new Florida Forever program, which allocated 35% of bond proceeds to the Board of Trustees of the Internal Improvement Trust Fund for acquiring and improving lands. These lands are on a list developed by the Acquisition and Restoration Council (ARC). Acquisitions under the Florida Forever program must meet at least two of the Florida Forever goals and measures. These goals and measures captures all of the old CARL 'criteria' but refocuses and expands them to include more ecosystem restoration and water resource protection and development goals. Projects developed by the ARC for the Board of Trustee' Florida Forever list may include only the lands of willing sellers. The Board has the authority to add the lands of unwilling sellers back into a project and can authorize the use of eminent domain to acquire them. The Board's general policy is to acquire property from willing sellers at or below appraised value. The state does not acquire improvements unless they are a minor component of a large acquisition or meet an identified need for the management agency. Any change to these requirements must be made by the Board of Trustees.

Special State Legislative Appropriations may also be available to fund specified CERP projects. In the 2001 Legislative Session, the Miami-Dade Delegation sponsored a State Legislative Appropriation for funds to be used by the SFWMD in support of the Biscayne Bay initiatives. Six million dollars were appropriated, of which \$3.5 million will be used for CERP land acquisition in the Biscayne Bay Coastal Wetlands Project. The SFWMD and its partners will actively seek future opportunities for similar special legislative appropriations.

Local governments have contributed to the purchase of lands anticipated to be necessary for CERP Projects. Broward County, through its Land Preservation Bond Program, has contributed funds to acquire lands located within a Water Preserve Area Basin Project. Martin County has contributed money through its 1% Sales Tax Referendum monies toward the purchase of lands within the Indian River Lagoon (IRL) Project component and is anticipated to partner on land acquisition for other IRL Project components. Palm Beach County has contributed toward the purchase of property in the Palm Beach County Agricultural Reservoir. Miami-Dade County, through its Environmentally Endangered Lands (EEL) Trust has purchased lands in the C-111 North Spreader Canal and Biscayne Bay Coastal Wetlands Project. St. Lucie County has contributed funds toward the purchase of lands in an Indian River Lagoon Project component. Both Collier and St. Lucie County have contributed funds for Critical Project lands. These partnerships are anticipated to continue.

As discussed earlier, the U.S. Department of the Interior has a history of grants to the SFWMD for land acquisition. These monies were earmarked specifically for land acquisition in the State of Florida under the DOI's Annual Appropriations Bill and through the Farm Bill. The Department of the Interior also manages the Land and Water Conservation Fund with the ability to transfer funds from this fund to the SFWMD for land purchases. These partnerships are expected to continue through the implementation of CERP with varying amounts available to leverage state funds. Other federal partnerships will be explored as funding sources including those programs authorized by the "Farm Security and Rural Investment Act of 2002 (Farm Bill) and administered by USDA such as the Wetlands Reserve program and the Farm Land Protection program.

## **Timing of Acquisitions**

The timing of land acquisition is critical, as project construction cannot begin until key project lands are acquired. The timelines for CERP projects are those contained in the July 2001 Master Project Implementation Schedule agreed to by the U.S. Army Corps of Engineers (USACE) and the SFWMD. The Detailed Design memoranda for the Modified Water Deliveries to Everglades National Park and the Supplemental General Reevaluation Report for the C-111 Canal Project describe the deadline for acquisitions for those projects.

The success of many of the CERP projects depends on the successful implementation of other parts of the restoration plan such as the C-111 Canal and Modified Water Deliveries to Everglades National Park Projects mentioned above. Failure to obtain critical parcels in a timely manner can result in delays and reconfiguration not just for one project, but for other related projects as well. The GAO report noted that much of the undeveloped land in South Florida is under development pressure, and that a land acquisition plan increases the likelihood of the restoration's success. Delay reduces the possibility that the necessary lands will be acquired and can also increase the cost of land.

In addition, strategies are being developed for early land acquisition in support of future CERP projects where there is development pressure to acquire property; when the real estate is part of other acquisition programs; or when there is a cost effective "opportunity purchase" with sellers that the SFWMD may wish to pursue. The USACE and SFWMD are developing Standard Operating Procedures and working closely with each other through these types of acquisitions in anticipation of lands being suitable for future CERP projects.

The project schedules and the projections of outputs included in this report span multiple decades and depend upon certain planning 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 strategy 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.

## **Cost of Real Estate**

Cost estimates for CERP lands as contained on the Project Profile Sheets are the estimated Fair Market value in 1999 dollars as described in the C&SF Restudy Appendix F. These estimates include the probable costs of real estate, associated costs, and contingency. Projects contained within the Indian River Lagoon Feasibility Study and the Water Preserve Area Feasibility Study reflect land cost estimates in October 2000 dollars. If some land has been acquired for a project, actual costs are known and are reflected on the project sheets.

Real estate cost estimates for USACE/SFWMD non-CERP projects such as the C-111 Canal Project and Kissimmee River Restoration are based on actual costs, the best appraisals, and the implication of condemnation proceedings, if applicable.

The USACE land cost estimates include the cost of the land plus other costs incurred in the land acquisition process. This includes staff time for land acquisition, federal review of the acquisition process, relocation costs, etc.

### **Degree of Land Ownership (Fee Simple vs. Less-Than-Fee Purchase of Land)**

The land cost estimates presented in the Project Profile Sheets are based on a fee simple purchase, meaning the purchase of the project lands and all rights associated with the land. Another type of land acquisition, less-than-fee, may be more cost-effective for some projects. The land acquisition agencies are committed to acquiring only that interest in land needed to complete a project and make it successful and will utilize less-than-fee purchases where appropriate.

### **Summary of Goal 1 lands**

There are 44 projects with federal and joint federal/state land acquisition dollars identified for Goal 1. Land acquisition required for these projects totals 462,372 acres with 234,790 acres (50%) acquired to date. The total estimated cost of these lands is \$2,495,094 with an estimated \$1,726,075 needed to complete acquisition of these parcels. The project profile sheets for Goal 1 lands are in Appendix C.

### **Goal 2: Restore, Preserve, and Protect Natural Habitats and Species**

Goal 2 for the Task Force is “Restore, Preserve and Protect Natural Habitats and Species” with the subgoals of “Restore, preserve, and protect natural habitats” and “Control invasive exotic plants.” The acquisition of lands that provide habitat for native plants and animals and act as a buffer to existing natural areas is an important component of the Task Force’s strategy to achieve Goal 2. Some Goal 1 projects that provide water quality treatment areas, water storage reservoirs, and aquifer recharge with a primary goal of restoring the natural hydrology will also provide habitat for native flora and fauna.

The U.S. Fish and Wildlife Service, the National Park Service and the Florida Department of Environmental Protection prepared the project profile sheets for Goal 2. Some of the project profiles represent multiple conservation areas, such as the Florida Keys NWR Complex (which includes the National Key Deer, Great White Heron, and Key West refuges) and the Ding Darling NWR Complex (which includes Caloosahatchee, Island Bay, Matlacha Pass, and Pine Island).

Other lands that contribute to this strategy and which have no federal funding are in Appendix D: South Florida Ecosystem Restoration Land Acquisition Update.

### **Identification of Lands Needed**

Any major boundary revisions to existing units of the National Park system must be established by an act of Congress. All land acquisition expenditures must be consistent with the existing Congressional authorization. The expansions of the National Park system in South Florida have undergone a rigorous review process and Congress has deemed that the authorized expansion areas possess nationally significant natural, cultural, or recreational resources; are a suitable and feasible addition to the system; and requires direct National Park Service (NPS) management instead of protection by

some other government agency or by the private sector. The Park Service acquires lands from willing sellers for the South Florida units. The NPS projects in the Strategy are nearly complete, with 5% or less of the land remaining to be acquired.

Numerous federal laws, including refuge-specific legislation, give the Fish and Wildlife Service (FWS) authority for acquisition of land and water to conserve fish, plant, and wildlife habitat. Land acquisition expenditures must be consistent with the existing Congressional authorization. All land acquisition projects in the Service's Southeast Region are developed from a total landscape perspective.

The FWS reports its projects not as expansions of existing refuges, but as acres of land within refuge boundaries remaining to be acquired. Like the National Park Service, the Fish and Wildlife Service acquires lands from willing sellers only. Less than 2% of refuge acres remain to be acquired when compared to currently authorized refuge boundaries for the FWS projects in the Strategy.

### **Land Acquisition Funding**

Appropriations of funds for the acquisition of lands for an addition to the National Park and Wildlife Refuge System may be provided in the act authorizing the addition and may be supplemented or provided directly through subsequent passage of the law. The funds are typically generated and drawn from the Land and Water Conservation Fund, a Congressionally established funding mechanism earmarked for certain activities including land acquisition by Federal agencies. The authorizing act may also require contributions for the acquisition of lands from the State, local government or other entities.

For Biscayne National Park and Everglades National Park, the State (including the SFWMD) is a land acquisition partner for at least part of the project. The State is also a partner in some of the FWS projects as well, such as Florida Panther NWR and National Key Deer NWR. Florida's land acquisition funding programs are discussed in the Goal 1 section of the Strategy.

### **Timing of Acquisitions**

Land acquisition to complete park and refuge boundaries is a multi-year process and can span decades. The goal is to acquire the lands before the on-site resources are destroyed. For Goal 2 purchases, the funding may be timed to specific appropriations, or as a project is positioned on an acquisition funding list. A land acquisition schedule is included for each of these projects.

### **Cost of Real Estate**

The cost estimates for land acquisitions for national parks and national wildlife refuges are based on fair market value and the best appraisals. The Division of State Lands approved using fair market value for lands purchases in Southern Golden Gate Estates. The Strazzulla wetlands cost estimate is estimated fair market value in the October 2001 Water Preserve Area Feasibility Study.

## **Degree of Land Ownership (Fee Simple vs. Less-Than-Fee Purchase of Land)**

The land cost estimates presented in the Project Profile Sheets are based on a fee simple purchase, meaning the purchase of the project lands and all rights associated with the land. Another type of land acquisition, less-than-fee, may be more cost-effective for some projects. The land acquisition agencies are committed to acquiring only that interest in land needed to complete a project and make it successful and will utilize less-than-fee purchases where appropriate.

## **Summary of Goal 2 lands**

There are twelve (12) projects with federal and joint federal/state land acquisition dollars identified for Goal 2. 1,517,182 acres have been identified with 1,495,026 acres (98%) acquired to date. The total estimated cost of these lands is \$655,810,000 with an estimated \$163,011,000 needed to complete acquisition on these parcels. Goal 2 lands in the project sheets are summarized in Appendix C.

## **South Florida Ecosystem Restoration Land Acquisition Strategy Maps**

Appendix B is the South Florida Ecosystem Restoration Land Acquisition Strategy Federal Projects and Joint Federal/State Projects map. This map graphically illustrates the data in Project Profiles in Appendix C. The Project ID on the Project Profile is the Map Label. Some CERP projects do not have a boundary labeled on the map because the project footprint is not yet defined. The identification process for CERP and other SFER projects is ongoing.

To illustrate all the land acquisitions identified for ecosystem restoration regardless of funding source, the Strategy includes Appendix D: The South Florida Ecosystem Restoration Land Acquisition Update map with a table listing all the projects and the federal/state cost share of those land acquisitions

## **FUTURE EFFORTS**

The Land Acquisition Strategy provides discusses in concept how the restoration goals will be accomplished through the use of land acquisition strategies that are designed to ensure that only those private property rights will be acquired that are necessary to accomplish the restoration goal. It also measures and reports on the acquisition of identified lands. The strategy presents an overall picture for those responsible for funding land acquisition, and also provides cooperating agencies and programs with a perspective on how their current and potential land acquisition projects relate and contribute to the vision of the Task Force.

Many of the CERP projects have only conceptually estimated land requirements. Additional land requirements for the South Florida Ecosystem Restoration have not been determined. Therefore, lands needed for restoration and their costs as identified in the Strategy and its appendices are subject to change over time.

The Strategy will be updated on an annual basis. Updates will reflect the increased certainty of which lands are needed for the ecosystem restoration, and will report on the

progress made in acquiring those lands. Some project lands will likely be lost to development, making it necessary for alternative lands to be identified.

During the next year, the SFWMD and other agencies will continue to acquire identified lands and refine the boundaries of those lands still needed. Additional projects may be identified through ongoing studies like the CERP Southwest Florida Feasibility Study.

The U.S. Fish and Wildlife Service's Multi-Species Recovery Plan (MSRP) will be further refined to include a map to assist in identifying critical habitat for threatened and endangered species. The initial draft of the MSRP implementation strategy is due early 2003.

In 1994, the Florida Fish and Wildlife Conservation Commission (FWCC) classified all of Florida into various land cover categories. FWC is currently reclassifying the entire state, and will compare the results to earlier classification efforts to show the changes that have occurred in the state. The statewide project will be done by 2004, but the area south of Lake Okeechobee (excluding the Florida Keys) will be completed before then. The FWC is also modeling Florida panther and black bear needs in southwest Florida. The FWCC document "Habitat Conservation Needs of Rare and Imperiled Wildlife in Florida, 2000 edition" further identifies lands of concern to the state for conservation.

The Task Force is developing Subgoals and Objectives for Goal 3: Foster Compatibility of the Build and Natural Systems. It is anticipated that land acquisition will be a component of achieving this goal. It is likely that local, county and regional government acquisitions will be an important part of the mosaic of lands needed for Goal 3. Future editions of the Land Acquisition Strategy will include Goal 3 lands and reflect local, county and regional government contributions towards meeting the all goals of the Task Force.

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 interest they represent retain all of their sovereign rights, authorities, and jurisdictions for implementation of the projects contained within this document.

# Appendices

Appendix A: Task Force Goals and Objectives

Appendix B: South Florida Ecosystem Restoration Land Acquisition Strategy  
Federal Projects and Joint Federal Projects Map

Appendix C: Project Profile Sheets and Summary Table

Appendix D: South Florida Ecosystem Restoration Land Acquisition Update  
Map and State/Federal Cost Share Table

Appendix E: Land Acquisition Task Team Directive

# Appendix A

## Appendix A. South Florida Ecosystem Restoration Goals

### Goal 1: Get the Water Right

#### Subgoal 1-A: Get the hydrology right

- Objective 1-A.1: Provide 1.4 million acre-feet of surface water storage by 2036
- Objective 1-A.2: Develop aquifer storage and recovery systems capable of storing 1.6 billion gallons per day by 2026
- Objective 1-A.3: Modify 335 miles of impediments to flow by 2019

#### Subgoal 1-B: Get the water quality right

- Objective 1-B.1: Construct 70,000 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: Complete acquisition of 5.6 million acres of land identified for habitat protection by 2015.
- Objective 2-A.2: Protect 20 percent of the coral reefs by 2010
- Objective 2-A.3: Improve habitat quality for 2.4 million acres of natural areas in South Florida

#### Subgoal 2-B: Control invasive exotic plants

- Objective 2-B.1: Coordinate the development of 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 area statewide 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

#### Subgoal 3-A: Use and manage land in a manner that is compatible with ecosystem restoration

- Objective 3-A.1: \*Designate an additional 480,000 acres as part of the Florida Greenways and Trails System by 2008
- Objective 3-A.2: \*Increase participation in the Voluntary Farm Bill conservation program by 230,000 acres by 2014
- Objective 3-A.3: \*Acquire an additional 2,500 acres of park, recreation, and open space lands by 2005
- Objective 3-A.4: Complete five brownfield rehabilitation and redevelopment projects by 2006
- Objective 3-A.5: Increase community understanding of ecosystem restoration

#### Subgoal 3-B: Maintain or improving existing levels of flood protection in a manner compatible with ecosystem restoration

- Objective 3-B.1: Maintain or improve existing levels of flood protection

#### Subgoal 3-C: Provide sufficient water resources for the built and natural systems

- Objective 3-C.1: Increase the regional water supply by 397 million gallons per day by 2005
- Objective 3-C.2: Increase volumes of reuse on a regional basis
- Objective 3-C.3: Achieve annual targets for water made available through the SFWMD alternative water supply program
- Objective 3-C.4: Reduce water consumption for irrigation 13,800 acres feet by 2004

\*These numbers are statewide goals; regional breakout not available from the reporting agency

# Appendix B

## **Appendix B: Map of the South Florida Ecosystem Restoration Land Acquisition Strategy Federal Projects and Joint/Federal State Projects**

The Land Acquisition Strategy Project Profiles in Appendix C are represented on the map. For this map, as for the Land Acquisition Strategy in general, the term “State” included the State of Florida, the South Florida Water Management District, and participating local governments. Each of the projects on the map is labeled with a circled number or a name. Four types of projects are illustrated: Comprehensive Everglades Restoration (CERP) projects, U.S. Fish and Wildlife Service and National Park Service projects, other Federal Acquisition Projects, and Joint State/Federal Acquisition Projects.

Existing conservation lands throughout the South Florida ecosystem restoration area, regardless of funding source, (as of September 30, 2001) is shown in light gray to provide context for the federal and joint federal/state projects. The project outlines depict the full extent of the acquisition project boundaries. Acquired lands within project boundaries are shown in the same light gray color as other conservation holdings. Some projects are more than 90% complete; in many of these cases, the remaining inholdings within the project boundaries are too small to be shown on this map and the entire project will appear to be shaded gray.

The CERP project boundaries are general boundaries and will be refined after further analysis. The majority of the CERP projects are indicated by a circled number on the map; the rest are labeled by name. The accompanying Map Key to CERP Projects lists all CERP projects by map label, CERP project component name and CERP project name.

The Joint State/Federal Acquisition Projects data layer (pink cross-hatching) is composed of Florida Forever Board of Trustees project and Save Our Rivers projects that have federal involvement.

The South Florida Water Management District provided digital data for CERP projects and the Save Our Rivers projects with the disclaimer that any information, including but not limited to software and data, received from the SFWMD in fulfillment of a request is provided “AS IS” without warranty, including but not limited to merchantability and fitness for a particular purpose. For SFWMD projects, this map is a conceptual tool utilized for project development only. This map is not self-extracting or binding on the SFWMD.

The Conservation Lands data layer was compiled by the Florida Natural Areas Inventory (FNAI) using data received from many different sources including federal, state, and local managing agencies and private conservation organizations.

# Appendix C

## **Appendix C: South Florida Ecosystem Restoration Land Acquisition Strategy Project Profiles**

The project profile sheet lists the following information for the projects on the map in Appendix B:

- Project name
- Overlapping projects
- Project Name Synonym
- Project ID (Map Label)
- Primary SFER-related goal
- Project synopsis
- Project Sponsorship
- Land Acquisition Funding Type
- Land Acquisition Funds Source
- Agency Responsible for Acquiring the Land
- Land Acquisition Program
- Land Managing Agency
- Funding Partners (if applicable)
- Land Acquisition Schedule with the date acquisition was initiated; the date acquisition will be concluded' and the date the project is needed for restoration
- Project Acreage/Progress includes the total size of the project; the acres acquired in the previous year; the acres acquired all years; and the acres remaining to be acquired
- Project Cost includes the estimated cost of the project; the cost of land closed through 2002; the estimated cost of remaining acres; and the cost of real estate and associated costs
- Land Cost Estimation Method
- Degree of Ownership desired
- Comments, Hyperlink and Update

# Appendix D

## **Appendix D: South Florida Ecosystem Restoration Land Acquisition Update Map and State/Federal Cost Share Table**

To illustrate all the land acquisitions identified for ecosystem restoration regardless of funding source, the Strategy includes Appendix D: The South Florida Ecosystem Restoration Land Acquisition Update map with a table listing all the projects and the federal/state cost share of those land acquisitions.

Data layers depicting acquired conservation lands were compiled by the Florida Natural Areas Inventory (FNAI) using data received from many different sources including federal, state, and local managing agencies and private conservation organizations. Lands acquired through September 30, 2001 are depicted on the map.

The Florida Forever Board of Trustees (BOT) project data layer represents projects on the Florida Forever BOT Acquisition List as of April 2001. Boundaries were digitized by FNAI staff using paper maps provided by the Florida Department of Environmental Protection Office of Environmental Services.

The South Florida Water Management District (SFWMD) provide digital data for the Comprehensive Everglades Restoration Plan (CERP) projects and the Save Our River projects with the disclaimer that any information, including but not limited to software and data, received from the SFWMD in fulfillment of a request is provided "AS IS" without warranty, including but not limited to merchantability and fitness for a particular purpose. For the SFWMD projects, this map is a conceptual tool utilized for project development only. This map is not self-extracting or binding on the SFWMD.

"Acquired - 100% State Funds" and "Acquired-Predominately State Funds" include all lands purchased by either the State of Florida or its acquisition partners- the SFWMD and the local governments within this water management district. Predominately means >50%.

# Appendix E