Coordinating Success

Strategy for Restoration of the South Florida Ecosystem

Tracking Success

Biennial Report for FY 2002-2004 of the South Florida Ecosystem Restoration Task Force Integrated Financial Plan

to the
U.S. Congress,
Florida Legislature,
Seminole Tribe of Florida
and Miccosukee Tribe
of Indians of Florida

Volume
1 of 2

South Florida Ecosystem Restoration Organization

Task Force

U.S. Department of the Interior (Chair)

U.S. Department of Agriculture

U.S. Department of the Army

U.S. Department of Commerce

U.S. Department of Justice

U.S. Department of Transporation

U.S. Environmental Protection Agency

Miccosukee Tribe of Indians of Florida

Seminole Tribe of Florida

Florida Department of Environmental Protection

South Florida Water Management District

Florida Governor's Office

Two Local Governments - Cities of Sweetwater and South Bay

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U.S. Department of the Interior: National Park Service, U.S. Fish and Wildlife, U.S. Geological Survey; U.S. Department of Agriculture: Natural Resources Conservation Service, Agricultural Research Service; U.S. Department of Commerce: National Oceanic and Atmospheric Administration, National Marine Fisheries Service - SEFSC, Ocean and Atmospheric Research - AOML; U.S. Department of the Army: U.S. Army Corps of Engineers; U.S. Environmental Protection Agency; Miccosukee Tribe of Indians of Florida; Seminole Tribe of Florida; Florida Fish and Wildlife Conservation Commission; Florida Department of Agriculture and Consumer Services; Florida Department of Environmental Protection; South Florida Water Management District; Miami-Dade Department of Environmental Resource Management; Palm Beach County; Florida Atlantic University.

South Florida Ecosystem Restoration Task Force

Volume 1

Coordinating Success

2004 Strategy for Restoration of the South Florida Ecosystem

and

Tracking Success

2002 - 2004 Biennial Report

To the U.S. Congress, Florida Legislature,
Seminole Tribe of Florida and
Miccosukee Tribe of Indians of Florida

This is Volume 1 of a 2 Volume report.
Volume 1 contains the coordination strategy and biennial report of the South Florida Ecosystem Restoration Task Force.
Volume 2 contains the integrated financial plan, including descriptions of all the individual projects that participating entities have identified as supporting ecosystem restoration. All information reported is as of June 30, 2004 unless otherwise noted.

Both Volumes combine information from federal, state, tribal and local agencies and therefore do not strictly follow any single agency's format.

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GLOSSARY

Terms

Acre-foot: The volume of water, 43,560 cubic feet that will cover an area of one acre to a depth of one foot.

Adaptive assessment: A process for learning and incorporating new information into the planning and evaluation phases of the restoration program. This process ensures that the scientific information produced for this effort is converted into products that are continuously used in management decision-making.

Benthic: Bottom dwelling, as in organisms

Best management practices (BMPs): Agricultural and other industrial management activities designed to achieve an important goal, such as reducing farm runoff or optimizing water use and water quality.

Economic equity: The fair treatment of all persons regardless of color, creed, or belief in aspects of opportunities and/or diseconomies regarding economic or environmental activities.

Ecosystem: A community of organisms, including humans, interacting with one another and the environment in which they live.

El niño/la niña: Warming and cooling patterns in the Pacific Ocean that affect the earth's atmosphere.

Environmental justice: The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Eutrophication: The natural or cultural enrichment of an aquatic environment with plant nutrients leading to rapid ecological changes and high productivity.

Exotic or invasive species: Exotic species are kinds of plants and animals not native to an area and found beyond their natural range. Exotic plants are introduced by people intentionally for social and economic reasons, and as accidental consequences of travel and commerce. Often such species are highly invasive and dominating to native forms.

Goal: Something to be achieved. Goals can be established for outcomes (results) or outputs (efforts).

Hydrology: The study of the properties, distribution, and effects of water. When used in the Task Force strategy and biennial reports, the term refers to the quantity, timing, and distribution of water in the ecosystem.

Hydropattern: The full range of hydrologic parameters, which include the depth of water, duration of inundation, and the timing and distribution of freshwater flow.

Hydroperiod: The frequency and duration of inundation or saturation of an ecosystem. In the context of wetland habitats, the term describes that length of time during the year in which the substrate is either saturated or covered with water.

Minimum flows and levels (MFLs): Florida statute requires water management districts to set water levels for each major body of water "at which further withdrawals would be significantly harmful to the water resources or ecology of the area…."

Nonpoint source (NPS) pollution: Comes from many diffuse sources. NPS pollution is caused by rainfall (or snowmelt in colder climates) moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even underground sources of drinking water

Nonstructural Flood Protection: Use of operation schedules, redirecting flows, or other operating strategies to manage water other than building new or modifying existing infrastructure

Objective: A goal expressed in specific, directly quantifiable terms.

Outcome: An end result. When used in the Task Force strategy and biennial reports, a quality of the restored South Florida Ecosystem.

Output: Levels of work and effort. When used in the Task Force strategy and biennial reports, the products, activities, or services produced by a project or program.

Periphyton: The biological community of microscopic plants and animals attached to surfaces in aquatic environments. Algae are the primary component in these assemblages and periphyton can be very important in aquatic food webs, such as those of the Everglades.

Performance measure: A desired result stated in quantifiable terms to allow for an assessment of how well the desired result (outcome) has been achieved.

Restoration: When used in the Task Force strategy and biennial reports, the recovery of a natural system's vitality and biological and hydrological integrity to the extent that that the health and ecological functions are self-sustaining over time.

Sheetflow: Water movement as a broad front with shallow uniform depth.

South Florida Ecosystem: An area consisting of the lands and waters within the boundaries of the South Florida Water Management District and the Multi-Species Recovery Plan, including the Kissimmee Basin, Lake Okeechobee, Everglades, the Florida Keys, and the contiguous nearshore coastal waters of South Florida.

Stormwater: Surface water runoff resulting from rainfall that does not percolate into the ground or evaporate.

Subsidence: The lowering of the soil level caused by shrinkage of organic layers. This shrinkage is due to desiccation, consolidation, and biological oxidation.

Success indicator: A subset of performance measures selected as a good representation of overall performance.

Sustainability: The state of having met the needs of the present without endangering the ability of future generations to be able to meet their own needs.

Vision: An aspiration of future conditions. In this case the results that the Task Force members intend to achieve in terms of ecosystem health and quality of life for South Florida residents and visitors.

Wetlands: Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetative or aquatic life that require saturated or seasonally saturated soil conditions for growth and reproduction.

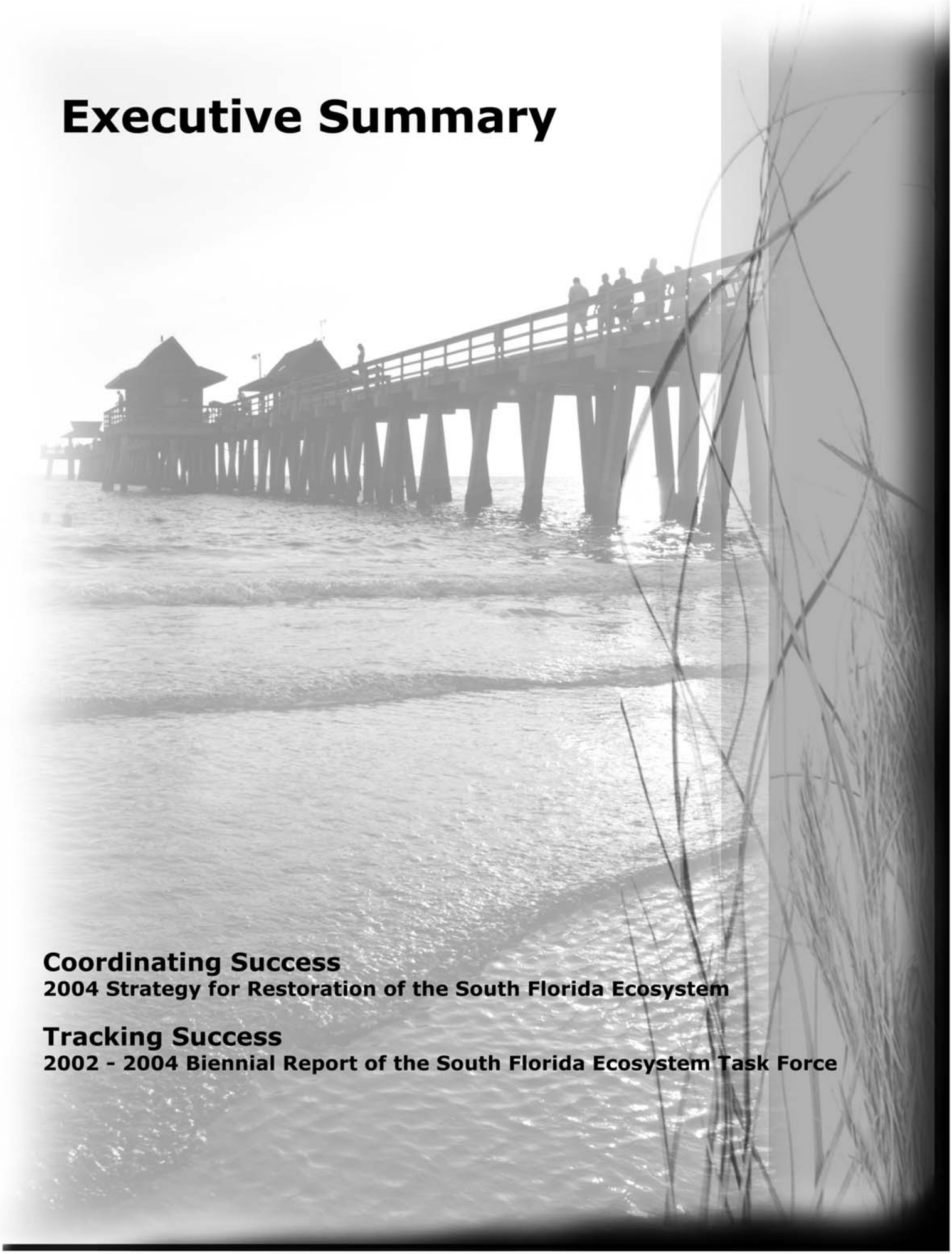
ACRONYMS

ASR	Aquifer storage and recovery
BAPRT	Best available phosphorus reduction technology
BMP	Best management practices
C&SF	Central and Southern Florida Project
CARL	Conservation and Recreational Lands Program
CERP	Comprehensive Everglades Restoration Plan
CSOP	Combined Structural and Operational Plan
DACS	Florida Department of Agriculture and Consumer Services
DCA	Florida Department of Community Affairs
DEP	Florida Department of Environmental Protection
DOI	U.S. Department of the Interior
EAA	Everglades Agricultural Area
EAR	Evaluation and Appraisal Report
ENP	Everglades National Park
EPA	U.S. Environmental Protection Agency
EPA	Everglades Protection Area
ERN	Everglades Radio Network
FEMA	Federal Emergency Management Agency
FIATT	Florida Invasive Animal Task Team
FWS	U.S. Fish and Wildlife Service
GAO	U.S. General Accountability Office

Acronyms continued

GPD	Gallons per day
LAT	Land Acquisition Team
LILA	Loxahatchee Impoundment Landscape Assessment
LOST	Lake Okeechobee Scenic Trail
MAP	Monitoring and Assessment Plan
µg/l	Micrograms per liter
MERIT	Multi-Species/Ecosystem Recovery Implementation Team
MFL	minimum flows and levels
MSRP	Multi-Species Recovery Plan
MWD	Modified Water Deliveries to Everglades National Park Project
NEWTT	Noxious Exotic Weed Task Team
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRCS	Natural Resources Conservation Service
PIR	Project Implementation Report
PMP	Project Management Plan
PPB	Parts per billion
PSTA	Periphyton stormwater treatment area
RECOVER	Restoration Coordination and Verification Team
SAV	Submerged aquatic vegetation
SCG	Science Coordination Group
SCT	Science Coordination Team
SFERTF	South Florida Ecosystem Restoration Task Force
SFWMD	South Florida Water Management District
SOR	Save Our Rivers
STA	Stormwater treatment area
SWIM	Surface Water Improvement and Management Act
TMDL	Total maximum daily load
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
WCA	Water Conservation Area
WRAC	Water Resources Advisory Commission
WRDA	Water Resources Development Act

Executive Summary



Coordinating Success
2004 Strategy for Restoration of the South Florida Ecosystem

Tracking Success
2002 - 2004 Biennial Report of the South Florida Ecosystem Task Force

EXECUTIVE SUMMARY

Significant progress has been made in developing plans and initiating action to restore the quality of the South Florida Ecosystem, one of America's unique natural areas.[1] The revised strategy and biennial report, both included in Volume 1, summarize recent progress, ongoing challenges, and plans that guide the coordinated efforts of local, state, tribal, and federal governments as they implement their respective work. The strategy and biennial report were prepared in accordance with Congressional guidance by the South Florida Ecosystem Restoration Task Force (hereinafter referred to as the Task Force), an intergovernmental group created by the Congress in 1996 to coordinate the restoration effort.

The purpose of the revised strategy ("Coordinating Success") is to update the strategy submitted to Congress in 2002. This strategy responds to Congressional direction to outline how the restoration effort will occur, identify the resources needed, establish responsibility for accomplishing actions, and link strategic goals to outcome-oriented goals. The strategy describes how the restoration effort is being coordinated among many government entities to achieve broad improvements throughout the ecosystem. The strategy retains the three strategic goals first published in July 2000: (1) get the water right; (2) restore, preserve, and protect natural habitats and species; and (3) foster compatibility of the built and natural systems. (These goals and the measurable objectives are summarized in a table included in this summary)

The overall premise of restoration is that the ecosystem must be managed from a systemwide perspective. Rather than dealing with issues independently, the challenge is to seek out the interrelationships that exist between all the components of the ecosystem. The same issues that are critical to the natural environment — getting the water right and restoring, preserving, and protecting diverse habitats and species — are equally critical to maintaining a quality built environment and lifestyle for South Florida's residents and visitors.

The success of this comprehensive approach will depend upon the coordination and integration of hundreds of individual restoration projects carried out by various agencies at all levels of government, and with input from many stakeholders. Each agency brings its own authority, jurisdiction, capabilities, and expertise to this initiative and applies them through its individual programs, projects, and activities.

The Task Force strategy is to focus the efforts of its members on a shared vision and set of strategic goals and objectives for achieving that vision, to coordinate individual member projects, to track and assess progress through indicators of success, and to facilitate the resolution of issues and conflicts as they arise.

It is important to note the significant contributions from other programs toward achievement of the Task Force's three strategic goals. While the Comprehensive Everglades Restoration Plan (CERP) is vital to accomplishing all the strategic goals, many other restoration projects are important to achieving restoration. Some of the non-CERP projects that are also critical to achieving goal 1 (get the water right) include the Kissimmee River Restoration, Modified Water Deliveries to Everglades National Park, Canal-111, and Everglades Construction Projects. For goal 2 (restore, preserve and protect natural habitats and species), the state's Florida Forever program and Save Our Rivers (SOR) Program are the lynchpins of the effort to acquire important habitat lands. For goal 3 (foster compatibility of the built and natural systems), state and local governments are now developing ways to coordinate land use and water supply planning to ensure availability of adequate water supplies to meet the legislative direction to support existing development but not degrade the environment. The State of Florida's ongoing Florida Forever and SOR increase the spatial extent of open space and multiply its benefits by linking park, conservation, recreation, water resource, and other open space lands. These efforts help protect natural systems by providing additional habitat and serving as buffers between the natural and built environments.

[1]See Appendix C Additional View of the Miccosukee Tribe" Putting Everglades back into Everglades Restoration." Sections I and V.

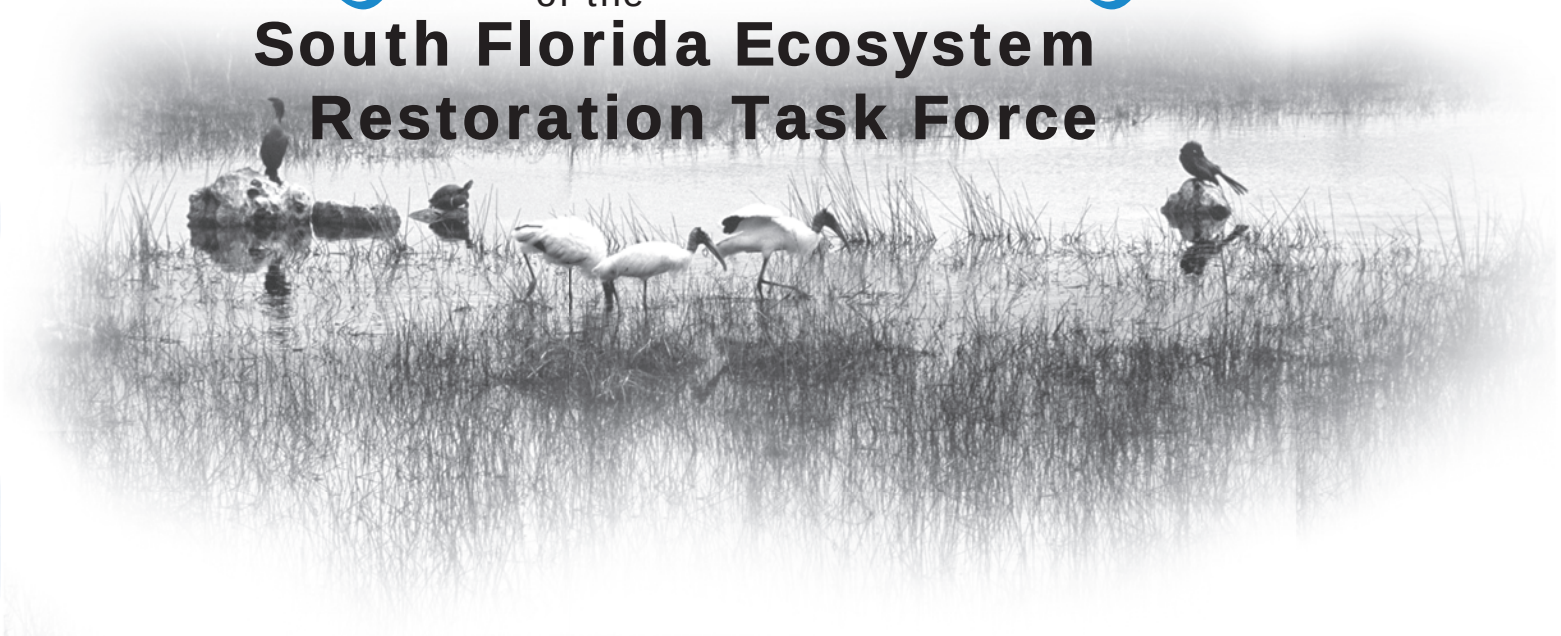
The Biennial Report ("Tracking Success") documents the activities of the Task Force and its members and progress made between August 2002 and July 2004 in achieving the strategic goals and objectives included in the Task Force Strategy. It also addresses the efforts underway by the Task Force to adopt and track a set of indicators of success. The indicators of success are currently being revised by an intergovernmental team and will be subject to a public process and peer reviewed for inclusion in future reports. These indicators will reflect the expected performance, in terms of ecosystem health and other water-related benefits, from all the projects when viewed collectively.

Restoring the Everglades is a national and state priority. The South Florida Ecosystem not only supports the economy and the high quality of life of Floridians and Native American Indians who live there, but also enriches the national legacy of all Americans. By working cooperatively and communicating with all stakeholders in this unique conservation effort, the Task Force members can ensure that all interests are protected as each member works to fulfill its individual responsibilities to local residents and the nation at large.

Strategic Goals and Objectives

of the

South Florida Ecosystem Restoration Task Force



Goal 1: Get the Water Right

Subgoal 1-A: Get the hydrology right.

Objective 1-A.1: Provide 1.3 million acre-feet of surface water storage by 2036.

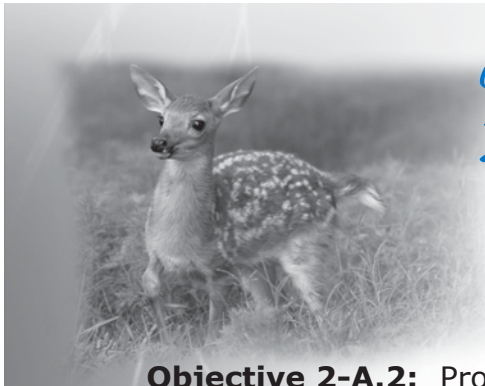
Objective 1-A.2: Develop Aquifer Storage and Recovery (ASR) systems capable of storing 1.6 billion gallons per day by 2028.

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 69,000 acres of stormwater treatment areas by 2035.

Objective 1-B.2: Prepare plans, with strategies and schedules for implementation, to comply with 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 5.8 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 2011.

Objective 1-B.2: Achieve maintenance control of Brazilian pepper, melaleuca, Australian pine, and Old World Climbing Fern on South Florida's public conservation lands by 2020.

Objective 2-B-3: Complete an invasive exotic plant species prevention, early detection, and eradication plan by 2005.

Goal 3: Foster the Compatibility of the Built and Natural Systems

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

Objective 3-A.1: Designate or acquire 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 Programs by 230,000 acres by 2014.

Objective 3-A.3: Acquire an additional 2,500 acres of park, recreation, and open spaces by 2006.

Objective 3-A.4: Compile five brownfield rehabilitation and redeelopment projects by 2006.

Objective 3-A.5: Increase community understanding of ecosystem restoration.

Subgoal 3-B: Maintain or improve existing flood protection in a manner compatible with ecosystem restoration.

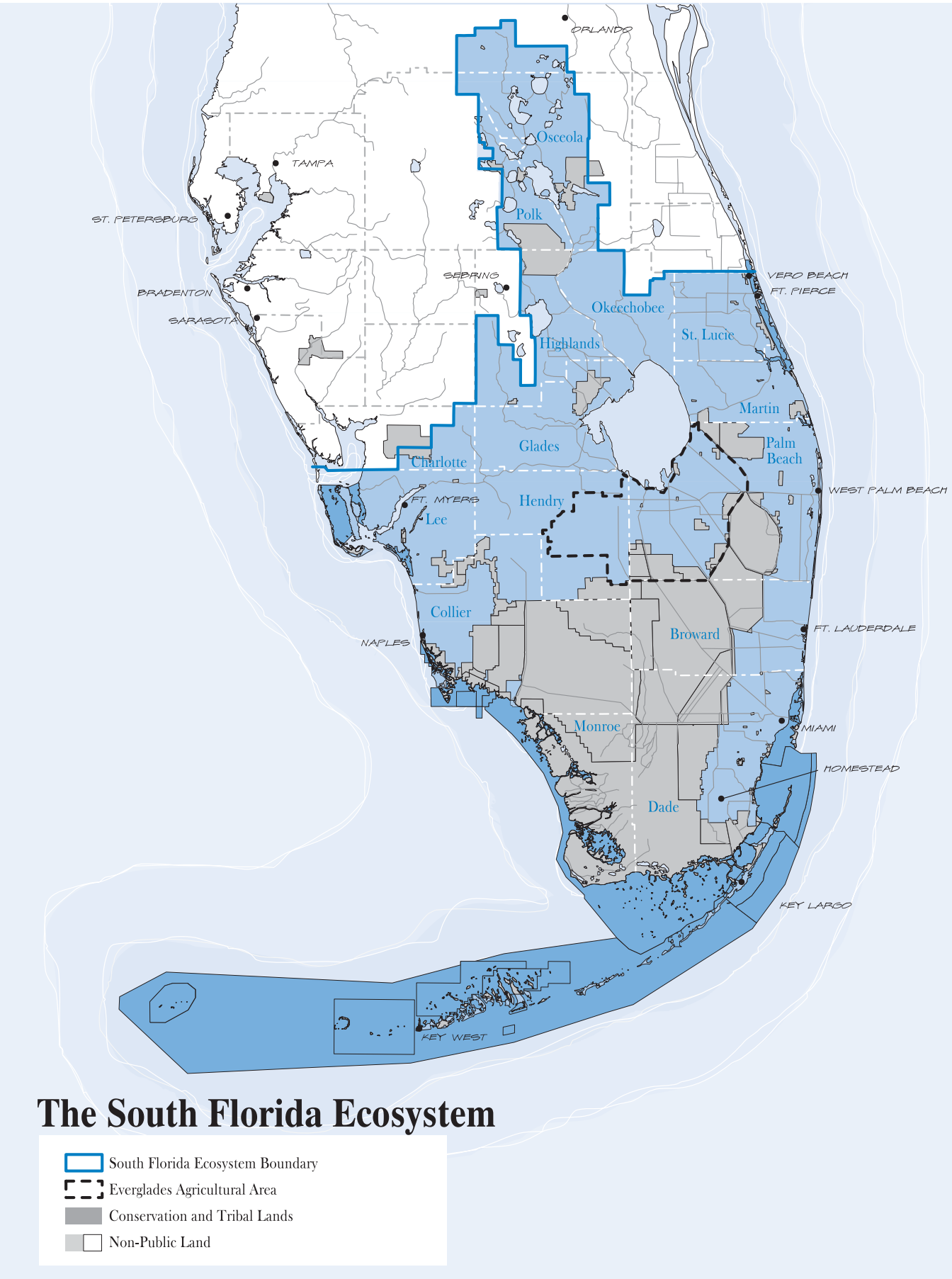
Objective 3-B.1: Maintain or improve existing levels of flood protection.

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

Objective 3-C.1: Increase the water available by target of 478.5 million gallons per day by 2008.

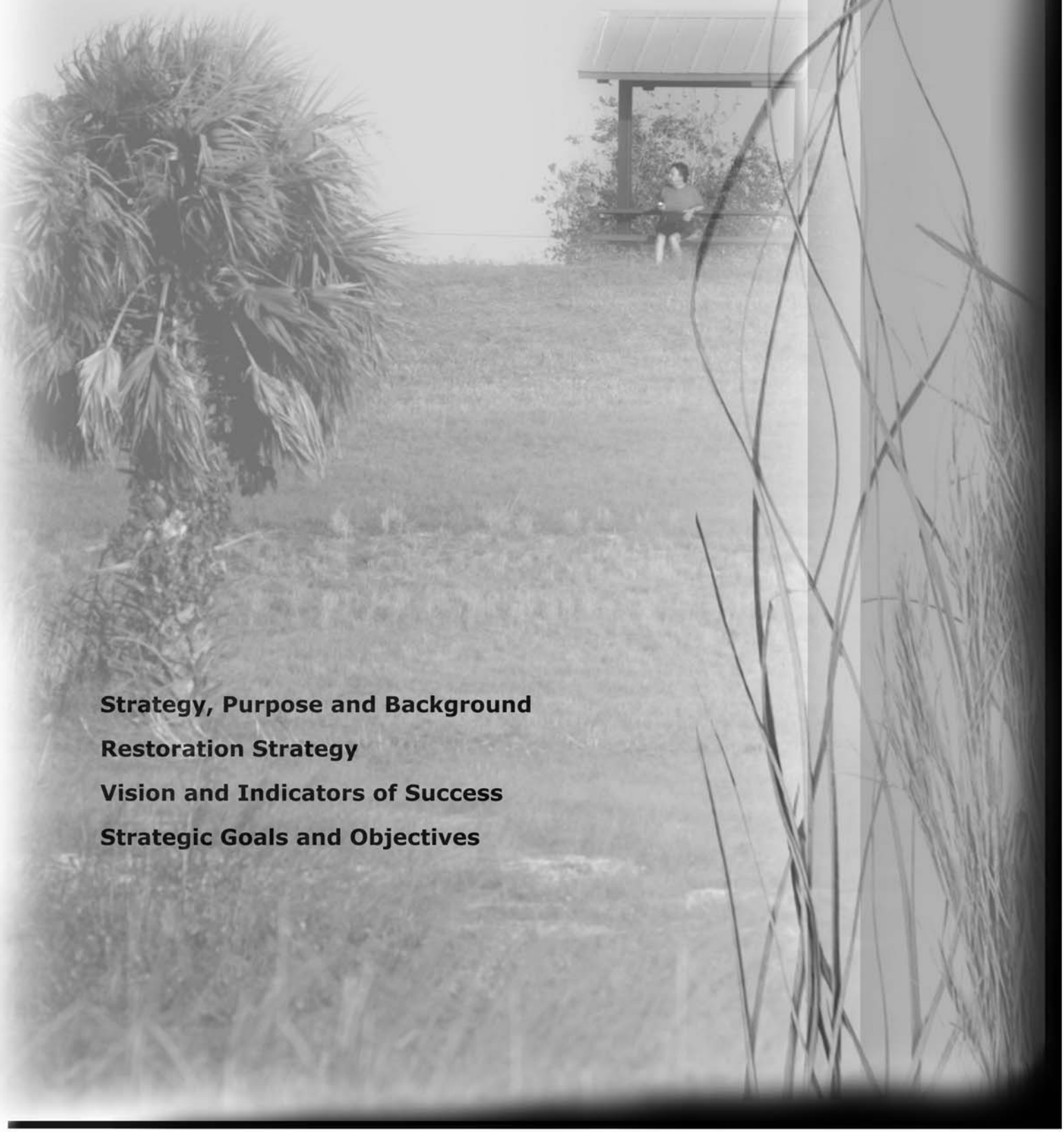
Objective 3-C.2: Increase volume of reuse on a regional basis.

Objective 3-C.3: Increase water made available through the SFWMD Alternative Water Supply Development Program.


ORLANDO
Osceola
TAMPA
ST. PETERSBURG
Polk
SEBRING
BRADENTON
SARASOTA
VERO BEACH
FT. PIERCE
Okeechobee
St. Lucie
Highlands
Martin
Glades
Palm Beach
Charlotte
WEST PALM BEACH
FT. MYERS
Hendry
Lee
Collier
Broward
FT. LAUDERDALE
NAPLES
Monroe
MIAMI
HOMESTEAD
Dade
KEY LARGO
KEY WEST
The South Florida Ecosystem
South Florida Ecosystem Boundary
Everglades Agricultural Area
Conservation and Tribal Lands
Non-Public Land

Coordinating Success

2004 Strategy for Restoration of the South Florida Ecosystem



Strategy, Purpose and Background

Restoration Strategy

Vision and Indicators of Success

Strategic Goals and Objectives

STRATEGY PURPOSE AND BACKGROUND

Purpose

The purpose of this strategy is to describe how the Task Force will coordinate the intergovernmental effort to restore and sustain the imperiled South Florida Ecosystem. The American people have a strong national as well as a state and local interest in preserving this 18,000-square-mile region of subtropical uplands, wetlands, and coral reefs that extends from the Kissimmee Chain of Lakes south of Orlando through Florida Bay and the reefs southwest of the Florida Keys. The South Florida Ecosystem not only supports the economy and the distinctive quality of life of the Floridians and the Native American Indians who live there, but also greatly enriches the shared legacy of all Americans. It encompasses many significant conservation areas, including Everglades, Biscayne, and Dry Tortugas National Parks, Big Cypress National Preserve, the Fakahatchee Strand, the Arthur R. Marshall Loxahatchee National Wildlife Refuge, John Pennekamp State Park, and the Florida Keys National Marine Sanctuary.

Many federal, state, tribal, and local entities are working to address the ecological conditions in South Florida. The Task Force reports on and facilitates the coordination of the work. In 1999 Congress directed the Task Force to produce a restoration strategy that meets four requirements as recommended by the United States General Accountability Office (GAO):

1. Outline how the restoration effort will occur
2. Identify the resources needed
3. Establish responsibility for accomplishing actions
4. Link the strategic goals established by the participants to outcome-oriented goals

This strategy describes how the restoration effort is being coordinated. The Task Force members have agreed upon guiding principles for restoration and a vision for the results to be achieved; they have established three broad strategic goals and measurable objectives for the work needed to achieve the 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 strategic goals and the results-oriented vision. The vision, strategic goals, objectives, indicators of success, and individual project data (including cost, responsible agency, and targeted completion dates) are all specified in this strategy.[2] The project details are summarized in the Integrated Financial Plan Summary Table provided as Appendix A. Additional information for each project is available in the more complete Integrated Financial Plan that is provided in Volume 2.

The Task Force strategy is designed for planning purposes only, is subject to modification as needed, and is not legally binding on any of the Task Force members. Each Task Force member entity retains all of its sovereign rights, authorities, and jurisdiction for implementation of the projects identified as part of the Task Force strategy.

Who Is Involved: The 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 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 participation by

[2] See Appendix C Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration." Sections II A.3 and 4.

the State of Florida, the Seminole Tribe of Florida, and the Miccosukee Tribe of Indians of Florida. In recognition of the magnitude of the restoration effort and the critical importance of partnerships with state, tribal, and local governments, the Task Force was expanded to include tribal, state, and local governments by the Water Resources Development Act of 1996 (WRDA 1996).

WRDA 1996 outlines the Task Force duties:

- Consult with, and provide recommendations to, the Secretary of the Army during development of the Comprehensive Everglades Restoration Plan (CERP)
- Coordinate development of consistent policies, strategies, plans, programs, projects, activities, and priorities for addressing the restoration, preservation, and protection of the South Florida Ecosystem
- Exchange information regarding programs, projects, and activities of the agencies and entities represented on the Task Force to promote ecosystem restoration and maintenance
- Establish a Florida-based Working Group that includes representatives of the agencies and entities represented on the Task Force as well as other governmental entities as appropriate for the purpose of formulating, recommending, coordinating, and implementing the policies, strategies, plans, programs, projects, activities, and priorities of the Task Force
- May establish advisory bodies as determined necessary to assist the Task Force in its duties, including public policy and scientific issues
- When desired, designated an existing advisory body or entity that represents a broad variety of private and public interests for additional input into their work
- Facilitate the resolution of interagency and intergovernmental conflicts associated with the restoration of the South Florida Ecosystem among agencies and entities represented on the Task Force
- Coordinate scientific and other research associated with the restoration
- Provide assistance and support to agencies and entities represented
- Prepare an integrated financial plan and recommendations for coordinated budget requests to be expended by agencies and entities on the Task Force
- Submit a biennial report to Congress that summarizes the restoration activities and progress made toward restoration

In December 2003 the Task Force revised the Working Group charter to streamline and clarify its duties. To assist the Task Force in fulfilling its obligations the Working Group was tasked to develop, for Task Force approval, a draft biennial report that summarizes the activities of the Task Force and progress made toward restoration; a draft integrated financial plan and recommendations for a coordinated budget request; a draft biennial update to the strategic plan; a draft biennial update to the total cost report; and responses to specific priority activities assigned by the Task Force.

The Task Force established a Science Coordination Group in December 2003 to assist it in coordinating scientific and other research. This group was charged to develop, for Task Force approval, a draft science coordination plan that tracks and coordinates programmatic-level science and other research, identifies programmatic level priority science needs and gaps, and facilitates management decisions; and specific responses to priority work activities assigned by the Task Force.

The Task Force does not have any oversight or project authority, and participating agencies are responsible for meeting their own projected accomplishments. The Task Force serves as a forum in which ideas are shared and consensus is sought. This enhances the productivity of each member government or agency effort. (The Task Force charter is attached as Appendix F.)

Brief History of South Florida Ecosystem Management

Early land developers viewed the Everglades and related habitats as worthless swamps. By the late 1800s efforts were underway to "reclaim" these swamplands for productive use. These initial efforts were encouraging, and more wetlands were drained for agriculture and for residential and commercial development. Little by little, canals, roads, and buildings began to displace native habitats.

In 1934 national concern about the degradation of the South Florida Everglades led to the creation of Everglades National Park. The portion of the Everglades included in the park was to be permanently reserved as a wilderness with no development that would interfere with preserving the unique flora and fauna and the essential primitive character existing at the date of enactment. This mandate to preserve wilderness is one of the strongest in the national park system. The park was authorized by Congress in 1934 and opened to the public in 1947.

The Miccosukee and the Seminole Indians, whose culture and way of life depend on a healthy Everglades Ecosystem, had been living and thriving in this diminishing natural environment for generations. The legislation establishing Everglades National Park specifically clarified the rights of the Miccosukee Tribe to live in the park and set aside land along the border for the tribe to govern its own affairs in perpetuity.

The region has historically been plagued with both hurricanes and droughts. A 1928 hurricane caused Lake Okeechobee to overflow, drowning approximately 2,400 people. Droughts from 1931 to 1945 lowered groundwater levels, creating serious threats of saltwater intrusion into wells and causing damaging muck fires. In 1947 successive storms left 90 percent of South Florida—more than 16,000 square miles from south of Orlando to the Keys—under water for the better part of the year.

In 1948 the ongoing efforts to drain the Everglades, protect the region from hurricanes, and make the region habitable culminated in the Congressional authorization of the original Central and Southern Florida Flood Control Project that later evolved into the current 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 C&SF Project significantly altered the region's hydrology. The primary project goal was to provide water and flood control for urban and agricultural lands. Another goal was to ensure a water supply for Everglades National Park and fish and wildlife resources in the Everglades. The first goal was achieved. The project succeeded in draining half of the original Everglades and allowing for expansion of the cities on the lower east coast of Florida and the farming area south of Lake Okeechobee known as the Everglades Agricultural Area (EAA). The second goal has not yet been accomplished. The correct quantity, quality, timing, and distribution of water to the South Florida Ecosystem have been the subject of much study. Many projects have been undertaken to restore natural water flows to this region.

The original C&SF Project water supply component for Everglades National Park was based on the understanding of the park hydrologic and ecologic needs at the time the plan was developed. Subsequent research has indicated the importance of hydroperiods to the health of natural systems as opposed to a conventional water supply delivery. Historically most rainwater flowed slowly across the extremely flat landscape, soaking into the region's wetlands and forming what became known as the "River of Grass." This natural functioning system began to be altered a century ago. The most significant alteration was the C&SF canal system, comprised of over 1,800 miles of canals and levees and 200 water control structures, which drained approximately 1.7 billion gallons of water per day into the Atlantic Ocean and the Gulf of Mexico. As a result, not enough water was available for the natural functioning of the Everglades or for the communities in the region. Water quality also was degraded. Phosphorus runoff from agriculture and other sources polluted much of the northern Everglades and Lake Okeechobee and caused destructive changes to the food chain.

During the 1970s and 1980s public policy, in line with predominant public opinion, moved in the direction of environmental protection and restoration in South Florida. In 1972, for example, the Florida Legislature passed the Florida Water Resources Act to balance human and natural system water

resource needs. In the same year the Florida Land Conservation Act was enacted to protect lands for environmental protection and recreation. In 1983, under the leadership of Governor Bob Graham, the Save Our Everglades program was initiated to protect and restore the Kissimmee River Basin, Lake Okeechobee, the state-managed water conservation areas (WCAs), Big Cypress Swamp, Everglades National Park, Florida Bay, and endangered wildlife. In 1987 the Florida Legislature passed the Surface Water Improvement and Management Act (SWIM), which directed the five water management districts to clean up the priority water bodies in the state. In 1988 Congress, with strong support from the State of Florida, passed the Big Cypress National Preserve Addition and Florida/Arizona Land Exchange Acts, which added 146,000 acres to the Big Cypress National Preserve. This act also affirmed the rights of the Seminole Tribe and Miccosukee Tribe of Indians to customary use and occupancy in the Preserve. In l989 Congress passed the Everglades Expansion and Protection Act, which added 107,600 acres to Everglades National Park and called for increased and improved water flows to the park.

Despite progress towards restoration in the 1980s and early 1990s, dramatic growth in the population and development of South Florida kept pressure on the environment. Research at this time detected declines in many native plant and animal species and heightened phosphorus pollution of the Everglades. Particularly alarming was evidence of the decline of Florida Bay, indicated by dramatic losses in seagrass habitat, algae blooms, reductions in shrimp and many fish species, and a decline in water clarity.

In 1988 the federal government sued the State of Florida, alleging that the state had failed to direct the SFWMD to require water quality permits for the discharge of water into the C&SF Project canals, thereby causing a violation of state water quality standards and causing conditions that allowed for the replacement of native species in the Everglades marsh with invasive vegetation. After three years and much additional litigation, no settlement had been reached. In 1991 Governor Lawton Chiles agreed to reach a settlement. For several years, mediation efforts helped reduce the scope of conflict between the state and federal governments and between agricultural and environmental interests. In February 1992 a court settlement was achieved to reduce the level of phosphorus entering Everglades National Park and the Arthur R. Marshall Loxahatchee National Wildlife Refuge by creating artificial wetlands designed to process and remove nutrients from agricultural runoff. In 1993 the sugar industry agreed to adopt best management practices and to pay for approximately one-third of the costs of the artificial wetlands to help reduce the phosphorous pollution in the Everglades. The settlement also called for additional measures to be implemented over the long term to meet a numeric phosphorus criterion for class III waters.

The mid-1990s saw the establishment of two important consensus building forums for Everglades issues. In 1993 the South Florida Ecosystem Restoration Task Force was established through a federal interagency agreement. In recognition of the magnitude of the restoration effort and the critical importance of partnerships with state, tribal, and local governments, the Task Force was formalized and expanded to include tribal, state, and local governments in WRDA 1996. In 1994 the Governor of Florida established the Governor's Commission for a Sustainable South Florida "to develop recommendations and public support for regaining a healthy Everglades Ecosystem with sustainable economies and quality communities." The Task Force and the Governor's Commission have been instrumental in formulating consensus for Everglades restoration.

In 1996 two significant pieces of legislation were approved by the U.S. Congress. The Federal Agriculture Improvement and Reform Act (the Farm Bill) provided $200 million to conduct restoration activities in the Everglades Ecosystem, including land acquisition, resource protection, and resource maintenance. The second piece of legislation, WRDA 1996, clarified Congressional guidance to the USACE to develop a comprehensive review study for restoring the hydrology of South Florida. This study, commonly referred to as "the Restudy," has since resulted in the CERP, a consensus plan that was approved by Congress and signed by the president as part of WRDA 2000. The CERP is designed to reverse unintended consequences resulting from the operation of the C&SF Project. The physical limitations of the existing water management system still have the potential to exacerbate resource conflicts. Implementation of the CERP should increase the system's flexibility, helping water

managers avoid such conflicts. In 2000 Governor Jeb Bush proposed, and the legislature passed, the Everglades Restoration and Investment Act, which committed the state to provide $2 billion over ten years to implement the first ten years of the CERP.

The Seminole and Miccosukee Tribes, which have maintained their lifestyle in this natural system, became active participants in the dialogue on restoration and were formally added to the Task Force under WRDA 1996. Because the 1929 Enabling Act establishing Everglades National Park recognized the Miccosukee Tribe of Indian's right to live there, Congress passed the Miccosukee Reserved Area Act, which clarified the rights of the Miccosukee Tribe to live in the park and set aside 666.6 acres along the border for the tribe to govern in perpetuity. A primary purpose of this act was to clarify the right of the Miccosukee Tribe to live and govern its own affairs on the acreage set aside for the tribe by this federal action. The presence of two Indian tribes living in the Everglades, whose culture and way of life depend on the health of this ecosystem, is an important reason to restore the ecosystem.[3]

The growing body of federal and state legislation and regulatory approvals directed at managing growth and protecting the natural environment is summarized in Strategic Plan Table 1.

[3]See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration."

Strategic Plan Table 1. Significant Events in South Florida Ecosystem Management

1934	Everglades National Park is authorized.
1972	Florida Water Resources Act establishes fundamental water policy for Florida, attempting to meet human needs and sustain natural systems; puts in place a comprehensive strategic program to preserve and restore the Everglades ecosystem.
1972	Florida Land Conservation Act authorizes the issuance of bonds to purchase environmentally endangered and recreation lands.
1974	Big Cypress National Preserve is created; legislation incorporates concerns of the Seminole Tribe and the Miccosukee Tribe for access to this preserve.
1982	Florida Indian Land Claims Settlement Act gives the Miccosukee Tribe a perpetual lease from the State of Florida for the use and occupancy of 189,000 acres in WCA-3A, which is to be kept in its natural state, and a 75,000-acre Federal Indian Reservation in the Everglades.
1983	Florida Governor's Save Our Everglades Program outlines a six-point plan for restoring and protecting the South Florida Ecosystem so that it functions more like it did in the early 1900s.
1984	Florida Warren Henderson Act authorizes the Department of Environmental Regulation (now the FDEP) to protect the state's wetlands and surface waters for public interest.
1985	Florida Local Government Comprehensive Planning and Land Development Regulation Act requires the development and coordination of local land use plans.
1987	Compact among the Seminole Tribe, the State of Florida, and the federal government is completed, clearly describing the Tribe's water supply and flood control rights; the goal of the compact is to harmonize state and federal water law.
1987	The Seminole Tribe transfers ownership to lands critical to the State of Florida's Everglades Construction Project in WCA-3.
1987	Florida Surface Water Improvement and Management Act requires the five Florida water management districts to develop plans to clean up and preserve Florida lakes, bays, estuaries, and rivers.
1988	Federal government sues the State of Florida, alleging that the state had failed to direct the SFWMD to require water quality permits for the discharge of water into the C&SF project canals.
1988	Land Settlement Act transfers acreage in WCA-3 and the Rotenberger tract to the State of Florida for Everglades restoration.
1988	Big Cypress National Preserve Addition Act expands the preserve and affirms the Seminole and Miccosukee Indian Tribes' customary use and occupancy rights in the preserve.
1989	Everglades National Park Expansion Act adds the East Everglades addition.
1990	Florida Preservation 2000 Act establishes a coordinated land acquisition program at $300 million per year for ten years to protect the integrity of ecological systems and to provide multiple benefits, including the preservation of fish and wildlife habitat, recreation space, and water recharge areas.
1990	Florida Keys National Marine Sanctuary and Protection Act establishes a 2,800-square-nautical-mile marine sanctuary and authorizes a water quality protection program.
1991	Florida Everglades Protection Act provides the SFWMD with clear tools for ecosystem restoration.
1992	Federal government issues a consent decree on Everglades water quality.

1992 WRDA 1992 authorizes the Kissimmee River Restoration Project and the C&SF Project Restudy; also provides for a fifty/fifty cost share between the federal government and the project sponsor, the SFWMD.

1993 Task Force is established to coordinate ecosystem restoration efforts in South Florida.

1993 Seminole Tribe is approved by the EPA to establish water quality standards for reservation lands in accordance with section 518 of the Clean Water Act.

1994 Florida Everglades Forever Act establishes and requires implementation of a comprehensive plan to restore significant portions of the South Florida Ecosystem through construction, research, and regulation.

1994 Governor's Commission for a Sustainable South Florida is established to make recommendations for achieving a healthy South Florida Ecosystem that can coexist with and mutually support a sustainable economy and quality communities.

1994 Miccosukee Tribe is approved by EPA to establish water quality standards for reservation lands in accordance with section 518 of the Clean Water Act.

1996 WRDA 1996 authorizes a comprehensive review study for restoring the hydrology of South Florida; expands the Task Force to include tribal, state, and local governments; mandates extensive public involvement.

1996 Section 390 of the Farm Bill grants $200 million to conduct restoration activities in the South Florida Ecosystem.

1997 Seminole Tribe of Florida's water quality standards for the Big Cypress Reservation are approved by EPA.

1997 Miccosukee Tribe water quality standards for the Tribe's Federal Indian Reservation establish a 10 ppb criterion for total phosphorus in tribal waters.

1997 - 2000 Annual Interior Appropriations Acts provide for land acquisition by the NPS and the FWS in the South Florida Ecosystem.

1998 Miccosukee Reserved Area Act clarifies the rights of the Miccosukee Tribe to live in Everglades National Park and sets aside 666.6 acres along the border for the tribe to govern in perpetuity.

1998 Seminole Tribe of Florida's water quality standards for the Brighton Reservation are approved by EPA.

1998 Miccosukee Reserved Area Act directs the Miccosukee Tribe to establish water quality standards for the Miccosukee Reserved Area (inflow points to Everglades National Park).

1999 WRDA 1999 extends Critical Restoration Project authority until 2003; authorizes two pilot infrastructure projects proposed in the CERP.

1999 Governor's Commission for the Everglades is established to make recommendations on issues relating to Everglades protection and restoration, environmental justice, and water resource protection, among other issues.

1999 Miccosukee Tribe water quality standards are established for the Miccosukee Reserved Area and the border near Everglades National Park and they are approved by EPA.

1999 Florida Forever Act improves and continues the coordinated land acquisition program initiated by the Florida Preservation 2000 Act of 1990; commits $300 million per year for ten years.

1999 Florida State Legislature passes Chapter 99-143, Laws of Florida, authorizing the SFWMD to be the local sponsor for Everglades restoration projects.

2000 Florida Everglades Restoration Investment Act creates a funding and accountability plan to help implement the CERP; commits an estimated $2 billion in state funding to Everglades restoration over ten years.

2000 Florida Legislature passes the Lake Okeechobee Protection Act, a phased, comprehensive program designed to restore and protect the lake.

2000 WRDA 2000 includes $1.4 billion in authorizations for ten initial Everglades infrastructure projects, four pilot projects, and an adaptive management and monitoring program; also grants programmatic authority for projects with immediate and substantial restoration benefits at a total cost of $206 million; establishes a 50 percent federal cost share for implementation of CERP and for operation and maintenance.

2001 Numeric water quality criterion of 10 ppb geometric mean proposed by Florida DEP in the Everglades Protection Area.

2001 WRAC is established by the SFWMD Governing Board as a representative stakeholder group to advise them on all aspects of water resource protection in South Florida.

2002 Task Force designates the WRAC as an advisory body to the Task Force on ecosystem restoration activities.

2003 Senate Bill 626 Amends the Everglades Forever Act.

2003 Science Coordination Group is established with direct reporting responsibilities to the Task Force.

2003 CSOP Advisory Team is established with direct reporting responsibilities to the Task Force.

2003 Final USACE Programmatic Regulations are issued.

2003 SFWMD adopts the Long-Term Plan for achieving Everglades water quality goals.

2003 State of Florida initiates early start on Southern Golden Gate Estates Project

2004 IRL-South CERP project is approved by State of Florida under Section 373.1501.F.S.

What Is at Stake

Current efforts to restore the South Florida Ecosystem must address a century of changes to the environment that have put the ecosystem in jeopardy. Evidence of the seriousness of the problem includes:

- Fifty percent reduction in the original extent of the Everglades, including important habitat and groundwater recharge areas
- Ninety percent reductions in some wading bird populations
- Sixty-nine species on the federal endangered or threatened list
- Declines in commercial fisheries in Biscayne and Florida Bays
- Loss of over five feet of organic soil in the Everglades Agricultural Area
- Decline in the clarity of water in the Florida Keys
- Infestations of exotic plant species on over 1.5 million acres
- Damaging freshwater releases into the St. Lucie and Caloosahatchee Estuaries
- Loss of 40,000 acres of grass beds in Lake Okeechobee
- Loss of tree islands and damaging ecological effects in the state-managed WCAs
- Loss of 37 percent of living corals at forty sites in the Florida Keys National Marine Sanctuary from 1996 to 2000

Today South Florida is home to over 6.5 million people and the population is expected to double by 2050. The region also receives more than 37 million tourists annually. The quality of life in South Florida and the region's $200 billion economy depend on the health and vitality of the natural system. If the coral reefs, estuaries, and shallow waters of Florida Bay cannot support populations of aquatic species, South Florida's tourism industry and associated economy will decline. The loss of fertile soil and conversion of land to nonagricultural uses will make farming and ranching harder to maintain and less profitable.

The stakes are high. The South Florida Ecosystem once supported some of the greatest biodiversity on earth. The biological abundance and the aesthetic values of the natural system warrant regional, national, and even international interest and concern. In addition to numerous local parks and private conservation areas, South Florida encompasses Federal Indian Reservations, thirty state parks and numerous state forests and wildlife management areas, including seventeen state aquatic preserves; thirteen federal wildlife refuges and a national marine sanctuary; and three national parks, a national preserve, and a national estuarine research reserve. Everglades National Park has been designated a world heritage site, a wetland of international significance, and an international biosphere reserve. Biosphere reserves are protected examples of the world's major ecosystem types, which are intended to serve as standards for measuring human impacts on the environment worldwide.

RESTORATION STRATEGY

The Task Force strategy includes a set of guiding principles, which have been adopted by the Task Force member agencies to guide all aspects of ecosystem restoration, and a clear definition of the roles of the Task Force as a coordinating, facilitating, and reporting body. Each of these is described separately in this chapter.

Guiding Principles

The Ecosystem Must Be Managed as a Whole

This is the overall premise that guides ecosystem planning and management. It demands that managers, scientists, and the public view the natural and the built environments and the resources needed to support them as parts of a single larger system. The challenges faced in South Florida must be solved collaboratively. Rather than dealing with issues independently, the challenge is to seek out the interrelationships and mutual dependencies that exist among all the components of the ecosystem.

The Task Force advocates a systemwide approach that addresses issues holistically, recognizing that the various levels of government have distinct jurisdictions and responsibilities that can be coordinated but not shared. For example, the state retains exclusive responsibility for all land management and water use except for lands and waters specifically reserved by the federal government or the Miccosukee or Seminole Tribes.

Holistic management by a variety of jurisdictions will require broad-based partnerships, coordinated management, and considerable 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 communication and examining 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, including the coordination of land and water use and the development of 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, including historically underserved communities and neighborhoods. Therefore, public outreach and communication will be an important part of the ecosystem restoration efforts.[4] Outreach strategies will seek two-way communication with all public sectors to broaden understanding and to instill a sense of stewardship among all South Floridians and visitors.

The Natural and Built Environments Are Inextricably Linked in the Ecosystem

Understanding the complexities of the South Florida Ecosystem is daunting. Until recently the term ecosystem meant the natural environment. However, the ecosystem also includes people and their built environment, which is inextricably linked to the natural environment. Events in the built environment can have catastrophic consequences in the natural environment, such as the destruction of wetlands when they are drained for development. Similarly, 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.

[4] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration." Section IV.

The Task Force recognizes that the restoration of the South Florida Ecosystem is not possible if subsequent decisions about the built environment are not consistent with ecosystem health. At the same time, the solutions to restore ecosystem health must be supportive of human needs. These links make it critical that decision makers for both the natural and the built environments be involved in the restoration effort.

Expectations Should Be Reasonable

Major ecological improvements will take many years to realize in South Florida. The large-scale hydrological improvements that will be necessary to stimulate major ecological improvements will depend upon and follow the implementation of CERP features designed to substantially increase the water storage capabilities of the regional system and to provide the infrastructure needed to move the water. Other features of the CERP must be in place before the additional storage and distribution components can be constructed and operated. Substantial alteration and degradation of the South Florida Ecosystem has occurred over many decades, and it will take decades to reverse this process.

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 has adopted an adaptive management process, authorized by Congress in WRDA 2000, which will continuously provide managers with updated scientific information, which will then be used to guide critical decisions. In this process, scientific models provide a conceptual framework and identify critical support studies. Support studies provide data and analysis that lead to better understanding of problems and the development of alternative solutions. Once an alternative is implemented, monitoring is used to assess the effectiveness of the action and provide feedback on ways to modify it (if warranted). Similarly, monitoring data can be used to revise and refine the original concepts and models, thereby continuing an interactive feedback loop of decision making, implementation, and assessment.

Environmental Justice and Economic Equity Need to Be Integrated into Restoration Efforts

The federal members of the Task Force are directed by federal law and executive orders to promote economic equity and environmental justice through fair treatment of all persons, regardless of color, creed, or belief. Fair treatment associated with economic equity includes efforts required to expand opportunities to small business concerns, including those controlled by socially and economically disadvantaged individuals and persons with limited proficiency in English. Fair treatment associated with environmental justice means that no group of people, including no racial, ethnic, or socioeconomic group, should bear a disproportionate share of any negative environmental consequences resulting from industrial, municipal, or commercial operations or the execution of federal, state, or local programs or policies. In WRDA 2000 Congress specifically recognized the importance of ensuring that small business concerns owned and controlled by socially and economically disadvantaged individuals are provided opportunities to participate in the restoration process. It also recognized the importance of ensuring, to the maximum extent practicable, that public outreach and educational opportunities are provided to all the individuals of South Florida.

The unique cultural and ethnic diversity of South Florida's population, with its strong representation of peoples from all over the world, will require significant efforts on behalf of the restoration partners to ensure that projects are implemented in ways that do not result in disproportionate impacts on any communities. Additional targeted efforts will be needed to provide opportunities to socially and economically disadvantaged individuals and small business to participate in the implementation of restoration programs and projects.

The Task Force and Working Group see this guiding principle as critical to long-term success. The Task Force Working Group established a task team for outreach and environmental and economic equity. The team solicited input about the various restoration outreach efforts of member agencies and developed an inventory of these efforts.

Restoration Must Meet Applicable Federal Indian Trust Responsibilities

The restoration of the South Florida Ecosystem involves a unique partnership between the Indian tribes of South Florida and the federal, state, and local governments. In carrying out the Task Force's responsibilities laid out in WRDA 2000, the Secretary of the Interior must fulfill the obligations to the Indian tribes in Florida specified under the Indian Trust Doctrine, and other applicable legal obligations. All federal agencies have a trust responsibility and are responsible for meaningful consultation with the tribes under Executive Order 13175 and Secretarial Order 3206.[5]

Task Force Roles in the Coordination of the Restoration Effort

The roles of the Task Force are not to manage the South Florida restoration, but to facilitate the coordination of the restoration, provide a forum for the participating agencies to share information about their restoration projects and resolve conflicts, 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. The Task Force strategy and biennial report are critical vehicles for sharing information.

Providing a forum for consensus building and issue engagement 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, each member is accountable individually to its appropriate authorities and to each other for the success of the restoration. The Task Force meets regularly to report on progress, facilitate consensus, and identify opportunities for improvement. The Task Force members coordinate and track the restoration effort as follows:

Focus on Goals

The Task Force strategy establishes strategic goals and measures of success that represent 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 strategic goals, be consistent with all the guiding principles, be timely, and support rather than duplicate other efforts. The Task Force strategy includes a master list of restoration projects that compiles information about goals and objectives, start and finish dates, lead agencies, and funding (see Appendix A). The Integrated Financial Plan in Volume 2 provides additional details about all of these projects.

Track and Assess Progress

The Task Force facilitates the coordination of the adaptive management processes used by the member agencies to track and assess progress. Adaptive management, an important restoration concept, involves constantly monitoring project contributions, indicators of success, and current scientific information to determine the actual versus expected results of various actions. This process acknowledges

[5] See Appendix C Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration." Sections III.

that not all the data needed to restore the South Florida Ecosystem is 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 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 producing the anticipated results may be replaced with new projects. Because each Task Force member is responsible for its particular programs, projects, and funding, such decisions are made by the entities involved. The Task Force will modify the strategic goals and objectives as relevant information becomes available.

Recognize and Work with Conflicting Goals

As restoration activities move forward in South Florida, there may be occasional conflicts between the strategic goals described in this strategy and individual agency programs or missions. When such conflicts occur, the strategic goals should prevail whenever possible, and it is the statutory duty of the Task Force to facilitate their resolution in ways that advance the strategic goals of restoring natural hydrology and ecology throughout South Florida. The Task Force recognizes that it may on occasion be appropriate to take short-term or interim management actions that are not immediately consistent with long-range strategic goals, while allowing time for other activities more consistent with strategic goals to take effect.[6] The Task Force is committed to facilitating the resolution of these issues, consistent with its statutory duties, without compromising its long-term focus on restoring natural conditions to South Florida. Where there may be conflicts between existing statutes and strategic goals, the Task Force recognizes that it may be necessary to have Congress address such issues.

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. The ability of the Task Force to resolve conflicts is complicated by the large number of governmental entities involved at the federal, state, tribal, and local levels, the differing, and sometimes conflicting, legal mandates and agency missions among the entities involved, and the diverse stakeholder interests, which include environmental, agricultural, Native American, urban, recreational, 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 possible solutions. Although these efforts are intended to facilitate conflict resolution, opportunities will always exist for parties to pursue conflicts through litigation. Litigation may prove to be time consuming, costly, and uncertain, and it may divert resources from restoration efforts.[7]

Changes made through project coordination, adaptive management, and the conflict resolution process will be incorporated into future editions of this strategy.

[6] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration. "Section II.A.2.
[7] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration. "Section II.B.1.

VISION AND INDICATORS OF SUCCESS

One of the first actions of the Task Force was to describe a vision for a resulting condition of the South Florida Ecosystem that all the member agencies could strongly support. Translating that vision into discernable and measurable terms is an ongoing process supported by intensive discussion, research, and monitoring. Teams of scientists are working to develop and refine the indicators that the Task Force will use to know when they have finally achieved their vision. The Task Force vision is presented below, followed by a discussion of the indicators of success.

Vision

The participants in the South Florida Ecosystem Restoration Task Force share this vision:

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. These efforts, which are described in detail in the "Strategic Goals and Objectives" section, will continue. The results will be continuously analyzed to provide restoration managers with increasingly comprehensive information about what remains to be done to achieve ecosystem restoration.

The Task Force members believe that the efforts described in this strategy, managed through an adaptive management process, will achieve their vision. The region's rich and varied habitats—Biscayne Bay; Lake Okeechobee; the Wild and Scenic Loxahatchee River; the Caloosahatchee, St. Lucie, and other estuaries; the Everglades, mangroves, coastal marshes, and seagrass beds of South Florida; and the coral reef ecosystem of the Florida Reef Tract—will become healthy feeding, nesting, and breeding grounds for diverse and abundant fish and wildlife. The American crocodile,

manatee, snail kite, Cape Sable seaside sparrow, and other endangered species will recover. The large nesting rookeries of herons, egrets, ibis, and storks will return. Commercial fishing, farming, recreation and tourism dependent businesses, and associated economies will benefit from a viable, productive, and aesthetically beautiful resource base. The quality of life enjoyed by residents and visitors will be enhanced by sustainable natural resources and by access to natural areas managed by federal, state, and local governments to provide a great variety of recreational and educational activities.

It is important to understand that the "restored" Everglades of the future will be different from any version of the Everglades that has existed in the past. While it is very likely to be healthier than the current ecosystem, it will not completely match the predrainage system. The irreversible physical changes made to the ecosystem make restoration to pristine conditions impossible. The restored Everglades will be smaller and somewhat differently arranged than the historic ecosystem. However, it will have recovered those hydrological and biological characteristics that defined the original Everglades and made it unique among the world's wetland systems. It will evoke the wildness and richness of the former Everglades.

Indicators of Success

The ultimate measure of Task Force success will be the restoration of the South Florida ecosystem. The appropriate Task Force agencies are tracking progress toward this end by developing and monitoring specific indicators of ecosystem health. In general three distinctly different types of indicators provide different types of information. One type of indicator is designed to track changes in stressors on the

natural system; a second is designed to track changes in ecological conditions, which are predicted to improve as a result of removing specific stressors; and a third is designed to track progress in providing for other water-related needs of the region. These indicators, represent the myriad physical, biological, and human elements that are all interrelated as parts of the ecosystem and are all important aspects of ecosystem health. In general, indicators selected to measure responses by ecosystem stressors are physical attributes; those selected to measure improvements in ecological conditions are biological attributes; and those selected to measure other water-related needs of the region are built environment attributes. Many of these indicators will describe desired end states that may take up to fifty years to realize. A means of measuring positive indications of successional change will be necessary to assess incremental progress.

An initial set of indictors selected for inclusion in the 2002 Task Force strategy document and in the 2000-2002 biennial report to Congress, the Florida Legislature, and the councils of the Miccosukee and Seminole Tribes is included in Appendix D. With the exception of the indicator for threatened and endangered species, which came from the FWS, these indicators were based on a RECOVER baseline report prepared in 1999 and revised in 2001. They were selected for inclusion in the 2002 Task Force strategy document and biennial report because at the time they were believed to be among the most indicative of natural system functioning throughout the region as a whole and among the most understandable and meaningful to the American people and the residents of South Florida. As stated in 2002, these were preliminary indicators that were expected to be refined as more information became available.

Over the past two reporting periods (1998-2000 and 2000-2002) a great deal of modeling and analysis has created new information that will be used to improve the initial set of indicators and to identify more accurate measures of restoration success. The ongoing discussion about indicators includes (1) how best to use them, (2) which ecological attributes are most appropriate and useful as indicators (especially the degree to which their future status may be predicted by reliable models), and (3) how to analyze and report the data in the most effective way for restoration management purposes.

The Task Force recognizes that restoration must be based on the best science available and that this will require use of adaptive management principles to continually incorporate new knowledge as it becomes available. The Task Force created a Science Coordination Group (SCG) in December 2003 to ensure that science is incorporated into decision making as effectively and efficiently as possible, and to respond to GAO's recommendations to improve science coordination. The SCG is developing a science coordination plan that tracks and coordinates programmatic-level science and other research, identifies programmatic-level priority science needs and gaps, and facilitates management decisions. In August 2004 the Task Force additionally assigned this group the task of reviewing new information and providing recommendations for revising the Task Force systemwide indicators reported in the 2002 Strategic Plan and Biennial Report. The SCG will first design an open process to develop a recommended set of comprehensive systemwide indicators. This process will include the opportunity for peer review and public input. After receiving Task Force guidance, the SCG will use this process to revise the indicators, restoration endpoints, and timelines used to measure success.

Much of the new information the SCG will review is from the CERP implementation process. Responding to congressional direction that CERP restoration efforts be guided by, and continuously adapted to, the best science available, a multiagency Restoration Coordination and Verification Team (RECOVER) has been established to support the implementation of the CERP with scientific and technical information. RECOVER is identifying indicators to be used to assess restoration progress and to adaptively manage the CERP portion of the restoration effort over time. New guidelines outlined in the Programmatic Regulations for the Comprehensive Everglades Restoration Plan have resulted in a set of

recommended indicators for interim goals (defined in the regulations as means of measuring restoration success) and interim targets (defined as means of measuring progress in providing for other water-related needs). These indicators are now under review. The review process, which includes scientific and public review of these indicators to ensure their comprehensiveness and appropriateness to determining restoration success, is expected to continue into the fall of 2004. A peer review panel will be charged with assessing the scientific validity of the indicators and providing comment on the presentation of these indicators to the public. To further assess the utility of the indicators, the RECOVER scientific teams will use five-year incremental model runs to "observe" trends in the indicators over the life of the CERP. Once interim goals have been established by the Secretary of the Army, the Governor of Florida, and the Secretary of the Interior and interim targets have been established by the Secretary of the Army and the Governor of Florida, the indicators will be used for systemwide assessment of CERP projects to support planning and adaptive management. (Additional ongoing work to comply with the Programmatic Regulations is addressed in the Biennial Report).

Additional scientific and technical information not covered by the CERP is being developed and refined by federal, state, and local agencies, including the FWS, which has developed and is implementing the *Multi-Species Recovery Plan*. The Task Force will ensure that the SCG also considers indicators identified through these non-CERP efforts.

STRATEGIC GOALS AND OBJECTIVES

The ultimate result of the Task Force member agencies' efforts should be the restoration of the South Florida Ecosystem. The direct measures of success for achieving this result are addressed in the preceding "Vision" section of this strategy.

Because of the complexity and the long time frame of this initiative, it is also important to measure and track the hundreds of activities (outputs in the language of performance management) that must be performed to achieve the result of a restored ecosystem. By measuring and tracking the contributions of individual and aggregated work efforts, or projects, the Task Force members can identify whether restoration activities are being implemented in a timely and effective manner.

To this end, the Task Force members have identified three strategic goals, related subgoals, and specific objectives for the work that must be done. The three strategic goals recognize that water, habitats and species, and the built environment are inextricably linked in the ecosystem and must be addressed simultaneously if the ecosystem is to be restored and preserved over the long term. The subgoals divide the goals into more definitive areas of concern:

GOAL 1: GET THE WATER RIGHT

Subgoal 1-A: Get the hydrology right
Subgoal 1-B: Get the water quality right

GOAL 2: RESTORE, PRESERVE, AND PROTECT NATURAL HABITATS AND SPECIES

Subgoal 2-A: Restore, preserve, and protect natural habitats
Subgoal 2-B: Control invasive exotic plants

GOAL 3: FOSTER COMPATIBILITY OF THE BUILT AND NATURAL SYSTEMS

Subgoal 3-A: Use and manage land in a manner compatible with ecosystem restoration
Subgoal 3-B: Maintain or improve flood protection in a manner compatible with ecosystem restoration
Subgoal 3-C: Provide sufficient water resources for built and natural systems

Specific objectives for what must be done in order to achieve the subgoals and goals–and ultimately the intended result of a restored ecosystem–were developed using the best information available gained through models, outputs, or research findings. Examples of these objectives include "develop aquifer storage and recovery systems capable of storing 1.6 billion gallons per day by 2028" and "protect 20 percent of the coral reefs by 2010."

The objectives included in this strategy do not comprise the exhaustive list of everything that needs to be done to restore the South Florida Ecosystem. Rather they provide an overview of the major restoration accomplishments and whether they are proceeding on schedule, indicating whether or not the work of the Task Force member agencies is on track. The objectives, like the projects, are subject to adaptive management and may be modified as new information becomes available or when desired outcomes are not achieved. The Task Force agencies periodically provide updated data to the Task Force, which synthesizes the information for its strategy and biennial reports.

The major projects contributing to each objective are listed in this section of the strategy. If more than one project is required to meet a single objective, then each project's partial contribution is identified. Not all the Task Force projects are listed in this section. However, all are listed in Appendix A and all are described in detail in the Integrated Financial Plan detailed project sheets provided in Volume 2.

GOAL 1: GET THE WATER RIGHT

Water is the lifeblood of the South Florida Ecosystem. The water flows today, however, have been reduced to less than one-third of those occurring in the historic Everglades. The quality of water that does enter the ecosystem has been seriously degraded. Water does not flow at the same times or durations as it did historically, nor can it move freely through the system. The whole South Florida Ecosystem has suffered. The health of Lake Okeechobee is seriously threatened. Many plants and animals that live in South Florida and the Everglades are in danger of becoming extinct because their habitats have been degraded, reduced, or eliminated. Excessive freshwater discharges in the wet season and inadequate flows in the dry season threaten the estuaries and bays that are critical nurseries and home to many fish and wildlife. Urban and agricultural areas are also adversely affected. Water shortages and water restrictions are occurring more frequently in some parts of South Florida.

Getting the water right must address four interrelated factors: the quantity, quality, timing, and distribution of water. More water is not always better. Alternating periods of flooding and drying were vital to the historical functioning of the Everglades Ecosystem. Getting the water right also must recognize the needs of natural systems, urban and rural communities, and agriculture. Waters need to meet applicable water quality standards, including standards to protect the natural functioning of the Everglades and those that ensure the availability of safe drinking water. The right quantity of water, of the right quality, needs to be delivered to the right places and at the right times.

A consensus-building exercise in 1999 with broad public input identified a list of statements that Task Force participants used as a foundation to develop the Task Force strategy. Based on that consensus, the water will be right when the following conditions are met: Natural hydrologic functions are restored in wetland, estuarine, marine, and groundwater systems, while also providing for the water resource needs of urban and agricultural landscapes. Natural variations in water flows and levels are restored without diminishing essential levels of water supply or flood control. Compartmentalization is reduced, and natural patterns of sheet flow are recovered to the maximum extent possible. Water resources accommodate the needs of natural systems, communities, and business. Safe drinking water is available for the people of South Florida. Damage caused to water quality by pollutants and contaminants (such as from agricultural nutrients or urban related pollutants) is eliminated. Water levels and the timing of water deliveries reflect quantities resulting from natural rainfall and are distributed according to natural hydrologic patterns or patterns modified by scientific consensus. Damage to natural and human systems caused by flood and drought is minimized. Groundwater resources are protected from depletion and contamination.

Efforts to achieve goal one must incorporate a process to address concerns of environmental justice and economic equity. The unique cultural and ethnic diversity of South Florida's population, with its strong representation of peoples from all over the world, will require significant efforts on behalf of the restoration partners to ensure that projects are implemented in ways that do not result in disproportionate impacts on any communities. Additional targeted efforts will be required to provide opportunities for socially and economically disadvantaged individuals and small businesses to participate in the implementation of restoration programs and projects. The Task Force and Working Group see this guiding principle as critical to long-term success.

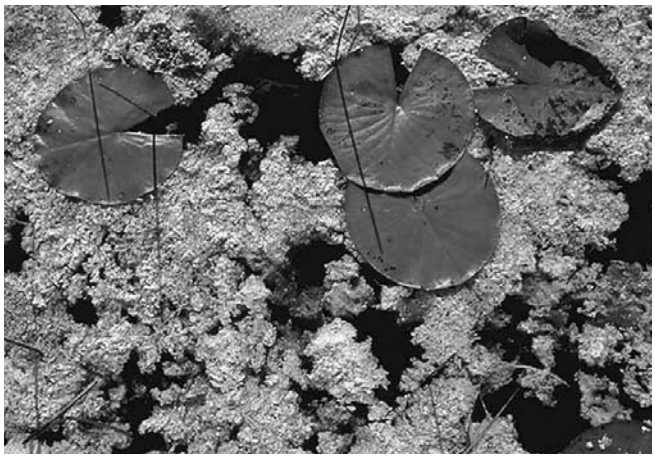
Subgoal 1-A: Get the Hydrology Right

How This Subgoal Will Be Implemented

On average 1.7 billion gallons per day (gpd) of water that once flowed through the South Florida Ecosystem is discharged via canals to the ocean or gulf. The CERP and other projects include five programs for recapturing most of this water and redirecting it to sustain natural system functioning and to supplement urban and agricultural water supplies:

Surface water storage reservoirs. Surface water storage impoundments and water control structures will allow manipulation of flows in the system to

mimic the natural system. A number of water storage facilities are planned north of Lake Okeechobee, in the Caloosahatchee and St. Lucie basins, in the Everglades Agricultural Area, and in Palm Beach, Broward, and Miami-Dade Counties. These areas will encompass approximately 181,300 acres and will have the capacity to store 1.4 million acre-feet of water. Two rock mining areas in Miami-Dade County will be converted to in-ground storage areas.



Aquifer storage and recovery (ASR). Subsurface storage will be used to meet remaining water supply needs. The limestone platform that underlies Florida is honeycombed with voids and porous layers of sedimentary rock capable of holding water in storage. Water that currently leaves the ecosystem in canals can be captured, treated, and injected into these aquifers, and held in storage until the water is needed to augment surface storage supplies. The CERP envisions that more than 300 wells will be built to store water 1,000 feet underground in the upper Floridan Aquifer. Pilot testing of this approach in different geologic areas is ongoing. If proven successful, wells will be located around Lake Okeechobee, in the Caloosahatchee Basin, and along the east coast. As much as 1.6 billion gallons a day may be pumped down the wells into underground storage zones for subsequent recovery. Because water does not evaporate when stored underground and less land is required for storage, aquifer storage and recovery has some advantages over surface storage. In particular, water stored in the aquifer can be made available for longer durations in years of severe drought conditions. The stored water will be pumped into the existing surface water delivery system to meet environmental, urban, and agricultural water supply demands. ASR components represented approximately one-fifth of the total CERP costs presented in the USACE 1999 *Central and South Florida Project Comprehensive Review Study*.

Removing barriers to sheet flow. Canals, internal levees, and other impediments to sheet flow will be removed or modified to reestablish the natural sheet flow of water through the system. The Kissimmee River Restoration Project will restore approximately 40 square miles of free-flowing river floodplain and associated wetlands, which likely will help improve the quality of water flowing into Lake Okeechobee. The Modified Water Deliveries and Canal-111 projects will restore historic hydrological patterns to the Everglades.[8] Most of the Miami Canal in WCA-3 will be removed, and 20 miles of the Tamiami Trail (U.S. Route 41) will be rebuilt with bridges and culverts, allowing water to flow more naturally into Everglades National Park. In the Big Cypress National Preserve, the levee that separates the preserve from the Everglades will be removed to restore more natural overland water flow.

Seepage management. Millions of gallons of groundwater are lost each year as it seeps away from the Everglades towards the east coast, where groundwater levels were lowered by the C&SF Project to allow for development and all human uses. Seepage generally occurs either as underground flow or through levees (the artificial boundaries of the natural system). Three kinds of projects will reduce unwanted water loss and redirect this flow westward to the WCAs, Everglades National Park, and northeast Shark River Slough: (1) adding impervious barriers to the levees to block loss of water; (2) installing pumps near levees to redirect water back into the Everglades; and (3) holding water levels higher in undeveloped areas east of the protective levee between the Everglades and Palm Beach, Broward, and Miami-Dade Counties.

Operational changes. Changes in water delivery schedules will be made in some areas to alleviate extreme fluctuations. Lake Okeechobee water levels will be modified to improve the health of the lake. In other areas, rainfall-driven operational plans will enhance the timing of water flows. Water will be delivered, as facilities are constructed, according to schedules that match natural hydrological patterns as closely as possible. Continued research will improve

[8] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration. "Section II.A.1.

understanding of the hydrology and how it can be restored while maintaining urban and agricultural water supply and flood control. All efforts in CERP to restore the ecosystem incorporate reviews required by the assurance language of WRDA 2000 (attached as Appendix E) to ensure that existing legal sources of water are not eliminated or transferred until a new source of water supply of comparable quality and quantity is available.

Long-Term Operations and Maintenance Needs

Effective management of water storage and delivery will require close coordination between the USACE and the SFWMD. Project sponsors will constantly monitor in-place storage and water flows to ensure that the storage and recovery systems are functioning properly. Wells, wellheads, and pumps will require regular maintenance to operate effectively, and long-term operating plans will be developed to ensure continued service.

Factors Affecting Achievement of this Subgoal

Population growth. The population of South Florida is expected to double by 2050, greatly increasing demands on water. Urban water supply demands could increase from approximately one billion gallons of water per day (gpd) to two billion gpd, taxing the limited natural and economic resources of the Task Force participants.

Funding. A critical factor is stable and reliable funding for the timely completion of these projects. If the hydrology projects cannot be completed on schedule, the effects can cascade through the restoration effort, blocking successful completion of the water quality subgoal and delaying the habitat restoration and preservation subgoals. Delays can increase costs over the long term and, in some cases, foreclose land acquisition options, thus creating further delays or requiring project design modifications. Increasing demands on the limited natural and financial resources of the Task Force members may affect their ability to achieve their strategic goals.

Land acquisition. Many of the surface storage impoundments will be constructed on lands that have yet to be acquired. In some cases, easements are needed for impoundments and/or for canals to connect an impoundment to the system. Willingness of landowners to sell land, funds to exercise land acquisition options, and community acceptance of projects are factors that can affect completion of the objective.

Natural disasters. Severe weather, including el niño and la niña cycles, and natural disasters, such as hurricanes and forest fires, could delay completion of the restoration activities. Impoundment dikes are particularly susceptible to severe rainstorm damage during and immediately after construction. Careful construction can minimize but not eliminate project setbacks and delays due to weather events, such as hurricanes and tropical storms. Extreme weather conditions may also affect the ability to manage and maintain aquifer water storage, given the complexity of the limestone geology of Florida.

Technical Uncertainties. Although aquifer storage and recovery technology has been used for many years there are some technical uncertainties of using this technology on such a large scale. These uncertainties are being thoroughly researched through the ASR pilot projects currently underway.

Specific, Measurable Objectives for Achieving this Subgoal

Three objectives for achieving this subgoal have been adopted by the Task Force:

- Provide 1.3 million acre-feet of surface water storage by 2036
- Develop aquifer storage and recovery systems capable of storing 1.6 billion gallons per day by 2028
- Modify 335 miles of impediments to flow by 2019

The key projects needed to achieve these objectives and the schedule for their implementation is shown in Strategic Plan Table 2.

Strategic Plan Table 2. Subgoal 1-A: Get the Hydrology Right

Milestone Projects
(Refer to Appendix A - for more information about project schedules, funding, responsible agencies, etc.)
** Some projects have been combined with others since 2002*

	Project ID	Restoration Endpoint	Project
Objective 1-A.1: Provide 1.3 million acre-feet of surface water storage by 2036	2100	TBD	Allapattah Flats*
	1111	2005	Ten Mile Creek
	1100	2009	Acme Basin B Discharge
	1102	2009	Everglades Agricultural Area Storage Reservoir, Phase 1
	1104	2013	Lake Okeechobee Watershed
	1103	2014	Everglades Agricultural Area Storage Reservoir, Phase 2
	1108	2018	Bird Drive Recharge Area
	1109	2019	C-43 Basin Storage Reservoir and ASR
	1106	2020	Palm Beach County Agricultural Reserve Reservoir and ASR
	1107	2024	Site 1 Impoundment and Aquifer Storage and Recovery
	1101	2033	Indian River Lagoon South, C-44 Basin Storage Reservoir and C-23/C-24/C-25/Northfork and Southfork Storage Reservoirs*
	1110	2035	Central Lake Belt Storage
	1105	2036	North Lake Belt Storage
Objective 1-A.2: Develop aquifer storage and recovery systems capable of storing 1.6 billion gallons per day by 2028	**Project ID**	**Restoration Endpoint**	**Project**
	1109	2019	C-43 Basin Storage Reservoir and ASR
	1106	2020	Palm Beach County Agricultural Reserve Reservoir and ASR
	1200	2021	C-51 Regional Groundwater Aquifer Storage and Recovery
	1107	2024	Site 1 Impoundment and Aquifer Storage and Recovery
	1201	2028	Lake Okeechobee Aquifer Storage and Recovery
Objective 1-A.3: Modify 335 miles of impediments to flow by 2019	**Project ID**	**Restoration Endpoint**	**Project**
	1305	1997	Kissimmee Prairie Ecosystem
	1304	2004	East WCA-3A Hydropattern Restoration
	1300	2008	Canal 111
	1307	2008	Modified Waters Delivery Project
	1306	2012	Kissimmee River Restoration
	1302	2018	Florida Keys Tidal Restoration
	1301	2019	WCA-3 Decompartmentalization and Sheetflow Enhancement

Subgoal 1-B: Get the Water Quality Right

Runoff from agriculture and stormwater from urban areas has polluted areas of the Everglades and Lake Okeechobee and impaired ecological functions in those critical ecosystems. Phosphorus is a major concern, but it is not the only pollution problem. The water quality of the Caloosahatchee River, St. Lucie Estuary, Biscayne Bay, Florida Bay, the Florida Keys, and the nearshore waters off the coasts periodically show signs of significant degradation, including eutrophication, excessive salinity range, and short-term variability and introduction of anthropogenic agricultural or industrial pollutants. In marine systems, exogenous nitrogen appears to be of particular concern. Mercury is also a concern in both freshwater and marine systems in South Florida.

The Task Force is committed to working with the relevant federal, state, and local agencies to ensure that water quality problems like coastal eutrophication are not exacerbated by the altered water management and delivery concurrently with the CERP.

How This Subgoal Will Be Implemented

Everglades Forever Act. In 1994 the Florida Legislature passed the Everglades Forever Act, which codified measures to improve water quality within the Everglades Protection Area (EPA), defined as the Loxahatchee National Wildlife Refuge, WCAs 2 and 3, and Everglades National Park. One provision establishes the Everglades Construction Project, a

series of six stormwater treatment areas (STAs) between the EAA and the natural areas to the south.[9] The main purpose of these treatment areas is to reduce the phosphorus loads in waters entering the EPA. Additionally, the state uses regulatory programs, and landowners implement best management practices, to reduce phosphorus from urban and agricultural discharges. These programs and practices have reduced the phosphorus levels discharged from the EAA and neighboring basins into the Everglades. However, the final standards have not yet been met. A plan of construction projects, source controls, and continuing scientific investigations has been developed to by the SFWMD to ensure that discharges from all basins impacting the Everglades meet state water quality standards. This plan is referred to as the *Long-Term Plan.*[10]

In March 2003 the SFWMD adopted a conceptual plan for achieving long-term water quality goals the district strategy for meeting water quality standard. In July 2003 the Florida Department of Environmental Protection (DEP) proposed a rule establishing a long-term geometric mean of 10 ppb with associated natural variability as the numeric phosphorus criterion for class III waters in the EPA. The rule also establishes moderating provisions for permits authorizing discharges into the EPA in compliance with water quality standards, including the numeric phosphorus criterion and a method for determining achievement of the numeric phosphorus criterion. The rule also establishes moderating provisions authorizing discharges above the criterion, provided measures are taken to implement the best available phosphorus reduction technologies and a compliance methodology for determining achievement of the criterion.[11]

Tribal water quality standards. In May 1999 the Environmental Protection Agency (EPA) approved the 10 micrograms per liter (10 µg/l) total phosphorus water column quality standard adopted by the Miccosukee Tribe of Indians of Florida. The tribe, which is treated as a state for purposes of the Clean Water Act, adopted water quality standards to protect the tribal Everglades under their jurisdiction on the Federal Reservation. The phosphorus standard applies to class III-A waters within tribal boundaries, defined by the tribe as tribal water bodies used for "fishing, frogging, recreation (including air boating), and the propagation and maintenance of a healthy, well-balanced population of fish and other aquatic life and wildlife…primarily designated for preservation of native plants and animals of the natural Everglades Ecosystem." While tribal waters on the Federal Reservation are located in the area of the Everglades which has median background total phosphorus concentrations ranging from 4 to 10 µg/l (often lower than the standard), the EPA determined that at present no data suggest that phosphorus concentrations less than or equal to 10 µg /l cause changes in flora or fauna. Citing peer reviewed publications and technical reports, the EPA determined that the 10 µg/l standard was a "scientifically defensible value which is not overly protective" and will protect the class III-A designated use. It also states, however, that additional Everglades data are still being collected, and if further studies show that 10 µg/l is not protective of class III-A waters, then the tribe should revise its standard as necessary.

Best Management Practices. The NRCS provides technical assistance on a voluntary basis to private landowners and operators, Indian Tribes and others for the planning of conservation practices and installation of needed conservation management systems with the goal of achieving natural resource sustainability. Participants associated with animal feeding, livestock grazing operations, and fruit and crop production within the South Florida Ecosystem are helped to implement practices that improve nutrient management, water quality, and water conservation. The Environmental Quality Incentives Program provides farmers and ranchers financial and technical assistance to install or implement structural and management practices on agricultural lands that will improve or maintain the health of natural resources in the area including water quality.

Water management plans. Monitoring and research will be required before outlining additional plans for improving water quality in South Florida's lakes, wetlands, estuaries, and bays. Consequently, not all the projects and outputs needed to achieve this subgoal have been identified.

Section 303(d) of the federal Clean Water Act requires states to submit lists of surface waters that

[9] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration." Section II.B.2

[10] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration." Section II.B.3.

[11] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration." Section II.B.3.

still do not meet applicable water quality standards (impaired waters) after implementation of technology-based effluent limitations, and to establish total maximum daily loads (TMDLs) for these waters on a prioritized schedule. For those waters deemed impaired, the FDEP, in conjunction with the SFWMD, the Florida Department of Agriculture and Consumer Services (FDACS), and other appropriate entities, will develop TMDLs. The TMDL will establish the maximum amount of a pollutant that a water body can assimilate without impairing the designated use. Currently there are 154 water segments listed on the state's 303(d) list within the boundaries of the SFWMD.

The state is transitioning to a watershed management program that is based on a five-phase cycle. During the first phase, the water quality data for each basin will be assessed, and waters determined to be potentially impaired will be identified. In phase two intensive monitoring will be conducted to supply data needed to either verify a suspected impairment or (in cases where the impairment has previously been verified) to model the impaired waters and generate TMDLs. During the third phase, TMDLs for impaired waters will be calculated and allocated to individual point sources and the major categories of nonpoint sources. After TMDLs are adopted, a consensus-based basin management action plan, which will include a TMDL implementation plan, will be developed during the fourth phase.

The fifth and final phase will involve the implementation of the proposed management plan, including securing funding, passing local or state legislation, and writing permits that reflect the limits of the TMDLs. Implementation of TMDLs may involve any combination of regulatory, nonregulatory, or incentive-based actions that attain the necessary reduction in pollutant loading. Nonregulatory or incentive-based actions may include development and implementation of best management practices, pollution prevention activities, and habitat preservation or restoration. Regulatory actions may include issuance or revision of wastewater, stormwater, or environmental resource permits to include permit conditions consistent with the TMDL. Once these plans have been adopted and implemented, progress will be monitored until waters are eventually certified as meeting water quality standards.

It will take two rotations through the state to assess all the waters on the list. The first five-year cycle will cover those waters with a high priority, while those with a lower priority will be addressed in the second rotation.

The FDEP will provide annual updates to the 303(d) list. Any new water bodies identified as being impaired by pollutants will be added to the list and given a priority for TMDL development, normally as part of the next five-year cycle. In addition, each existing TMDL will be reevaluated as part of the next five-year cycle to determine progress toward meeting water quality standards and whether the TMDL needs to be revised.

Lake Okeechobee Protection Program. The state has embarked on a program to establish TMDLs for the Lake Okeechobee watershed and lake. The Florida DEP adopted a phosphorus TMDL for Lake Okeechobee in May 2001. Phosphorus TMDLs for the tributaries in the watershed are being developed following the schedule associated with the DEP watershed management approach. The SFWMD, with participation from the Florida DACS and the DEP has implemented the Lake Okeechobee Protection Program to clean up nutrient discharges from agricultural and urban lands north of the lake within the lake's watershed. Coordinating agencies in the Lake Okeechobee Protection Plan incorporated an outline of the remaining actions needed to achieve the Lake Okeechobee TMDL adopted in 2001.

Florida Keys National Marine Sanctuary Water Quality Protection Program. The EPA and the Florida DEP conduct a comprehensive water quality monitoring and research program aimed at correcting point and nonpoint sources of water pollution within the Florida Keys National Marine Sanctuary. The Water Quality Protection Program, initiated in 1996, is the first such program developed for a national marine sanctuary. All state waters within the sanctuary boundary were designed a no-discharge zone in 2002.

Comprehensive Integrated Water Quality Feasibility Study (CIWQFS). The SFWMD and USACE have recently completed a prioritization process for projects identified in the CERP. As a result of this process the USACE and the Florida DEP will brief the scope and schedule for the CIWQFS at the December 2004 Task Force Meeting.[12]

[12] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration. " Section II.B.5

Factors Affecting Achievement of the Subgoal

Natural disasters. Severe weather, including el niño and la niña cycles, and natural disasters, such as hurricanes and forest fires, will adversely affect water quality.

Land acquisition. Many of the stormwater treatment areas will be constructed on lands that have yet to be acquired. Willing land sellers, funds to exercise land acquisition options, and community acceptance of projects are factors that can affect completion of the objective.

Funding. Funding is always a critical factor. If the water quality projects cannot be completed on schedule, the effects can cascade through the restoration effort, delaying progress toward meeting the habitat restoration and preservation subgoals.

Specific, Measurable Objectives for Achieving this Subgoal

Two objectives for achieving this subgoal have been adopted by the Task Force:

- Construct 69,000 acres of stormwater treatment areas by 2035
- Prepare plans, with strategies and schedules for implementation, to comply with total maximum daily loads for 100 percent of impaired water bodies by 2011

The key projects needed to achieve these objectives and the schedule for their implementation is shown in Strategic Plan Table 3.[13]

[13] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration." Section II.B.4.

Strategic Plan Table 3. Subgoal 1-B: Get the Water Quality Right

Milestone Projects (Refer to Appendix A for more information about project schedules, funding, responsible agencies, etc.)			
Objective 1-B.1: Construct 69,000 acres of stormwater treatment areas by 2035	**Project ID**	**Restoration Endpoint**	**Project**
	1508	2003	STA-1 West Works and Outflow Pump Station
	1509	2004	STA-2 Works and Outflow Pump Station
	1511	2005	STA-5 Works
	1510	2005	STA-3/4 Works
	1414	2005	Henderson Creek/Belle Meade Restoration
	1506	2006	Lake Okeechobee Water Retention/Phosphorus Removal
	1512	2006	STA-6
	1104	2009	Lake Okeechobee Watershed
	1502	2010	Miccosukee Tribe Water Management Plan
	1501	2011	Broward County WPA - C-9 STA and Impoundment and Western C-11 Diversion Impoundment and Canal and WCAs 3A and 3B Levee Seepage Management
	1513	2014	West Palm Beach Canal (C-51) and STA-1E
	1503	2014	North Palm Beach County
	1505	2014	Caloosahatchee Back pumping with Stormwater Treatment
	1500	2015	Big Cypress/L-28 Interceptor Modifications
	1110	2035	Central Lake Belt Storage Area
Objective 1-B.2: Prepare plans, with strategies and schedules for implementation, to comply with total maximum daily loads for 100 percent of impaired water bodies by 2011	**Project ID**	**Restoration Endpoint**	**Project**
	1600	TBD	Total Maximum Daily Load for South Florida

GOAL 2: RESTORE, PRESERVE, AND PROTECT NATURAL HABITATS AND SPECIES

Before European settlement the natural habitats of South Florida covered an area of about 18,000 square miles. This enormous space encompassed a rich mosaic of ponds, sloughs, sawgrass marshes, hardwood hammocks, and forested uplands. In and around the estuaries, freshwater mingled with salt to create habitats supporting mangroves and nurseries for wading birds and fish. Beyond, nearshore islands and coral reefs provided shelter for an array of terrestrial and marine life. The vast expanses of habitat were large enough to support far-ranging animals, such as the Florida panther, and super colonies of wading birds, such as herons, egrets, roseate spoonbills, ibis, and wood storks. For thousands of years this resilient ecosystem withstood and repeatedly recovered from the effects of hurricanes, fires, severe droughts, and floods, retaining some of the greatest biodiversity found on earth.

Today the Florida panther and sixty-eight other animal or plant species are listed by the FWS as threatened or endangered. Many additional species are of special concern to the State of Florida. Super colonies of wading birds no longer nest in the Everglades. The wetland habitats that supported these species have been reduced by half, fragmented by roads, levees, and other structures, dewatered by canals, and degraded by urban and agricultural pollutants. The marine environments of the bays and coral reefs have suffered a similar decline. Altered biological communities are being overrun by invasive exotic plants and animals capable of outcompeting native species and habitats. Exotic plants now make up approximately one-third of the total plant species known in Florida. The Florida Exotic Pest Plant Council has identified 125 of these as serious risks to Florida's natural areas and its threatened and endangered native plants and animals.

A combination of connectivity and spatial extent created the range of habitats and supported the levels of productivity needed for the historic diversity and abundance of native plants and animals. The original Everglades and other South Florida environments formed hydrologically integrated systems from boundary to boundary. Restoring natural habitats and species will require reestablishing the hydrologic and other conditions conducive to native communities and piecing together large enough areas of potential habitat. Exotic species must be managed, and the escape of new exotics must be prevented. Then it will require time for native plants and animals to reestablish populations and communities. The intended result will be self-sustaining populations of diverse native animal and plant species. This must take into account that populations that have adapted to current conditions may be impacted.

A consensus-building exercise in 1999 with broad public input identified a list of statements that Task Force participants used as a foundation to develop the Task Force strategy. Based on that consensus, the habitats will be restored, preserved, and protected when the following conditions are met: The diversity, abundance, and behavior of native South Florida animals and plants and their terrestrial and aquatic habitats are characteristic of predrainage conditions. The spatial extent of wetlands and other natural systems is sufficient to support the historic functions of the greater Everglades Ecosystem. Important wildlife corridors are identified, enhanced, and preserved. Endangered and other federal and state listed species recover self-sustaining levels, and sufficient habitats for maintaining healthy numbers are restored and protected. Invasive exotic plant and animal species are substantially eliminated or reduced to manageable levels.

Efforts to achieve goal 2 must incorporate a process to address concerns of environmental justice and economic equity. The unique cultural and ethnic diversity of South Florida's population, with its strong representation of peoples from all over the world, will require significant efforts on behalf of the restoration partners to ensure that projects are implemented in ways that do not result in disproportionate impacts on any communities. Additional targeted efforts will be required to provide opportunities for socially and economically disadvantaged individuals and small businesses to participate in the implementation of restoration programs and projects. The Task Force and Working Group see this guiding principle as critical to long-term success.

Subgoal 2-A: Restore, Preserve, and Protect Natural Habitats

How This Subgoal Will Be Implemented

Land acquisition. Land acquisition is critical to South Florida ecosystem restoration efforts. Land is needed to preserve habitat for native plants and animals and to act as a buffer to existing natural areas. Land is also needed for water quality treatment areas, water storage reservoirs, and aquifer recharge areas that will help restore natural hydrology. Federal, state, and local governments have all played important roles in land acquisition. As of June 2004, state and federal agencies have acquired 4.9 million acres of land for habitat conservation purposes, and the Task Force interagency Land Acquisition Team has identified an additional 881,736 acres for acquisition by 2015. The most efficient use of resources may not be fee simple purchase of land, nor is it always desirable. Many alternative tools to meet restoration land use needs are being implemented to maximize the benefits of these limited resources. The Task Force supports the use of less than fee acquisitions or the use of other tools. Some examples of the tools being used include:

– Easements

– Temporary Lease Agreements

– Mitigation Banks

– Public Private Partnerships

Over the past several decades, the federal government has acquired title to lands for conservation and public enjoyment of national parks, national preserves, and national wildlife refuges. Using existing land use plans and priorities, and based upon the availability of annual appropriations, federal land managers will continue to acquire lands within authorized boundaries of existing national wildlife refuges and national parks and preserves in the South Florida Ecosystem. The completion of these areas will provide additional habitat for threatened, endangered, and other species, as well as recreational opportunities for the people of South Florida. The federal government also has provided financial support to state land acquisition programs, such as the $200 million provided by the 1996 Farm Bill for acquisition in support of ecosystem restoration. Based upon the availability of annual appropriations, federal land managers will continue to look for opportunities to assist the State of Florida in preserving the highest priority areas for implementation of the CERP.

The Florida Forever Program is Florida's primary land acquisition program. It is a ten-year program that will raise approximately $3 billion ($300 million per year) for land acquisition. The program identifies and acquires lands from voluntary sellers through a process described under chapters 259 and 373 of the Florida Statutes. The state also partners with local governments and other entities to identify and jointly acquire conservation lands. All of the state laws governing the acquisition of land with public funds for the purposes of conservation, recreation, or fish and wildlife management ensure that the public will be provided access.

In recent years local governments have initiated, voted, and approved land acquisition programs for hundreds of millions of dollars that are helping protect and restore the South Florida Ecosystem. Interest is growing for many counties to undertake similar initiatives. These programs have the potential to complement and support the CERP as well as to foster compatibility of the built and natural systems.

State Florida Forever lands, federal parks and preserves, state water preserve areas, county and private conservation lands, conservation easements and other agreements with private landowners, and other lands acquired for South Florida Ecosystem restoration will help expand and connect a mosaic of upland, wetland, coastal, and marine habitats that will support the recovery of many currently imperiled species. When completed, these efforts will yield a total of approximately 5.8 million acres for conservation and habitat protection. These lands also provide opportunities for water supply enhancement; natural-resource based outdoor recreation, and environmental awareness and education to the state's residents and visitors.

Protection of critical habitat for threatened and endangered species. As part of the South Florida Ecosystem restoration initiative, in 1995 the FWS was directed to prepare a comprehensive, ecosystemwide strategy (the MSRP) to recover threatened and endangered species and to restore and maintain the extremely high biodiversity of native plants and animals in the upland, wetland, estuarine, and marine communities of the South Florida Ecosystem.

The MSRP addresses the recovery needs of South Florida's sixty-nine federally listed threatened and endangered species. A major section of that plan describes twenty-three of the natural vegetative communities in South Florida and identifies management actions needed to restore South Florida's ecosystem. Protecting critical habitat for threatened and endangered species will involve major coordination between the aggressive land acquisition programs of the state and the land acquisition plans for the national wildlife refuge system and the national park system. The Task Force has appointed a Multi-Species/Ecosystem Recovery Implementation Team (MERIT) to prioritize actions included in the recovery plan.

Wetlands enhancement. The CERP calls for removing barriers to sheetflow, restoring more natural hydroperiods to wetlands, and providing natural system water flows to coastal waters. These projects will restore hydrological connections to large portions of the remnant Everglades marsh, improve water quality, and increase the extent of wetlands, thus enhancing fish and wildlife habitat. Habitat heterogeneity will also be improved as upland and transitional areas experience more natural hydroperiods. Modeling of CERP project components shows that almost 2.4 million acres will be restored and enhanced.

Wetlands enhancement is also achieved through the Wetlands Preserve Program, a voluntary conservation program funded by the Farm Bill through which the USDA provides incentive payments and cost-sharing to restore, enhance, and protect degraded wetlands on agricultural lands. (An objective for this program is included under subgoal 3-A, "use and manage land in a manner compatible with ecosystem restoration.")

Restoration and preservation of coral reefs. Other major efforts to restore and preserve habitat involve the designation of an ecological reserve and a research natural area to protect critical coral reef communities in the western portion of the Florida Keys National Marine Sanctuary and Dry Tortugas National Park. The Tortugas region in the Straits of Florida has near-pristine marine resources, including one of the best-developed tropical coral reef systems on the continent. It is the epicenter of marine productivity for the region. Ensuring its long-term protection and appropriate public use will require cooperation among multiple and overlapping jurisdictions, including the U.S. Departments of Commerce and Interior and the State of Florida.

The Florida Keys National Marine Sanctuary's Tortugas Ecological Reserve fully protects 151 square nautical miles of coral reefs and associated communities. The Dry Tortugas National Park's research natural area will protect an additional 46 nautical miles of reefs and marine habitats. Combined, these two areas will encompass 197 square nautical miles, protecting more than 10 percent of the coral reefs in the Florida Keys. Reefs elsewhere in South Florida have not received any significant protection to date.

Factors Affecting Achievement of this Subgoal

Progress in acquiring lands needed for habitat protection will depend upon the availability of land from willing sellers, land values, the rate of development, and annual federal and state legislative appropriations.

Specific, Measurable Objectives for Achieving this Subgoal

Three objectives for achieving this subgoal have been adopted by the Task Force:

- Complete acquisition of 5.8 million acres of land identified for habitat protection by 2015
- Protect 20 percent of the coral reefs by 2010
- Improve habitat quality for 2.4 million acres of natural areas in South Florida

The key projects needed to achieve these objectives and the schedule for their implementation is shown in Strategic Plan Table 4.

Strategic Plan Table 4. Subgoal 2-A: Restore, Preserve, and Protect Natural Habitats

Milestone Projects (Refer to Appendix A - for more information about project schedules, funding, responsible agencies, etc.)			
Objective 2-A.1: Complete acquisition of 5.8 million acres of land identified for habitat protection by 2015	**Project ID**	**Project Endpoint**	**Project Name**
	STATE/SFWMD PROJECTS		
	2100		Allapattah Flats/Ranch
	2101		Atlantic Ridge Ecosystem
	2102		Babcock Ranch
	2103		Barfield Farms
	2104		Belle Meade
	2105		Big Bend Swamp/Holopaw Ranch
	2106		Biscayne Coastal Wetlands
	2107		Bombing Range Ridge
	2108		Caloosahatchee Ecoscape
	2109		Catfish Creek
	2111		Charlotte Harbor Estuary/Flatwoods/Cape Haze
	2112		Corkscrew Reg. Ecosystem Watershed (CREW)
	2114		Coupon Bight/Key Deer/Big Pine Key
	2115		Cypress Creek/Trail Ridge
	2172		Cypress Creek/Loxahatchee
	2185		Devils Garden
	2117		East Coast Buffer/Water Preserve Areas
	2118		Estero Bay
	2119		Everglades Agricultural Area/Talisman
	2120		Fakahatchee Strand
	2121		Fisheating Creek
	2122		Florida Keys Ecosystem
	2123		Frog Pond/L31N
	2173		Grassy Island Ranch
	2174		Half Circle L Ranch
	2175		Hen Scratch Ranch
	2124		Indian River Lagoon Blueway
	2125		Juno Hills /Dunes
	2176		Jupiter Ridge
	2127		Kissimmee River (Lower Basin)*
	2128		Kissimmee River (Upper Basin)*
	2126		Kissimmee-St. Johns River Connector
	2129		Lake Wales Ridge Ecosystem
	2132		Loxahatchee Slough
	2133		McDaniel Ranch
	2134		Miami Dade County Archipelago
	2135		Model Lands Basin
	2138		North Fork of the St. Lucie River
	2139		North Key Largo Hammocks
	2140		North Savannas
	2141		Okaloacoochee Slough
	2142		Okeechobee Battlefield
	2143		Osceola Pine Savannas
	2144		Pal-Mar
	2145		Panther Glades
	2146		Paradise Run
	2147		Parker-Poinciana/Lake Hatchineha Watershed
	2148		Pineland Site Complex
	2178		Ranch Reserve
	2149		Rookery Bay
	2150		Rotenberger/Holey Land Tract
	2151		Shingle Creek
	2152		Six Mile Cypress I & II
	2154		South Savannas
	2155		Southern Glades
	2156		Southern Golden Gate Estates
	1508-1512		STA 1 W, 2, 3/ 4, 5 and 6
	2158		Twelve Mile Slough
	2181		Upper Econ Mosaic
	2159		Upper Lakes Basin Watershed (ULBW)
	2160		WCAs 2 and 3

Milestone Projects (Refer to Appendix A - for more information about project schedules, funding, responsible agencies, etc.)			
	Project ID	**Project Endpoint**	**Project Name**
	STATE COMPLETED PROJECTS		
	2110		Cayo Costa Island
	2113		Corkscrew Regional Mitigation Bank
	2116		Dupuis Reserve
	1305		Kissimmee Prairie
	2130		Lake Walk-In-Water
	2131		Loxahatchee River Land Acquisition
	2137		Nicodemus Slough
	2153		South Fork St. Lucie River Land Acquisition
	1513		STA 1 E
	1111		Ten Mile Creek
	2157		Tibet-Butler Preserve
	2161		Yamato Scrub
	FCT, STATE PARKS, & WMA'S		
			State Florida Communities Trust Lands
			State Park Lands
			State Wildlife Management Areas
	FEDERAL CONSERVATION LANDS		
	2162		A.R.M. Loxahatchee NWR
	2164		Big Cypress National Preserve Addition
	2163		Big Cypress National Preserve
	2165		Biscayne National Park
	2166		Crocodile Lake NWR
	2167		East Everglades Addition to Everglades National Park
	2169		Florida Panther NWR
	2168		Florida Keys NWR
	2170		Hobe Sound NWR
	2171		J. N. Ding Darling NWR
Objective 2-A.2: Protect 20 percent of the coral reefs by 2010	**Project ID**	**Project Endpoint**	**Project Name**
		2004	Florida Keys National Marine Sanctuary Zoning Action Plan
Objective 2-A.3: Improve habitat quality for 2.4 million acres of natural areas in South Florida.	**Project ID**	**Project Endpoint**	**Project Name**
			Note – The April 1999 USACE C&SF Project Comprehensive Review Study Final Integrated Feasibility Report and Programmatic Environmental Impact Statement included an extensive environmental evaluation of habitat units that would be improved through implementation of the CERP projects. Table 7-18 in this publication identifies in detail which projects are anticipated to achieve this objective. However, appropriate measures by project are currently being developed through the establishment of interim goals. There are some projects included in our tracking matrix that exemplify how this objective will be achieved.

Subgoal 2-B: Control Invasive Exotic Plants

The MSRP identifies the control of exotic species as integral to the restoration of the ecosystem and to the recovery of threatened and endangered and other imperiled species. Some invasive exotic plants have spread in natural areas to the extent that the native plant and animal communities are being replaced. The most widespread and serious exotic plants are listed below, along with the extent of their current infestations.

How This Subgoal Will Be Implemented

Invasive exotic plant management strategies. In 1993 the Florida Legislature charged the Florida DEP with establishing a plan to control invasive exotic plants on public conservation lands (§369.252, Florida Statutes). The DEP Bureau of Invasive Plant Management has developed a comprehensive interagency strategy for elimination or control of the highest priority species and management to control and minimize the spread of other pest plant species.

The Noxious Exotic Weed Task Team established by

the Task Force has completed an assessment and strategy, called Weeds Won't Wait, for managing invasive exotic plants and is working with all the agencies to implement the strategy. The following three actions included in that strategy are the highest priorities for ecosystem restoration. Other actions are still being developed and will be incorporated into updates of the implementation plan based on the Weeds Won't Wait strategy.

Management Plans. Comprehensive management plans, when adequately funded and implemented, have provided successful control of invasive exotic plants. These plans offer the advantage of replacing piecemeal efforts to manage exotic plants–typically by controlling them on individual sites or by controlling only one or a few species in broader regions–with coordinated multi-agency programs that integrate invasive plant management activities, organizations, priorities, and resources statewide.

Six species in Florida (melaleuca, Brazilian pepper, Old World climbing fern, hydrilla, water lettuce, and water hyacinth) already have statewide species-based management plans. More than twenty exotic plants need urgent attention, and developing plans for just the top twenty will take several years. Plans must be developed for each species because each has species-specific characteristics (biology, method of reproduction, life form, etc.) that need to be addressed.

The Florida DEP has developed and is implementing the Upland Invasive Exotic Plant Management (Upland Weeds) Program. This is a statewide strategy to coordinate the efforts of federal, state, and local agencies and nongovernmental organizations in prioritizing needs and developing the methods, research, public education, technology transfer, oversight, and funding needed to conduct an efficient and cost-effective statewide maintenance control program for the control of upland weeds.

Maintenance control. Maintenance control is defined in the Florida Statutes as "a method for the control of exotic plants in which control techniques are utilized in a coordinated manner on a continuous basis in order to maintain the plant population at the lowest feasible level" (F.S.369.22). Many techniques are used in an integrated approach and they include mechanical removal, chemical treatment, and biological controls. The three major aquatic species (hydrilla, water hyacinth, and water lettuce) are currently under a maintenance control program for Florida's 1.25 million acres of public water bodies. Achieving maintenance control for melaleuca is well underway through mechanical and chemical treatment. In 1993 the SFWMD estimated more than 252,008 acres of melaleuca within its boundaries (melaleuca also occurs outside the district). Of these total acres 52 percent were public lands and 48 percent private lands. In 2002 the estimated acreage was 154,423 acres, of which 22 percent were public lands. The decrease of 97,071 acres has been made possible by funding from many agencies, especially the Florida DEP and the SFWMD.

The state is funding research to determine the best approaches for chemical treatment and biological control of Brazilian pepper and Old World climbing fern. Although the climbing fern has only recently been recognized as a serious ecological threat, since 1998 the state has expended over $6 million to control 32,000 acres of infestations.

Plans for other priority species need to developed and incorporated into the state's multi-agency management framework and invasive exotic plant implementation plan and strategy.

The Florida DEP and the NPS have jointly implemented Exotic Plant Management Teams for Florida natural areas. An additional team for national wildlife refuges is being planned and funded by the FWS. These teams are trained to identify and remove invasive exotic plants and to help the land-managing agencies bring the species under maintenance control.

Prevention. The reasons some species become invasive and some ecosystems seem more readily invaded are not well understood. However, if a species becomes widely invasive it is difficult and expensive to manage. Preventing the introduction of invasive species is the only absolute means to control them, but absolute prohibitions and exclusions are impractical. An early warning program for potentially invasive species, a risk assessment for evaluating possible invasiveness prior to introduction, methods for early detection of incipient populations of new species, predictive tools to assist in determining where plants may invade, and the ability to eradicate incipient populations are needed. The Federal

Interagency Committee for the Management of Noxious Exotic Weeds is planning a national early-warning information system for invasive exotic plants.

Long-Term Operations and Maintenance Needs

Weed management is like any other long-term program in that sufficient funds must be available on a continuous basis to achieve and then sustain maintenance control. If resources necessary to support management drop below the maintenance level requirement, the species will expand and reinvade to pre-control levels, and the program must start from zero again. The only exception is when adequate maintenance control is being achieved exclusively through biological control organisms and even in those instances, minimal monitoring is needed to ensure that the biocontrol organisms are continuing to work. Discontinuing funding once maintenance control has been achieved is a problem that has continually plagued invasive species management programs nationally.

Factors Affecting Achievement of this Subgoal

Management complexity. The control programs for water hyacinth, water lettuce, and hydrilla have been successful because good management plans were developed for each species that included prioritizing sites for control, assessing the extent of infestations, directing essential research to understand the biology of the species, and specifying proven control techniques. The plans had multi-agency coordination and adequate funding.

To ensure success in bringing other high priority species under maintenance control, agencies will need to build upon the foundation of coordination and cooperation that has been established as part of their collective planning and control efforts to date. Collective efforts sufficient to manage invasive species throughout Florida will require formal agreements supporting the multi-agency approach and the formal designation of a lead agency to direct cooperative planning, project integration, and integrated budgets and resource requests. Identifiable elements from the strategies developed by the Florida DEP and the Task Force NEWTT need to be integrated to expand policy setting, planning, prioritization, funding, and management to the ecosystem level.

Interface with infested landscapes. Continuing degradation of the natural environment may enhance the spread or rate of spread of exotic species. Adjacent landowners will impact the success of controlling exotics if these lands remain infested or if the landowners are not interested in land acquisition.

Importation of new exotics. The unregulated importation of new plant species continues to increase the potential for infestations of exotic plants.

Specific, Measurable Objectives for Achieving this Subgoal

Three objectives for achieving this subgoal have been adopted by the Task Force:

- Coordinate the development of management plans for the top twenty South Florida invasive exotic plant species by 2011
- Achieve maintenance control of Brazilian Pepper, Melaleuca, Australian Pine, and Old World Climbing Fern in South Florida's public conservation lands by 2020
- Complete an invasive exotic plant species prevention, early detection, and eradication plan by 2005

The key projects needed to achieve these objectives and the schedule for their implementation is shown in Strategic Plan Table 5.

Strategic Plan Table 5. Subgoal 2-B: Control Invasive Exotic Plants

Milestone Projects (Refer to Appendix A - for more information about project schedules, funding, responsible agencies, etc.)			
Objective 2-B.1: Coordinate the development of management plans for the top twenty South Florida invasive exotic plant species by 2011	**Project ID**	**Project Endpoint**	**Project Name**
	2500	2011	Management plans for melaleuca, Brazilian Pepper, Old World Climbing Fern, Hydrilla, Water Lettuce, and Water Hyacinth
			Remaining plans
Objective 2-B.2: Achieve maintenance control of Brazilian Pepper, Melaleuca, Australian Pine, and Old World Climbing Fern on South Florida's public conservation lands by 2020	**Project ID**	**Project Endpoint**	**Project Name**
	2600	2020	Achieve maintenance control status for Brazilian pepper, melaleuca, Australian pine, and Old World climbing fern
Objective 2-B.3: Complete an invasive exotic plant prevention, early detection, and eradication plan by 2005	**Project ID**	**Project Endpoint**	**Project Name**
	2700	2005	Invasive Exotic Plant Prevention, Early Detection, and Eradication Plan

GOAL 3: FOSTER COMPATIBILITY OF THE BUILT AND NATURAL SYSTEMS

Balmy weather, vibrant communities, beautiful scenery, and abundant natural habitats at the land/sea interface offer South Florida residents a unique choice of lifestyles and visitors a variety of destinations. The diversity of landscapes, including some of the most intensively developed and densely populated areas in the state, has contributed to the economic success and high quality of life enjoyed by Floridians and experienced by visitors from around the world.

This lifestyle has not come without a price. Tremendous population growth and the subsequent need for public services have resulted in adverse impacts on natural ecological systems. These impacts include loss of marine, wetland, and upland habitat, severe drawdown of freshwater resources, intrusion of saltwater into freshwater aquifers, loss of open space, and degradation of water quality. The rapid rate and volume of growth and the accompanying sprawl development patterns have reduced the spatial extent and vitality of the natural system. Its declining health has become more apparent as symptoms of stress have developed in the South Florida Ecosystem. The imbalance has caused state, local, regional, and national decision makers and citizens to focus on addressing the unintended consequences of growth.

A consensus-building exercise in 1999 with broad public input identified a list of statements that Task Force participants used as a foundation to develop the Task Force strategy. Based on that consensus, the compatibility of the built and natural systems will be achieved when the following conditions are met: The people of South Florida understand the connections between a healthy environment and a healthy community. Development patterns—development, redevelopment, and infrastructure— are complementary to ecosystem restoration and compatible with a restored natural system. Development practices support conservation of significant and special natural areas and reduce habitat fragmentation. Flood-protection level of service and water resources are maintained at existing levels, or augmented where appropriate. The quality of life of people in South Florida is enhanced through the ability to reside in areas with fishable, drinkable, and swimmable water and clean air. Park, open space, and recreation lands, blueways, greenways, and roadways are compatible with and complementary to getting the water right and enhancing and preserving the natural system. Land, water, wastewater, and transportation planning are coordinated and supportive of ecosystem restoration. Agriculture is an

environmentally and economically sound component of the landscape, consistent with ecosystem restoration. In agricultural and urban areas stormwater and wastewater are reclaimed when possible. The ecosystem is not damaged by improper disposal of wastes.

The same issues that are critical to the natural system—getting the water right and restoring, preserving, and protecting diverse habitats and species—are equally critical to maintaining a high quality of life for South Florida's residents. Like the future of South Florida's natural systems, the future of its human communities is dependent on getting the water right. The appropriate quantity, quality, timing, and distribution of water is essential to meeting the future water supply needs generated by projected population growth and by continuing economic productivity, most notably in tourism and agriculture (the two largest sectors of the economy). The overriding issue is not who gets the water, the natural system or the built system, but how to fulfill all water needs by ensuring that what is built can be adequately supported within the parameters of a healthy natural system. Failure to achieve this compatibility would likely be detrimental for both future residents and the environment. Recognizing this relationship, the State of Florida's guiding statute, Chapter 373.016, in the Declaration of Policy, promotes the availability of sufficient water for all existing and future reasonable-beneficial uses and natural systems.

Similarly, in order to maintain a high quality of life for South Florida's residents, the built environment must be planned and managed in a manner that both supports the social and economic needs of communities and is compatible with the restoration, preservation, and protection of natural habitats and species. This will require development patterns, policies, and practices that serve both built and natural systems. Urban, suburban, and rural development utilizes lands that would otherwise be available to support natural system functioning. To the extent that development patterns in these areas are sensitive to the critical needs of both community residents and the natural system, South Florida's communities can be a sustainable part of a healthy ecosystem.

Providing the land for suitable development and human habitation will continue to require considerable flood protection, since without such protection most of South Florida would be unsuitable for existing urban and agricultural uses. Given the population growth projections for South Florida, there will be an ongoing need for monitoring and balancing the flood-protection needs of urban, natural, and agricultural lands as part of restoration.

Providing sufficient water resources, using and managing land, and maintaining and improving flood protection—all in a manner compatible with restoration of the South Florida Ecosystem—are important subgoals for fostering compatibility of the built and natural systems. The land use planning, flood control, environmental regulation, and similar activities needed to accomplish these subgoals are primarily the responsibility of the tribal, state, regional, and local governments in Florida. These government agencies must function within the authorities and appropriations for programs and activities established by the Florida Legislature and the local elected governing bodies. Constitutionally protected private property rights and the freedom of movement of the American people are also factors that affect the growth and development patterns in a given state and in localities.

The Task Force members recognize that these factors affect implementation of the restoration strategy and achievement of the strategic goals. Efforts to achieve goal 3 must incorporate a process to address concerns of environmental justice and economic equity. The unique cultural and ethnic diversity of South Florida's population, with its strong representation of peoples from all over the world, will require significant efforts on behalf of the restoration partners to ensure that projects are implemented in ways that do not result in disproportionate impacts on any communities. Additional targeted efforts will be required to provide opportunities for socially and economically disadvantaged individuals and small businesses to participate in the implementation of restoration programs and projects. The Task Force and Working Group see this guiding principle as critical to long-term success.

Subgoal 3-A: Use and Manage Land in a Manner Compatible with Ecosystem Restoration

How This Subgoal Will Be Implemented

Compatible land use policies and practices. State, regional, and local agencies are using a variety of planning tools to foster increased compatibility of the built and natural systems. Over the past several decades Florida has enacted several pieces of legislation regarding comprehensive planning and growth management, including the Local Government Comprehensive Planning Act and Land Development Regulations, which provide an integrated framework of planning at the state, regional, and local levels. However, growth continues to stress both public infrastructure and the natural environment. The Governor's Growth Management Study Commission has reported that although the processes established by the existing growth management laws were well intended, improvements to the process should still be made.

Recognizing the critical importance of water to both the built and natural systems, the Florida Legislature passed a law in 2002 that addresses growth management and alternative water supply. The law requires that the comprehensive land use plans of counties and cities be coordinated with the completed regional water supply plans of the state's water management districts to ensure the availability of adequate water supplies.

A new initiative by the Florida Department of Community Affairs (DCA) involves the review and analysis of existing and future land use designations adjacent to lands identified for acquisition for ecosystem restoration and associated buffers. DCA anticipates working with local governments as they develop the criteria for this review process.

Protection of a wide range of compatible recreational uses. People's enjoyment of nature is arguably the strongest impetus for the broad public support of ecosystem restoration. Many of the cultural traditions of the residents of South Florida have been shaped by people's access to expansive wetland, upland, and marine habitats harboring abundant populations of fish, birds, and other wildlife, and to exceptionally beautiful landscapes where they could lose themselves for days or a few moments. As citizens and their governments work to restore and protect the unique South Florida Ecosystem, they must not lose sight of the importance of public access to natural areas. At the same time the public must respect the sensitivities of the natural system and ensure that their activities do not unduly stress the wildlife and the landscapes that are such an important part of their heritage.

The Task Force members are working to protect opportunities for a wide range of compatible outdoor recreational activities for all residents of South Florida and their visitors. The acquisition of rural and urban park, recreation, and other open space lands, and efforts to link these natural areas through a system of greenways, blueways, and trails, are specifically addressed in this section of the Task Force strategy. So are the efforts to help ensure that agricultural lands, which provide valuable open space and wildlife habitat, remain undeveloped. Other efforts include the improvement of recreational areas with appropriate facilities, including boat ramps, off road vehicles/ airboat ramps, hiking trails, and horse trails, and the management of canals to enhance fishery habitat. The work to improve the health and productivity of habitats, addressed directly by goal 2 and indirectly by goal 1, is expected to restore a sustainable natural system that South Floridians may continue to enjoy for generations to come. Local, state, and federal efforts to ensure a variety of opportunities for people's access to this natural system are a critically important complement to this work.

Park, recreation, and other open space lands. Park, recreation, and other open space lands protect natural systems and/or serve as buffers between natural and built environments. They often improve water quality and help attenuate flood waters after significant storm events. Public access to these areas fosters an appreciation for the natural system. When residents of urban areas have access to natural areas and a variety of resource-based recreational opportunities, it increases the potential that they will appreciate the importance of protecting a healthy natural system.

The Florida Communities Trust program provides grants to local governments in the state to help implement the natural resource, conservation, coastal, and recreation elements of the statutorily mandated

Local Government Comprehensive Plan. These grant funds are primarily used for the acquisition of green and open space, and park and recreation lands at the local level. In addition, many localities use grant funds appropriated by the Florida Legislature to acquire and develop local park and recreation areas under the Florida Recreational Development and Assistance Program.

Linked open space and buffers. Greenways, blueways, and trails multiply the benefits of open spaces to natural systems by linking those spaces together, and they enrich the quality of life of community residents and visitors by facilitating access to the state's natural and cultural heritage sites and by enhancing people's sense of place. In some cases, the greenway system also offers opportunities to improve the water quality of stormwater runoff.

The Florida Greenways and Trails System is guiding a statewide initiative to create a system of greenways and trails connecting communities and conservation areas. When completed, the system will connect one end of the state to the other, from Key West to Pensacola. One goal of the program is to work with land managers to add an additional 10 percent per year to the total lands designated. The criteria for a designated land or waterway are that it must (1) protect and/or enhance natural, recreational, cultural, or historic resources and (2) either provide linear open space or a hub or site, or promote connectivity between or among conservation lands, communities, parks, other recreational facilities, cultural sites, or historic sites. The designation program encourages voluntary partnerships in conservation, development, and management of greenways and trails provides recognition for individual components of the system and the partners involved, and raise public awareness of the conservation and recreation benefits of greenways and trails.

Protecting and preserving sustainable agriculture. Agriculture is Florida's second leading industry, producing $18 billion in economic value each year. A large portion of agricultural land can be viewed as open space that benefits the natural system through buffering, augmentation of natural habitats, water storage and filtration, and aquifer recharge. It is of great concern that Florida is losing its farms and ranches because of declining profitability, land valuation, import/export and grade issues, and urban sprawl. Statewide almost 150,000 acres of productive agricultural lands are converted to other land uses each year. In the past some agricultural practices have impaired the functioning of natural systems, sometimes with adverse effects on native plants and animals, and sometimes to the detriment of the ability of the land to sustain agricultural uses over the long term. Several regulatory and voluntary programs are underway in the South Florida Ecosystem and other areas in Florida to enhance environmental quality and the natural resource base upon which the agricultural economy depends.

The Everglades Best Management Practices Program, required by the 1994 Everglades Forever Act, specifically addresses the EAA and the C-139 Basin. The program goal of achieving a 25 percent reduction in the phosphorus load from the EAA has been met for each water year since the first full year of implementing best management practices (water years 1996 – 2003). EAA farmers have implemented a variety of practices to reduce the levels of phosphorus coming from their farms, including efficient fertilizer application, control of erosion and sediment loss, and effective stormwater management. Similar BMPs are implemented in the C-139 Basin, which is located adjacent to the EAA. The goal in this basin is to maintain phosphorus loads at or below historic levels. The first year of compliance determination was water year 2003, in which the C-139 Basin was determined to be out of compliance. This determination triggered inspections by the SFWMD staff to verify initial BMP implementation. The future direction in both basins is optimization of BMPs for further water quality improvements.

The federal Farm Bill of 2002 provides several voluntary conservation programs through the U.S. Department of Agriculture (USDA) to assist landowners in protecting and preserving their natural resources. The USDA provides incentive payments and cost-sharing to restore, enhance, and protect degraded wetlands on agricultural lands, including the purchase of easements through the Wetland Reserve Program. The Farm and Ranch Land Protection Program helps farmers and ranchers keep their land in agriculture through the purchase of conservation easements in partnership with local and state governments and nonprofit entities. The Environmental Quality Incentive Program promotes agricultural production and environmental quality as compatible goals. Financial and technical assistance is provided to landowners to implement best management practices to improve water quality or enhance natural resource values. The Wildlife Habitat Incentives Program encourages the creation of high-quality wildlife habitats that support wildlife populations important to the ecosystem. Financial assistance is provided to develop upland, wetland, riparian, and aquatic habitats on private lands. Implementation of these programs will contribute significantly to the strategic goals for South Florida Ecosystem restoration. The Grassland Reserve Program helps landowners and operators restore and protect grassland, including rangeland and pastureland, while maintaining the areas as grazing lands. The program emphasizes containing shrubs and forbs under the greatest threat of conversion.

Strategies for implementing the 2001 Rural and Family Lands Protection Act. The conversion of rural lands to higher density and more intense uses is having a profound effect on Florida's ability to maintain a balance between population growth and the natural resources necessary to support that growth. The development of previously isolated rural landscapes is fragmenting and degrading the quality and character of Florida's natural and agricultural lands. The prevailing development patterns threaten the state's ability to meet the needs of its citizens through adequate delivery of services and the maintenance of an agricultural economy. Additionally, these growth patterns interrupt the natural hydrological and biological functions that support not only sustainable agriculture and healthy ecosystems, but also the quality of life enjoyed by South Floridians.

The Florida Legislature recognized the importance of maintaining a healthy agriculture industry when it passed the Rural and Family Lands Protection Act of 2001. This important act authorizes the responsible agencies to develop strategies to protect rural and agricultural and timber lands. Implementation strategies and appropriations for this effort are currently being developed, and appropriations continue to be sought for the program.

One such strategy is to secure conservation easements or protection agreements to compensate property owners for restrictions on the future use of their land. One of the biggest challenges in administering these programs is identifying economic resources to fund the program each year in a growing state struggling with many fiscal challenges. Recognizing these challenges in Florida and elsewhere, the NRCS Farm and Ranch Lands Protection Program (FRPP) provides matching funds to state, tribal and local governments and nongovernmental organizations with existing farm and ranch land protection programs to purchase conservation easements that help keep land in agriculture.

Concerned with the rapid rate at which agricultural lands are being converted into an urban environment in South Florida, federal and state agriculture agencies are implementing a number of incentive programs to decrease that rate. An effort is underway to assess how much land is in productive agriculture and what kinds of development pressures it is under. The Florida DEP and DACS and the University of Florida Institute of Food and Agricultural Sciences have been working together to implement incentive programs and to collect comprehensive data that will support efforts to retain viable and sustainable agriculture as part of the South Florida Ecosystem.

Redevelopment of brownfields. Federal EPA, state, regional, and local programs are contributing to the cleanup and redevelopment of contaminated and abandoned or underused sites in urban and rural areas of South Florida. Actual or perceived environmental contamination in urban infill sites—along with the risks and costs associated with cleanup—is a significant barrier to redevelopment. The remediation of this problem is contributing to the revitalization of South Florida's historic developed areas. This revitalization is expected to lessen development pressure and urban sprawl in areas to the west,

the west, needed in order to restore the South Florida Ecosystem and to ensure future regional water supplies.

The Eastward Ho! Brownfields Partnership, which includes Miami-Dade, Broward, and Palm Beach Counties is a good example of how local, regional, state, and federal agencies are working with private nonprofit and community organizations to facilitate the redevelopment of brownfields. The partnership received a National Brownfields Showcase Community designation from the EPA in 1998. The EPA also has granted $2 million to capitalize a brownfields cleanup revolving loan fund, which is being used to assist in the cleanup and reuse of brownfields in southeast Florida. The Partnership has also been active in the Florida Brownfields Program, administered and implemented by the Florida DEP. Miami-Dade County and the Cities of West Palm Beach, Opa-Locka, Miami, Miramar, Pompano Beach, Dania Beach, Miami Beach, Lauderhill, Hollywood, North Miami Beach, Hialeah, and Lauderdale Lakes have designated twenty-nine sites and areas, totaling 48,190 acres, under the Florida Brownfields Program. This accounts for 71 percent of the acreage designated in Florida as brownfields. The Florida DEP has delegated the administration and implementation of the Florida Brownfields Program in their respective jurisdictions to Miami-Dade and Broward Counties. This results in streamlining of the review and implementation of assessment and cleanup activities. Miami-Dade and Broward Counties are the only counties in the state of Florida to receive this delegation.

Of the approximately 2,100 estimated brownfield sites in the three-county southeast Florida area, some 390 sites have received various levels of environmental assessment review. Approximately 75 sites need no further assessment and will not require remediation. Five sites have undergone remediation activities and are either undergoing redevelopment or will shortly undergo redevelopment.

Community Understanding of Restoration Projects. The Corps of Engineers and the SFWMD coordinated an intensive public involvement process during the development of CERP, which culminated in more than 1,500 people attending twelve public meetings in the fall of 1998. The agencies remain committed to involving the public in all aspects of CERP implementation. Their Public Outreach Program Management Plan, completed in 2001, defines the general scope, schedules, costs, products, and funding requirements necessary for the first five years of outreach activities. The major elements of the plan are summarized below:

General public awareness. Information about the CERP will be provided to the general population through media stories, participation by CERP outreach staff at community events; and distribution of informative print, electronic and other materials.

Minority Community Outreach. Special efforts will be made to inform and involve African-American, Haitian, and Hispanic residents of South Florida about CERP – groups that historically have been underrepresented in environmental programs.

Environmental Education. Appreciation of the Everglades and other natural resources by our children is extremely important because they will benefit from, and perhaps even participate in, CERP and other related restoration efforts as adults. Curricula and teachers' guides will be developed and distributed in K-12 schools throughout the 16-county south Florida region, often in partnership with the Newspapers in Education (NIE) program.

Small Business Outreach. Many CERP components will be handled by the private sector through contracts. Outreach activities will seek to empower and enable South Florida's small businesses to do business with the USACE and its partners. Staff will proactively engage and assist small businesses through business forums, workshops, and training sessions; development of web sites; distribution of printed materials; and other means.

Project-Level Involvement. Hundreds of stakeholder meetings, public workshops, and public meetings have already been held to involve local residents in the development of CERP projects. These have been widely publicized, planned in locations convenient to the public, and often featured an open house for staff to meet with residents. This form of one-on-one communication is essential to the success of CERP.

The Working Group also participates in a public-private partnership between the Task Force and the Museum of Discovery and Science. The success of this collaborative effort will result in environmental

education programs, enhanced outdoor exhibitry, and an informative kiosk about the Greater Everglades ecosystem restoration effort, which will provide information to the half million people who visit the museum annually.

Factors Affecting Achievement of this Subgoal

Unanticipated growth. Accelerated growth in South Florida over predicted levels will significantly increase the loss of open space to other land uses, particularly development. Government agencies are preparing long-term plans and setting priorities based on assumptions about levels of growth and demand for services, which if eclipsed will seriously challenge the ability of local governments and agencies to respond in ways that adequately protect the natural system.

Management complexity. Fostering development patterns that are compatible with natural systems requires close coordination of multiple jurisdictions with authority over the built environment. Without such coordination, gains in compatibility on lands within one jurisdiction (in habitat connectivity, for example) might be negated by incompatible development in a neighboring jurisdiction. Because many development issues involve corridors such as roads, transit routes, or greenways that cross multiple jurisdictions, unilateral actions by individual communities are often impossible.

Coordination is also required between jurisdictions with authority over the built environment and jurisdictions with authority over natural systems. The strategic goal is compatibility, and any efforts that undermine the sustainability of either the built or the natural system could further harm the ecosystem. Potential regulations on agriculture pose a good example. On the one hand, any federal, state, or local agricultural policy intended to protect natural systems but that does not sufficiently provide for economic stability of the industry may result in such unintended consequences as a long-term reduction in open space and wildlife habitat as agricultural land is converted to other land uses. On the other hand, agricultural practices that degrade the natural environment may also ultimately prove catastrophic to agriculture. If awareness of and respect for these interrelationships lags behind other considerations, the success of ecosystem restoration may be delayed.

Funding. Local and regional jurisdictions will need adequate revenues and possibly supplemental funding to develop plans for a better pattern of protection by acquiring land, or less-than-fee interests in land, to link park, recreation, open space, and other significant land and water areas, and to enforce environmental regulations for the protection of those areas. Changes in local, state, or federal economic conditions may change the priorities of projects needed to implement this subgoal.

Environmental Justice. Early and sustained participation in community affairs by all segments of the community is critical. This may not occur unless policies and activities designed to involve all segments of the community are institutionalized so that they may continue beyond the timeline of the Working Group. Environmental ombudsmen located in restoration partner agencies would aid in getting community issues to the appropriate person and responsible agency. In addition, trained volunteers who continually improve the knowledge base of restoration in the community will be important.

Specific, Measurable Objectives for Achieving this Subgoal

Five objectives for achieving this subgoal have been adopted by the Task Force:

- Designate or acquire an additional 480,000 acres as part of the Florida Greenways and Trails System by 2008
- Increase participation in the Voluntary Farm Bill conservation programs by 230,000 acres by 2014
- Acquire an additional 2,500 acres of park, recreation, and open space lands by 2005
- Complete five brownfield rehabilitation and redevelopment projects by 2006
- Increase community understanding of ecosystem restoration

The key projects needed to achieve these objectives and the schedule for their implementation is shown in Strategic Plan Table 6.

Strategic Plan Table 6. Subgoal 3-A: Use and Manage Land in a Manner Compatible with Ecosystem Restoration

Milestone Projects (Refer to Appendix A - for more information about project schedules, funding, responsible agencies, etc.)			
Objective 3-A.1: Designate or acquire an additional 480,000 acres as part of the Florida Greenways and Trails System by 2008	**Project ID**	**Project Endpoint**	**Project Name**
	3100 3102	2008 2004	Florida Greenways and Trails Program Lake Okeechobee Scenic Trail
Objective 3-A.2: Increase participating in the voluntary Farm Bill Conservation Programs by 230,000 acres by 2014	**Project ID**	**Project Endpoint**	**Project Name**
	3201	2011	Technical Assistance to Indian Reservations
	3200	2014	Farm Bill Conservation Programs
Objective 3-A.3: Acquire an additional 2,500 acres of park, recreation, and open space lands by 2005	**Project ID**	**Project Endpoint**	**Project Name**
	3300	2005	Florida Communities Trust Grant Program
Objective 3-A.4: Complete five brownfield rehabilitation and redevelopment projects by 2006	**Project ID**	**Project Endpoint**	**Project Name**
	3400	2006	Konover Site - Fort Lauderdale Little Haiti Park Site - Miami Liberia Area - Hollywood Gravity Entertainment Site – Lauderdale Lakes Former Palm Beach Lakes Golf Course – West Palm Beach Liberty City Area - Miami The Wynwood Project - Miami Wagner Square Project - Miami Pompano Beach Multi-Purpose Project Potamkin Properties – Miami Beach Biscayne Commons Site – North Miami Beach Beacon Lakes – Miami Dade County Mid-Town Miami Stiegel Gas & Oil Corp – Miami Former Gipson's Service Station – Miami Former JG Shamrock/Supreme Service Station- Miami McArthur Dairy Site – Lauderhill Dania Motocross Brownfield Area – Dania Beach
Objective 3-A.5: Increase community understanding of ecosystem restoration by 2006	**Project ID**	**Project Endpoint**	**Project Name**
	3500	TBD	USDA NRCS Earth Team Project, in cooperation and coordination with the South Florida Ecosystem Restoration Inc. and South Florida Ecosystem Restoration Advisory Committee, will train 1000 volunteers to educate citizens about and how to participate in ecosystem restoration and conserving natural resources.

Subgoal 3-B: Maintain or Improve Flood Protection in a Manner Compatible with Ecosystem Restoration

WRDA 2000 clearly states that implementation of the CERP shall not reduce levels of service for flood protection that were in existence on the date that the law was enacted and in accordance with applicable law. The Savings Clause states that CERP environmental protection projects, including increased canal and groundwater levels, need to be accomplished in a way that does not harm flood protection.

The SFWMD operates and maintains the primary flood control and water supply system within its sixteen-county jurisdiction. The major portion of that system is comprised of the federally designed and constructed C&SF Project. The SFWMD operates and maintains the multipurpose CS&F Project and other projects within the Big Cypress Basin pursuant to regulation schedules and operational guidelines established by the USACE. This primary regional

system is complemented by secondary and tertiary systems that are operated and managed by local governments, drainage districts established by Chapter 298 of the Florida Statutes, and private interests to ensure that the drainage and surface waters are routed to the primary drainage system.

The C&SF Project was originally authorized by the Flood Control Act of 1948, and most of the originally authorized project facilities were constructed during the period from 1950 to 1972. Some modifications to the primary system have occurred since the original authorization. Larger than predicted population growth and different development patterns from those projected in 1948 have, over time, challenged the ability of the primary, secondary, and tertiary drainage systems to meet the original goals of maintaining flood protection for urban and agricultural lands.

Maintaining efficiencies in a combination of primary and secondary drainage systems is needed to achieve and maintain original design flood protection planning goals for South Florida. Further modifications, updates, and upgrades are needed in many of the existing water control facilities in order to support the current restoration endpoint levels of flood protection. The CERP, as authorized by Congress in WRDA 2000, is the consensus plan that is to be used to modify and improve the C&SF Project to benefit the Everglades Ecosystem and to help provide for the water needs of the South Florida region, including water supply and flood protection.

Severe flooding occurred within areas of Miami-Dade County as a result of Hurricane Irene in October 1999 and intense rainfall in October 2000. In response to the October 2000 flood, the executive director of the SFWMD appointed a Recovery Task Force under the auspices of the Emergency Operations Center to develop a list of proposed flood mitigation projects for the impacted areas of Miami-Dade County. This Task Force has recommended that mitigation projects be considered on a basinwide basis and include improvements to both the primary and secondary stormwater conveyance systems. A Miami-Dade County Flooding Task Force, which also was created in response to these events, made recommendations that included the expeditious completion of the Modified Water Deliveries and C-111 Projects to help alleviate the flooding risk. Although none of the recommendations are designed to "flood-proof" the basins in which they are constructed, the projects should provide for increased primary system conveyance, which will then allow flood mitigation benefits from secondary system improvements provided by local communities.

Maintaining flood protection can also impact water supply. The C&SF Project provides flood protection by discharging water into the ocean through canals. That water therefore is made unavailable for water supply. As flood protection is provided for the agricultural and urban areas bordering the Everglades, there is the potential for increasing the loss of freshwater supplies. Some components of the CERP are designed to decrease this loss.

How This Subgoal Will Be Implemented

Public works construction. Capital improvements, modifications, and repairs to water control and conveyance facilities will help maintain and improve flood protection. The CERP consists of numerous projects that may provide incidental improvements to flood protection while decreasing the loss of freshwater supplies. Other large-scale projects, such as the C-111 Project, consist of structural and nonstructural modifications to existing works intended in part to maintain flood protection. Opportunities to provide greater levels of flood protection or to provide flood protection in areas where there is currently no flood protection may be considered during implementation of the CERP, provided that the greater level of protection or the provision of new flood protection is consistent with the goals and purposes of the CERP and is economically justified.

Additional flood protection is provided by projects funded by the Federal Emergency Management Agency (FEMA), including the C-4 Basin Flood Mitigation Project. This project, which is administered by the SFWMD, will improve canals in the C-4 basin and provide an emergency water impoundment to hold excess canal water when canals reach critical capacity.

Nonstructural flood protection. Numerous nonstructural options for flood protection exist for the built environment. These include, but are not limited to, ensuring that new construction meets FEMA guidelines, land use planning to guide development away from flood-prone areas, and acquiring undeveloped lands from willing sellers.

Long-Term Operations and Maintenance Needs. The SFWMD implements an ongoing Canal Conveyance Capacity Program to evaluate the maintenance, dredging, and bank stabilization requirements of the C&SF Project. This program is intended to restore the original design capacity of the canals as constructed. SFWMD's Capital Maintenance Program evaluates and implements refurbishment and/or replacement of existing water control structures and pumping stations that have reached the end of their design life. Exotic and aquatic plant control, through herbicidal, mechanical, and biological control methods, is another means of ensuring that conveyance capacity within canals and water bodies is maintained to their original capacity.

Factors Affecting Achievement of this Subgoal

Unanticipated growth. Population growth and changes in land use, especially if different from what is projected, will continue to affect the capability of state and federal agencies to provide flood protection for natural, urban, and agricultural lands. Land conversions to different uses are particularly stressful to the flood-protection system, since the flood protection requirements may vary greatly among different uses.

The increase in developed areas to accommodate population growth within the drainage basin of the C&SF Project will increase surface runoff, lowering the level of service for flood protection and increasing the intensity and duration of floods.

Funding. Continued financial support from Congress and the Florida Legislature will be necessary to complete projects for timely achievement of flood-protection goals.

Specific, Measurable Objectives for Achieving this Subgoal

One objective for achieving this subgoal has been adopted by the Task Force:

- Maintain or improve existing levels of flood protection

The key projects needed to achieve this objective and the schedule for their implementation is shown in Strategic Plan Table 7.

Subgoal 3-C: Provide Sufficient Water Resources for Built and Natural Systems

The State of Florida has statutory goals and responsibilities to ensure an adequate supply of water for protection of the natural system and for existing and future "reasonable-beneficial" potable, industrial, and agricultural uses. For protection of the natural system, Florida law directs the SFWMD to set minimum flows and levels (MFLs) to prevent significant harm to water resources. MFLs have been established for Everglades National Park, the WCAs, Lake Okeechobee, and the Northern Biscayne Aquifer (except that portion of the aquifer located in southern Miami-Dade County). MFLs also have been established for the Caloosahatchee River, St. Lucie River and Estuary, and the Northwest Fork of the Loxahatchee River. WRDA 2000 (attached as Appendix E) requires water reservations for the protection of fish and wildlife in natural systems pursuant to state and federal laws associated with implementation of the CERP.

WRDA 2000, through the Savings Clause, prohibits the elimination or transfer of existing legal sources of water until a new source of water supply of comparable quantity and quality as that available on December 11, 2000 is available to replace the water that will be lost as a result of CERP implementation.

Strategic Plan Table 7
Subgoal 3-B: Maintain or Improve Flood Protection in a Manner Compatible with Ecosystem Restoration

Milestone Projects (Refer to Appendix A - for more information about project schedules, funding, responsible agencies, etc.)			
Objective 3-B.1: Maintain or improve existing levels of flood protection	**Project ID**	**Project Endpoint**	**Project**
	3600	2004	C-4 Basin Flood Mitigation Project
	1300	2005	C- 111 Canal project

How This Subgoal Will Be Implemented

As water storage and other water supply related projects and programs are implemented (see subgoal 1-A), reliable sources of water identified for human supplies will become available to meet projected demands on a regular basis. The potential for water shortages will be reduced as projects are completed.

Restoration partners support the state's strong commitment to achieving its water supply goals through a variety of additional state and local efforts. Some of these efforts are reflected under other strategic goals and subgoals (for example, planning for growth is addressed under subgoal 3-A). Efforts unique to this subgoal are described below.

Implement a process of reserving water through time that will meet the needs of the natural system. WRDA 2000 requires the State of Florida to reserve the water generated by the CERP and needed for Everglades restoration. The SFWMD, consistent with its water management responsibilities, is working to fulfill that commitment.

The SFWMD will also identify existing water supplies for the protection of fish and wildlife for key natural systems (e.g. Everglades and WCAs). This will provide information needed to make future decisions about consumptive use permits.

The SFWMD Governing Board has developed guiding principles for reviewing permit applications dependent upon C&SF project deliveries and recharge to ensure consistency with the CERP. These will complement the "B" list consumptive use permitting rules that limit permit durations for increased withdrawals that affect the regional system water supplies. This document was accepted by the SFWMD Governing Board in June 2003. A guidance memorandum, required by the Federal Programmatic Regulations, is being developed which further details the process and methodology for identifying water to be managed and reserved for the natural system. This guidance memorandum is scheduled for completion in December 2004.

Implement the Recommendations of the 2002 Water Conservation Initiative Report. The SFWMD is developing a rule that will implement certain report recommendations and assist water managers in improving the ability to meet water demands in times of flood and drought over and above existing mandatory conservation requirements in District Rules. The Water Conservation Rule will establish goal-based water conservation standards that will reflect a water conservation ethic focused on performance. The rule will enhance the SFWMD's ability to achieve conservation benefits through public outreach, cooperative grant funding, and technical assistance.

Implement and update regional water supply plans. Regional water supply plans with twenty-year planning horizons, which reassess base assumptions and current technologies every five years, have been completed for each of the four SFWMD regional water supply planning areas: Lower East Coast, Upper East Coast, Kissimmee Basin, and Lower West Coast. The goal of each plan is to meet the water supply needs of the region during a one-in-ten-year drought while not causing harm to the environment. The water supply plans include strategies for (1) increasing supply for natural systems and the human population through water resource development projects, (2) promoting the use of alternative water supply sources and conservation, (3) protecting water quality at the source of supply, (4) accurately reflecting limitations of the available ground water or other available water supplies in plans for future growth and development, (5) increasing the available water supply, and (6) protecting natural systems from harm through the consumptive use permitting process, from significant harm through establishment of minimum flows and levels, and from serious harm through proper implementation of water shortage plans. The Lower East Coast Water Supply Plan will incorporate and account for the CERP projects and their benefits for the natural system and human water supply.

Improve water conservation and reuse. The SFWMD regional water supply plans outline the planning and permitting efforts needed to encourage water conservation and lower consumptive use rates over time. Strategies to improve conservation and reuse incorporate different approaches for public, commercial, landscape, and agricultural consumers. These strategies include limits on the time of day irrigation is allowed, inverted rate structures, xeriscape landscaping using native plants, establishment of mobile irrigation labs, grants to

implement conservation projects, and feasibility analyses for using reclaimed water. A strong public education program supports these strategies.

Increase water resources through alternative water supply development and water resource development projects. The SFWMD has implemented programs with goals to increase the amount of available water. These programs have been in place for some time and are often in addition to the projects in the CERP. The Alternative Water Supply Development Program awards grants to local water providers to develop additional water supply through alternative technologies. Through its Water Resource Development Projects, the SFWMD attempts to increase the regional water resources available for natural and built environment needs.

Establish minimum flows and levels for priority water bodies. The SFWMD is working to establish minimum flows and levels for priority water bodies according to the annual Florida DEP approved schedule. This will improve the efficiencies of delivering water and maximizing available resources.

Factors Affecting Achievement of this Subgoal

Unanticipated growth. If population growth and/or water used for irrigation exceed projections, variations in growth projections are incorporated into five-year updates to the regional water supply plans.

Funding. Adequate funding will be required to accomplish water storage and other water supply related projects. Likewise, adequate funding of public outreach and education will be critical to achieving water conservation strategies and reduced consumption rates. Efforts to encourage partnerships that promote and enhance local government programs to develop and implement alternative water supply resources will be important to achieving water supply goals.

Specific, Measurable Objectives for Achieving this Subgoal

Three objectives for achieving this subgoal have been adopted by the Task Force:

- Increase water available towards restoration endpoint of 478.5 million gallons per day by 2008
- Increase volumes of reuse on a regional basis
- Increase water made available through the SFWMD Alternative Water Supply Development Program

The key projects needed to achieve these objectives and the schedule for their implementation is shown in Strategic Plan Table 8. The outputs listed in Table 9 and the measures and restoration endpoints in the Project Summary Table in Appendix A reflect the strategic goals and are not intended to function as an allocation or reservation of water, which must be implemented through applicable law.

Strategic Plan Table 8. Subgoal 3-C: Provide Sufficient Water Resources for Built and Natural Systems

Milestone Projects (Refer to Appendix A for more information about project schedules, funding, responsible agencies, etc.)			
Objective 3-C.1: Increase water available towards restoration endpoint of 478.5 million gallons per day by 2008	**Project ID**	**Restoration Endpoint**	**Project**
	3701	2008	Lower East Cost Water Supply Plan
	3702	2008	Lower West Coast Water Supply Plan
	3703	2008	Upper East Coast Water Supply Plan
	3700	2008	Kissimmee Basin Water Supply Plan
Objective 3-C.2: Increase volume of reuse on a regional basis	**Project ID**	**Restoration Endpoint**	**Project**
	3800	2023	C&SF: CERP –South Miami-Dade County Reuse
	3801	2023	C&SF:CERP – West Miami-Dade County Reuse
	3805	2004	Orlando Kissimmee Area Regional Reclaimed Water Optimization Plan
	3803	2008	Lower West Coast Regional Irrigation Distribution System Master Plan Study
	3804	2004	Northern Palm Beach County and Southern Martin County Reclaimed Water Master Plan
Objective 3-C.3: Achieve annual targets for water made available through SFWMD alternative water supply program	**Project ID**	**Restoration Endpoint**	**Project**
	3900	Ongoing	Alternative Water Supply Grant Program - annually

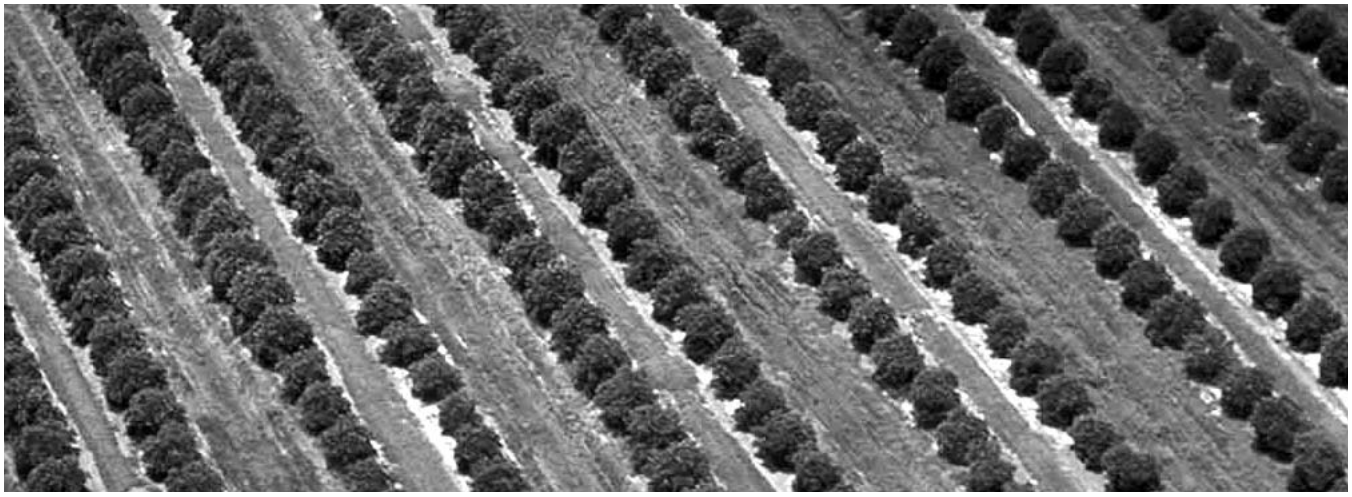
Linkages between Strategic Work Efforts and Ecosystem Restoration

The Task Force members measure progress on two complementary scales: (1) scales that measure the satisfactory completion of work and (2) scales that measure ecosystem health (in terms of either stressors, ecological conditions, or other water-related needs). With these two scales the Task Force distinguishes between those things that are within people's capability to manipulate and control (the strategic goals, subgoals, and objectives) and those things that are the responses of natural systems (indicators and restoration endpoints) to the Task Force agencies' efforts.

No exclusive linkage exists between any one strategic goal or objective (let alone, any one specific project) and any one indicator of ecological conditions. Efforts on many fronts will be necessary to restore and sustain a healthy ecosystem, which will then be manifested through a myriad of species and processes. However, positive correlations are expected between individual indicators of ecological conditions and groups of projects designed to eliminate or mitigate stressors that are detrimental to those indicators. Some of these relationships were charted in table D-1 in Appendix D. This table will be updated when the Task Force adopts revised indicators and restoration endpoints following the current work of the SCG.

The Task Force believes that the ecosystem will respond with improved health and vigor to efforts to reverse disruptive human influences. Due to the complexity and large scope of this effort, the agencies involved in restoration continue to improve their understanding of how restoration will occur. This understanding is critical to the ability to accurately assess the major stressors on the various components of the ecosystem and consider how the physical improvements expected to result from projects designed to eliminate or mitigate stressors will affect ecological conditions and other water-related needs. Relationships between projects and the elimination or mitigation of stressors will be more direct than relationships between projects and resulting ecological conditions; however, even these relationships cannot yet be accurately predicted with current ecological models.

The monitoring and assessment complexities cited above pose challenges, but the monitoring conducted to date has provided good information that has been useful in assessing the success of early restoration efforts. For example, in response to the reestablishment of more natural flow characteristics in the Kissimmee River, accomplished through the implementation of the Kissimmee River Restoration Project, wetland vegetation, particularly broadleaf marsh species and buttonbush, is rapidly expanding within the reflooded floodplain. Recent observations indicate that the reconstructed section of river channel has received increased use by wading bird species, particularly snowy egrets, white ibis, tricolored herons, wood storks, and black crowned night herons. Other notable bird observations in this region include a roseate spoonbill and a whooping crane. This is one localized and general example of how the ecosystem is responding to work efforts that eliminate or mitigate disruptive human influences.



South Florida Ecosystem Restoration Timeline

by project completion date

1985 through 2005

- Dupuis Reserve
- Nicodemus Slough
- South Fork of the St. Lucie River
- Yamato Scrub
- Kissimmee Prarie
- Lake Walk in Water
- Corkscrew Regional Mitigation Bank
- Tibet Butler Reserve
- Loxahatchee River Land Acquisition
- Ten Mile Creek Acquisition
- Ten Mile Creek Acquisition
- Cayo Costa
- Hobe Sound National Wildlife Refuge
- East Everglades Addition to ENP
- Kissimmee River - lower basin
- Kissimmee River - upper basin
- Big Cypress National Preserve Addition
- Crocodile Lake National Refuge
- Florida Keys National Wildlife Refuge Complex
- J.N. "Ding" Darliing National Wildlife Refuge
- A.R.M. Loxahatchee National Wildlife Refuge

2005 through 2010

- Lake Okeechobee Water Retention/Phosphorus Removal
- Henderson Creek/Belle Meade
- Miccosukee Tribe Water Management Plan
- Acme Basin B Discharge
- Everglades Agricultural Storage Reservoir Phase 1
- Seminole Tribe Comprehensive Surface Water Management System for Brighton Reservoir

2010 through 2015

- Broward County WPA, C-9 STA/Impoundment & Western C-11 Impoundment & Canal & WCA 3A/3B Levee Seepage Management
- Lake Okeechobee Watershed
- Everglades Agricultural Storage Reservoir Phase II
- Loxahatchee Impoundment Landscape Assessment
- Wastewater Reuse Pilot Project
- Lake Park Restoration

2015 through 2020

- Florida Keys Tidal Restoration
- WCA-3 Decomp & Sheetflow Enhancement
- Bird Drive Recharge Area
- C-43 Basin Storage Reservoir
- Palm Beach County Agricultural Reservoir & ASR

2020 through 2040

- Site 1 Impoundment & ASR
- Indian River Lagoon South, C-23/C-24/C-25/Northfork & Southfork Storage Reservoirs & C-44 Basin Storage Reservoir
- Central Lake Belt Storage Area
- North Lake Belt Storage Area
- Central Lake Belt Storage Area
- Maintenance control achieved: Melaleuca; Brazillian Pepper; Australian Pine; Old World Climbing Fern

Legend

- Surface Water Storage
- Sheet Flow
- Water Quality
- Wildlife Habitat
- Exotic Species Control
- Aquifer Storage
- Coral Reef Protection

- Ten Mile Creek

- STA-1 West Works
- STA-2 Works
- STA-5 Works
- STA-3/4

- Management Plan for 6 Species
- Estero Bay Aquatic Preserve
- Melaleuca Quarantine Facility
- Integration of Federal, State & Local Agency Invasive Exotic Control

- WCA-3A Hydropattern Restoration
- Southern Crew

- Dry Tortugas National Park General Management Plan
- Planning & Implementation of the Tortugas Ecological Reserve

- Modified Water Deliveries to ENP
- Southern Golden Gate Estates - Picayune Strand
- Canal 111
- Kissimmee River Restoration

- Modified Water Deliveries to ENP
- Southern Golden Gate Estates - Picayune Strand
- Canal 111
- Kissimmee River Restoration

- 14 Additional Species Management Plan
- Melaleuca Eradication Project & Other Exotic Plants

- Broward County WPA, C-9 STA/Impoundment & Western C-11 Impoundment & Canal & WCA 3A/3B Levee Seepage Management
- Total Maximum Daily Load (TMDL) Program
- STA-1E/C-51 West
- Lake Okeechobee Watershed

- Big Cypress/L-28 Interceptor Modification
- North PBC PIR Part 1
- Caloosahatchee Backpumping

- Hole in the Donut
- Florida Keys Tidal Restoration
- Flow to NW & Central WCA-3A(II)(RR)
- WCA-3 Decomp & Sheetflow Enhancement

- C-43 Basin Storage Reservoir & ASR
- Palm Beach County Agricultural Reservoir ASR

- Pineland & hardwood hammock restoration in C-111 Basin

- North Palm Beach County Part 2
- Site 1 Impoundment & ASR
- Lake Okeechobee Aquifer Storage & Recovery

Wildlife Habitat Projects
(completion date to be determined)

- Allapattah Flats/Ranch
- Atlantic Ridge Ecosystem
- Babcock Ranch
- Barfield Farms
- Belle Meade
- Big Cypress National Preserve Private Inholdings
- Big Bend Swamp/Holopaw Ranch
- Biscayne Coastal Wetlands
- Biscayne National Park
- Bombing Range Ridge
- Caloosahatchee Ecoscape
- Catfish Creek
- Charlotte Harbor Estuary/Flatwoods/Cape Haze
- Corkscrew Regional Watershed
- Coupon Bight/Key Deer Big Pine Key
- Cypress Creek/Loxahatchee
- Cypress Creek/Trail Ridge
- Devils Garden
- Estero Bay
- East Coast Buffer/Water Preserve Areas
- Everglades Agricultural Area/Talisman
- Fakahatchee Strand
- Fisheating Creek
- Florida Keys Ecosystem
- Frog Pond/L-31 N
- Half Circle L Ranch
- Hen Scratch Ranch
- Indian River Lagoon Blueway
- Juno Hills/Dunes
- Jupiter Ridge
- Kissimmee - St. John Connector
- Lake Wales Ridge Ecosystem
- Loxahatchee Slough
- McDaniel Ranch
- Miami-Dade County Archipelago
- North Key Laro Hammocks
- Model Lands
- North Fork St. Lucie River
- North Savannas
- Okaloacoochee Slough
- Okeechobee Battlefield
- Osceola Pine Savannas
- Pal-Mar
- Panther Glades
- Paradise Run
- Lake Hatchineha Watershed/Parker Poinciana
- Pineland Site Complex
- Ranch Reserve
- Rookery Bay
- Rotenberger/Holey Land Tract
- Shingle Creek
- Six Mile Cypress
- South Savannas
- Southern Glades
- Southern Golden Gate Estates - Picayune Strand
- Twelve Mile Slough
- Upper Lakes Basin Watershed
- Upper Econ Mosaic

Tracking Success

2002-2004 Biennial Report of the South Florida Ecosystem Task Force

Biennial Report Purpose

Activities of the Task Force

Policies, Strategies, Plans, Programs, Projects, Activities, and Priorities

Progress Made Toward Restoration

BIENNIAL REPORT PURPOSE AND ACCOMPLISHMENTS

Biennial Report Purpose

This report summarizes the policies, strategies, plans, programs, projects, activities, and priorities of the South Florida Ecosystem Restoration Task Force for the reporting years 2002 – 2004.[14] WRDA 1996 directs the Task Force to report to the Congress biennially on:

- The activities of the South Florida Ecosystem Restoration Task Force for the reporting years
- Policies, strategies, plans, programs, projects, activities, and priorities planned, developed, or implemented for South Florida Ecosystem restoration, and
- Progress made toward restoration

The biennial report documents activities and progress, and describes how funds are targeted for restoration. It satisfies the WRDA requirements by providing the following information: First, it summarizes the activities and major accomplishments of the reporting period in terms of the policies, strategies, plans, programs, projects, activities, and priorities that were developed or conducted to carry out the specific strategic goals and objectives adopted by the Task Force members and the Task Force. Second, it tracks the progress made toward restoration during the reporting period. in terms of selected measurable indicators of ecosystem health.

The indicators of success tracked in previous biennial reports are being revised. Those approved in 2002 are provided as Appendix D until new indicators have been formally adopted.

This Biennial Report is intended for four principal audiences:

- United States Congress
- Florida Legislature
- Seminole Tribe of Florida
- Miccosukee Tribe of Indians of Florida

The information included here will also be broadly shared with state and federal agencies, local governments, regional agencies and industries, private interest groups, and private citizens interested in South Florida Ecosystem restoration.

Policies, Strategies, Plans, Programs, Projects, Activities and Priorities

A comprehensive discussion of the principles and strategies adopted by the Task Force, along with the major plans, programs, and projects of the various Task Force member agencies, is provided in Coordinating Success: Strategy for Restoration of the South Florida Ecosystem. This Biennial Report, Tracking Success, addresses only the Task Force member agencies' activities during the past two years, and it covers only the highlights of those activities. More complete and detailed discussions of the recently completed and ongoing projects can be found in reports produced by the participating agencies, particularly the USACE, the SFWMD, the Florida DEP, and the DOI.

The Task Force's strategy for restoration identifies strategic goals, subgoals, and measurable objectives that have been adopted by the Task Force member agencies, along with schedules for their accomplishment. This section of the biennial report is organized to describe the progress made toward each strategic goal and objective during the two-year reporting period, providing a basis for continuously evaluating and adaptively managing the restoration effort. This goal-by-goal discussion is preceded by a discussion of the accomplishments related to overall coordination and adaptive management of the restoration effort.

[14] The reporting period for this information is July 2002 – August 2004 unless otherwise noted. The Task Force member agencies operate within various fiscal year periods. All the federal agencies and the South Florida Water Management District operate within a fiscal year that begins on October 1 and ends on September 30 of each year. The State of Florida agencies operate within a fiscal year that starts on July 1 and ends on June 30 of each year. Any annual dollar amounts included in this report apply to each agency's fiscal year. Pertinent footnotes are provided for these data.

Coordination and Adaptive Management of the Restoration Effort

Task Force Organization

The Task Force implemented several organizational changes to improve the coordination and adaptive management of the restoration effort. Four of them are summarized below.

Science Coordination Group (SCG). The SCG is the successor to the Science Coordination Team (SCT) that was established in 1997. In 2003, based on six years of activities by the SCT and on evaluations of the SCT role and activities by the Task Force, the SCT itself, and the General Accountability Office (GAO),[15] the following changes were made to clarify and further improve the coordination of science: First, the Task Force created a new science coordinating body to replace the former SCT. This new group was elevated to the level of the Working Group and renamed the Science Coordination Group to better reflect its new role and status. Second, the Task Force, in consultation with the SCT, wrote a new charter establishing the SCG and clarifying the roles and duties of the organization. Third, the Task Force directed the SCG to develop a draft science coordination plan that tracks and coordinates programmatic-level science and other research, identifies programmatic-level priority science needs and gaps, and facilitates management decisions. The SCG has been provided with additional resources to assist in the development of products needed by the Task Force.

Working Group. The charter for the Task Force Working Group was revised and approved December 3, 2003. The new charter clarifies the working relationship of the Task Force and Working Group and provides more succinct guidance on work priorities and a streamlined membership.

Combined Structural and Operating Plan (CSOP) Advisory Team. The USACE asked the Task Force to develop a team to assist in providing recommendations to the USACE during key phases in the CSOP process, and by doing so, to increase stakeholder participation. The CSOP Advisory Team was chartered by the Task Force on October 15, 2003, and held its first meeting December 17-18, 2003. The CSOP Advisory Team is comprised of stakeholders who will provide recommendations about the operations of the Modified Water Deliveries and C-111 Projects to the Task Force, which will in turn provide recommendations to the USACE.[16] The implementation of the C-111 Canal Project is unusual due to the early implementation of components (S-332B, S-332C, and S-332D), the jeopardy opinion on the Cape Sable seaside sparrow by the FWS, and the additional water quality authorization and responsibilities directed by WRDA 1996.

Florida Invasive Animal Task Team (FIATT). The Working Group formed an invasive animal task team (previously called NEATT) for the purpose of developing a comprehensive assessment and strategy for the control and management of nonindigenous animals.

CERP Programmatic Regulations

The USACE, with the concurrence of the Governor of Florida and the DOI, and in consultation with the Seminole Tribe of Florida, the Miccosukee Tribe of Indians of Florida, the U.S. Environmental Protection Agency (EPA), the U. S. Department of Commerce, and other federal, state, and local agencies, published the final rule for the "Programmatic Regulations for the Comprehensive Everglades Restoration Plan" in the Federal Register on November 12, 2003. The Programmatic Regulations are required by WRDA 2000 to define:

- CERP implementation processes, including the development of project implementation reports, project coordination agreements, and operating manuals that ensure that the CERP goals and objective are achieved
- Processes to ensure that new information, resulting from new or unforeseen circumstances, new scientific or technical information, or from adaptive management, is integrated into CERP implementation
- Processes to ensure the protection of the natural system consistent with CERP goals and purposes, including the establishment of interim goals needed to evaluate success throughout the implementation process

[15] GAO-03-345, March 2003.
[16] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration." Section II.A.1.

The Programmatic Regulations direct the USACE and the SFWMD, in consultation with the DOI, the Miccosukee Tribe of Indians of Florida, the Seminole Tribe of Florida, the EPA, the Department of Commerce, the Florida DEP, other federal, state, and local agencies, and the Task Force, to develop:

- A pre-CERP baseline
- Six programwide guidance memoranda
- A master implementation sequencing plan
- Periodic CERP updates

The Programmatic Regulations also require the establishment of interim goals and endpoints. The progress made toward these requirements during the reporting period is summarized below.

Pre-CERP Baseline. The pre-CERP baseline is currently under development (see the CERP Monitoring and Assessment Plan, below). This baseline is defined in the Programmatic Regulations as the hydrologic conditions in the South Florida Ecosystem on the date of enactment of WRDA 2000, as modeled by using a multiyear period of record based on assumptions such as land use, population, water demand, water quality, and assumed operations of the C&SF Project. The pre-CERP baseline will be used, along with other analyses, to determine if an existing legal source of water has been eliminated or transferred or if a new source of water is of comparable quality to that which has been transferred. Also, each project implementation report (PIR) shall include appropriate analyses and consider the operational conditions included in the pre-CERP baseline to demonstrate that the project will not reduce levels of service for flood protection that (1) were in existence on the date of enactment of WRDA 2000 and (2) are in accordance with applicable law.

Guidance Memoranda. The process to develop the Guidance Memoranda, which are required by the Programmatic Regulations to be developed by December 2004, was well underway at the end of the reporting period. The six guidance memoranda are as follows:

- General format and content of project implementation reports
- Instructions for formulation and evaluation of alternatives developed for project implementation reports, their cost effectiveness and impacts
- General content of operating manuals
- General directions for the conduct of the assessment activities of RECOVER
- Instructions relevant to project implementation reports for identifying the appropriate quantity, timing, and distribution of water to be dedicated and managed for the natural system
- Instructions relevant to project implementation reports for identifying if an elimination or transfer of existing legal sources of water will occur as a result of implementation of the plan

Master Implementation Sequencing Plan. The development of the Master Implementation Sequencing Plan (MISP), which is required by the Programmatic Regulations to be developed by December 13, 2004, in consultation with the USACE and SFWMD restoration partners, was also well underway at the end of the reporting period. The preliminary draft time bands of the MISP for CERP projects have been incorporated into the Task Force strategy and the integrated financial plan. The MISP includes the sequencing and scheduling of all the CERP projects, including pilot projects and operational elements, based on the best scientific, technical, funding, contracting, and other information available. The purpose of the MISP is to define the order in which the many projects within the South Florida Ecosystem Restoration Program will be planned, designed, and constructed. The MISP shall be reviewed at least every five years.

Initial CERP Update. An initial CERP update is presently under development. Such an evaluation of the CERP using new or updated modeling that includes the latest scientific, technical, and planning information will occur whenever necessary to ensure that the goals and purposes of the CERP are achieved, but not any less often than every five years. As part of these evaluations the USACE and the SFWMD shall

determine the total quantity of water that is expected to be generated by the plan, including the quantity expected to be generated for the natural system to attain the Task Force strategic goals, as well as the quantity expected to be generated for use in the human environment.

CERP Interim Goals and Targets

The Programmatic Regulations require the establishment of interim goals to provide a means for evaluating restoration success of the CERP at specific time intervals during implementation, and the establishment of interim targets to evaluate progress in providing for other water-related needs of the region. The interim goals and targets shall be consistent with each other. More specifically, the Programmatic Regulations require the following:

- By June 14, 2004, RECOVER was to provide recommendations about interim goals to the USACE, the DOI, and the SFWMD and recommendations about interim targets to the USACE and the SFWMD. However, the date for providing recommendations has been delayed, and the dates below are also anticipated to change accordingly.
- By December 13, 2004, the Secretary of the Army and the Secretary of the Interior, in consultation with EPA, the Department of Commerce, the Miccosukee Tribe of Indians of Florida, the Seminole Tribe of Florida, other federal, state, and local agencies, the Task Force, and the Governor of the State of Florida, are to execute an Interim Goals Agreement establishing interim goals to facilitate interagency planning, monitoring, and assessment so as to achieve the overarching objectives of the CERP and to provide a means by which the restoration success of the CERP may be evaluated and ultimately reported to Congress throughout the implementation process.
- By December 13, 2004, the Secretary of the Army and the Governor of the State of Florida, in consultation with EPA, the Department of Commerce, the Miccosukee Tribe of Indians of Florida, the Seminole Tribe of Florida, other federal, state, and local agencies, and the Task Force, are to develop proposed interim targets for evaluating progress towards other water-related needs of the region, provided for in the CERP, throughout the implementation process.

In October 2002 a RECOVER subteam developed a process for identifying and establishing numeric measures for indicators of ecosystem restoration (referred to as interim goals) and measures for indicators of other water-related needs (referred to as interim targets). In February 2003 the subteam published Proposed Indicators for Interim Goals and Interim Targets for the CERP. Because of the importance placed on the interim goals in WRDA 2000 and the CERP Programmatic Regulations, the RECOVER subteam determined that the proposed indicators and the methods for setting specific goals and targets should be vetted through a public and agency review process and submitted to an independent peer review panel.

RECOVER updated their proposed indicators and issued a review draft of Recommendations for Interim Goals and Interim Targets for the Comprehensive Everglades Restoration Plan: Indicators and Prediction Methods on January 30, 2004. This document, which describes twenty-two hydrologic, water quality, and biological indicators and five indicators for other water-related needs (including water supply and flood protection), will be submitted for peer review. Once approved, the RECOVER indicators will be used for systemwide assessment of CERP projects to support planning and adaptive management, and the set of indicators reported by the Task Force will be revised accordingly (recognizing that the Task Force may also report on other indicators not covered by the CERP).

CERP Adaptive Management Program

This program developed by the USACE and SFWMD, in consultation with the Seminole Tribe of Florida, the Miccosukee Tribe of Indians of Florida, the EPA, the U. S. Department of Commerce, and other federal, state, and local agencies will assess responses of the South Florida Ecosystem to implementation of the CERP. Periodic CERP updates will ensure that the goals and purposes of the plan are being achieved.

CERP Monitoring and Assessment Plan

Part one of the Monitoring and Assessment Plan (MAP) was completed in February 2004. The MAP is the primary tool by which the RECOVER program will assess the performance of the CERP. Part one

describes the monitoring components and supporting research of the MAP and summarizes the assessment process. Part two, which is under development by the Adaptive Assessment and Water Quality Teams of RECOVER, will fully describe an assessment process for interpreting the information to be collected under the plan.

The overarching goal for implementation of the MAP is to have a single, integrated, systemwide monitoring and assessment plan that will be used and supported by all participating agencies and tribal governments as the means of tracking and measuring the performance of the CERP. The four broad objectives for the MAP are to

- Establish a pre-CERP reference state ("baseline"), including variability for each of the performance measures
- Assess systemwide responses of the ecosystem to CERP implementation
- Detect unexpected responses of the ecosystem to changes in stressors resulting from CERP activities
- Support scientific investigations designed to increase ecosystem understanding, establish cause-and-effect relationships, and interpret unanticipated results

State and Federal CERP Funding Commitments

Federal and state budgets reflected a continued priority to restore America's Everglades.

FY 2003-04 federal funding to the DOI and USACE for Everglades restoration totaled $420 million. Additional FY 2003-04 funding to the EPA and the Departments of Commerce and Agriculture in support of Everglades restoration totaled $76 million This funding will continue successful partnerships and will steer ongoing projects towards completion. State funding for the same time period amounted to $1.6 billion. State agencies included the SFWMD and the Florida DACS, DCA, DEP, Fish and Wildlife Conservation Commission, and Department of Transportation. Further information can be found in the Cross Cut Budgets for fiscal years 2003 and 2004.

Water Resources Advisory Commission (WRAC)

The 48-member WRAC was appointed by the SFWMD Governing Board in 2001 and was designated as a stakeholder advisory group by the Task Force in January 2002. The WRAC has been meeting every month since its creation in 2001 and has conducted public participation and consensus-building workshops on critical water resource issues. Several significant issues were addressed by the WRAC in 2003. These included in-depth stakeholder review and recommendations on "B" List Rules of the SFWMD governing the issuance of consumptive water use permits, development of guidelines for issuing consumptive use permits consistent with CERP projects, the pre-CERP baseline, the SFWMD white paper on Water Resource Protection Strategies for the Implementation of CERP under State and Federal Law, recommendations to improve the SFWMD Long Term Plan to Improve Water Quality, development and recommendation to the Governing Board of a recreational access and use policy for SFWMD lands, recommendations about the need to restore flow patterns in WCA-3 while maintaining an important recreational fishery in the L-67 canal; and, recommendations to the Governing Board regarding the Upper East Coast Regional Water Supply Plan Update.

Independent Scientific Review

On June 14, 2004, the DOI, USACE, and SFWMD signed an intergovernmental agreement to engage the National Academy of Science (NAS) in the implementation of Everglades restoration. This agreement addresses requirements established by the Programmatic Regulations (33CFR Part 385). The NAS will convene an Independent Science Review Panel composed of a diverse team of internationally recognized experts in restoration science and provide expert assistance in independently reviewing the progress toward Everglades restoration.

GOAL 1 ACCOMPLISHMENTS: GETTING THE WATER RIGHT

The first strategic goal of the Task Force is "get the water right." The Task Force has adopted the following subgoals and objectives for this goal:

GOAL 1: GET THE WATER RIGHT

Subgoal 1-A:	Get the hydrology right
Objective 1-A.1:	Provide 1.3 million acre-feet of surface water storage by 2036
Objective 1-A.2:	Develop Aquifer Storage and Recovery (ASR) systems capable of storing 1.6 billion gallons per day by 2028
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 69,000 acres of stormwater treatment areas by 2035
Objective 1-B.2:	Prepare plans, with strategies and schedules for implementation, to comply with total maximum daily loads for 100 percent of impaired water bodies by 2011

The major projects planned to meet these objectives are listed in the Task Force strategy in part one of this volume ("Coordinating Success"), along with a schedule for their implementation.[17] The projects or activities that were ongoing or completed during the 2002 – 2004 reporting period are described below in the context of progress toward meeting each of the Task Force objectives. The Critical Restoration Projects contribute to various objectives but are grouped together in this biennial report to provide an overview of the progress associated with these early efforts.

Critical Restoration Projects

The progress made on the nine Critical Restoration Projects authorized under WRDA 1996 to produce immediate, substantial, and independent benefits prior to the CERP is summarized below.

East Coast Canal Structures (C-4 Structure)

Construction was completed in July 2003, and the project is now operational. This project will help reduce seepage losses from the Everglades, increase aquifer recharge, and enhance habitat in the Pensucco Wetlands.

Western C-11 Basin Water Quality Treatment

Construction of the S-9A pump station was completed. A contract for construction of the S-381 divide structure was awarded in September 2003. Construction was initiated in November 2003 and is scheduled for completion by December 2004. During nonflood conditions, these new features will separate seepage from stormwater runoff, allowing the return of seepage waters to WCA-3A.

Tamiami Trail Culverts

Construction of the western portion of the project (Phase I), located south of the Southern Golden Gate Estates (Picayune Strand) Restoration Project, started in June 2004. Implementation is being accomplished with SFWMD (culvert construction) and Florida Department of Transportation (road resurfacing) funds. Construction of the eastern portion of the project (Phase II) is dependent upon additional funding. For purposes of improving water quality, this project will help restore more natural hydropatterns and improve sheetflow of surface water within the Ten Thousand Islands National Wildlife Refuge, Rookery Bay Estuarine Research Reserve and Aquatic Preserve, Big Cypress National Preserve, and Everglades National Park. The cost estimates for completion of this project in combination with the other eight Critical Projects exceed the USACE appropriation cap for the Critical Projects ($75,000,000) set by WRDA 1996. Congress is considering draft legislation that would raise the cap so that this project may move forward with federal cost-share.

[17] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration. " Section V.

Seminole Big Cypress Reservation Water Conservation Plan

Construction of the conveyance canal system on the east side of the reservation (Phase I) was completed in May 2004. Canal pump stations will connect this conveyance canal system to the North Feeder Canal system. The USACE completed the designs for Phase II in April 2004 and plans to award contracts to construct by December 2004. This project will enhance the Big Cypress Reservation's water storage capacity, improve wetland hydrology, enhance flood protection, and reduce the concentration of phosphorus from water flowing off reservation lands. Outflows from the project will be routed southward and to the current West Feeder Canal system on the reservation to rehydrate the undeveloped native area and the Big Cypress National Preserve.

Southern CREW Addition/Imperial River Flowway

This project was approximately 80 percent complete at the end of the reporting period, with construction proceeding as restoration lands were acquired. It is anticipated that land acquisition will be completed by the end of 2005. This project will restore historical sheetflow in the project area, reduce freshwater discharges to Estero Bay during the rainy season, reduce loading of nutrients to the Imperial River and Estero Bay, and reduce flooding of homes and private lands west of the project area. The cost estimates for this project in combination with the other eight Critical Projects exceed the USACE appropriation cap for the Critical Projects ($75,000,000) set by WRDA 1996. Congress is considering draft legislation that would raise the cap so that this project may move forward with federal cost-share. Meanwhile, the SFWMD has entered into a grant cost-share agreement under which the DOI is providing matching funds for acquisition of the lands needed for this project.

Lake Okeechobee Water Retention/ Phosphorus Removal

Construction of the Taylor Creek and Nubbin Slough STAs was initiated in 2004. Competitive bidding for the Grassy Island STA closed on March 9, 2004. Assuming the contractor selection proceeds on schedule, construction will start in the summer of 2004.

Ten Mile Creek Water Preservation Area

A groundbreaking ceremony was held on November 7, 2003. Construction and operation of this reservoir and associated STA will be an important test of the effectiveness of facilities that are proposed on a much larger scale throughout the CERP. Detailed monitoring of the reservoir will give practical information about how well the reservoir can capture nutrients on its own, prior to treatment in the STA, and about fish and wildlife use of the reservoir and whether species can persist under the greatly fluctuating hydrologic regime. This project will attenuate flows and improve water quality to the St. Lucie Estuary and Indian River Lagoon.

Lake Trafford Restoration

Construction plans and specifications were completed and the containment area for dredged material was under construction by the end of the reporting period. Dredging of the lake is dependent upon availability of additional funding. This project will improve water quality and enhance fish and wildlife habitat in Lake Trafford by removing approximately 2.85 million cubic yards of organic sediments that blanket the bottom of the lake. The cost estimates for completion of this project in combination with the other eight Critical Projects exceed the USACE appropriation cap for the Critical Projects ($75,000,000) set by WRDA 1996. Congress is considering draft legislation that would raise the cap so that this project may move forward with federal cost-share. Meanwhile, the SFWMD is moving forward with detailed design and construction with the intent of receiving credit and/or reimbursement from the USACE if Congress authorizes the increase in the federal cap for Critical Projects. The USACE and the SFWMD are evaluating options to reduce the costs while still achieving restoration objectives.

Florida Keys Carrying Capacity Study

A user's manual for the Florida Keys Carrying Capacity Study was made available in March 2003. The manual provides local planners and decision makers with an impact assessment model and planning tool to determine if and how their comprehensive plans should be amended.

Objective 1-A.1: Provide 1.3 million acre-feet of surface water storage by 2036

At the end of the reporting period, nine of the projects contributing to objective 1-A.1 were underway, along with a technology pilot to determine the feasibility of the two Lake Belt storage projects.

Everglades Agricultural Area Storage Reservoir, Phase I

The preliminary survey and geotechnical work on the expedited reservoir was completed in May 2004; 30 percent design commenced in June 2004, with a restoration endpoint finish date of February 2005. In late April the U.S. Sugar Corporation agreed to vacate leased, state-owned land (former Talisman Sugar Company property) just south of Lake Okeechobee, allowing the SFWMD to expedite work on this large reservoir and stormwater treatment area.

C-43 Basin Storage Reservoir and ASR

The USACE and SFWMD completed the initial steps in the planning process and entered the plan formulation phase. The SFWMD initiated the 30 percent design of the reservoir at Berry Groves. Technical uncertainties associated with the high-capacity C-43 Basin ASR feature are currently being investigated by the Caloosahatchee River Basin ASR Pilot Project (see below). The results of this pilot project, along with the ASR Regional Study, will form the basis for future feasibility studies or project implementation reports concerning high-capacity ASR.

Lake Belt In-Ground Reservoir Technology Pilot

A site ("North Stairstep") with similar geology to the full-scale in-ground reservoir site was selected to test whether installing a barrier around a rock-mined area used as a reservoir can adequately protect against potential adverse impacts associated with seepage. The technology pilot is required to determine whether the two full-scale Lake Belt Storage Area CERP components can be successfully constructed and operated to supply environmental and water supply deliveries.

Indian River Lagoon South

The Indian River Lagoon Feasibility Study was completed in October 2002. The Final Project Implementation Report for the Indian River Lagoon Project was published in the Federal Register on May 7, 2004, and Congressional authorization could potentially occur in late 2004. The project will increase the spatial extent of the Everglades by restoring approximately 90,000 acres of wetland/upland mosaic and 4,000 acres of estuary within the St. Lucie River and Southern Indian River Lagoon.

The Loxahatchee Impoundment Landscape Assessment (LILA)

The FWS signed a cooperative agreement with the SFWMD to conduct long-term research on two impoundments on the Arthur R. Marshall Loxahatchee NWR, needed to inform the development of several CERP performance measures of a healthy South Florida Ecosystem. LILA will serve as a pilot study for hydrologic regimes proposed under the CERP. The approach will be to sculpt key Everglades landscape features, overlay controlled hydrologic regimes with flow rates that simulate historic flows, and measure responses by wading birds, tree islands, and ridge and slough communities. LILA provides a unique opportunity to fill key information gaps of the CERP and to provide the public with a rare opportunity to see restored Everglades habitats.

Objective 1-A.2: Develop aquifer storage and recovery systems capable of storing 1.6 billion gallons per day by 2028

A combined *Draft Pilot Project Design Report and Environmental Impact Statement*, the decision-making document for engineering options for the three ASR pilot project field tests (Hillsboro, Lake Okeechobee, and Caloosahatchee River Basin), was released in May 2004 for public review and comment. The field tests and other evaluations are required to address technical uncertainties before the SFWMD and USACE can determine the feasibility of full-scale implementation of ASR technology as proposed in the CERP. The interrelated nature of these pilot projects led to the decision to combine the associated design efforts into a single decision document.

The USACE and SFWMD conducted a geotechnical investigation of the proposed site for the Caloosahatchee River Basin ASR Pilot Project and initiated the design of a water treatment and conveyance system that includes the use of engineered subsurface filtration coupled with ultraviolet disinfection. The surface facility design is 90 percent complete. An exploratory well was constructed at the site and was in the final stages of testing at the end of the reporting period.

Objective 1-A.3: Modify 335 miles of impediments to flow by 2019

At the end of the reporting period, one of the projects contributing to objective 1-A.3 was completed and the rest were underway.

Kissimmee River Restoration Project

Approximately 12,000 acres of river floodplain and wetlands were reestablished as a result of continuous flows along a 15-mile section of the river during the reporting period (following the backfilling of 7 miles of the C-38 Canal in 2001). Approximately 85 percent of the total 105,000 acres needed for restoration has been acquired.

The scheduled completion date for the Kissimmee River Restoration Project was changed from 2010 to 2012. Upon completion, the project, which is being jointly implemented and cost-shared by the SFWMD and the USACE, will eliminate two major water control structures and restore over 40 square miles of river/floodplain ecosystem, including 43 miles of meandering river channel and 27,000 acres of wetlands.

Canal 111 Project

The January 2002 *Final Integrated General Evaluation Report* and Supplemental Environmental Impact Statement addressing the addition of features for water quality improvement and a land exchange between Everglades National Park and the SFWMD was approved by the SFWMD Governing Board. The report is still under review by the USACE. The C-111 Project will help restore flows from Taylor Slough to Florida Bay.

Modified Water Deliveries to Everglades National Park (MWD) Project

This project was initially authorized by the Everglades National Park Protection and Expansion Act in 1989 to improve water deliveries to Everglades National Park. Due to concerns over delays and the development of the larger CERP in WRDA 2000, Congress made the appropriation of funds for construction of components of the CERP WCA-3 Decompartmentalization and Sheetflow Enhancement Project and the Central Lakebelt Storage Project contingent on the completion of the Modified Water Deliveries Project.[18]

The *Final General Reevaluation Report and Supplemental Environmental Impact* Statement for the Tamiami Trail portion of the MWD Project was completed in December 2003. The selected plan includes constructing a 3,000-foot bridge and raising the pavement of the eastern section of the roadbed. Negotiations with the Florida DOT on roadway relocation requirements are taking place, and initial geotechnical investigation of the project site has commenced. In addition, construction of the S-356 pump station and removal of 4 miles of the L67

[18] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration. " Section II.A.1-3.

extension levee have been completed. Plans and specifications have been completed for S-333 modifications.

Regarding the 8.5 Square Mile Area, the USACE completed engineering and design for Alternative 6d features (pump station S-357, a seepage canal and levee, and an STA) in May 2004. The construction contract was awarded in July 2004, with construction scheduled for completion in August 2005. Of the 743 tracts of land required for the project, 361 have been acquired. All real estate acquisitions are scheduled for completion by June 2005. Demolition of structures on tracts of land owned by the government within the construction footprint was 78 percent complete at the end of the reporting period.

Other Related Hydrology Projects

Seepage Management Pilot

The alternatives for seepage management technologies were screened to a total of five candidate technologies. Wells were installed to capture baseline groundwater flow data. The purpose of this project is to investigate seepage management technologies to control seepage from Everglades National Park and to provide necessary information to determine the appropriate amount of wet season groundwater flow to return to the park while minimizing potential impacts to Miami-Dade County's west wellfield and freshwater flows to Biscayne Bay.

Biennial Report Table 1 - Subgoal 1-A: Get the Hydrology Right

Table reflects July 2004 Status of Projects					
	Project ID	**Project Endpoint**	**Project Name**	**Output (acre-feet)****	**Status**
Objective 1-A.1: Provide 1.3 million acre-feet of surface water storage by 2036	2100	TBD	Allapattah Flats *	32,000	Underway
	1111	2005	Ten Mile Creek	5,000	Underway
	1100	2009	Acme Basin B Discharge	3,800	Underway
	1102	2009	Everglades Agricultural Area Storage Reservoir, Phase 1	240,000	Underway
	1104	2013	Lake Okeechobee Watershed	250,000	Underway
	1103	2014	Everglades Agricultural Area Storage Reservoir, Phase 2	120,000	Underway
	1108	2018	Bird Drive Recharge Area	11,500	
	1109	2019	C-43 Basin Storage Reservoir and ASR	160,000	Underway
	1106	2020	Palm Beach County Agricultural Reserve Reservoir and ASR	20,000	
	1107	2024	Site 1 Impoundment and Aquifer Storage and Recovery	15,000	Underway
	1101	2033	Indian River Lagoon South, C-44 Basin Storage Reservoir and C-23/C-24/C-25/Northfork and Southfork Storage Reservoirs*	190,000	Underway
	1110	2035	Central Lake Belt Storage	190,000	
	1105	2036	North Lake Belt Storage	90,000	
	Project ID	**Project Endpoint**	**Project Name**	**Output (million gpd)****	**Status**
Objective 1-A.2: Develop aquifer storage and recovery systems capable of storing 1.6 billion gallons per day by 2028	1109	2019	C-43 Basin Storage Reservoir and ASR	220	Underway
	1106	2020	Palm Beach County Agricultural Reserve Reservoir and ASR	75	
	1200	2021	C-51 Regional Groundwater Aquifer Storage and Recovery	170	
	1107	2024	Site 1 Impoundment and Aquifer Storage and Recovery	150	Underway
	1201	2028	Lake Okeechobee Aquifer Storage and Recovery	1,000	Underway
	Project ID	**Project Endpoint**	**Project Name**	**Output (miles modified)**	**Status**
Objective 1-A.3: Modify 335 miles of impediments to flow by 2019	1305	1997	Kissimmee Prairie Ecosystem	39.3	Completed
	1304	2004	East WCA-3A Hydropattern Restoration	8.5	Underway
	1300	2008	Canal 111	4	Underway
	1307	2008	Modified Waters Delivery Project	21	Underway
	1306	2012	Kissimmee River Restoration	22	Underway
	1302	2018	Florida Keys Tidal Restoration	0.6	Underway
	1301	2019	WCA-3 Decompartmentalization and Sheetflow Enhancement	240	Underway

* Some projects have been combined with others since 2002

** The outputs listed in Biennial Table 1 and the measures and restoration endpoints in Appendix A (the Integrated Financial Plan Summary table) reflect the strategic goals and are not intended to function as an allocation or reservation of water, which must be implemented through applicable law.

Objective 1-B.1: Construct 69,000 acres of Stormwater Treatment Areas by 2035

At the end of the reporting period, two of the projects contributing to objective 1-B.1 were completed, and ten were underway.

Everglades Construction Project

As of June 2004, over 35,000 acres of stormwater treatment areas (STAs) had been constructed by the SFWMD. Almost 30,000 acres were in flow-through operation and removing total phosphorus that otherwise would have gone into the EPA. During water year 2004[19] , STA-1W, STA-2, STA-3/4, STA-5, and STA-6 Section 1 removed more than 87 metric tons of total phosphorus, bringing the total removal to over 425 tons since 1994. Inflow concentrations averaged 136 ppb, while the outflow concentrations averaged 42 ppb.[20] STA performance varied, ranging from 13-14 ppb for STA-2 and STA-6, to almost 100 ppb for STA-5. Portions of the stormwater treatment areas were being managed for submerged aquatic vegetation, and the remainder for cattails and other emergent vegetation.

Everglades restoration is now focused on developing biologically based ("green") technologies to the maximum extent possible. This approach is based on manipulating hydrology together with selective vegetation management to create a wetland plant community dominated by emergent plants, submerged aquatic vegetation (SAV), or periphyton (algae). Research has indicated that SAV and periphyton-based STA (PSTA) have the potential to reach restoration endpoint total phosphorus levels on a consistent basis. One scenario for improving performance in the STAs envisions that these wetlands would be reconfigured internally to contain sequences of cells dominated by emergent plants followed by cells dominated by SAV. Another possible scenario would sequence cells dominated by emergent plants followed by SAV followed by PSTA. The SFWMD and the Florida DEP will continue to investigate ways to exploit green technologies for use in Everglades restoration.

The most significant milestone during this last reporting period was construction of STA-3/4, the world's largest constructed wetland at over 16,500 acres.[21] On January 15, 2004, the 6,500-acre flowway 1 of STA-3/4 passed the start-up requirements of the operating permits, and on February 25, 2004, the first discharges of treated water from this STA began. On June 7, 2004 the 3,500-acre Cell 3 began discharging. The remainder of STA-3/4 is presently in a vegetation start-up phase and is expected to begin flow-through operations soon. The SFWMD began the design and implementation of enhancements to STA-3/4, intended to further lower phosphorus levels. Key components include additional levees and water control structures, refined operations, and revisions to the vegetation communities, including a 400-acre demonstration PSTA within the footprint of STA-3/4. These enhancements, along with enhancements to the other five STAs, will continue through the end of 2006.

The construction of STA-1E was substantially completed by the USACE in June 2004. A 6 to 18 month vegetation start-up period is anticipated before STA-1E is expected to discharge to the ARM Loxahatchee National Wildlife Refuge, depending on growth of the vegetation. The preliminary design stage for the PSTA field–scale demonstration for cell 4S of STA-1E was completed.

Objective 1-B.2: Prepare plans to comply with total maximum daily loads for 100 percent of impaired water bodies by 2011

By the end of the reporting period, the Florida DEP had addressed 16 percent of the total TMDLs that were to be addressed according to the 1998 303(d) list.

The USACE and the Florida DEP, based on a process to prioritize CERP projects, decided to postpone the Water Quality Feasibility Study. At this point in time, the FDEP has not decided when and how it will move forward with the study.

[19] A "water year" is from May 1 through April 30 of the following calendar year. This period is used instead of calendar year because it more closely matches South Florida weather patterns – wet season and dry season.
[20] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration." Section II.B.4.
[21] See Appendix C: Additional View of the Miccosukee Tribe, "Putting the Everglades Back into Everglades Restoration. " Section II.B.4.

Biennial Report Table 2 - Subgoal 1-B: Get the Water Quality Right

Table reflects July 2004 Status of Projects					
	Project ID	**Project Endpoint**	**Project Name**	**Output (acres)**	**Status**
Objective 1-B.1: Construct 69,000 acres of stormwater treatment areas by 2035	1508	2003	STA-1 West Works and Outflow Pump Station	6,700	Completed
	1509	2004	STA-2 Works and Outflow Pump Station	6,430	Completed
	1511	2005	STA-5 Works	4,118	Underway
	1510	2005	STA-3/4 Works	16,600	Underway
	1506	2006	Lake Okeechobee Water Retention/Phosphorus Removal	940	Underway
	1512	2006	STA-6	2,222	Underway
	1414	2007	Henderson Creek/Belle Meade Restoration	10	Underway
	1502	2010	Miccosukee Tribe Water Management Plan	900	Underway
	1501	2011	Broward County WPA - C-9 STA and Impoundment and Western C-11 Diversion Impoundment and Canal and WCAs 3A and 3B Levee Seepage Management	4,100	Underway
	1513	2014	West Palm Beach Canal (C-51) and STA-1E	6,500	Underway
	1104	2014	Lake Okeechobee Watershed	11,875	Underway
	1503	2019	North Palm Beach County	1,260	Underway
	1500	2019	Big Cypress/L-28 Interceptor Modifications	1,900	
	1505	2020	Caloosahatchee Backpumping with Stormwater Treatment	5,000	
	1110	2035	Central Lake Belt Storage Area	640	
	Project ID	**Project Endpoint**	**Project Name**	**Output (% of waters having plans)**	**Status**
Objective 1-B.2: Prepare plans, with strategies and schedules for implementation, to comply with total maximum daily loads for 100 percent of impaired water bodies by 2011	1600	TBD	Total Maximum Daily Load for South Florida		Underway

GOAL 2 ACCOMPLISHMENTS: RESTORING, PRESERVING, AND PROTECTING NATURAL HABITATS AND SPECIES

The second strategic goal of the Task Force is "restore, preserve, and protect natural habitats and species." The Task Force has adopted the following subgoals and objectives for this goal:

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 5.8 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 2011
Objective 2-B.2:	Achieve maintenance control of Brazilian pepper, melaleuca, Australian pine, and Old World climbing fern on South Florida's public conservation lands by 2020
Objective 2-B.3:	Complete an invasive exotic plant species prevention, early detection, and eradication plan by 2005

The major projects planned to meet these objectives are listed in the Task Force strategy in part one of this volume ("Coordinating Success"), along with a schedule for their implementation. The projects or activities that were ongoing or completed during FY 2002-04 are described below in the context of progress toward meeting each of the Task Force objectives.

Objective 2-A.1: Complete acquisition of 5.8 million acres of land identified for habitat protection by 2015

By the end of the reporting period, state and federal agencies had acquired a total of approximately 4.7 million acres of land identified for habitat protection. As of June 2004 the state had acquired 3.6 million acres of habitat conservation land in South Florida at a cost of over $2 billion.

Land Acquisition Strategy and Data Base

The Task Force Land Acquisition Team (LAT) presented the first Land Acquisition Strategy to the Task Force, and after some improvements the Task Force accepted it on February 4, 2003. The land acquisition strategy was developed as a response to a recommendation by the GAO for a land acquisition plan to identify and prioritize additional lands needed to achieve the restoration goals. The GAO highlighted the importance of acquiring as much land as possible, and quickly, because undeveloped land in South Florida is becoming increasingly scarce and costly.

The LAT submitted updated land acquisition data to the Task Force in December 2003. The LAT was successful in adding representatives of the 16 counties in the watershed, making it possible to include county acquisitions in support of restoration, which are not tracked by the state or federal agencies. This information has been incorporated into the 2004 update to the data base.

Habitat Acquisition

The federal, state, and local accomplishments in land acquisition during the reporting period are shown in Biennial Report Table 3.

Southern Golden Gate Estates (Picayune Strand) CERP Restoration Project

The State of Florida initiated an early start on this hydrologic restoration project in October 2003. Phase I will backfill portions of the Prairie Canal and remove roads to restore sheet flow. This first phase

will reduce drainage of the adjacent Fakahatchee Strand State Preserve and restore habitat for threatened and endangered species.

Objective 2-A.2: Protect 20 percent of the coral reefs by 2010

At the end of the reporting period, one of the projects contributing to objective 2-A.2 was completed. Other projects remained to be identified.

Florida Keys National Marine Sanctuary Zoning Plan

The Florida Keys National Marine Sanctuary has implemented a marine zoning action plan that includes a network of fully protected areas, including two ecological reserves (Western Sambo and Tortugas Ecological Reserves), eighteen sanctuary preservation areas, and four research only areas. Combined, these areas fully protect 10 percent of the coral reef resources in the Sanctuary. The Sanctuary has met the goal of protecting 10 percent of the coral reefs in this region by 2004. It is monitoring the biological, ecological, and socioeconomic changes resulting from the full protection of these areas and will use the information learned to extend protection to 20 percent of the coral reefs by 2010.

Objective 2-A.3: Improve Habitat Quality for 2.4 million acres of natural areas

Loxahatchee National Wildlife Refuge Prescribed Burn Program

In June 2003 the Arthur R. Marshall Loxahatchee National Wildlife Refuge conducted a prescribed burn on 2,300 acres of the refuge interior (the first burn in almost 20 years). The vegetative response was almost immediate, with healthy sawgrass sprouting in areas opened up by the fire. Waterfowl were observed using the burned areas.

The FWS signed a cooperative agreement with the SFWMD to conduct long-term research on two impoundments on the Arthur R. Marshall Loxahatchee NWR, needed to inform the development of several CERP performance measures of a healthy South Florida Ecosystem. LILA will serve as a pilot study for hydrologic regimes proposed under the CERP. The approach will be to serve as a pilot study for hydrologic regimes proposed under the CERP. The approach will be to sculpt key Everglades landscape features, overlay controlled hydrologic regimes with flow rates that simulate historic flows, and measure responses by wading birds, tree islands, and ridge and slough

Biennial Report Table 3. Land Acquisition Expenditures Summary, 2002-2004**

Funding Source	Amount ($ millions)	Acres
Farm Bill 1996 [1]	$ 16.37	2,588
Florida Forever	155.7	55,869
Save Our Everglades Trust Fund	108.9	9,631
State, Local & Other Funding Sources [2]	95.9	16,640
Land & Water Conservation Fund [3]	7.3	6,666
TOTALS	**$384.17**	**91,394**

[1] Some acres were jointly acquired using state funds.
[2] The following funding sources are captured in this category: SFWMD ad valorem, county, mitigation, special state appropriations, Preservation 2000, Land Acquisition Trust Fund, and Water Management Lands Trust Fund.
[3] The Land and Water Conservation Fund is administered by the DOI.
** The fiscal year for FDEP is July 1 through June 30. The fiscal year for the SFWMD, the FWS, and the NPS is October 1 through September 30.

communities. LILA provides a unique opportunity to fill key information gaps of the CERP and to provide the public with a rare opportunity to see restored Everglades habitats.

Indian River Lagoon South

The Indian River Lagoon Feasibility Study was completed in October 2002. The *Final Project Implementation Report* for the Indian River Lagoon Project was published in the *Federal Register* on May 7, 2004, and Congressional authorization could potentially occur in late 2004. The project will increase the spatial extent of the Everglades by restoring approximately 90,000 acres of wetland/upland mosaic and 4,000 acres of estuary within the St. Lucie River and Southern Indian River Lagoon.

The Loxahatchee Impoundment Landscape Assessment (LILA)

The FWS signed a cooperative agreement with the SFWMD to conduct long-term research on two impoundments on the Arthur R. Marshall Loxahatchee NWR, needed to inform the development of several CERP performance measures of a healthy South Florida Ecosystem. LILA will serve as a pilot study for hydrologic regimes proposed under the CERP. The approach will be to sculpt key Everglades landscape features, overlay controlled hydrologic regimes with flow rates that simulate historic flows, and measure responses by wading birds, tree islands, and ridge and slough communities. LILA provides a unique opportunity to fill key information gaps of the CERP and to provide the public with a rare opportunity to see restored Everglades habitats.

Other Natural Habitat and Species Projects

Florida Panther Landscape Conservation Strategy

The Panther Subteam's *Landscape Conservation Strategy for the Florida Panther in South Florida* was submitted to the FWS in December 2002. This strategy identifies lands essential for the continued conservation of panthers in South Florida, and also a landscape linkage to provide for population expansion north of the Caloosahatchee River to aid in the recovery of the species. The FWS plans to publish a notice of availability in the *Federal Register* to obtain comments on this document from the broad scientific community and general public to ensure the highest level of quality possible. Comments from the scientific community and general public may result in changes to the landscape conservation strategy.

Florida Panther Regulatory Review Update

Between January 2002 and November 2003, the FWS preserved through conservation easements or acquisition 6,495 acres of habitat important to Florida panthers. These preserved lands are generally adjacent to larger tracts of publicly owned lands in the core area of the Florida panther population.

Key Deer Recovery

As part of the FWS program, consistent with the MSRP, to translocate significant numbers of Key deer beyond the boundaries of the core populations, four deer were moved from Big Pine Key to Sugarloaf Key on May 14-15, 2003. Additional recovery activities that have been or will be accomplished with the DOI funding provided for this effort include more translocations, a soft-release enclosure on Cudjoe Key, research and monitoring of translocated deer, and appointing a biologist for project oversight and continuity.

South Florida Multi-Species Recovery Plan

A draft implementation schedule for the MSRP was completed in early 2003. The MSRP and the implementation schedule are intended to be used by state and federal agencies, tribes, nongovernmental organizations, and other partners who are committed to endangered species conservation and to restoration of the South Florida Ecosystem. The implementation schedule will assist with prioritizing, planning, and implementing species-specific tasks and various restoration activities.

Biennial Report Table 4 - Subgoal 2-A: Restore, Preserve, and Protect Natural Habitats

Table reflects July 2004 Status of Projects						
				Output		
	Project ID	Project Endpoint	Project Name	Total Project Acres	Acres Acquired to Date	Acres Remaining To Be Acquired
	STATE/SFWMD PROJECTS					
Objective 2-A.1: Complete acquisition of 5.8 million acres of land identified for habitat protection by 2015	2100		Allapattah Flats/Ranch	35,999	21,407	14,592
	2101		Atlantic Ridge Ecosystem	15,698	11,764	3,934
	2102		Babcock Ranch	91,361	0	91,361
	2103		Barfield Ranch	1,367	0	1,367
	2104		Belle Meade	28,506	17,812	10,694
	2105		Big Bend Swamp/Holopaw Ranch	59,849	0	59,849
	2106		Biscayne Coastal Wetlands	2,241	144	2,097
	2107		Bombing Range Ridge	41,748	5,293	36,455
	2108		Caloosahatchee Ecoscape	18,497	3,180	15,317
	2109		Catfish Creek	14,901	10,184	4,717
	2111		Charlotte Harbor Estuary/Flatwoods/Cape Haze	15,054	10,603	4,451
	2112		Corkscrew Reg. Ecosystem Watershed (CREW)	64,103	25,644	38,459
	2114		Coupon Bight/Key Deer/Big Pine Key	3,638	1,453	2,185
	2115		Cypress Creek/Trail Ridge	13,788	3,285	10,503
	2172		Cypress Creek/Loxahatchee	4,347	4,276	71
	2185		Devils Garden	82,508	0	82,508
	2117		East Coast Buffer/Water Preserve Areas	66,809	21,680	45,129
	2118		Estero Bay	15,572	9,045	6,528
	2119		Everglades Agricultural Area/Talisman	51,210	50,794	416
	2120		Fakahatchee Strand	80,332	60,902	19,430
	2121		Fisheating Creek	176,760	59,910	116,850
	2122		Florida Keys Ecosystem	8,566	1,818	6,748
	2123		Frog Pond/L31N	10,450	9,713	737
	2174		Half Circle L Ranch	10,500	0	10,500
	2175		Hen Scratch Ranch	2,880	0	2,880
	2124		Indian River Lagoon Blueway	5,136	1,619	3,517
	2125		Juno Hills /Dunes	590	336	254
	2176		Jupiter Ridge	287	223	64
	2127		Kissimmee River (Lower Basin)*	68,332	52,023	16,309
	2128		Kissimmee River (Upper Basin)*	36,763	34,981	1,782
	2126		Kissimmee-St. Johns River Connector	9,463	0	9,463
	2129		Lake Wales Ridge Ecosystem	13,848	9,864	3,984
	2132		Loxahatchee Slough	15,200	15,056	144
	2133		McDaniel Ranch	7,000	0	7,000
	2134		Miami Dade County Archipelago	858	505	353
	2135		Model Lands Basin	42,402	14,799	27,603
	2138		North Fork of the St. Lucie River	3,800	474	3,326
	2139		North Key Largo Hammocks	4,513	3,538	975
	2140		North Savannas	930	0	930
	2141		Okaloacoochee Slough	37,210	34,982	2,228
	2142		Okeechobee Battlefield	56	0	56
	2143		Osceola Pine Savannas	1,374	1,333	41
	2144		Pal-Mar	36,745	20,786	15,959
	2145		Panther Glades	53,894	21,724	32,170
	2146		Paradise Run	4,265	3,328	937
	2147		Parker-Poinciana/Lake Hatchineha Watershed	6,437	0	6,437
	2148		Pineland Site Complex	206	57	149
	2178		Ranch Reserve	2,217	67	2,150
	2149		Rookery Bay	18,721	18,576	145
	2150		Rotenberger/Holey Land Tract	79,170	70,833	8,337
	2151		Shingle Creek	7,655	1,457	6,198
	2152		Six Mile Cypress I & II	1,966	1,864	102
	2154		South Savannas	6,046	5,182	864
	2155		Southern Glades	37,620	33,576	4,044
	2156		Southern Golden Gate Estates	55,247	54,282	965

Table reflects July 2004 Status of Projects						
				Output		
	Project ID	**Project Endpoint**	**Project Name**	**Total Project Acres**	**Acres Acquired to Date**	**Acres Remaining To Be Acquired**
	1508-1512		STA 1 W, 2 ,3/4, 5 and 6	41,089	41,043	46
	2158		Twelve Mile Slough	15,653	7,486	8,167
	2181		Upper Econ Mosaic	16,595	918	15,677
	2159		Upper Lakes Basin Watershed (ULBW)	47,300	12,550	34,750
	2160		WCAs 2 and 3	721,433	670,844	50,589
	STATE COMPLETED PROJECTS					
	2110		Cayo Costa Island	1,954	1,954	0
	2113		Corkscrew Regional Mitigation Bank	633	633	0
	2116		Dupuis Reserve	21,875	21,875	0
	1305		Kissimmee Prairie	38,282	38,282	0
	2130		Lake Walk-In-Water	4,009	4,009	0
	2131		Loxahatchee River Land Acquisition	1,936	1,936	0
	2137		Nicodemus Slough	2,231	2,231	0
	2153		South Fork St. Lucie River Land Acquisition	184	184	0
	1513		STA 1 E	6,503	6,503	0
	1111		Ten Mile Creek	913	913	0
	2157		Tibet-Butler Preserve	439	439	0
	2161		Yamato Scrub	207	207	0
	FCT, STATE PARKS, & WMA'S					
			State Florida Communities Trust Lands	18,122	18,121	0
			State Park Lands	101,438	88,375	13,063
			State Wildlife Management Areas	126,867	126,577	290
	FEDERAL CONSERVATION LANDS					
	2162		A.R.M. Loxahatchee NWR	145,567	143,874	1,693
	2164		Big Cypress National Preserve Addition	146,117	143,161	2,956
	2163		Big Cypress National Preserve	574,446	573,614	835
	2165		Biscayne National Park	172,924	172,542	382
	2166		Crocodile Lake NWR	7,100	6,688	412
	2167		East Everglades Addition to Everglades National Park	109,504	108,524	980
	2169		Florida Panther NWR	61,573	61,563	10
	2168		Florida Keys NWR	415,436	410,041	5,395
	2170		Hobe Sound NWR	1,130	1,034	96
	2171		J. N. Ding Darling NWR	10,275	8,605	1,670
	2168		Key West NWR	208,308	208,308	0
	GRAND TOTAL HABITAT ACQUISITION			5,750,151	4,868,416	881,736
	Project ID	**Project Endpoint**	**Project Name**	**Output (percent of reefs protected)**	**Status**	
Objective 2-A.2: Protect 20 percent of the coral reefs by 2010		2004	Florida Keys National Marine Sanctuary Zoning Action Plan	10+ percent of reefs in Florida Keys	Underway	
	Project ID	**Project Endpoint**	**Project Name**		**Status**	
Objective 2-A.3: Improve habitat quality for 2.4 million acres of natural areas in South Florida.			*Note* – The April 1999 USACE *C&SF Project Comprehensive Review Study Final Integrated Feasibility Report and Programmatic Environmental Impact Statement* included an extensive environmental evaluation of habitat units that would be improved through implementation of the CERP projects. Table 7-18 in this publication identifies in detail which projects are anticipated to achieve this objective. However, appropriate measures by project are currently being developed through the establishment of interim goals. There are some projects included in our tracking matrix that exemplify how this objective will be achieved.			

Objective 2-B-1: Coordinate the development of management plans for the top twenty South Florida invasive exotic plant species by 2011

At the end of the reporting period, the three projects contributing to objective 2-B.1 were all underway.

Noxious Exotic Weed Task Team (NEWTT)

The first three of five elements were completed in the research contracted to the Environmental Law Institute to explore how existing federal and state authorities can be used to manage invasive species in Florida and to identify gaps in these authorities.

Contractor services were obtained to develop a web-based database of invasive plant control activities being conducted in South Florida. The database will track ongoing activities and find gaps in current control efforts. The database was released in its Beta trial version to the Noxious Exotic Weed Task Team and the Florida Invasive Animal Task Team in March 2004.

Objective 2-B.2: Achieve maintenance control of Brazilian pepper, melaleuca, Australian pine, and Old World climbing fern on South Florida's public conservation lands by 2020

Current efforts on melaleuca have achieved remarkable success in the use of chemical control on public lands within the EPA. Since the development and release of two biological control insects and the anticipated release of two additional insects, monitoring information indicates that melaleuca may well be a species that will no longer be a serious pest of natural areas in Florida by 2020.

In contrast, the control programs for Brazilian pepper are severely lacking in support and coordination. The state's biological control program has been slow to find and research possible biocontrols, and the control organism that is nearing preparation appears to be held up in administrative regulatory procedures. Brazilian pepper is still and will continue to be an extremely widespread and serious threat to natural areas of Florida.

Australian pine control efforts are not coordinated among all the agencies and areas. However, where control is being conducted, it is quite successful. It appears that this species is relatively simple to control, and once controlled reinvasion can easily be prevented so long as occasional detection is undertaken. It is this latter element that seems to be preventing this species from being controlled at most sites.

Old World climbing fern (Lygodium) is still considered the most serious recent invader. Less is known about how to control it than is known about the other high-priority species. Research is being conducted to determine the efficacy of biological and chemical control methods. Recent revisions to the Lygodium management plan spell out the next round of needed research initiatives. While sparsely funded, the biological control program is progressing, and a biocontrol agent for Lygodium is expected to be released later this year. In addition, two more insects are under development for release in the near future.

Loxahatchee National Wildlife Refuge Exotic Management

More than 17,000 acres of the Arthur R. Marshall Loxahatchee NWR interior were treated for melaleuca and Lygodium (Old World climbing fern) during 2002-2003. Australian pine was almost 100 percent controlled.

Melaleuca Control Program - Melaleuca Eradication and Other Exotic Plants Project

The USACE and the SFWMD amended the CERP design agreement to include this project. A meeting was held on March 25, 2004, to initiate the establishment of teams to conduct the project management plan (PMP) and the project implementation report (PIR).

Gainesville Quarantine and Research Facility

The Florida Department of Agriculture and Consumer Services do not have funds for this project, so it was cancelled in January 2004.

Special Report on Invasive Species

The USACE contracted with the DOI invasive species specialist to produce a special report on the federal role in invasive species management for Everglades restoration and to make recommendations on further federal involvement. The first draft of the report was delivered to the USACE for comment. All elements of the report were not yet completed, but the final draft is expected sometime later in 2004. The report will include a review of laws and regulations pertaining to invasive species, with particular attention to the USACE authorities for managing and funding invasive species programs.

Removal of Exotic Plants from Big Cypress National Preserve

The Big Cypress preserve estimates that 150 square miles is infested with melaleuca. In the spring of 2003 the preserve staff completed initial chemical treatment of all melaleuca, but because some stems will resprout and seeds are brought in from outside the boundaries, retreatment and monitoring will always be necessary. In fiscal year 2003 the preserve initially treated 54.4 square miles and retreated 49.4 square miles.

Objective 2-B.3: Complete an invasive exotic plant prevention, early detection, and eradication plan by 2005

Exotic Species Quarantine Facility

Construction delays and cost overruns resulted in the facility not being ready within the original timeframe. It is currently expected to open later in 2004.

Biennial Report Table 5 - Subgoal 2-B: Control Invasive Exotic Plants

Table reflects July 2004 Status of Projects					
	Project ID	**Project Endpoint**	**Project Name**	**Output (plans)**	**Status**
Objective 2-B.1: Coordinate the development of management plans for the top twenty South Florida invasive exotic plant species by 2011	2500	2011	Management plans for melaleuca, Brazilian pepper, Old World climbing fern, hydrilla, water lettuce, and water hyacinth	6	20% completed
			Remaining plans	14	Prioritization underway
	2700	2005	Invasive Exotic Plant Prevention, Early Detection, and Eradication Plan		Underway
	Project ID	**Project Endpoint**	**Project Name**	**Output (control)**	**Status**
Objective 2-B.2: Achieve maintenance control of Brazilian Pepper, Melaleuca, Australian Pine, and Old World Climbing Fern on South Florida's public conservation lands by 2020	2600	2020	Achieve maintenance control status for Brazilian pepper, melaleuca, Australian pine, and Old World climbing fern		Underway
	Project ID	**Project Endpoint**	**Project Name**	**Output (plans)**	**Status**
Objective 2-B.3: Complete an invasive exotic plant prevention, early detection, and eradication plan by 2005	2700	2005	Invasive Exotic Plant Prevention, Early Detection, and Eradication Plan		Underway

GOAL 3 ACCOMPLISHMENTS: FOSTERING COMPATIBILITY OF THE BUILT AND NATURAL SYSTEM

The third strategic goal of the Task Force is "foster compatibility of the built and natural systems." The Task Force has adopted the following subgoals and objectives for this goal:

GOAL 3: FOSTER COMPATIBILITY OF THE BUILT AND NATURAL SYSTEMS

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

Objective 3-A.1: Designate or acquire 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 programs 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 improve 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 built and natural systems

Objective 3-C-1: Increase water available to provide restoration endpoint of 478.5 million gallons per day by 2008

Objective 3-C.2: Increase volumes of reuse on a regional basis

Objective 3-C.3: Increase water made available through the SFWMD Alternative Water Supply Development Program

The major projects planned to meet these objectives are listed in the Task Force strategy in part one of this Volume ("Coordinating Success"), along with a schedule for their implementation. The projects or activities that were ongoing or completed during FY 2002-04 are described below in the context of progress toward meeting each of the Task Force objectives.

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

Integrated Land Use and Water Supply Planning

The Florida DCA and DEP worked on ways to implement the law passed in 2002 that requires the comprehensive plans of counties and cities to be coordinated with the regional water supply plans of the state's water management districts.

In November 2002 the Florida DCA, DEP, and the five water management districts released a report, *Agency Coordination of Comprehensive Planning and Water Supply Planning in Florida*, outlining an improved interagency coordination process to improve the integration of land use comprehensive planning and water supply planning. The new process includes technical assistance and the review of comprehensive plan amendments and evaluation and appraisal reports (EARs).

Objective 3-A.1: Designate or acquire an additional 480,000 acres as part of the Florida Greenways and Trails System by 2008[22]

Florida Greenways and Trails Designation Program

At the end of the reporting period, the Florida Statewide System of Greenways and Trails contained 298,774 acres plus an additional 147 linear miles of greenways and trails land in the sixteen-county area corresponding in whole in the SFWMD.[23] The primary mission of this program is to provide a recreational trail or greenway experience within 15 minutes of every residence and business within the state.

[22] This is a statewide goal; a regional breakout was not available from the reporting agency at the time this goal was established by the Task Force.

[23] The SFWMD encompasses all of Broward, Collier, Miami-Dade, Glades, Hendry, Lee, Martin, Palm Beach and St. Lucie Counties, as well as portions of Charlotte, Highlands, Okeechobee, Orange, Osceola and Polk Counties.

Lake Okeechobee Scenic Trail (LOST) State Park

Design and land acquisition began in 2003, and construction was well underway at the end of the reporting period. This project, which will create a 115-mile-long trail around Lake Okeechobee, is expected to be completed in 2004. The cost of the project, $125 million, will be shared equally by the federal and state governments.

The project will make Lake Okeechobee accessible to pedestrians, backpackers, bicyclists, equestrians, sightseers, naturalists, skaters, picnickers, campers, and fishermen, allowing the surrounding communities to appreciate this great natural resource.

Objective 3-A.2: Increase participation in the voluntary Farm Bill Conservation Programs by 230,000 acres by 2014

At the end of the reporting period, the two projects contributing to objective 3-A.2 was both underway.

Farm Bill Conservation Programs

Since 2002, a total of 173,300 acres in the sixteen-county South Florida region were enrolled in Farm Bill Conservation Programs at an obligated cost of $51.7 million. The breakout by specific programs was as reflected in Table 6.

The Wetlands Reserve Program (WRP) recently enrolled one of the largest WRP projects in the nation, the Allapattah Ranch Project, which is part of the Indian River Lagoon South Program. The Allapattah Ranch Wetland Reserve will restore and preserve approximately 15,370 acres of agriculturally impacted wetlands and associated upland buffer habitat. The project is located within the eastern portion of the Allapattah Ranch, a 22,700 acre beef cattle ranch in northwestern Martin County.

Objective 3-A.3: Acquire an additional 2,500 acres of park, recreation, and open space lands by 2005[24]

At the end of the reporting period, the three projects contributing to objective 3-A.3 were all underway.

Florida Communities Trust Grant Program

1000 acres were acquired in the 2002-03 state fiscal year through this program. Approximately $66 million is available statewide to eligible applicants each year and applicants are eligible for up to 6.6 million or 10 percent of this amount. The local governments in the greater Everglades ecosystem have been taken advantage of this program with regular applications for resources to increase open space in this region.

[24] This is a statewide goal: a regional breakout was not available from the reporting agency at the time this goal was established by the Task Force.

Biennial Report Table 6. Farm Bill Accomplishments, 2002-2004

Program	Dollar Amount	Acreage Enrolled
Wetlands Reserve Program	$42.4 million	26,215 acres
Farm Land Protection Program	$ 0.63 million	1,385 acres
Environmental Quality Incentive Program	$8.4 million	142,000 acres
Wildlife Habitat Incentives Program	$ 0.14 million	2,800 acres
Grassland Reserve Program	$ 0.13 million	900 acres
TOTALS	**$51.7 million**	**173,300 acres**

CERP Master Recreation Plan (MRP)

The draft PMP for the CERP MRP was released for public comment on February 23, 2004. When completed the MRP will guide a systemwide approach to identifying, evaluating, and addressing the recreation aspects of CERP project implementation. This will include not only existing recreation use within the South Florida Ecosystem, but also potential new recreation, public use, and public educational opportunities. The MRP will coordinate CERP recreation with other known public and private recreation plans.

Objective 3-A.4: Complete five brownfield rehabilitation and redevelopment projects by 2006

At the end of the reporting period, eighteen brownfield rehabilitation and redevelopment projects were underway.

The Eastward Ho! Brownfields Partnership, which includes Miami-Dade, Broward, and Palm Beach Counties, is a good example of how local, regional, state, and federal agencies are working with private nonprofit and community organizations to facilitate the redevelopment of brownfields. More than $41 million had been committed by state, regional, local, and private entities for pilot projects through September 2003. In addition, approximately $29.2 million in federal funding had been committed to assist projects in the partnership area.

During the reporting period one loan was closed under the Eastward Ho! Brownfields Revolving Loan Fund Program. The brownfields program in southwest Florida had one project underway in Fort Myers.

Objective 3-A.5: Increase community understanding of ecosystem restoration

CERP Outreach and Regional Coordination

Public Involvement and Information. The USACE and SFWMD made considerable progress during the reporting period in raising the awareness of South Florida's public-at-large and minority communities about the CERP. Innovative products, unique delivery methods, and public involvement all helped ensure that the CERP is better understood and that the public has opportunities to participate in decision making. Highlights from the reporting period are summarized below.

General Public Awareness. The new logo--The Journey to Restore America's Everglades – was incorporated into many outreach materials to emphasize that each person can make a difference everyday to protect the natural environment. In 2004, an interactive kiosk was developed to reach new audiences, which will be placed in shopping malls, libraries, airports, and other non-traditional venues.

Minority Community Outreach. Databases, newspaper inserts, electronic newsletters, translation of materials, radio programs, and specialty items including fans and calendars were developed to communicate the goals of CERP in culturally-sensitive ways. Meetings were held with community leaders and focus groups.

Environmental Education. Curricula and teachers' guides were developed and distributed in K-12 schools throughout the sixteen-county South Florida region, often in partnership with the Newspapers in Education (NIE) program. In 2004, a new animated CERP character, Wayne Drop, was introduced to bring CERP to life for elementary students.

Small Business Outreach. Staff proactively engaged and assisted small businesses through business forums, workshops, and training sessions; development of web sites; distribution of printed materials; and other means.

Project-Level Involvement. Stakeholder meetings, public workshops, and public meetings were held to involve local residents in the development of CERP projects.

The Museum of Discovery and Science and the Task Force Collaboration Committee. The Museum of Discovery and Science continued to serve as the interpretive site for the Everglades Restoration Project by educating South Florida's residents and visitors about the quality, quantity, timing, and distribution of water in the Everglades. During the reporting period, the Living in the Everglades exhibit was visited by over 800,000 visitors. Museum programming focused on a unique combination of engaging hands-on demonstrations, labs, and live animal encounters. These presentations were delivered at the Museum and in the community. By visiting community centers, churches, schools, fairs, and festivals the Museum staff served 6,349 individuals in six underserved communities in South Florida. Additional Everglades programming was delivered during the Museum's camp-ins, day camps, summer camps, and via school, public, and BECON television programs. The Museum contracted with the Task Force (Office of the Executive Director) to create and deliver 40 new outreach programs to underserved communities in Broward County. It received grants from the Department of Planning and Environmental Protection to develop and implement educational programming, from the Division of Forestry for backyard programming, and from the SFWMD to design new graphic panels for the Museum's Ecoscapes exhibit.

Everglades Radio Network (ERN). The ERN was launched on February 23, 2004. The ERN is a low-power, 24/7 FM transmission along Alligator Alley that will inform travelers about the Everglades Ecosystem and the progress towards its restoration.

Biennial Report Table 7 - Subgoal 3-A: Use and Manage Land in a Manner Compatible with Ecosystem Restoration

Table reflects July 2004 Status of Projects					
	Project ID	**Project End Date**	**Project Name**	**Output (additional acres)**	**Status**
Objective 3-A.1: Designate or acquire an additional 480,000 acres as part of the Florida Greenways and Trails System by 2008	3100	2008	Florida Greenways and Trails Program	480,000	Ongoing
	3102	2004	Lake Okeechobee Scenic Trail		Underway
	3103	TBD	Florida Keys Overseas Heritage Trail		
	Project ID	**Project End Date**	**Project Name**	**Output (annual additional acres)**	**Status**
Objective 3-A.2: Increase participating in the voluntary Farm Bill Conservation Programs by 230,000 acres by 2014	3201	2011	Technical Assistance to Indian Reservations	107,000	Underway
	3200	2014	Farm Bill Conservation Programs	173,300	Underway
	Project ID	**Project End Date**	**Project Name**	**Output (acres/miles)**	**Status**
Objective 3-A.3: Acquire an additional 2,500 acres of park, recreation, and open space lands by 2005	3300	2005	Florida Communities Trust Grant Program	1,000 acres	Underway
	Project ID	**Project End point**	**Project Name**	**Output**	**Status**
Objective 3-A.4: Complete five brownfield rehabilitation and	3400	2006	Konover Site – Fort Lauderdale Little Haiti Park Site – Miami Liberia Area – Hollywood Gravity Entertainment Site – Lauderdale Lakes Former Palm Beach Lakes Golf Course – West Palm Beach Liberty City Area – Miami The Wynwood Project – Miami Wagner Square Project – Miami Pompano Beach Multi-Purpose Project Potamkin Properties – Miami Beach Biscayne Commons Site – North Miami Beach Beacon Lakes – Miami Dade County Mid-Town Miami Stiegel Gas & Oil Corp – Miami Former Gipson's Service Station – Miami Former JG Shamrock/Supreme Service Station – Miami McArthur Dairy Site – Lauderhill Dania Motocross Brownfield Area – Dania Beach	Completion of Rehabilitation and/or redevelopment of current projects underway each year.	All of these project are at varying states moving toward final completion of both cleanup if needed and redevelopment
	Project ID	**Project Endpoint**	**Project Name**	**Output**	**Status**
Objective 3-A.5: Increase community understandingof ecosystem restoration by 2006	3500	TBD	USDA NRCS Earth Team Project, in cooperation and coordination with the South Florida Ecosystem Restoration Inc. and South Florida Ecosystem Restoration Advisory Committee, will train 1000 volunteers to educate citizens about and how to participate in ecosystem restoration and conserving natural resources	Trained volunteers	10% complete

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

At the end of the reporting period, the two projects contributing to objective 3-B.1 were both underway.

C-4 Basin Flood Mitigation Project

The project was under construction during the reporting period and is scheduled to be completed in December 2004. This to a more-than-10-year service level. The C-4 Emergency Detention Basin Phase 1 is completed and operational. The C-4 Emergency Detention Phase 2 is under construction. The Earthwork portion of the project (perimeter levee system) was completed in June 2004, and the Inflow Pump Station (G-422) is scheduled to be completed by October 2004. Phase 3 involves the selective dredging of the C-4 to improve conveyance capacity at specific locations including 137th Avenue and the Turnpike, west of the Palmetto Expressway and downstream of Structure S-25-B. This phase of the project is currently under planning and design.

Objective 3-C.1: Increase the water available to reach restoration endpoint of 478.5 gallons per day by 2008

At the end of reporting period the four projects contributing to objective 3-C.1 were all underway.

Regional Water Supply Plan Estimated Water Made Available

The first round of updates to the regional water supply plans was started in 2003 and will be concluded for all the regions by December 2005. The water supply achievements in 2004 are compared to the 2006 restoration endpoints in Biennial Report.

Objective 3-C.2: Increase the volume of water reuse on a regional basis

At the end of the reporting period, one of the projects contributing to objective 3-C.2 was completed, one had been dropped, and one was underway.

Wastewater Reuse Technology Pilot

The PMP was approved in November 2003. The site–selection process narrowed the number of potential sites to receive discharge from eight to four.

The scope of this project was changed to include two main efforts. The first is the preparation of a Technology Report to evaluate various treatment alternatives, the performance of these alternatives in obtaining the desired water quality to be discharged to a pristine environment, and the capital and operating costs associated with these technologies for a full-scale implementation. The second is the monitoring and evaluation of the presence of emergent pollutants of concern in the existing wastewater treatment facility in south Miami-Dade County.

Northern Palm Beach County and Southern Martin County Reclaimed Water Master Plan

In FY 2002 the SFWMD conducted a master plan study of the feasibility of construction and operation of a reclaimed water system for northern Palm Beach County. This study was conducted as part of the Lower East Coast Regional Water Supply Plan. The nine-month study included the quantification of existing and future (2020) irrigation demands in the study area, the availability of local sources, and the unmet needs. The study evaluated different treatment and transmission options, institutional frameworks, and funding options. Local entities contributed $55,000 towards this project. The study was completed and it was determined that the project was not economically feasible.

Biennial Report Table 8. Subgoal 3-B: Maintain or Improve Flood Protection in a Manner Compatible with Ecosystem Restoration

Table reflects July 2004 Status of Projects to Maintain or Improve Existing Levels of Flood Protection				
Project ID	**Project Endpoint**	**Project Name**	**Output**	**Status**
3600	2004	C-4 Basin Flood Mitigation Project	Flood protection at 1 in 10-year level	Underway
1300	2005	C-111 Canal project	Flood protection at 1 in 10-year level	Underway

Biennial Report Table 9. Water Supply Achievements, 2004

Region	Estimated Achieved in 2004	R (MGD) To achieve by 2006
Lower East Coast	33.5	154.7
Lower West Coast	69.3	189.6
Upper East Coast	21.3	63.0
Kissimmee Basin	7.4	71.2
Total		478.5

Objective 3-C.3: Increase water made available through the SFWMD alternative water supply program

The Florida DEP continued to work with the water management districts, public water suppliers, and other stakeholders to implement the recommendations of the 2002 State Water Conservation Initiative Report. The FDEP, the districts, and representatives of public water supply utilities signed a Joint Statement of Commitment for the Development and Implementation of a Statewide Comprehensive Water Conservation Program for Public Water Supply. The legislature affirmed this effort in the 2004 legislative session with the passage of HB 293. Among other things, the bill directs the DEP to develop such a program and to submit a progress report to the legislature by December 1, 2004.

The annual targets and the actual alternative water supplies for each region are listed in Biennial Report Table 24. The 2004 achievements were lower than the annual water targets by 35.95 million gallons per day (mgd). The most significant regional difference occurred in the Kissimmee Basin.

The differences between the targets and achievements occurred for two main reasons. With respect to the total differences, the 2004 targets were made in April 2003, when 38 of the 42 applications were deemed eligible by SFWMD staff. The Alternative Water Supply Funding Selection Committee later recommended that only 34 projects receive funding. In fiscal year 2004 the SFWMD contributed $4.5 million to 34 water supply projects as part of the Alternative Water Supply Funding Program. If all 38 projects had been funded, the total water made available would have been 120.59 instead of 101.73. The difference between the four projects in terms of water made available was 18.86 mgd.

Projects located in the Kissimmee Basin were not eligible to apply for a grant until April 2003. Up to that time, proposed alternative water supply projects were limited to areas within a designated Water Resource Caution Area. However, in 2002, legislation was passed to allow for proposed projects in all areas. The Kissimmee Basin Planning Area was not eligible to apply for a grant until the FY 2004. AWS Grant Application was made available in April 2003. It was assumed that there would be a larger number of applicants from the Kissimmee Basin; however, there were only three. These three projects, when completed, are expected to make 7.70 mgd available.

Biennial Report Table 10
SFWMD Alternative Water Supply Program Achievements, 2004

Region	2004 Targets (mgd)	2004 Achievements (mgd)
Lower East Coast	41.2	55.11
Lower West Coast	68.7	30.59
Upper East Coast	4.40	8.33
Kissimmee Basin	23.38	7.70
TOTALS	**137.68**	**101.73**

Biennial Report Table 11 - Subgoal 3-C: Provide Sufficient Water Resources for Built and Natural Systems

Table reflects July 2004 Status of Projects					
	Project ID	**Project Endpoint**	**Project Name**	**Output (mgd)**	**Status**
3-C.1: Increase water available towards restoration endpoint of 478.5 million gallons per day by 2008	3701	2008	Lower East Cost Water Supply Plan	154.7	Underway
	3702	2008	Lower West Coast Water Supply Plan	189.6	Underway
	3703	2008	Upper East Coast Water Supply Plan	63	Underway
	3700	2008	Kissimmee Basin Water Supply Plan	71.2	Underway
	Project ID	**Project Endpoint**	**Project Name**	**Output (mgd)**	**Status**
3-C.2: Increase volume of reuse on a regional basis	3802	2013	Wastewater Reuse Technology Pilot Project		Underway
	3800	2023	C&SF: CERP – South Miami-Dade County Reuse	131	
	3801	2023	C&SF: CERP – West Miami-Dade County Reuse	100	
	3805	2004	Orlando Kissimmee Area Regional Reclaimed Water Optimization Plan	Study	Project dropped no local support
	3803	2008	Lower West Coast Regional Irrigation Distribution System Master Plan Study	Study	
	3804	2004	Northern Palm Beach County and Southern Martin County Reclaimed Water Master Plan	Study	Completed – not economically feasible at this time
	Project ID	**Project Endpoint**	**Project Name**	**Output**	**Status**
3-C.3: Achieve annual targets for water made available through SFWMD alternative water supply program	3900	Ongoing	Alternative Water Supply Grant Program - annually	200 mgd	Underway

MEASURING PROGRESS TOWARD RESTORATION

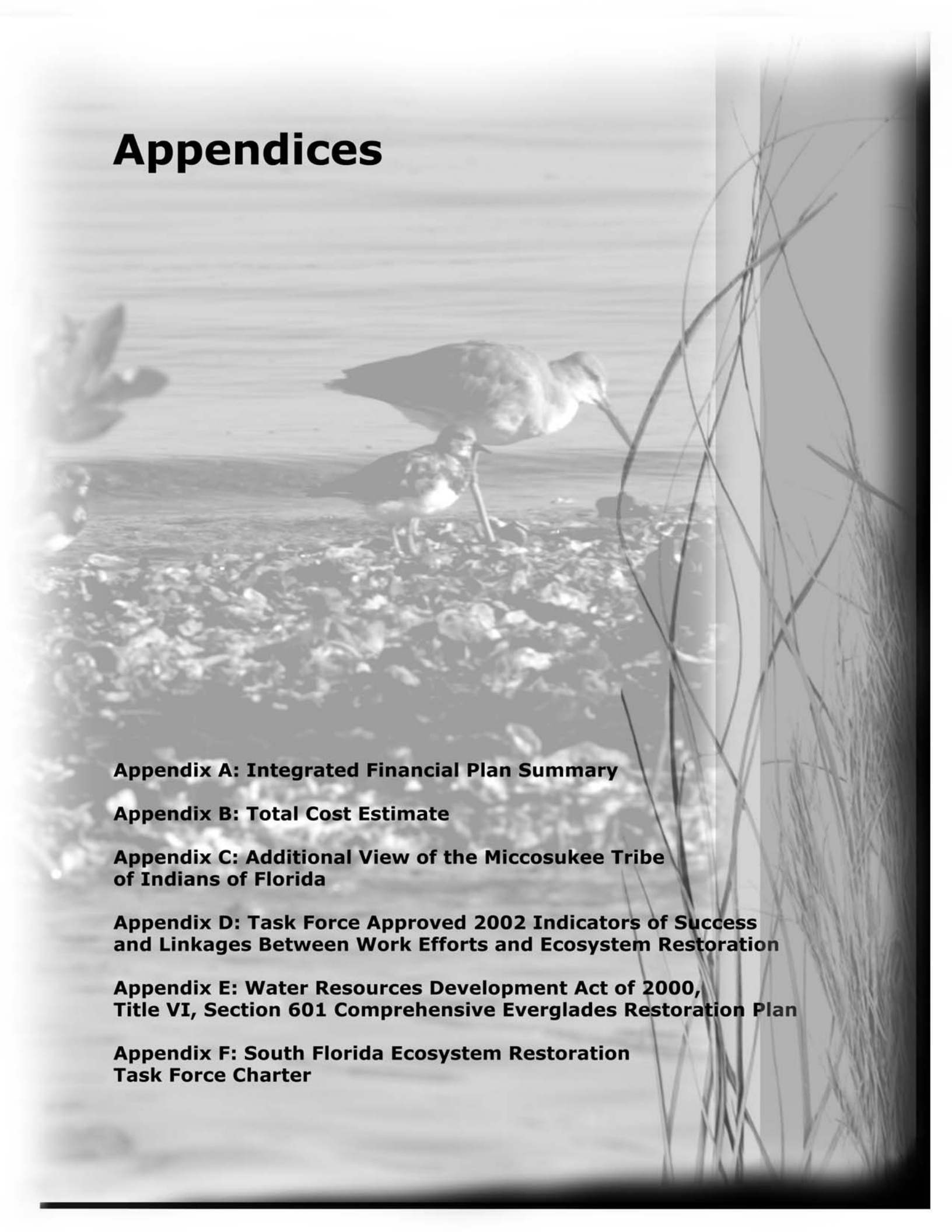
The appropriate Task Force agencies are tracking progress toward the Restoration of the South Florida Ecosystem by developing and monitoring specific indicators of ecosystem health. In 2000-2002 the Task Force reported on a preliminary set of indicators that are now included in Appendix D. Over the past two reporting periods a great deal of modeling and analysis has created new information that is being used to revise the initial set of indicators and to identify more accurate restoration endpoints that will aide in measuring restoration success. The ongoing discussion about indicators includes (1) how best to use them, (2) which ecological attributes are most appropriate and useful as indicators (especially the degree to which their future status may be predicted by reliable models), and (3) how to analyze and report the data in the most effective way for restoration management purposes.

In compliance with the Programmatic Regulations discussed in this biennial report, RECOVER is vetting indicators to be used to assess restoration progress and to adaptively manage the CERP portion of the restoration effort over time. Additional scientific and technical information about areas not covered by the CERP is being developed and refined by federal, state, and local agencies, including the FWS, which has developed and is implementing the Multi-Species Recovery Plan. The Task Force will also report on some of the indicators identified through these efforts. Thus, although there has been and likely will continue to be a strong correlation between the indicators tracked in the reports of the Task Force and the reports of RECOVER, they will not necessarily be identical.

As noted in the Strategic Plan, the Task Force has charged the SCG with recommending a comprehensive set of systemwide indicators and restoration endpoints that the Task Force will report on in the future. The SCG will first design an open process that will provide ample opportunity for peer review and public input in the selection of a comprehensive set of systemwide indicators.

Indicators are prerequisite to a series of tasks to accurately predict progress towards restoration. These tasks include: Identifying what will be tracked (indicators), the baseline for those indicators, what the indicator will look like when restoration is successful (restoration endpoints), and a system-wide monitoring plan. The baseline will define the condition of the indicator prior to restoration efforts, as a basis for determining whether changes that are measured are due to the natural variability of the indicator or due to real change that may linked to restoration or other changes in the environment. Finally a process to synthesize and report on interim progress on a periodic (annual/biennial) basis that includes a period of public input and peer review.

Appendices



Appendix A: Integrated Financial Plan Summary

Appendix B: Total Cost Estimate

Appendix C: Additional View of the Miccosukee Tribe of Indians of Florida

Appendix D: Task Force Approved 2002 Indicators of Success and Linkages Between Work Efforts and Ecosystem Restoration

Appendix E: Water Resources Development Act of 2000, Title VI, Section 601 Comprehensive Everglades Restoration Plan

Appendix F: South Florida Ecosystem Restoration Task Force Charter

APPENDIX A Integrated Financial Plan Summary

2004 Integrated Financial Plan

Purpose

The purpose of the Integrated Financial Plan (IFP) is to provide detailed information about the federal, state, tribal and local restoration projects that contribute to the accomplishment of the vision, goals, subgoals, and objectives of the Task Force Strategy. The complete IFP is provided in Volume 2.

In 1996 Congress directed the Task Force to prepare an integrated financial plan for the restoration, preservation and protection of the South Florida Ecosystem. The IFP is updated annually and posted on the South Florida Ecosystem Restoration Task Force website. Every two years it is published along with the Task Force Strategy and Biennial Report.

Background

The overall premise of restoration is that the ecosystem must be managed from a systemwide perspective. Rather than dealing with issues independently, the challenge is to seek out the interrelationships that exist between all the components of the ecosystem. The same issues that are critical to the natural environment — getting the water right and restoring, preserving, and protecting diverse habitats and species — are equally critical to maintaining a quality built environment and lifestyle for South Florida's residents and visitors.

The success of this comprehensive approach will depend upon the coordination and integration of hundreds of individual restoration projects carried out by various agencies at all levels of government, and with input from many stakeholders. Each agency brings its own authority, jurisdiction, capabilities, and expertise to this initiative and applies them through its individual programs, projects, and activities.

Criteria and Assumptions

The IFP is a compilation of project information provided by the members of the Task Force. The cost estimating protocols, fiscal year cycles, time frames and methodologies used by the members vary widely. As such, the IFP reflects the criteria and assumptions used by the reporting Task Force entities and does not follow a single format. Specific criteria and assumptions for each project are annotated with footnotes.

For policy reasons, the Florida Department of Environmental Protection (FDEP) and SFWMD do not make individual project cost projections on future non-CERP land acquisitions for habitat preservation and conservation purposes listed under goal 2. The cost of lands already purchased for habitat preservation and conservation purposes are the actual costs. An estimate of future land costs for non-CERP goal 2 land acquisition is provided in the Total Cost Estimate in Appendix B.

The following criteria and assumptions apply to all of the project financial information as provided in the Task Force's 2004 Strategy and Biennial Report, Volume 1, Appendix A and the Volume 2, Integrated Financial Plan:

- Federal agencies and the South Florida Water Management District (SFWMD) operate and report financial activities on an October 1 to September 30 fiscal year, while other State of Florida agencies operate on a July 1 to June 30 fiscal year.
- The U.S. Army Corps of Engineers (USACE), in seeking project authorizations, uses constant year dollars to develop cost estimates. Once a project is authorized, the USACE revises their estimate at their next annual budget submission to a fully funded level using current year dollars. Fully funded is defined as a cost estimate that reflects projected costs through the period of construction using applicable OMB inflation factors. USACE project costs are reported as follows:
    a) CERP: The Project Implementation Report (PIR) is the decision document used to obtain approval and/or authorization of CERP projects and completion of the final PIR is normally the time when all costs are updated. At present, most PIR's remain incomplete and, as such, all project cost estimates reported assume a 50% Federal and 50 % Non-Federal cost share and are reported in 1999 dollars, with the following exceptions: the Indian River Lagoon-South project, which has a completed Final PIR and is reported in 2003 dollars; and several Water Preserve Area

(WPA) projects which reflect construction costs in 1999 dollars and land cost estimates that were updated to 2001 dollars during the WPA feasibility study. None of the CERP projects are fully funded.
b) Central & Southern Florida (C&SF) South Dade County C-111, C&SF West Palm Beach STA 1 East/ C-51 West, Kissimmee River Restoration, Everglades and South Florida Ecosystem Restoration Critical Projects costs are reported in 2003 dollars, fully funded.
c) Southwest Florida Feasibility Study: study cost estimate is reported in 2000 dollars.
d) Florida Bay/Florida Keys Feasibility Study: study cost estimate is reported in 2001 dollars.

- The SFWMD project costs are reported as follows:
  a) Lake Okeechobee Protection Plan – project cost estimate is reported in 2003 dollars.
  b) Everglades Construction Projects – project cost estimates are escalated values and are derived from construction industry-accepted cost databases and compared with similar previous SFWMD completed projects. Escalated value is defined as the value of when that component is expected to be constructed, including the estimated cost of inflation.
  c) Water Supply Plans – cost estimates are reported in 1999 dollars.
- The Project Summary Table and IFP report actual or estimated costs for construction projects initiated or scheduled to be completed between the years 1990-2036.
- The Project Summary Table and IFP report costs for land acquisition projects generally initiated or scheduled to be completed between the years 1990-2036. A few of the project sheets reflect costs for land acquisitions dating back to 1945.
- Reporting agencies needed to presume annual levels of Congressional and State of Florida appropriations to develop project completion schedules. If the actual appropriations vary from presumed levels, then project completion schedules and estimated projects costs may change.
- The Project Summary Table and IFP do not include operational costs or agency programmatic costs that would be incurred regardless of the restoration initiatives. For example, the National Park Service costs to operate and maintain Everglades National Park, Fish and Wildlife Service costs to provide for Endangered Species Act consultation and South Florida Water Management District costs to operate and maintain water delivery infrastructure are not included herein.
- The Project Summary Table and IFP do not include the costs of land development and associated infrastructure as well as infrastructure improvements in existing urban areas including but not limited to redeveloping declining urban areas, wastewater and storm water management systems construction and improvements, schools, roadways, utilities, government services, and light rail.
- The Project Summary Table and IFP do not include any current or future costs for science/research projects or studies.
- The Project Summary Table and IFP do not include any costs or future resource needs projected for environmental and system-wide monitoring programs (For example, the $100 million funded over ten years for the CERP monitoring programs is not included).
- The Project Summary Table and IFP do not include any post-construction operations and maintenance costs in the total financial requirement.

HOW TO USE THE IFP PROJECT SUMMARY TABLE

The Integrated Financial Plan Summary Table provides a great deal of useful information for those interested in project details at a glance and describes how the projects link to the overall strategic goals, subgoals and objectives of the Task Force. This same table is repeated in Volume 1, Appendix A.

Each column of the table has a specific purpose to assist in finding information quickly and aggregating different information components:

Column 1 identifies the goal and subgoal the project is designed to achieve or partially achieve

Column 2 assigns a unique project number linked to the Task Force goals, subgoals, and objectives. The first digit is a goal number (1, 2, or 3). The second digit is the subgoal/objective number. For the purpose of assigning project numbers, the objectives under each goal have been numbered consecutively regardless of their subgoal. For example, project 1104 would be a project that supports objective 1-A.1, while project 1504 would be a project that supports objective 1-B.1 (the fifth objective under goal 1). The third and fourth digits reflect the order of listing of the projects under each subgoal/objective. For example, project 1104 would be the 4th project on the list for that objective.

Column 3 is the project name. The staff strives to use the same project name used by all agencies, although at times this is quite challenging. Some of the project names changed from year to year as projects are grouped together or split apart in the CERP adaptive management process. For example the Lake Istokpoga Project, which was a separate project in 2002, has since been included in the Lake Okeechobee Watershed Project. These types of actions affect the restoration endpoints and total outputs measured by some of the objectives, and as a result some of the restoration endpoints have changed.

Column 4 identifies the lead agency

Column 5 and 6 identify the reported start and Completion dates

Column 7 identifies the cost estimate

Column 8 identifies the financial resources appropriated to date

Column 9 identifies the measurable output (e.g., acre-feet of storage, miles modified, etc.) that collectively add up to the restoration endpoint identified for achieving the objectives of each subgoal

Columns 10 and 11 identify the primary and secondary objectives that the project outputs support. The staff identified the primary and secondary objectives based on input from the reporting agency. Some projects provide outputs supporting more than one objective. Thus, they are listed in more than one section with different outputs. For example, the Lake Okeechobee Watershed Project (project 1104) provides acres of stormwater treatment for Objective 1.B.1 and acre-feet of storage for Objective 1.A.1. Such projects are numbered according to the primary objective identified for the project, and the same number is maintained when the project is repeated to identify the secondary benefit.

Column 12 identifies the page number in Volume 2 where the detailed project sheet can be located.

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
GOAL 1. GET THE WATER RIGHT											
SUB-GOAL 1.A.GET THE HYDROLOGY RIGHT (Quantity, Timing & Distribution)											
1.A.1		**SURFACE WATER STORAGE PROJECTS**						**Acre Feet**			
	1100	C&SF: CERP Acme Basin B Discharge (CERP Project # WBS 38)	USACE	2002	2009	20,100,000	1,657,000	3,800	1.A.1		25
	1101	C&SF: CERP Indian River Lagoon South, C-23/C-24/C-25/Northfork and Southfork Storage Reservoirs (UU), and C&SF: CERP C-44 Basin Storage Reservoir (B) (CERP Project # WBS 07)	USACE/ SFWMD	2002	2033	1,210,608,000	93,970,000	190,000	1.A.1		26
	1102	C&SF: CERP Everglades Agricultural Storage Reservoir Phase I (CERP Project # WBS 08)	USACE/ SFWMD	2001	2009	233,408,000	12,565,000	240,000	1.A.1		28
	1103	C&SF: CERP Everglades Agricultural Storage Reservoir Phase II (GP2) (CERP Project # WBS 09)	USACE/ SFWMD	2006	2014	203,240,000	356,000	120,000	1.A.1		29
	1104	C&SF: CERP Lake Okeechobee Watershed (CERP Project # WBS 01)	USACE/ SFWMD	2001	2013	455,878,000	11,114,000	250,000	1.A.1	1.B.1, 2.A.3	30
	1105	C&SF: CERP North Lake Belt Storage Area (Phase I & II) (CERP Project # WBS 25)	USACE/ SFWMD	2017	2036	500,346,000	902,000	90,000	1.A.1		32
	1106	C&SF: CERP Palm Beach County Agricultural Reserve Reservoir and ASR (CERP Project # WBS 20 and 21)	USACE/ SFWMD	2006	2020	121,359,000	216,000	20,000	1.A.1	1.A.2	33
	1107	C&SF: CERP Site 1 Impoundment and Aquifer Storage and Recovery (CERP Project # WBS 22 and 40)	USACE/ SFWMD	2002	2024	131,379,000	6,091,000	15,000	1.A.1	1.A.2	34
	1108	C&SF: CERP Bird Drive Recharge Area (U) (CERP Project # WBS 43)	USACE/ SFWMD	2010	2018	124,083,000	608,000	11,500	1.A.1		35

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

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	1109	C&SF: CERP C-43 Basin Storage Reservoir and ASR (CERP Project # WBS 04 and 05)	USACE/ SFWMD	2001	2019	440,195,000	6,726,000	160,000	1.A.1	1.A.2	36
	1110	C&SF: CERP Central Lake Belt Storage Area (CERP Project # WBS 26)	USACE/ SFWMD	2017	2035	466,725,000	844,000	190,000	1.A.1	1.B.1	37
	1111	Critical Ecosystems Restoration Projects - Ten Mile Creek	USACE/ SFWMD	1997	2005	40,589,000	20,609,000	5,000	1.A.1	2.A.3	38
1.A.2		**AQUIFER STORAGE & RECOVERY (ASR) PROJECTS**						**BGD**			
	1109	C&SF: CERP C-43 Basin Storage Reservoir and ASR (CERP Project # WBS 05)	USACE/ SFWMD	2001	2013	*Footnote 1*	*Footnote 1*	0.22	1.A.1	1.A.2	36
	1200	C&SF: CERP North Palm Beach County - Part 2 (CERP Project # WBS 18)	USACE/ SFWMD	2010	2021	127,291,000	328,000	0.17	1.A.2		39
	1201	C&SF: CERP Lake Okeechobee ASR (GG)(CERP Project # WBS 03)	USACE/ SFWMD	2013	2028	1,097,312,000	1,918,000	1	1.A.2		40
	1106	C&SF: CERP Palm Beach County Agricultural Reserve Reservoir and ASR (CERP Project # WBS 21)	USACE/ SFWMD	2010	2020	*Footnote 1*	*Footnote 1*	0.075	1.A.1	1.A.2	33
	1107	C&SF: CERP Site 1 Impoundment and Aquifer Storage and Recovery (CERP Project # WBS 40)	USACE/ SFWMD	2002	2024	*Footnote 1*	*Footnote 1*	0.15	1.A.1	1.A.2	34
1.A.3.		**MODIFY IMPEDIMENTS TO SHEETFLOW PROJECTS**						**Miles Modified**			
	1300	Canal 111	USACE/ SFWMD	1994	2008	274,670,000	211,170,000	4	1.A.3	3.B.1	41
	1301	C&SF: CERP WCA -3 Decompartmentalization and Sheetflow Enhancement (AA)(QQ)(SS) (CERP Project # WBS 12 and 13)	USACE/ SFWMD	2001	2019	211,687,000	7,967,000	240	1.A.3	2.A.3	42
	1302	C&SF: CERP Florida Keys Tidal Restoration (CERP Project # WBS 31)	USACE/ SFWMD	2001	2018	3,874,600	1,891,000	0.6	1.A.3		43
	1303	Critical Projects Southern CREW	USACE	1999	2005	33,312,000	6,184,000		1.A.3		44

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	1304	East WCA-3A Hydropattern Restoration	SFWMD	1994	2004	5,040,571	5,040,571	8.5	1.A.3		45
	1305	Kissimmee Prairie	FDEP/ SFWMD	1996	1997	*Footnote 1*	*Footnote 1*	39.3	1.A.3	2.A.1	46
	1306	Kissimmee River Restoration Project	USACE/ SFWMD	1994	2010	572,400,000	306,329,000	22	1.A.3	2.A.3	47
	1307	Modified Water Deliveries to Everglades National Park *(Footnote 3)*	NPS	1990	2008	191,000,000	154,884	21	1.A.3		48
OTHER RELATED HYDROLOGY PROJECTS								**TBD**			
	1400	Critical Projects Additional Water Conveyance Structures Under Tamiami Trail	USACE/ SFWMD	1998	2006	7,678,000	4,878,000				50
	1401	Biscayne Bay Feasibility Study	USACE/ M-DADE	1996	2006	6,370,000	2,937,000				51
	1403	C&SF: CERP Broward County Secondary Canal System (CERP Project # WBS 24)	USACE/ SFWMD	2001	2016	12,898,000	45,000				52
	1404	C&SF: CERP C-111N Spreader Canal (CERP Project # WBS 29)	USACE/ SFWMD	2000	2010	94,035,000	6,376,000				53
	1405	C&SF: CERP – Water Preserve Area Conveyance (BB)(CERP Project # WBS 49)	USACE/ SFWMD	2002	2017	18,778,000	211,000				54
	1406	Critical Projects East Coast Canal Structures (C-4) - *Completed*	USACE/ SFWMD	1999	2003	3,683,000	3,683,000				55
	1408	C&SF: CERP Loxahatchee National Wildlife Refuge Internal Canal Structures (CERP Project # WBS 14)	USACE/ SFWMD	2014	2020	7,669,000	1,000				56
	1503	C&SF: CERP North Palm Beach County PIR Part 1 (CERP Project # WBS 17)	USACE/ SFWMD	2001	2019	*Footnote 1*	*Footnote 1*		1.B.1		83
	1409	C&SF: CERP Seminole Tribe Big Cypress Water Conservation Plan (CERP Project # WBS 96)	USACE/ Seminole	2015	2022	30,090,000	0				57

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

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	1410	C&SF: CERP Biscayne Bay Coastal Wetlands (CERP Project # WBS 28)	USACE/ SFWMD	2001	2022	299,583,000	5,554,000				58
	1411	C&SF: CERP Caloosahatchee R. (C-43) Basin ASR Pilot Project (CERP Project # WBS 33)	USACE/ SFWMD	2001	2008	6,000,000	2,305,000				59
	1412	C&SF: CERP Diverting WCA-2 and WCA-3 Flows to Central Lake Belt Storage Area (CERP Project # WBS 47 and 48)	USACE/ SFWMD	2018	2025	76,921,000	357,000				60
	1413	C&SF: CERP Everglades Rain Driven Operations	USACE/ SFWMD	TBD	TBD	TBD	TBD				61
	1414	C&SF: CERP Henderson Creek/Belle Meade Restoration (CERP Project # WBS 93)	USACE	2002	2018	4,806,000	454,000			1.B.1	62
	1415	C&SF: CERP L-31 N Improvements for Seepage Management and S-356 Structures (CERP Project # WBS 27)	USACE/ SFWMD	2009	2014	184,845,000	322,000				63
	1416	C&SF: CERP L-31 N Seepage Management Pilot Project (CERP Project # WBS 36)	USACE/ SFWMD	2001	2008	10,000,000	2,533,000				64
	1417	C&SF: CERP Lake Belt (In-Ground Reservoir) Technology - Pilot Project (CERP Project # WBS 35)	USACE/ SFWMD	2001	2017	23,000,000	1,689,000				65
	1418	C&SF: CERP Lake Okeechobee Aquifer Storage and Recovery Pilot Project (CERP Project # WBS 32)	USACE/ SFWMD	2000	2008	19,000,000	7,130,000				66
	1419	C&SF: CERP Lake Okeechobee Regulation Schedule (CERP Project # WBS)	USACE/ SFWMD	TBD	TBD	TBD	0				67
	1420	C&SF: CERP Modified Holeyland Wildlife Management Area Operation Plan (CERP Project # WBS 15)	USACE/ SFWMD	2007	2011	150,000	0				68
	1421	C&SF: CERP Modified Rotenberger Wildlife Management Area Operation Plan (CERP Project # WBS 16)	USACE/ SFWMD	2007	2009	150,000	0				69

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

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	1422	C&SF: CERP Operational Modification to Southern Portion of L-31N and C-111 (CERP Project # WBS)	USACE/ SFWMD	TBD	TBD	TBD	0				70
	1423	C&SF: CERP Site 1 Impoundment and Aquifer Storage and Recovery Pilot Project (CERP Project # WBS 34)	USACE/ SFWMD	2000	2008	9,000,000	3,314,000				71
	1424	C&SF: CERP Southern Golden Gates Estates Restoration (CERP Project # WBS 30)	USACE/ SFWMD	2001	2008	45,654,000	15,708,000				72
	1425	Critical Projects Seminole Big Cypress Reservation Water Conservation Plan	Seminole/ USACE	1997	2008	48,783,000	18,862,000				73
	1426	Florida Bay and The Florida Keys Feasibility Study	USACE	2001	2012	6,300,000	2,290,000				74
	1428	Indian River Lagoon Restoration Feasibility Study **(Completed)**	USACE/ SFWMD	1996	2002	6,150,000	6,150,000				249
	1430	Rotenberger Restoration	SFWMD	1994	2002	5,002,111	3,587,645				75
	1431	Southwest Florida Feasibility Study	USACE	2001	2005	12,000,000	6,131,000				76
	1432	WCA-2A Hydropattern Restoration	SFWMD	1994	2006	6,000,962	4,944,200				77
	1433	West WCA-3A Hydropattern Restoration	SFWMD	1994	2006	10,492,653	7,261,490				78
SUB-GOAL 1.B GET THE WATER QUALITY RIGHT											
1.B.1		**STORMWATER TREATMENT AREA (STA) PROJECTS**						**Acres**			
	1104	C&SF: CERP Lake Okeechobee Watershed (CERP Project # WBS 01)	USACE/ SFWMD	2001	2014	*Footnote 1*	*Footnote 1*	11,875	1.A.1	1.B.1	30

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	1500	C&SF: CERP Big Cypress/L-28 Interceptor Modifications (CCC) (CERP Project # WBS 10)	USACE/ SFWMD	2011	2019	42,751,000	74,000	1,900	1.B.1		79
	1501	C&SF: CERP - Broward County WPA - C-9 Stormwater Treatment Area/Impoundment (R) and Western C-11 Diversion Impoundment and Canal and Water Conservation Areas 3A and 3B Levee Seepage Management (O) (Q) (CERP Project # WBS 45)	USACE/ SFWMD	2002	2011	313,690,000	3,503,000	4,100	1.B.1		80
	1502	C&SF: CERP Miccosukee Tribe Water Management Plan (CERP Project # WBS 90)	USACE / Miccosukee	2003	2010	24,459,000	624,000	0	1.B.1		82
	1503	C&SF: CERP North Palm Beach County PIR Part 1 (CERP Project # WBS 17)	USACE/ SFWMD	2001	2019	464,994,000	11,054,000	1,260	1.B.1	Other	83
	1505	C&SF: CERP Caloosahatchee Backpumping with Stormwater Treatment (CERP Project # WBS 06)	USACE/ SFWMD	2011	2020	82,895,000	144,000	5,000	1.B.1		84
	1110	C&SF: CERP Central Lake Belt Storage Area(CERP Project # WBS 26)	USACE	2017	2035	*Footnote 1*	*Footnote 1*	640	1.A.1	1.B.1	37
	1414	C&SF: CERP Henderson Creek/Belle Meade Restoration (CERP Project # WBS 93)	USACE	2002	2007	*Footnote 1*	*Footnote 1*	10	Other	1.B.1	62
	1506	Critical Projects: Lake Okeechobee Water Retention/ Phosphorus Removal	USACE/ SFWMD	1997	2006	23,306,000	9,177,000	940	1.B.1		85
	1507	Miccosukee Tribe Water Management Area	Miccosukee	TBD	TBD	42,113,000	0	900	1.B.1		86
	1508	STA-1 West Works and Outflow Pump Station (G-310)	SFWMD	1994	2003	97,516,089	79,401,066	6,700	1.B.1		87
	1509	STA-2 Works and Outflow Pump Station (G-335)	SFWMD	1994	2004	113,595,331	98,990,934	6,430	1.B.1		88
	1510	STA-3/4 Works	SFWMD	1994	2005	219,338,858	192,137,984	16,600	1.B.1		89
	1511	STA-5 Works	SFWMD	1994	2005	47,891,842	38,547,097	4,118	1.B.1		90
	1512	STA-6 (includes sections 1 and 2)	SFWMD	1994	2006	23,066,387	13,042,587	2,222	1.B.1		91
	1513	West Palm Beach Canal (C-51) and STA-1E	USACE/ SFWMD	1994	2014	244,574,100	218,283,200	6,500	1.B.1		92

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
1.B.2.		**TOTAL MAXIMUM DAILY LOAD (TMDL) PLAN DEVELOPMENT**						**Completed Plans**			
	1600	Total Maximum Daily Load (TMDL) for South Florida	FDEP	2000	TBD	*Footnote 2*	3,800,000		1.B.2		93
OTHER RELATED WATER QUALITY PROJECTS											
	1700	Chapter 298 Districts/Lease 3420 Improvements	SFWMD	1994	2004	22,817,145	21,924,656				94
	1701	Comprehensive Integrated Water Quality Plan	USACE	2001	2008	8,100,000	1,350,000				95
	1702	Critical Projects Lake Trafford	USACE	1999	2005	25,678,000	5,440,000			2.A.3	96
	1703	Critical Projects Western C-11 Water Quality Treatment	USACE	1997	2005	18,259,000	17,205,000				97
	1704	Development of Best Management Practices Related to the Land Application of Residuals and Chicken Manure in the Lake Okeechobee Watershed	SFWMD	2000	2006	657,000	557,000				98
	1705	Everglades National Park Water & Wastewater	NPS	1997	TBD	18,965,000	18,965,000				99
	1706	Everglades Stormwater Program	SFWMD	1998	2016	*Footnote 1*	38,575,000				100
	1707	Florida Aquifer Restoration	NRCS	2002	2008	1,209,000	170,000				101
	1708	Lake Okeechobee Sediment Removal Feasibility Study and Pilot Project	SFWMD	2000	2003	*Footnote 2*	2,009,301				102
	1709	Lake Okeechobee Tributary Sediment Removal Pilot Project	SFWMD	2000	2004	440,000	440,000				103
	1710	Miccosukee Water Resources Management	Miccosukee	TBD	TBD	25,200,000	0				104
	1713	S-5A Basin Runoff Diversion Works	SFWMD	1994	2005	14,210,274	11,622,799				105
	1714	Seminole Tribe Best Management Practices for the Big Cypress Reservation	Seminole	1996	2008	4,779,000	955,800				106
	1715	Seminole Tribe Best Management Practices for the Brighton Reservation	Seminole	1998	2008	338,000	96,000				107

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	1716	Seminole Tribe Comprehensive Surface Water Management System for the Brighton Reservation	Seminole	1999	2010	15,818,000	20,000				108
	1717	Seminole Tribe Water Conservation Project for Big Cypress Reservation	Seminole	2002	2012	49,000,000	0				109
	1719	STA-1 Inflow and Distribution Works	SFWMD	1994	2005	13,001,613	11,340,813				110
		TOTAL FOR GOAL 1				**9,422,782,837**	**1,592,814,027**				
Goal 2 Restore Preserve and Protect Natural Habitats and Species											
SUB-GOAL 2.A. RESTORE, PRESERVE AND PROTECT NATURAL HABITATS											
2.A.1.		**HABITAT PROTECTION LAND ACQUISITION PROJECTS**						**Acres**			
STATE LAND ACQUISITIONS (FLORIDA FOREVER PRIORITY LIST)											
	2100	Allapattah Flats/Ranch *(Footnote 5)*	FDEP	1997	TBD	TBD	3,775,844	35,999	2.A.1	1.A.1	113
	2101	Atlantic Ridge Ecosystem *(Footnote 5)*	FDEP/ SFWMD	1995	TBD	TBD	47,254,082	15,698	2.A.1		114
	2102	Babcock Ranch	FDEP	2001	TBD	TBD	0	91,361	2.A.1		115
	2103	Barfield Farms	SFWMD	1998	TBD	TBD	0	1,367	2.A.1		116
	2104	Belle Meade	FDEP	1993	TBD	TBD	36,183,158	28,506	2.A.1		117
	2105	Big Bend Swamp/Holopaw Ranch	FDEP	2000	TBD	TBD	0	59,849	2.A.1		118
	2106	Biscayne Coastal Wetlands *(Footnote 5)*	SFWMD/ M-DADE	1998	TBD	TBD	0	2,241	2.A.1		119
	2107	Bombing Range Ridge	FDEP	1998	TBD	TBD	12,003,388	41,748	2.A.1		120
	2108	Caloosahatchee Ecoscape	FDEP	1998	TBD	TBD	1,948,038	18,497	2.A.1		121
	2109	Catfish Creek	FDEP	1990	TBD	TBD	47,442,266	14,901	2.A.1		122
	2111	Charlotte Harbor Estuary/ Flatwoods/Cape Haze	FDEP	1986	TBD	TBD	17,781,504	15,054	2.A.1		123
	2112	Corkscrew Regional Ecosystem Watershed	FDEP	1991	TBD	TBD	40,024,343	64,103	2.A.1		124

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE											
Goals Column 1	**Strategic Plan Project Number** Column 2	**Project Name** Column 3	**Lead Agency** Column 4	**Start** Column 5	**End** Column 6	**Cost Estimate** Column 7	**Appropriated to Date 2004** Column 8	**Measurable Outputs** Column 9	**Primary Objective** Column 10	**Secondary Objectives** Column 11	**PG#** Col 12
	2114	Coupon Bight/ Key Deer/ Big Pine Key	FDEP	1985	TBD	TBD	17,734,013	3,638	2.A.1		125
	2172	Cypress Creek/Loxahatchee	SFWMD	2002	TBD	TBD	47,112,325	4,347	2.A.1		126
	2115	Cypress Creek/Trail Ridge *(Footnote 5)*	SFWMD	1997	TBD	TBD	968,857	13,788	2.A.1		127
	2183	Devils Garden	FDEP	1998	TBD	TBD	0	82,508	2.A.1		128
	2117	East Coast Buffer/Water Preserve Areas *(Footnote 5)*	FDEP/ SFWMD	1994	TBD	TBD	120,745,323	66,809	2.A.1		129
	2118	Estero Bay	FDEP	1985	TBD	TBD	44,720,290	15,572	2.A.1		130
	2119	Everglades Agricultural Area (EAA) / Talisman *(Footnote 5)*	SFWMD/ DOI	1997	TBD	TBD	3,390,353	51,210	2.A.1		131
	2120	Fakahatchee Strand	FDEP	1980	TBD	TBD	24,743,638	80,332	2.A.1		132
	2121	Fisheating Creek	SFWMD/ FDEP	1999	TBD	TBD	101,928,563	176,760	2.A.1		133
	2122	Florida Keys Ecosystem	FDEP	1992	TBD	TBD	35,940,928	8,566	2.A.1		134
	2123	Frog Pond/L-31 N	FDEP/ SFWMD	1994	TBD	TBD	83,623,264	10,450	2.A.1		135
	2185	Half Circle L Ranch	SFWMD	2003	TBD	TBD	0	10,500	2.A.1		136
	2175	Hen Scratch Ranch	SFWMD	2002	TBD	TBD	0	2,880	2.A.1		137
	2124	Indian River Lagoon Blueway	FDEP	1998	TBD	TBD	21,927,795	5,136	2.A.1		138
	2125	Juno Hills /Dunes	FDEP	1994	TBD	TBD	42,009,592	590	2.A.1		139
	2176	Jupiter Ridge	FDEP	1991	TBD	TBD	25,412,200	287	2.A.1		140
	2126	Kissimmee - St. John Connector	FDEP	2001	TBD	TBD	0	9,463	2.A.1		141
	2127	Kissimmee River (Lower Basin)	SFWMD	1985	2005	TBD	56,406,882	68,332	2.A.1		142
	2128	Kissimmee River (Upper Basin)	SFWMD	1990	2005	TBD	70,825,219	36,763	2.A.1		143
	2129	Lake Wales Ridge Ecosystem	FDEP	1992	TBD	TBD	24,564,760	13,848	2.A.1		144
	2132	Loxahatchee Slough Land Acquisition	SFWMD	1996	TBD	TBD	35,920,793	15,200	2.A.1		145
	2133	McDaniel Ranch Land Acquisition	SFWMD	2000	TBD	TBD	0	7,000	2.A.1		146
	2134	Miami-Dade County Archipelago	FDEP	1994	TBD	TBD	23,524,235	858	2.A.1		147

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Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	2135	Model Lands *(Footnote 5)*	SFWMD/ M-DADE	1994	2007	TBD	2,119,701	42,402	2.A.1		148
	2138	North Fork St Lucie River *(Footnote 5)*	FDEP/ SFWMD	1988	TBD	TBD	0	3,800	2.A.1		149
	2139	North Key Largo Hammocks	FDEP	1983	TBD	TBD	75,272,465	4,513	2.A.1		150
	2140	North Savannas	SFWMD	1997	TBD	TBD	0	930	2.A.1		151
	2141	Okaloacoochee Slough	FDEP/ SFWMD	1996	TBD	TBD	20,570,673	37,210	2.A.1		152
	2142	Okeechobee Battlefield	FDEP	2001	TBD	TBD	0	56	2.A.1		153
	2143	Osceola Pine Savannas	FDEP	1995	TBD	TBD	310,000	1,374	2.A.1		154
	2144	Pal-Mar *(Footnote 5)*	FDEP/ SFWMD	1992	TBD	TBD	23,987,087	36,745	2.A.1		155
	2145	Panther Glades	FDEP	2001	TBD	TBD	75,049,836	53,894	2.A.1		156
	2146	Paradise Run	SFWMD	1998	TBD	TBD	4,908,095	4,265	2.A.1		157
	2147	Lake Hatchineha Watershed/ Parker-Poinciana	SFWMD	1996	TBD	TBD	0	6,437	2.A.1		158
	2148	Pineland Site Complex	FDEP	1996	TBD	TBD	1,751,874	206	2.A.1		159
	2178	Ranch Reserve	SFWMD		TBD	TBD	39,286	2,217	2.A.1		160
	2149	Rookery Bay	FDEP	1980	TBD	TBD	44,960,833	18,721	2.A.1		161
	2150	Rotenberger/Holey Land Tract	FDEP	1984	TBD	TBD	20,114,395	79,170	2.A.1		162
	2151	Shingle Creek	SFWMD	1987	TBD	TBD	6,465,800	7,655	2.A.1		163
	2152	Six Mile Cypress I & II Land Acquisition	SFWMD	1987	TBD	TBD	6,903,701	1,966	2.A.1		164
	2154	South Savannas	FDEP/ SFWMD	1981	TBD	TBD	20,902,290	6,046	2.A.1		165
	2155	Southern Glades *(Footnote 5)*	SFWMD/ M-DADE	1964	TBD	TBD	6,951,829	37,620	2.A.1		166
	2156	Southern Golden Gate Estates *(Footnote 5)*	FDEP	1984	TBD	TBD	632,659	55,247	2.A.1		167
		STA 1 W, 2,3/4, 5, and 6 (See project IDs 1508-1512)	SFWMD			TBD	126,772,412	41,089	2.A.1		
	2158	Twelve Mile Slough	SFWMD	1998	TBD	TBD	11,000,000	15,653	2.A.1		168

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Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	2159	Upper Lakes Basin Watershed	SFWMD	1995	TBD	TBD	12,343,957	47,300	2.A.1		169
	2186	Upper Econ Mosaic	FDEP		TBD	TBD	0	16,595	2.A.1		170
	2160	Water Conservation Areas 2, and 3	SFWMD	1948	TBD	TBD	10,572,395	721,433	2.A.1		171
FEDERAL LAND ACQUISITIONS (AUTHORIZED FEDERAL PROJECTS)											
	2162	A.R.M. Loxahatchee National Wildlife Refuge	USFWS	1955	2005	30,119,000	119,000	145,567	2.A.1		172
	2163	Big Cypress National Preserve Addition	NPS	1989	2005	48,793,000	46,225,000	146,117	2.A.1		173
	2164	Big Cypress National Preserve Private Inholdings *(Footnote 4)*	NPS	1974	TBD	243,982,000	222,105,000	574,449	2.A.1		174
	2165	Complete Land Acquisition for Biscayne National Park	NPS	1968	TBD	33,699,000	31,851,000	172,924	2.A.1		175
	2166	Crocodile Lake National Wildlife Refuge	USFWS	1979	2005	14,319,000	13,093,000	7,100	2.A.1		176
	2167	East Everglades Addition to Everglades National Park	NPS	1990	2005	102,535,000	90,278,000	109,504	2.A.1		177
	2168	Florida Keys National Wildlife Refuge Complex	USFWS	1960	2005	35,028,000	31,168,000	415,436	2.A.1		178
	2169	Florida Panther National Wildlife Refuge	USFWS	1989	TBD	10,692,000	10,682,000	61,573	2.A.1		179
	2170	Hobe Sound National Wildlife Refuge	USFWS	1968	2004	5,818,000	18,000	1,130	2.A.1		180
	2171	J.N. "Ding" Darling National Wildlife Refuge	USFWS	1945	2005	12,145,000	9,035,000	10,275	2.A.1		181
COMPLETED STATE LAND ACQUISITION PROJECTS											
	2110	Cayo Costa	FDEP	1980	2004	28,337,346	28,337,346	1,954	2.A.1		240
	2113	Corkscrew Regional Mitigation Bank	SFWMD	1995	1999	2,600,000	2,600,000	633	2.A.1		241
	2116	Dupuis Reserve	SFWMD	1985	1986	23,016,601	23,016,601	21,875	2.A.1		242
	1305	Kissimmee Prairie	FDEP	1996	1997	21,953,790	21,953,790	38,282	2.A.1		46
	2130	Lake Walk-In-Water	SFWMD	1995	1998	3,950,000	3,950,000	4,009	2.A.1		243
	2131	Loxahatchee River Land Acquisition	SFWMD	1984	2001	13,074,703	13,074,703	1,936	2.A.1		244
	2137	Nicodemus Slough	SFWMD	1981	1988	1,894,501	1,894,501	2,231	2.A.1		245

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	2153	South Fork St. Lucie River Land Acquisition	SFWMD	1995	1995	2,480,000	2,480,000	184	2.A.1		246
	2180	Ten Mile Creek	SFWMD	1990	2004	5,332,000	5,332,000	913	2.A.1		38
	2157	Tibet-Butler Preserve	SFWMD	1988	1999	3,601,900	3,601,900	439	2.A.1		247
	2161	Yamato Scrub	FDEP	1992	1996	25,932,850	25,932,850	207	2.A.1		248
		STA 1 E (See project ID1513)	SFWMD			46,000,000	46,000,000	6503	2.A.1		92
2.A.2.		**CORAL REEF PROTECTION PROJECTS**						**% Reef Protected**			
	2200	Planning and Implementation of the Tortugas Ecological Reserve	NOAA	1998	2001	*Footnote 2*	32,000,000	10%	2.A.2		182
2.A.3		**IMPROVE NATURAL AREAS HABITAT QUALITY PROJECTS**						**Acres**			
	Note – The April 1999 USACE Central and Southern Florida Project Comprehensive Review Study Final Integrated Feasibility Report and Programmatic Environmental Impact Statement included an extensive environmental evaluation of habitat units that would be improved through implementation of the CERP projects. Table 7-18 in this publication identifies in detail which projects are anticipated to achieve this objective. However, appropriate measures by project are currently being developed through the establishment of interim goals. There are some projects included in our tracking matrix that exemplify how this objective will be achieved.										
	2300	C&SF: CERP Protect and Enhance Existing Wetland Systems along LNWR (Strazzulla Tract) (CERP Project # WBS 39)	USACE/ SFWMD	2002	2008	52,772,000	869,000	10,000	2.A.3		183
	2301	C&SF: CERP Winsburg Farms Wetland Restoration (CERP Project # WBS 91)	USACE	2000	2014	14,140,000	950,000	175	2.A.3		184
	2302	C&SF: CERP Lake Park Restoration (CERP Project # WBS 94)	USACE/ Lee Co.	1999	2014	5,166,000	220,000	40	2.A.3		185
	2303	C&SF: CERP Restoration of pineland and hardwood hammocks in C-111 Basin (CERP Project # WBS 92)	USACE	2016	2022	600,000	0	50	2.A.3		186
	3802	C&SF: CERP Wastewater Reuse Technology Pilot Project(CERP Project # WBS 37)	USACE/ SFWMD	2001	2013	*Footnote 1*	*Footnote 1*	1,500	3.C.2	2.A.3	229
	1301	C&SF: CERP WCA -3 Decompartmentalization and Sheetflow Enhancement (AA)(QQ)(SS)(CERP Project # WBS 12 and 13))	USACE/ SFWMD	2001	2019	*Footnote 1*	*Footnote 1*		1.A.3	2.A.3	42
	1111	Critical Ecosystems Restoration Projects - Ten Mile Creek	USACE/ SFWMD	1997	2003	*Footnote 1*	*Footnote 1*	2,740	1.A.1	2.A.3	38

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	1702	Critical Projects Lake Trafford	USACE	1999	2004	*Footnote 1*	*Footnote 1*			2.A.3	96
	2606	Hole-in-the-Donut	NPS	1994	2017	*Footnote 1*	*Footnote 1*	6,000		2.A.3	202
	1306	Kissimmee River Restoration Project	USACE/ SFWMD	1994	2010	*Footnote 1*	*Footnote 1*	27,000	1.A.3	2.A.3	47
	2304	A.R.M. Loxahatchee NWR Prescribed fire program	USFWS	2002	TBD	*Footnote 1*	602,640	TBD	2.A.3		187
	2305	Loxahatchee Impoundment Landscape Assessment (LILA)	USFWS	2002	2012	6,050,000	3,369,000	TBD	2.A.3		188
OTHER NATURAL HABITAT AND SPECIES PROJECTS											
	2400	Big Cypress National Preserve Mineral Rights	NPS	2000	TBD	TBD	0				189
	2401	C&SF: CERP- Flow to Northwest and Central WCA -3A (II)(RR) (CERP Project # WBS 11)	USACE/ SFWMD	2002	2018	30,877,000	66,000				190
	1307	Modified Water Deliveries to Everglades National Park	NPS	1990	2008	*Footnote 1*	*Footnote 1*		1.A.3		48
	2402	South Florida Multi-Species Recovery Plan	USFWS	1994	2010	386,991,000	109,843,000				191
	2403	WCA-2A Regulation Schedule Review	USACE	TBD	TBD	TBD	0				193
	2404	C&SF: Manatee Pass Gates	USACE/ SFWMD	2001	2007	14,000,000	6,720,000				194
SUB-GOAL 2.B. CONTROL INVASIVE PLANT AND ANIMAL SPECIES											
2.B.1		**INVASIVE EXOTIC PLANT SPECIES MANAGEMENT PLAN DEVELOPMENT**						**Completed Plans**			
	2500	Coordinate the development of management plans for top 20 south Florida exotic pest plants	NEWTT	2001	2011	600,000	0	20	2.B.1		195
2.B.2		**EXOTIC PLANT SPECIES MAINTENANCE CONTROL PROJECTS**									

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	2600	Achieve "Maintenance Control" status for Brazilian Pepper, Melaleuca, Australian pine and Old world climbing fern in all natural areas statewide by 2020	SFWMD	2002	2020	139,078,000	70,400,000	4	2.B.2		196
	2601	Integration of Federal, State, and Local Agency Invasive Exotic Control Programs into Florida-wide Strategy	FDEP	2000	2005	*Footnote 2*	415,090,000		2.B.2		197
	2602	C&SF: CERP- Melaleuca Eradication Project and other Exotic Plants (CERP Project # WBS 95)	USACE	2003	2013	5,772,000	145,000		2.B.2		198
	2603	Estero Bay Aquatic Preserve and Buffer Reserve Enhancement and Exotic Removal Project	FDEP	1998	2004	*Footnote 1*	1,100,000		2.B.2		199
	2604	Everglades National Park Exotic Control Program	NPS	2002	TBD	2,150,000	2,150,000		2.B.2		200
	2605	Exotic Species Removal	Seminole	1998	2010	988,000	280,000		2.B.2		201
	2606	Hole-in-the-Donut	NPS	1994	2017	123,750,000	41,529,000		2.B.2	2.A.3	202
	2607	Melaleuca Control (Critical) Big Cypress National Preserve	NPS	1998	TBD	4,000,000	3,200,000		2.B.2		203
	2608	Aquatic and Upland Invasive Plant Management	FDEP	TBD	TBD	*Footnote 2*	73,276,500		2.B.2		204
2.B.3.		**INVASIVE EXOTIC PLANT SPECIES PREVENTION PLAN DEVELOPMENT**									
	2700	Complete an Invasive Exotics Plant Prevention, Early Detection and Eradication Plan by 2005	NEWTT/ DEP/ NPS	2001	2003	5,000,000	0		2.B.3		205
	2701	Melaleuca Quarantine Facility	USDA/ ARS	1997	2004	6,200,000	6,200,000		2.B.3		206
		TOTAL FOR GOAL 2				**3,495,047,772**	**2,860,298,772**				
GOAL 3. FOSTER COMPATIBILITY OF THE BUILT AND NATURAL SYSTEM											
SUB-GOAL 3.A. USE AND MANAGE LAND COMPATIBLE WITH RESTORATION											
3.A.1		**DESIGNATE OR AQUIRE LAND FOR FLORIDA GREENWAYS AND TRAILS SYSTEM**						**Acres**			
	3100	Florida Greenways and Trails Designation Project	FDEP/ OGT	2000	2009	4,500,000	TBD	480,000	3.A.1		209

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	3102	Lake Okeechobee Scenic Trail	FDEP	2003	TBD	25,000,000	12,500,000		3.A.1		210
3.A.2		**AGRICULTURE LANDS CONSERVATION MANAGEMENT PROJECTS**						**Acres**			
	3201	Technical Assistance to Seminole and Miccosukee Indian Reservations	NRCS	1998	2011	7,928,526	960,000	107,000	3.A.2		211
	3203	2002 Farm Bill	NRCS	2002	2007	*Footnote 2*	51,700,000	*see project sheet*	3.A.2		212
3.A.3		**FLORIDA PARK, RECREATION AND OPEN SPACE LANDS PROJECTS**						**Acres**			
	3301	Florida Keys Overseas Heritage Trail	FDEP	TBD	TBD	40,000,000	14,555,841	TBD			213
3.A.4		**BROWNFIELDS REHABILITATION AND REDEVELOPMENT PROJECTS**									
	3400	Eastward Ho! Brownfields Partnership	SFRPC	1998	2010	*Footnote 2*	63,982,000		3.A.4		217
3.A.5		**INCREASE COMMUNITY UNDERSTANDING OF RESTORATION PROJECTS**									
	3500	USDA-NRCS/South Florida Ecosystem Restoration Council & Committee Earth Team Project	USDA	2004	TBD	1,550,000	0		3.A.5		218
	3501	South Florida Ecosystem Restoration Non Point Source Pollution and Disease Prevention Project	USDA	2004	TBD	15,000,000	0		3.A.5		219
SUB-GOAL 3.B FLOOD PROTECTION COMPATIBLE WITH ECOSYSTEM RESTORATION											
3.B.1		**FLOOD PROTECTION COMPATIBLE WITH ECOSYSTEM RESTORATION PROJECTS**						**Flood Protection**			
	3600	C-4 Flood Mitigation Projects	SFWMD	2001	2004	44,500,000	44,500,000		3.B.1		220
	1300	Canal 111	USACE/ SFWMD	1994	2008	*Footnote 1*	*Footnote 1*		1.A.3	3.B.1	41
SUB-GOAL 3.C PROVIDE SUFFICIENT WATER RESOURCES FOR BUILT AND NATURAL SYSTEMS											
3.C.1		**WATER RESOURCE DEVELOPMENT PROJECTS**						**MGD**			
	3700	Kissimmee Basin Water Supply Plan	SFWMD	2003	2008	477,000	152,000	71.2	3.C.1		222
	3701	Lower East Coast Water Supply Plan	SFWMD	2000	2008	12,480,000	2,128,000	154.7	3.C.1		223

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	3702	Lower West Coast Water Supply Plan	SFWMD	2004	2008	6,235,000	740,000	189.6	3.C.1		224
	3703	Upper East Coast Water Supply Plan	SFWMD	2004	2008	634,000	134,000	63	3.C.1		225
3.C.2		**INCREASE VOLUME OF WATER RESOURCE PROJECTS**						**MGD**			
	3800	C&SF: CERP-South Miami-Dade County Reuse (CERP Project # WBS 98)	USACE/ M-DADE	2013	2023	363,024,000	0	131	3.C.2		226
	3801	C&SF: CERP-West Miami-Dade County Reuse (CERP Project # WBS 97)	USACE/ M-DADE	2013	2023	437,237,000	0	100	3.C.2		227
	3802	C&SF: CERP Wastewater Reuse Technology Pilot Project (CERP Project # WBS 37)	USACE/ SFWMD	2001	2013	30,000,000	2,248,000		3.C.2	2.A.3	228
	3803	Lower West Coast Regional Irrigation Distribution System Master Plan Study	SFWMD	2004	2008	*Included in Project #3702*	200,000		3.C.2		229
	3804	Northern Palm Beach County and Southern Martin County Reclaimed Water Master Plan	SFWMD	2002	TBD	*Included in Project #3701*	140,000		3.C.2		230
	3805	Orlando/Kissimmee Area Regional Reclaimed Water Optimization Plan	SFWMD	2002	2004	*Included in Project #3700*	80,000		3.C.2		231
	2301	C&SF: CERP Winsburg Farms Wetland Restoration (CERP Project # WBS 91)	Palm Beach County	1999	2003	*Footnote 1*	*Footnote 1*		2.A.3	3.C.2	184
3.C.3		**ALTERNATIVE WATER SUPPLY PROJECTS**						**MGD**			
	3900	Alternative Water Supply Grant	SFWMD	1996	TBD	*Footnote 1*	45,056,000	200	3.C.3		232
OTHER BUILT AND NATURAL SYSTEM COMPATIBILITY PROJECTS											
	4100	Critical Project Keys Carrying Capacity Study	FDCA/ USACE	1997	2003	6,000,000	6,000,000				233
	4101	BMPs for Agriculture	NRCS	1997	2011	77,584,000	30,053,000				234

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE											
Goals Column 1	**Strategic Plan Project Number** Column 2	**Project Name** Column 3	**Lead Agency** Column 4	**Start** Column 5	**End** Column 6	**Cost Estimate** Column 7	**Appropriated to Date 2004** Column 8	**Measurable Outputs** Column 9	**Primary Objective** Column 10	**Secondary Objectives** Column 11	**PG#** Col 12
	4102	Monitoring of Organic Soils in the Everglades	NRCS	1998	2017	1,236,000	36,000				235
	4103	Soil Survey Update for the Everglades Agricultural Area	NRCS	2004	2008	1,500,000	0				236
	4104	Soil Survey Update for the Everglades National Park, Big Cypress National Preserve and Water Conservation Areas	NRCS	2005	2010	5,600,000	0				237
		TOTAL FOR GOAL 3				**1,277,223,526**	**297,664,841**				

Project specific footnotes:

The following information is project specific and is provided in reference to it's appearance as a numbered notation on the project summary table:

[1] This is a multiple objective project, funding is listed in other objective.

[2] Available funding through project completion is not provided on the project sheet, due to the uncertainty of the annual Federal and State appropriations process. For the purposes of calculating Goal subtotals for all projects, only the dollars appropriated to date have been used for this project.

[3] The $191 million cost for the Modified Water Deliveries project reflects the currently approved National Park Service Capital Asset Plan for the project. The funding necessary to complete this project is under evaluation by USDOI and USACE.

[4] Consistent with authorizing Big Cypress legislation.

[5] The cost information for this project reflects the adjusted total cost information provided on the project sheet.

Project change notations from the 2002 edition:

The following projects from the 2002 Edition have been deleted or merged in the 2004 update of the Project Summary Table and IFP:

Project ID 1504: Western C-11 Diversion Impoundment & WCA3A&B Levee Seepage Management was combined with 1501: C-9 STA and Impoundment. The new project name is 1501: Broward County WPA- C-9 STA/Impoundment and Western C-11 Diversion Impoundment and Canal and Water Conservation Areas 3A and 3B Levee Seepage Management.

Project ID 1407: Lake Istokpoga Regulation Schedule was merged into the Lake Okeechobee Watershed project 1104.

Project ID 1429: Northern L-8 Basin Improvements was deleted.

Project ID 1718: South Florida Water Quality Protection Program and CERP Numeric Targets and Loading Analyses was deleted as the grant no longer exists.

Project ID 1402: The WPA Feasibility Study was deleted.

Project ID 1427: Herbert Hoover Dike was deleted.

Project ID 3200: Agricultural Land Stewardship was deleted

Project ID 4000: Mobile Irrigation Lab was deleted.

STRATEGIC GOALS AND OBJECTIVES OF THE SOUTH FLORIDA ECOSYSTEM RESTORATION TASK FORCE

GOAL 1: GET THE WATER RIGHT

Subgoal 1-A: Get the hydrology right

- Objective 1-A.1: Provide 1.3 million acre-feet of surface water storage by 2036
- Objective 1-A.2: Develop aquifer storage and recovery (ASR) systems capable of storing 1.6 billion gallons per day by 2028
- 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 69,000 acres of stormwater treatment areas by 2035
- Objective 1-B.2: Prepare plans, with strategies and schedules for implementation, to comply with total maximum daily loads for 100 percent of impaired water bodies by 2011

GOAL 2: RESTORE, PRESERVE, AND PROTECT NATURAL HABITATS & SPECIES

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

- Objective 2-A.1: Complete acquisition of 5.8 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 2011
- Objective 2-B.2: Achieve maintenance control of Brazilian pepper, melaleuca, Australian pine, and Old World Climbing Fern on South Florida's public conservation lands by 2020
- Objective 2-B.3: Complete an invasive exotic plant species 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 compatible with ecosystem restoration

- Objective 3-A.1: Designate or acquire 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 Programs 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 improve 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 built and natural systems

- Objective 3-C-1: Increase the water available by target of 478.5 million gallons per day by 2008
- Objective 3-C.2: Increase volumes of reuse on a regional basis
- Objective 3-C.3: Increase water made available through the SFWMD Alternative Water Supply Development Program

APPENDIX B Total Cost Estimate as of June 30, 2004

I. Purpose

The purpose of the 2004 Total Cost Estimate (TCE) is to provide an updated estimate of the total costs to restore the South Florida ecosystem as directed by Congress in 1999. This estimate uses the Task Force's 2004 Strategy and Biennial Report, Volume 1 Appendix A and the Volume 2, Integrated Financial Plan, as the primary sources of information and includes the reported costs for all three strategic goals. It includes the actual cost of work accomplished to date, as well as estimates for work to be completed in the future. This approach links the total cost estimate with related restoration project and cost information provided by our partners in this intergovernmental effort for ongoing South Florida restoration reports in a manner consistent with the individual agency procedures to report on and implement the specific projects.

II. 2004 Updated estimate of the total cost to restore the South Florida Ecosystem

For this update, the estimate of the total costs to restore the South Florida ecosystem has been defined as follows.The cumulative sum of the financial requirements for the completion of all Comprehensive Everglades Restoration Plan (CERP) and non-CERP restoration projects and activities identified on the individual project sheets provided by each lead agency/entity and compiled in the latest edition of the Task Force's Strategy and Biennial Report, Volume 1, Appendix A and the Volume 2, Integrated Financial Plan (IFP) and an estimated range of costs for future land acquisitions under Goal 2.

This 2004 Total Cost Estimate is the biennial update and refines cost and project information previously provided to the Congress.

The 2004 estimate of the total costs to restore the South Florida ecosystem is estimated to range between $16.5 and $18.1 billion.

III. Criteria and assumptions for the total cost estimate

Except for the future land acquisition costs, the TCE reflects the criteria and assumptions used to prepare the Task Force's Strategy and Biennial Report. As such, the TCE reflects the criteria and assumptions used by the various agencies and entities to report individual project costs. These specific criteria and assumptions are noted in the Strategy and Biennial Report.

In general individual Task Force member cost estimating protocols, fiscal year cycles, time frames and methodologies vary both in approach and in the time period for reporting financial information. Federal agencies and the South Florida Water Management District (SFWMD) operate and report financial activities on an October 1 to September 30 fiscal year, while other State of Florida agencies operate on a July 1 to June 30 fiscal year. Another variable is the use by some agencies of constant dollars until a project is specifically authorized.

Additionally, the TCE does not include operational costs or agency programmatic costs that would be incurred regardless of the restoration initiatives.

IFP PROJECT COSTS SUMMARIZED BY STRATEGIC GOAL	FINANCIAL REQUIREMENT (Billions) As of June 30, 2004
Goal 1	$9.4
Goal 2	$3.5
Goal 3	$1.3
NON-IFP COSTS	
Future land acquisitions in Goal 2	$2.3 - $3.9
TOTAL COST ESTIMATE	$16.5 to $18.1

For example, the National Park Service costs to operate and maintain Everglades National Park, Fish and Wildlife Service costs to provide for Endangered Species Act consultation and South Florida Water Management District costs to operate and maintain water delivery infrastructure are not included in the TCE.

Reporting agencies needed to presume annual levels of Congressional and State of Florida appropriations to develop project completion schedules as noted in the Integrated Financial Plan. If the actual appropriations vary from presumed levels, then project completion schedules and estimated projects costs may change.

For the future land acquisitions costs, the following criteria and assumptions were used. The Florida Department of Environmental Protection (FDEP) and SFWMD as a matter of policy do not make individual project cost projections on future Goal 2 land acquisitions for habitat preservation and conservation purposes. The cost of lands already purchased for habitat preservation and conservation purposes are the actual costs and are included in the Goal 2 costs. The $2.3 to $3.9 billion for future land acquisitions in Goal 2 is derived by using the FDEP forecast of 779,101 acres remaining to be acquired as of June 2004 and an approximate value for land ranging between $3,000- $5,000 per acre.

The majority report was approved by all the members of the intergovernmental Task Force except for the representative of the Miccosukee Tribe of Indians. In accordance with the Task Force protocol regarding consensus and voting, the following minority report was provided by the Miccosukee Tribe of Indians and expresses their thoughts and positions. It was not reviewed by the members of the Task Force and may contain issues that were not raised with the members while discussing the majority report or that exceed the scope or reporting period of the majority report. Additionally, the Miccosukee Tribe of Indians are in litigation with several members of the Task Force over some of the issues raised in the minority report. Accordingly, resolution of these matters is the subject of judicial review.

APPENDIX C: Additional View of the Miccosukee Tribe of Indians of Florida

Putting the Everglades Back into Everglades Restoration

Requires Assessing Problems, As Well As Progress

An Additional View of the Miccosukee Tribe of Indians of Florida

Supplement to Coordinating Success 2004, Strategy for Restoration of the South Florida Ecosystem

Submitted to the U.S. Congress, Florida Legislature, Seminole Tribe of Florida and All Interested Parties

By Dexter W. Lehtinen, Task Force Member, November 2004.

"The Everglades is our mother and she is dying."
- Billy Cypress, Chairman of the Miccosukee Tribe of Indians

I. EXECUTIVE SUMMARY

The Tribe agrees with the Task Force Biennial Report, Coordinating Success 2004, in many respects and appreciates the changes that were made to the document at its request. The Tribe has long held the position that any performance measures, indicators, or targets used must be based on sound science and go through an open public process. The Tribe credits the Task Force for finally realizing that the use of premature performance indicators and targets in past reports needed to be discontinued until they were reviewed through an open public process to ensure that they are scientifically sound. The Tribe will continue to support the use of hydrological performance measures for restoration. It believes that if proper water quantity and quality are achieved, the biology will follow. While the Tribe commends the hard work that the Task Force has put into the Biennial Report, it felt the need to submit this additional view to give Congress an accurate assessment of problems that exist in critical areas.

A major concern of the Tribe is the *pro forma* use of the Task Force to give the appearance of oversight and coordination where it does not exist. Recently, the state and federal government failed to seek Task Force advice on a new ACCELER8 plan that changes the priority of certain Comprehensive Everglades Restoration Plan (CERP) projects and shifts construction responsibility for those projects from the Secretary of the Army to the state of Florida. While the Tribe agrees that CERP must move forward, it should not do so blindly, or by excluding the input of the Task Force, public, and the Tribe. This new plan was discussed by selected government entities for at least six months, but was not brought before the Task Force before it was announced at a press conference. This is disturbing since Congress intended that the Task Force "coordinate the development of consistent policies, strategies, plans, projects, activities, and priorities for addressing the restoration, preservation, and protection of the South Florida Ecosystem…" Indeed, the title of the Task Force Biennial Report is "Coordinating Success."

It is also sad to report that despite a Congressional directive, certain agencies that sit on the Task Force continue to ignore their solemn Trust Responsibility to the Tribe in the restoration process. This is contrary to the Water Resources Development Act of 2000 ("WRDA 2000") which reads: "In carrying out his responsibilities under this subsection with respect to the restoration of the South Florida ecosystem, the Secretary of the Interior shall fulfill his obligations to the Indian tribes in South Florida under the Indian trust doctrine." All federal agencies also have a Trust Responsibility that requires honest pre-decisional consultation on matters that could adversely impact the Tribe and its lands. Despite this, restoration decisions continue to be made by the Department of the Interior (DOI), and others, without first consulting with the Tribe.

The Tribe, whose members have lived in the Everglades since time immemorial, wants nothing more than to see their homeland restored. The Tribe will not agree, however, that progress has been made in certain areas where it knows that none exists. Nor will it allow those who adopt policies that are moving away from restoration, to fool the public and

Congress into believing that restoration is moving forward. The Tribe will continue to work with the other representatives on the Task Force and attempt to convince them that progress will only be made when problems that threaten restoration are openly addressed and resolved.

This additional view is being submitted, because the Tribe has serious concerns that would not allow it to vote to adopt the Biennial Report in its entirety. These concerns include: the continued delay of the Modified Water Deliveries Project; a lack of commitment to water quality; escalating costs of projects; favoring some areas of the Everglades at the expense of others; a lack of a comprehensive approach to restoration; the lack of Tribal and public input on important restoration decisions; and the danger that the Everglades is being taken out of the Everglades Restoration process. The Tribe believes that any report that goes to Congress should openly detail restoration problems, as well as progress. It further believes that Everglades Restoration, despite its problems, is of great national importance and well worth the effort.

II. GETTING THE WATER RIGHT IN THE EVERGLADES

"The Indians, before anyone else, knew the Everglades were being destroyed "

- Marjory Stoneman Douglas in:
The Everglades: River of Grass

A. RESTORING MORE NATURAL FLOWS TO THE EVERGLADES

1. Modified Water Deliveries Project: Restoration Delayed is Restoration Denied

Perhaps the best example of an ongoing Everglades restoration problem is the failure to complete the Modified Water Deliveries Project ("Mod Waters"). This essential project was authorized by Congress in 1989, but its implementation continues to be delayed. Originally priced at $76 million dollars for both construction and land costs, this pre-CERP project had more restoration bang for the buck than many high cost CERP projects. Its purpose is to restore more natural flows to the Everglades and Everglades National Park. Doing so will benefit more than 900,000 acres of Everglades wetlands. The Corps told Congress it could be completed by 1997, but it continues to be mired in political red tape. After the Tribe submitted its "additional view" in April 1999, Congress held hearings on the failure to complete it. In fact, Congress was so concerned about the inability to complete Mod Waters that the law that authorized CERP, WRDA 2000, contains language Congress thought would ensure its completion. WRDA 2000 mandates that CERP components important to restoring natural flows to the historic Everglades, such as decompartmentalization, could not move forward until it is completed. Apparently, to get around Congress and the law, the agencies have cleverly pushed forward certain CERP projects located outside the historic Everglades for authorization and funding.

The Modified Water Deliveries Project has been combined with another delayed project, the C-111 project, into the Combined Structural and Operational Plan (CSOP). Admirably, the Task Force has created a CSOP Advisory Team to monitor progress and report back. The Tribe appreciates the Army Corps of Engineers' assertions that it is dedicated to completing Mod Waters by December 2006. It is concerned, however, that the delay will continue due to lack of funding and the acceleration of non-Everglades projects. Also, although the Report tells Congress on page 67 that the Supplemental EIS on the Tamiami Trail component of Mod Waters was completed in 2003, the process is not yet complete. The Corps recently announced that this SEIS, which took more than two years to complete, will be back for another 9-12 month review with the project completion date now at 2009. At the 1999 Congressional hearing on the delay of Mod Waters, Congressman James Hansen told the government agencies, "we will all be pushing up daisies before you fully get it resolved." Today, in 2004, his poignant comment still rings true.

The Tribe believes the Biennial Report should have treated the Modified Waters Deliveries Project with the heightened sense of urgency that Congress assigned to it. The document does not accurately reflect its progress or importance to the Everglades and CERP. It appears to the Tribe that projects such as Mod Waters, which are intended to restore a more natural flow through the historic Everglades, are being put on the back burner while others that

merely attach themselves to the name "Everglades" are expedited. While the Tribe agrees that all ecosystem projects are important, it does not believe that Congress, or the general public, intended for the Everglades to be taken out of Everglades Restoration.

The Modified Water Deliveries Project should be constructed and operating right now. The failure to do so has caused the project costs to escalate to more than $319 million dollars. The delay has also resulted in draconian "interim" water management actions that have backed water up in the Everglades, causing excessive tree island loss and environmental damage to the largest expanse of sawgrass Everglades left in existence. It has also contributed to high water in Lake Okeechobee and damaging releases to the St. Lucie and Caloosahatchee estuaries. Until the Modified Water Deliveries project is operational, the natural flow of water through the Everglades and Everglades National Park will not be restored, and the historic Everglades, no matter how progress is touted, will continue to be destroyed.

2. "Short Term" Actions: Moving Further Away from Restoration

The language on page 18 of the Biennial Report that states, "...it may on occasion be appropriate to take short-term or interim water management actions that are not immediately consistent with long range strategic goals," is disconcerting. While it has been explained as (and should properly be understood as) referring to temporary adverse consequences of initial steps in implementing restoration projects, it could be improperly interpreted to support damaging agency actions that have nothing to do with restoration. The Tribe, and the Everglades, have suffered greatly from so-called "short-term" and "interim" actions. In 1998, DOI agencies forced the Corps to take "short term" water management actions allegedly to protect the Cape Sable seaside sparrow. These actions have not been "short term," nor have they helped the sparrow.

More than 7 years of "short term" water management actions, culminating in the Interim Operational Plan (IOP), have caused severe man-made flooding of the Tribal Everglades in Water Conservation Area 3A (WCA 3A). This area is also the designated critical habitat for the endangered snail kite. Believe it or not, DOI has actually forced the Corps to move away from strategic restoration goals in these "short term" actions. The water in the area of the sparrow is being kept unnaturally low (well below CERP levels), and water levels in WCA 3A, snail kite critical habitat, are being kept unnaturally high (above CERP levels) and even above the previous C&SF high water levels that we are supposed to be reducing through restoration.

Ironically, the 7 years of so-called "short term" actions have not helped the sparrow. The numbers of sparrows in subpopulation "A," on which jeopardy was declared, have plummeted. A Park Service news release reported the sighting of only one singing male sparrow in subpopulation A in its 2003 census. This is down from the 25 singing males counted in "A" when the Fish and Wildlife Service ("FWS") issued its jeopardy Biological Opinion in 1999. (Note: the Park arbitrarily multiplies the actual number counted by 16 to estimate population.) It is painfully obvious to anybody, except the agencies involved, that the unnatural drying out of subpopulation "A" habitat with the "short term" actions has hurt, not helped, the once estuarine sparrow. It is also clear that the unnatural flooding of snail kite critical habitat on Tribal land in WCA 3A is harming the snail kite. FWS reported the status of the snail kite as declining for 2003, because the surveys indicate a continuing decline in nesting success and juvenile and adult survivorship. This should be of no surprise to FWS, which predicted that IOP would adversely impact 88,300 acres of designated snail kite critical habitat. The agencies involved, which must be embarrassed and reluctant to admit their grave mistakes, are unwilling to acknowledge the disastrous impacts of these "interim" actions on the Everglades and its wildlife.

Based on its experience, the Tribe will not endorse an ambiguous statement on "short term" or "interim" actions that can be twisted by agencies to support destroying the Everglades and moving us farther away from restoration goals. The Tribe contends that these "short term" actions are short sighted and harmful to restoration. Tree islands, once destroyed by high water take geological time

frames to return, if they ever do. A Corps employee testified that if one had to replace all the tree islands lost in WCA 3 it would cost more than the entire $8.4 billion dollar restoration project to do so. Rather than support a blanket statement on "short term" actions that have harmful long-term side effects, the Tribe encourages the Task Force to adopt the oath of the physician: "First do no harm." The Task Force should be cautious about using statements that could be used to endorse this type of conduct, which if it continues, will leave no tree islands or historic Everglades left to restore. For the Miccosukee Tribe of Indians, whose entire culture and way of life depend on a healthy Everglades ecosystem, this would be a tragedy indeed.

3. Costs of Restoration Projects Should Be Fully Reported

The Tribe is concerned that the Biennial Report does not fully and accurately inform Congress about the full cost of restoration projects. The Tribe suggested that the Project Summary Table 12 contain a separate column that depicts the full cost of the project from when it was authorized until the present time. It suggested that the table also identify whether the project is subject to WRDA 1996, Section 902 cost constraints. Our suggestions were not adopted by the Task Force. Consequently, there is no way for Congress to know from Table 12 that the Modified Water Deliveries Project has experienced extreme cost overruns. This project was initially estimated to cost $76 million dollars for both construction and land costs. The 1994 Project Cooperation Agreement (PCA) with the local partner estimated $114 million dollars in construction costs, which included a Section 902 cap at 20% above the estimated cost. Under Section 902, the agencies would be forced to go back to Congress if the cap was exceeded, but the agencies later determined that Section 902 did not apply to Mod Waters. Removal of the Section 902 cap may be part of the reason that, according to a recent estimate, the cost of the Mod Waters Project has now escalated to over $319 million dollars. Of this cost escalation, $182 million dollars is attributed to acquiring land in the 8.5 Square Mile Area, which the Tribe opposed as being expensive and unnecessary for restoration of more natural flows. It is the Tribe's position that the Project Summary Table does not give Congress the information it must have to make certain that similar unrestrained cost escalations do not occur on other restoration projects.

4. Costs of Delay to the Everglades Should Be Assessed

The Tribe believes that the Biennial Report should include an estimate of environmental damage caused by the failure to implement restoration projects in a timely manner. For instance, it is well known that the since the Central and Southern Florida Project ("C&SF") went into operation in the 1940s through 1995, Water Conservation Area 3A has lost 45% of its tree islands and 61% of the tree island acreage. The Corps used this data to calculate the cost of delaying Mod Waters in its General Reevaluation Report (GRR) on the 8.5 Square Mile Area. The Corps estimated that each year of delay of the Modified Water Deliveries Project would result in the loss of 8.4 tree islands and 246 acres per year in WCA 3 alone. (8.5 SMA GRR, July 2000 at Table 7.) The loss to the Tribe's culture and way of life is incalculable. An assessment of the cost of delay in the Biennial Report would help Congress decide whether project delays are reasonable in light of the environmental cost to the Everglades. The Report could similarly assess the amount of acreage of sawgrass Everglades that has been lost to cattail due to the failure to meet water quality in the Everglades for each reporting period.

B. GETTING THE WATER QUALITY RIGHT IS A #1 PRIORITY

"As for Everglades water, everything has changed…We cannot just say that the water is no good … and turn our back on that."

- Buffalo Tiger, Tribal Elder in: A Life in the Everglades

1. 1988 Everglades Lawsuit Put the Everglades on the Map

Contrary to assertions in the Strategic Plan at page 19 that "litigation may divert resources away from restoration efforts," it was the federal government's lawsuit against the state in 1988 for not enforcing pollution laws that brought national

attention to the plight of the Everglades. The Miccosukee Tribe is still involved in this federal lawsuit which was settled in the form of a Consent Decree in 1992. The Tribe has a Memorandum of Agreement that allows it to seek enforcement of the Consent Decree, if it believes the provisions are being violated. The Tribe has filed such motions, when necessary, through the years. The Federal Judge, overseeing the Consent Decree, held a hearing in September on two motions filed by the Tribe, including one alleging water quality violations in the Loxahatchee National Wildlife Refuge. The Judge made a preliminary finding that the Tribe had sufficiently shown, at the preliminary stage, based upon the numbers and exhibits presented, sufficient evidence of possible non-compliance based on the numbers. The Court set a "Remedy Hearing" for December 13-15th to take rebuttal testimony from the District and hear from all the parties on a remedy to stop water quality exceedances.

The Tribe has also been forced to file other lawsuits to stop the pollution and flooding of its Everglades homeland. The lawsuits are filed when nothing else works and only with the best interests of the Everglades in mind. It is the Tribe's position that litigation has often proven to be the only effective means to force agencies to fulfill their legal duties. The Tribe does not agree that all litigation is harmful to restoration. It contends that its current enforcement motion before Judge Moreno, who oversees the 1992 Consent Decree, is the primary reason that the South Florida Water Management District is considering constructing 13,800 acres more of Stormwater Treatment Areas to help clean the phosphorous laden water before it flows into the Everglades.

2. The Amended Everglades Forever Act Threatens Restoration

The Task Force Biennial Report fails to address the controversy surrounding the 2003 Amended Everglades Forever Act (Amended EFA) discussed at page 30. The Tribe contends that this state law suspends water quality enforcement for a decade or more, and is harmful to restoration. The Comprehensive Everglades Restoration Plan contained in the "Final Integrated Feasibility Report and Programmatic Environmental Impact Statement" (Restudy) dated April 1, 1999, which was adopted by Congress on July 1, 1999, acknowledged the state's responsibility to meet water quality requirements in waters being discharged to the Everglades by December 31, 2006. The Amended EFA passed in 2003 proves that the state has no intention to do so.

The fact that the Amended EFA (then a Senate Bill) would allow the state to miss the December 2006 date promised to Congress when CERP was authorized, did not escape the notice of the Congressional Appropriations Committee. On April 29, 2003, a joint statement was issued by Congressman Young, Regula, Hobson, Taylor Shaw and Goss which stated: "The earlier agreed upon deadline for achieving compliance is December 2006, which is the foundation for implementing the $8 billion equally cost shared and congressionally authorized Comprehensive Everglades restoration Plan or CERP." The joint statement further addressed the Long Term Plan in what is now the Amended EFA: "The bill directs that the Long Term Plan be implemented over 23 years. This makes uncertain the time period for compliance. This is inconsistent not only with the Everglades Forever Act, but also with the 1992 Consent Decree that settled the federal and state water quality litigation."

The Tribe has been forced to challenge this state law, which delays enforcement of water quality in the Everglades until 2016 and beyond, in federal court. This unfortunate law also allows the Everglades to be rehydrated with dirty water and contains moderating provisions that will allow polluted water to be discharged, not only to Tribal Everglades, but also to Everglades National Park and the Loxahatchee National Wildlife Refuge. As discussed below, Congress and all of us have a very good reason to be concerned about the delay of water quality sanctioned by the Amended EFA and its Long Term Plan. It is the golden rule of Everglades Restoration that the Everglades can not be restored with dirty water.

3. The Tragedy of the Long Term Plan

The fundamental flaw with the Long Term Plan authorized by the Amended EFA and discussed at page 30 of the Biennial Report is that it embodies a decision not to fully employ the best available technology to achieve the water quality necessary to restore and preserve the Everglades. Indeed, it is designed to excuse and cover the failure to achieve the water quality that the Everglades must have to survive in a timely manner. Both the 1992 federal Consent Decree and the 1994 Everglades Forever Act required that water discharged to the Everglades meet the final water quality criterion by December 2006. No imbalance of flora and fauna was allowed. In an attempt to protect its own Everglades lands from pollution, the Tribe set its own water quality standards for its Federal Reservation. In 1999, the Environmental Protection Agency approved the Tribe's water quality standards, including a 10ppb phosphorous criterion, as scientifically defensible and protective of the Everglades.

In 2004, the state of Florida adopted a complicated Phosphorous Rule, which set the phosphorous criterion at a 10ppb geometric mean. Despite claiming that it embraced 10ppb for the Everglades, the state's 10 is not a 10. The Rule's inappropriate use of a geometric mean to set the criterion, along with a complicated compliance methodology that allows individual stations to reach an annual limit of 15ppb geometric mean, masks high phosphorous values. Also, the inclusion of moderating provisions, and other loopholes in the Rule, allows the Everglades to continue to be polluted with phosphorous for an extended period of time. The trinity of trickery consisting of the Amended EFA, the Phosphorous Rule, and the Long Term Plan will ensure that the quality of water necessary for Everglades Restoration will not be achieved by December 2006. Instead, it is a license for dischargers to continue to pollute the Everglades until 2016 and beyond. The result will be the continued degradation of the Everglades, the massive spread of cattail, and the delay of restoration projects that require clean water to operate.

Most disturbing, as long as dischargers are following the Long Term Plan, they are deemed in compliance with water quality standards even if the water being discharged to the Everglades is polluted. This allows the state bureaucracy complete discretion to determine that the bureaucracy has fully complied with all requirements of law at any and all times. The Tribe, of course, disagrees that "non-compliance" is "compliance," as long as a discharger follows the Long Term Plan, or that “achieve” water quality can actually mean “not achieve.” To the Tribe, “enforce" water quality means "enforce," so it has sued the EPA in federal court to force it to enforce the Clean Water Act to protect the Everglades and ensure the water quality goal is met.

4. STA 3/4 Did Not Meet Its Deadline

The Tribe disagrees with the finding at page 69 of the Biennial Report that the "most significant milestone during the last reporting period was construction of STA 3/4." The Tribe disagrees that the construction of STA 3/4 is complete. It further contends that the South Florida Water Management District did not meet the Court mandated October 1, 2003, deadline in the Consent Decree for STA 3/4 to be operational. The Tribe recently filed a motion in Federal District Court asking the Judge who oversees the Consent Decree to review the matter. In September 2004, Judge Moreno held a hearing where the Tribe presented evidence and expert testimony showing the District had not met the October 1, 2003 date. Judge Moreno made a finding that the Tribe had standing to raise the issue, but did not rule at that time, because the state and federal parties were considering filing an amendment to modify the Consent Decree. The Special Master assigned to the case had previously suggested that such a motion be filed because certain deadlines, including the deadline for STA 3/4, had not been met.

The Tribe contends that neither statements of the District, nor any party, that are contested should be adopted in the Biennial Report without attribution solely to the party making the claim. The Task Force has no independent knowledge of

the accuracy of the statement on STA 3/4, and the Tribe has presented evidence in Court that it has not been completed. The Task Force should be cautious about what it reports to Congress. Additionally, the Task Force discusses the Everglades Construction Project and STAs in this section as the way the water quality goal will be achieved. It should be noted that the STAs are currently designed to provide an interim phosphorous concentration of 50ppb. This is five times higher than what the Everglades can tolerate. It is becoming increasingly clear that the water being discharged to the Everglades will not meet the 10ppb phosphorous criterion, which the Everglades needs to survive, by December 31, 2006. This issue is vital to restoration and must be addressed.

5. Delay of Water Quality Feasibility Study Shows Lack of Commitment

The Tribe remains concerned about the lack of commitment to water quality evidenced by the agencies' failure to complete the Comprehensive Integrated Water Quality Feasibility Study discussed at page 31 of the Report. Like the Tribe, the Task Force understands that the water being restored to the Everglades must be clean and put the Water Quality Feasibility Study at the top of its "must do" list. In a June 17, 1999, letter from then Task Force Chair, Patricia Beneki, to Secretary of the Army, Louis Caldera, she said: "The Task Force recommends that important water quality improvements have been added to the plan that will when combined with the follow-on-feasibility study provide the water quality capability necessary for restoration. We believe that these features are essential to restoration and should be cost shared with the non-federal sponsor. It is vitally important that the follow-on-feasibility study and detailed component designs continue to focus on this requirement."

The words of the Task Force were memorialized in the July 1999 Restudy document that went to Congress when it authorized CERP. The Comprehensive Integrated Water Quality Feasibility Study is discussed at pages 9-52 to 9-53 of the Restudy which states: "To ensure that the South Florida Ecosystem restoration objectives are achieved, a Comprehensive Integrated Water Quality plan that links water quality restoration remediation programs to the hydrologic restoration objectives of the recommended plan must be developed for the entire study area." It goes on to say, "Development of a comprehensive integrated water quality plan for South Florida is consistent with the recommendations of the South Florida Ecosystem Restoration Task Force and the Florida Governor's Commission for a Sustainable South Florida."

Despite the Task Force's continuing support for the Water Quality Feasibility Study, it has been unreasonably delayed, downgraded in priority, and only belatedly supported on the day the Task Force voted on the Biennial Report. The Tribe believes that this delay is indicative of the overall failure to address water quality, an essential element of restoration, on a priority basis. The Tribe expects that this last minute support was the result of its vigorous defense of the study on conference calls held to discuss the draft report. While the Tribe is hopeful that the eleventh hour language put into the Report will help propel this "vital" study forward, only time will tell whether the next report to Congress will show forward progress or continued delay.

III. Trust Responsibility and the Restoration Process

"The River of Grass is a world of beauty and life…and the world and life of the Miccosukee."

- Houston Cypress, Miccosukee Tribal member and writer

The words of Houston Cypress illustrate the importance of the Everglades to the Miccosukee. The Miccosukee Tribe not only has a unique relationship with the Everglades, it has a unique relationship with the federal government. Congress recognized the fact that federal agencies have a solemn trust responsibility to the Tribe, in the Water Resources Development Act of 2000 that authorized CERP. The Tribe applauds the Task Force for including the WRDA 2000 language and the Trust Responsibility at page 17 of the Biennial Report. However, the unfortunate reality is that the

federal agencies' adherence to these Congressional mandates is a rare exception, rather than the rule. The development of the new ACCELER8 plan without consultation with the Tribe is the most recent example of the failure to abide by this solemn duty.

The Tribe remains hopeful that one day these federal agencies will understand that the law requires them to consult with the Tribe, whose members live in the Everglades, before restoration decisions are made. The Tribe welcomes the recent efforts of the new leadership of the Jacksonville Corps to treat the Miccosukee on a government-to-government basis on certain projects. It is concerned, however, that the new plan that accelerates certain CERP projects under state construction could interfere with the Trust Responsibility of the federal agencies that have a duty to protect Indian people and their land in the Everglades Restoration process.

IV. Congressional Oversight and Public Scrutiny Are Critical to Accountability in Restoration

President Thomas Jefferson once said: "Information is the currency of democracy." It is equally true that both information, and public and Congressional scrutiny, are the basis for agency accountability in Everglades Restoration. The Tribe, and the public, have attended more than a decade of meetings on the Everglades Restoration plans. The Water Resources Development Act of 1996 and 2000 dictated an open public process as an important element of the restoration process. The Tribe fears that the public process, much like the Task Force, is being used pro forma to give an appearance of public involvement and accountability. Nothing else could explain how restoration decisions made in six years of open public meetings can be reversed in six months of closed door meetings.

Backroom restoration decisions were not what Congress directed in WRDA 2000, and should not be tolerated by the Task Force or the public. The Task Force must insist that Everglades Restoration decisions be made following a full and open public process, as Congress directed. Such an open public process requires bringing restoration proposals before the Task Force before they are made. Full public scrutiny and input is the only way that citizens, and Congress, will ensure accountability in Everglades Restoration.

V. Comprehensive Everglades Restoration Plan Should Be Comprehensive and Include the Everglades

As described herein, certain agencies fail to treat all parts of the Everglades equally. The Tribal Everglades, and even its endangered species, are given secondary status. Now, there appears to be another disturbing threat looming on the horizon. It seems that the historic Everglades itself is being lost in the Comprehensive Everglades Restoration Plan (CERP) process. In the eagerness to push CERP forward, the urgent need to restore more natural flows to the Everglades is being left behind. WRDA 2000 directed the agencies to complete the long delayed Modified Water Deliveries Project before funds would be authorized for CERP projects designed to restore the natural flow of water through the central Everglades. Rather than expedite the Pre-CERP Mod Waters, other non- Everglades CERP projects are being pushed forward.

In a July 22, 2004, news release about Congressional Hearings on the "First Projects of Everglades Restoration," Congressman John J. Duncan, Jr. (R-TN), Chairman, reminds us, "The principal goal of this effort is to restore water to the Everglades, but at the same time recognizing the water supply needs of agricultural and urban areas." He went on to say, "And, even if we focus on Everglades restoration alone, we have to recognize that doing expensive projects early in the process will effect how other Everglades projects can be implemented."

Congressman Duncan reminded us that it is important to take "a logical, system-wide approach" to restoration. A review of the 1999 Restudy document adopted by Congress entails just such a comprehensive approach. It promised that project implementation and sequencing would be an open process, subject to public and scientific review. Yet,

the new plan recently announced for CERP project implementation did not go through an open public process. Some of the projects are priority projects that benefit the Everglades, others have been moved up based on a state decision to construct them on its own. The $8.4 billion dollar question that remains is: How much will the Everglades benefit from the plan that benefits from its name?

WRDA 2000 was a positive step toward Everglades Restoration. Four years later, many essential Everglades projects are delayed (especially the Pre-CERP Mod Waters) while certain peripheral CERP projects are being "accelerated." The Tribe believes that it is of the utmost importance to the future of the Everglades, and its restoration, that the Modified Water Deliveries Project be completed expeditiously. It will not accept a charade that represents diversion rather than progress. The Miccosukee Tribe knows that progress will only be made when more natural flows are restored through the Everglades, and when restoring the Everglades once again becomes the overarching purpose of the Comprehensive Everglades Restoration Plan.

APPENDIX D: Task Force Approved 2002 Indicators of Success and Linkages Between Work Efforts and Ecosystem Restoration

These Sections From the 2002 Document are Being Revised, But Maintained as an Appendix for Reference

Indicators of Success from 2002 "Coordinating and Tracking Success"

The appropriate Task Force agencies are tracking success toward the restoration of the South Florida Ecosystem, by developing and monitoring approximately 200 indicators of ecosystem health. These indicators, 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 are all interrelated as parts of the ecosystem and are all important to ecosystem health. Many of these indicators of ecosystem health 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.

The following indicators are a small representative subset of that much larger set of measures. They have been selected for inclusion in this iteration of the Task Force's strategy and in the current biennial report to Congress, the Florida Legislature, and the councils of the Miccosukee and Seminole Tribes because they are currently believed to be among the most indicative of natural system functioning throughout the region as a whole and among the most understandable and meaningful to the American people and the residents of South Florida. These preliminary indicators may be refined as more information is available. The selected indicators and their long-term targets are presented in this section of the strategy, and the progress made over the past two-year period is described in the biennial report (which begins on page 58 of this Volume).

Responding to Congress's direction that the restoration effort be guided by, and continuously adapted to, the best science available, a multiagency Restoration Coordination and Verification Team (RECOVER) has been established to support the implementation of the CERP with scientific and technical information. RECOVER is developing recommendations for the majority of the performance measures that will be used to assess restoration progress and to adaptively manage the restoration effort over time. Additional scientific and technical information about areas not covered by the CERP is being developed and refined by other federal, state, and local agencies.

With the exception of the indicator for threatened and endangered species, which came from the U.S. Fish and Wildlife Service (FWS), the following indicators are from the 1999 Baseline Report for the Comprehensive Everglades Restoration Plan, prepared by RECOVER. This information may be modified as new data becomes available. RECOVER, for example, will update the information in the Baseline Report but this will not take place until after publication of this strategy and biennial report. This updated information will be incorporated into future Task Force reports.

INDICATORS OF TOTAL ECOSYSTEM HEALTH

Threatened and Endangered Species

Significance and background. The FWS Multi-Species Recovery Plan (MSRP) identified more than four hundred species of plants and animals that are listed as threatened or endangered by the State of Florida, the FWS, or the National Marine Fisheries Service (NMFS). Of those, sixty-nine species are federally listed in this region. The MSRP contains information on the biology, ecology, distribution, status, trends, management, and recovery actions needed to recover the sixty-eight federally listed species under FWS authority (the sixty-ninth species is under NMFS authority). The plan also identifies the biological composition, status, trends, and management and restoration needs of the twenty-three major ecological communities that compose the South Florida Ecosystem. An ecosystem-based approach to species recovery will optimize benefits to the greatest number of imperiled species and other species of concern. It will also ensure that management and planning efforts reflect the best known step-wise processes for overall restoration of the communities. To achieve the

recovery and restoration actions identified in the MSRP, the FWS is developing an ecosystemwide implementation strategy with support from a multi-agency/stakeholder team.

Target. 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

Nesting Wading Birds

Significance and background. Large numbers of wading birds were a striking feature of the predrainage wetlands of South Florida. Single nesting colonies could contain as many as 50,000 to 100,000 pairs of birds. Although most of these colonies were decimated by plume hunters late in the nineteenth century, protective legislation and good habitat conditions during the early twentieth century allowed most of the nesting species to fully recover. The huge traditional rookery that was located along the extreme upper reaches of Shark River was estimated in 1934 to have been a mile long and several hundred feet wide. These "bird cities," which contained an estimated 75-95 percent of all wading birds nesting in the predrainage Everglades, had largely disappeared from the southern Everglades wetlands by the 1960s.

Substantial reductions in the total area of wetlands, changes in the location, timing, and Volumes of flows, and the creation of unnatural water impoundments in the Everglades have been the factors that have combined to disrupt traditional nesting patterns, leading to a 90 percent decline in the total number of birds. Colonies that have been forced to relocate to the Everglades water conservation areas have been smaller and less successful than were the colonies in the traditional estuarine rookeries such as Shark River. As a requirement for recovery, wading birds may need to reoccupy the now largely abandoned estuarine colony sites in southern and western Everglades National Park. In addition, wood storks must be able to return to more natural timing patterns for nesting (between November and January) than current water management practices allow.

Target. Recover, at a minimum, an annual average of 10,000 nesting pairs of great egrets, 15,000 pairs of snowy egrets and tricolored herons combined, 25,000 pairs of white ibis, and 5,000 pairs of wood storks.

Urban and Agricultural Water Supply

Significance and background. A regional water supply system can be evaluated on how well it meets reasonable and beneficial urban and agricultural demands even in drought years. In 1997 Florida established a water supply planning goal to provide water to all existing users during droughts up to the level of severity of a one-in-ten-year frequency of occurrence. This goal has been interpreted to mean at least a 90 percent probability that during any given year all of the needs of reasonable, beneficial water uses will be met while also not causing harm to the water resources and related natural environment.

Target. Meet urban and agricultural water supply needs in all years up to and including those years with droughts with a one-in-ten-year frequency of occurrence

INDICATORS OF LAKE OKEECHOBEE HEALTH

Submerged Aquatic Vegetation

Significance and background. In shallow eutrophic lakes, submerged aquatic vegetation (plants that grow under water) plays a critical role in providing habitat for fish, wading birds, and other wildlife. When submerged aquatic vegetation is dense and widespread, water generally is clear and nutrient concentrations are low, reflecting active uptake of nutrients by the plants. Shoreline areas of Lake Okeechobee supported more of this type of vegetation in the past; however, unnaturally high lake levels are believed to have precipitated its decline. The extent to which fish and birds will recover following a sustained recovery of these plants remains to be seen and is a major focus of ongoing research.

Target. Sustain at least 40,000 acres of total submerged vegetation, including benthic macro-algae, around the shoreline of Lake Okeechobee on an ongoing basis, and of that total have at least 20,000 acres of rooted plants, in particular, eelgrass and peppergrass

INDICATORS OF ESTUARY HEALTH

Oyster Beds in the St. Lucie Estuary

Significance and background. Oysters are ecologically important as filter-feeding primary consumers, as prey for numerous higher consumers, and as habitat formers. The decline in oyster populations has

contributed to ecologically damaging algal blooms in the estuary. The inability of the water body to assimilate the overabundance of algae produced by large Volumes of nutrient-laden discharge is compounded by the low numbers of healthy oysters and other bivalves, which would otherwise help filter the water.

A healthy oyster population in the St. Lucie Estuary is only possible if a more stable salinity regime can be established by restoring a more natural quantity and timing of freshwater flows into the estuary. The target is based on areas with suitable substrate that will potentially recover appropriate salinity ranges as a result of CERP project implementation.

Target. Increase the extent of healthy oyster beds in the St. Lucie Estuary to approximately 900 acres.

Roseate Spoonbills

Significance and background. Although the number of nesting spoonbills in extreme southern Florida increased from 15 pairs in the late 1930s to a peak of 1,254 pairs in 1979, numbers in the 1990s have fluctuated between 500 and 750 pairs. The considerable reduction since the late 1970s in the number of nesting birds in once-large nesting colonies in northeastern Florida Bay has been due to deterioration in important feeding grounds in mainland estuaries between lower Taylor Slough and Turkey Point. Recovery of nesting in northeastern Florida Bay may depend on more natural flow Volumes and patterns of freshwater into adjacent estuaries. Recovery of long-abandoned spoonbill nesting colonies along the southwestern gulf coast is more problematic, but it may also depend, at least in part, on freshwater flows necessary to recover historical salinity patterns.

Target. Two measurable targets have been set for roseate spoonbills: (1) Recover and stabilize the Florida Bay nesting population to at least 1,000 pairs annually distributed throughout the bay, including 250 pairs nesting in northeast Florida Bay (a doubling from the current 125 pairs). (2) Recover some level of nesting by spoonbills in the coastal zone of the southwestern gulf coast between Lostman's River and the Caloosahatchee River estuary.

INDICATORS OF THE HEALTH OF THE EVERGLADES RIDGE AND SLOUGH

Tree Islands

Significance and background. Tree islands, which occur throughout the Everglades marshes, are small, isolated high spots, which historically have provided essential habitat for a wide variety of plants and animals. The islands serve as places of refuge for animals during periods of high water. They are sources of food and cover for wildlife and provide nesting sites for wading birds and freshwater turtles. Tree islands are highly important to the culture of both the Miccosukee and the Seminole Tribes. Hunters, fishermen, and recreational visitors to the Everglades consider tree islands to be symbolic of the health of the entire ecosystem.

Unnaturally deep water has had a devastating effect on the tree islands. In the water conservation areas, only four of the fifty-eight tree islands present in WCA-2A in 1940 were still present in 1995. Approximately half the tree islands have been lost in WCA- 3A and -3B. Exotics are contributing to the devastation of tree islands. By 1997 Old World climbing fern had infested 21,000 acres of tree islands in WCA-1. While the majority of this infestation has been at the north end, the species has continued to spread through all of WCA-1 and has recently been identified in WCA-2 and WCA-3. It is not known if the tree islands can be restored. Further research is needed to determine the feasibility of rebuilding lost tree islands.

Target. No further degradation of tree islands, and recovery of as much as possible of the number and acreage of the islands present in WCA-2 and WCA-3 in 1940 (Additional research will be needed to identify the potential for recovering the acreage and number of islands present in 1940.)

INDICATORS OF FLORIDA BAY HEALTH

Seagrass Beds

Significance and background. The seagrass beds of Florida Bay are the keystone of the entire bay ecosystem. They provide critical food and habitat for shrimp, fish, and other estuarine organisms. The grass beds also stabilize the bay's sediments, thus promoting clear water and helping to minimize ecologically damaging algal blooms.

The first quantitative survey of Florida Bay seagrasses in 1984 revealed that the beds were already adversely impacted by the diversion of freshwater flows from the mainland Everglades and by other human activities of the twentieth century. A large-scale die-off of seagrass started in 1987. The judgment of the overall quality of seagrass beds in Florida Bay is based on the diversity of species of grasses in the beds.

Target. Achieve coverage of 65 -70 percent of Florida Bay with high-quality seagrass beds distributed throughout the bay.

Commercial Pink Shrimp Harvests

Significance and background. Pink shrimp are important both economically and ecologically in South Florida. Until the decline of the Tortugas fishery, the pink shrimp was Florida's number one fishery species in terms of value, and the bulk of the landings came from the Tortugas. In addition, pink shrimp are a major link in the food chains of many fish, such as grey snapper and other game fish species of coastal South Florida. The growth and survival of young pink shrimp is influenced by salinity. Adult shrimp abundance, as reflected in catch rates per unit of effort, is influenced by the quantity and timing of freshwater inflows to the southwest gulf coast and Florida Bay nursery grounds. Restoration of flows more similar to rainfall-driven flows, which can be predicted by the Natural System Model, should benefit the Tortugas pink shrimp fishery.

Target. A long-term average rate of commercial harvest of pink shrimp on the Dry Tortugas fishing grounds that equals or exceeds the 600 pounds per vessel-day that occurred during the seasons 1961-62 to 1982-83, and an amount of large shrimp (defined as fewer than sixty-eight shrimp per pound) in the long-term average catch exceeding 500 pounds per vessel.

LINKAGES BETWEEN WORK EFFORTS AND ECOSYSTEM RESTORATION FROM 2002 "COORDINATING AND TRACKING SUCCESS"

Table D-1. Linkages between Work Efforts and Ecosystem Restoration

MEASURES OF ECOSYSTEM HEALTH		LINK AGES		MEASURES OF WORK EFFORTS	
Indicator	**Measurable Output**	**Stressor**	**Restoration Action**	**Examples of Projects Related To Eliminating/Mitigating Stressor**	**Objective**
Total System: Threatened and endangered species	Improved status for fourteen federally listed T&E species, and no declines in status for those additional species listed by the state, by 2020.	Loss, degradation, and fragmentation of habitat	Acquisition and restoration of critical habitat lands, including linkage corridors, along with restoration of more natural hydrologic functions in wetlands and maintenance control of invasive exotic species, is expected to halt declines in species status and lead to the recovery of healthy populations.	2004: Hobe Sound National Wildlife Refuge	2-A.1
				2005: Florida Keys National Wildlife Complex	2-A.1
				2005: Big Cypress National Preserve Addition	2-A.1
				2010: Kissimmee River Restoration Project	2-A.3
				2020: Achieve Maintenance Control Status for Brazilian Pepper, Melaleuca, Australian Pine, and Old World Climbing Fern	2-B.2
Total System: Nesting wading birds	Target: Recover, at a minimum, an annual average of 10,000 nesting pairs of great egrets, 15,000 pairs of snowy egrets and tricolored herons combined, 25,000 pairs of white ibis and 5,000 pairs of wood storks.	Disruptions to traditional nesting patterns caused by reduced water flows into the estuaries, which were traditionally the richest rookery sites, substantial reductions in the total area of wetlands throughout the ecosystem, and the creation of unnatural water impoundments in the Everglades	Restoring the location, timing, and volumes of water flows, particularly the flows to the estuaries, is expected to result in more traditional nesting patterns, improved reproductive success, and recovered larger populations of nesting wading birds.	2008: Modified Waters Delivery Project	1-A.3
				2008: Canal 111	1-A.3
				2009: Everglades Agricultural Area Storage Reservoir, Phase 1	1-A.1
				2014: Everglades Agricultural Area Storage Reservoir, phase 2	1-A.1
				2019: WCA-3 Decompartmentalization	1-A.3
				2028: Lake Okeechobee Aquifer Storage and Recovery)	1-A.2
				2035: Central Lake Belt Storage Area	1-A.1
Total System: Urban and Agricultural Water Supply	Target: Water provided to all users during droughts up to the level of severity of a one-in-ten-year frequency of occurrence	Loss of freshwater through discharge and seepage	Surface storage reservoirs, aquifer storage and recovery, and seepage management projects are expected to recapture the water	2008: Kissimmee Basin Water Supply Plan	3.C.1
				2008: Lower East Cost Water Supply Plan	3.C.1
				2008: Lower West Coast Water Supply Plan	3.C.1
				2008: Upper East Coast Water Supply Plan	3.C.1
				2013: C-43 Basin Storage Reservoir and ASR	1.A.2
				2020: Palm Beach Co. Agricultural Reserve and ASR	1.A.2
				2021: C-51 Regional Groundwater ASR	1.A.2

Table D-1. Linkages between Work Efforts and Ecosystem Restoration					
MEASURES OF ECOSYSTEM HEALTH		LINK AGES		MEASURES OF WORK EFFORTS	
Indicator	**Measurable Output**	**Stressor**	**Restoration Action**	**Examples of Projects Related To Eliminating/Mitigating Stressor**	**Objective**
			that is currently lost to the ecosystem through unnatural discharges.	2024: Site 1 Impoundment and ASR	1.A.2
				2028: Lake Okeechobee ASR	1.A.2
Estuaries: Oyster beds in the St. Lucie Estuary	Approximately 900 acres of healthy oyster beds.	Unnatural changes in water salinity caused by excessive freshwater flows into the estuary; also changes in water quality caused by discharges of unnaturally nutrient-laden waters	Storage projects and projects that will remove barriers to sheet flow, thus curtailing the unnatural discharges of nutrient laden freshwater into the estuary, are expected to create conditions for oyster recolonization of areas with a suitable substrate.	2013: Lake Okeechobee Watershed	1-A.1
				2033: Indian River Lagoon South, C-44 Basin Storage Reservoir	1-A.1
Estuaries: Roseate spoonbills	At least 1,000 nesting pairs throughout Florida Bay, and some nesting pairs in the coastal zone of the southwestern gulf coast	Declines in the productivity of estuarine feeding grounds caused by too little freshwater entering the estuaries	Projects that will restore more natural flow volumes and patterns of freshwater entering the Florida Bay and gulf coast estuaries are expected to improve the productivity of feeding grounds used by roseate spoonbills and lead to population increases for this species.	2007: Henderson Creek/Belle Meade Restoration	1-B.1
				TBD: Southern Golden Gate Estates	2-A.1
Lake Okeechobee: Submerged Aquatic Vegetation	Sustain at least 40,000 acres of healthy submerged aquatic vegetation around the shoreline of Lake Okeechobee on an ongoing basis	Unnaturally frequent and prolonged high water levels in the lake	Major surface water and aquifer storage projects in the Lake Okeechobee watershed, along with the watershed water quality treatment project, are expected to result in lower lake levels and to significantly improve the long-term survival of large beds of submerged aquatic vegetation.	2009: Everglades Agricultural Area Storage Reservoir, Phase 1	1-A.1
				2013: Lake Okeechobee Watershed	1-A.1
				2013: C-43 Basin Storage, Phase 1	1-A.1
				2014: Everglades Agricultural Area Storage Reservoir, Phase 2	1-A.1
				2028: Lake Okeechobee ASR	1-A.2

Table D-1. Linkages between Work Efforts and Ecosystem Restoration

MEASURES OF ECOSYSTEM HEALTH		LINK AGES		MEASURES OF WORK EFFORTS	
Indicator	**Measurable Output**	**Stressor**	**Restoration Action**	**Examples of Projects Related To Eliminating/Mitigating Stressor**	**Objective**
Everglades Ridge and Slough: Tree Islands	Target: A 90 percent recovery of the acreage and number of tree islands existing in 1940, and a health index of 0.90	Unnaturally frequent and prolonged flooding of tree islands Unnaturally frequent intense fires	Major surface water and aquifer storage projects upstream from the Everglades, along with removal of impediments to water flow through the Everglades, are expected to reduce unnatural flooding of tree islands. Rainfall-driven operations and water use restrictions are expected to reduce intense fires due to severe drought conditions	2008: Lower West Coast Regional Irrigation Distribution System Master Plan Study	3-C.2
				2009: Everglades Agricultural Area Storage Reservoir, Phase 1	1-A.1
				2014: Everglades Agricultural Area Storage Reservoir, Phase 2	1-A.1
				2019: WCA-3 Decompartmentalization	1-A.3
				2020: South Miami-Dade County Reuse	3-C.2
				2020: West Miami-Dade County Reuse	3-C.2
				2028: Lake Okeechobee Aquifer Storage and Recovery	1-A.2
				2035: Central Lake Belt Storage Area	1-A.1
Florida Bay: Seagrass beds	A 65-70 percent coverage of Florida Bay with high-quality seagrass beds	Disruptions of natural volume and timing of freshwater flows into the southern estuaries	Projects that increase freshwater flows into the bay, such as the projects to improve water management practices in the C-111 and Taylor Slough basin, are expected to improve conditions for seagrass beds.	2008: Canal 111	1-A.3
				2009: Everglades Agricultural Area Storage Reservoir, phase 1	1-A.1
				2014: Everglades Agricultural Area Storage Reservoir, phase 2	1-A.1
				2019: WCA-3 Decompartmentalization	1-A.3
				2028: Lake Okeechobee Aquifer Storage and Recovery)	1-A.2
				2035: Central Lake Belt Storage Area	1-A.1
Florida Bay: Commercial harvest rates for pink shrimp	A long-term average rate of commercial harvest of pink shrimp on the Dry Tortugas fishing grounds that equals or exceeds 600 pounds per vessel-day, and an amount of large shrimp in the long-term average catch exceeding 500 pounds per vessel	Disruptions of natural volume and timing of freshwater flows into the southern estuaries	Restoration of flows that more closely match natural hydrological patterns should benefit the Tortugas pink shrimp fishery.	2018: Florida Keys Tidal Restoration	1-A.3

APPENDIX E: Water Resources Development Act of 2000, Title VI, Section 601

Comprehensive Everglades Restoration Plan

TITLE VI--COMPREHENSIVE EVERGLADES RESTORATION

Sec. 601. Comprehensive Everglades restoration plan.
Sec. 602. Sense of Congress concerning Homestead Air Force Base.

SEC. 601. COMPREHENSIVE EVERGLADES RESTORATION PLAN.
(a) DEFINITIONS- In this section, the following definitions apply:
(1) CENTRAL AND SOUTHERN FLORIDA PROJECT-
(A) IN GENERAL- The term `Central and Southern Florida Project' means the project for Central and Southern Florida authorized under the heading `CENTRAL AND SOUTHERN FLORIDA' in section 203 of the Flood Control Act of 1948 (62 Stat. 1176).
(B) INCLUSION- The term `Central and Southern Florida Project' includes any modification to the project authorized by this section or any other provision of law.
(2) GOVERNOR- The term `Governor' means the Governor of the State of Florida.
(3) NATURAL SYSTEM-
(A) IN GENERAL- The term `natural system' means all land and water managed by the Federal Government or the State within the South Florida ecosystem.
(B) INCLUSIONS- The term `natural system' includes--
(i) water conservation areas;
(ii) sovereign submerged land;
(iii) Everglades National Park;
(iv) Biscayne National Park;
(v) Big Cypress National Preserve;
(vi) other Federal or State (including a political subdivision of a State) land that is designated and managed for conservation purposes; and
(vii) any tribal land that is designated and managed for conservation purposes, as approved by the tribe.
(4) PLAN- The term `Plan' means the Comprehensive Everglades Restoration Plan contained in the `Final Integrated Feasibility Report and Programmatic Environmental Impact Statement', dated April 1, 1999, as modified by this section.
(5) SOUTH FLORIDA ECOSYSTEM-
(A) IN GENERAL- The term `South Florida ecosystem' means the area consisting of the land and water within the boundary of the South Florida Water Management District in effect on July 1, 1999.
(B) INCLUSIONS- The term `South Florida ecosystem' includes--
(i) the Everglades;
(ii) the Florida Keys; and
(iii) the contiguous near-shore coastal water of South Florida.
(6) STATE- The term `State' means the State of Florida.
(b) COMPREHENSIVE EVERGLADES RESTORATION PLAN-
(1) APPROVAL-
(A) IN GENERAL- Except as modified by this section, the Plan is approved as a framework for modifications and operational changes to the Central and Southern Florida Project 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 Plan shall be implemented to ensure the protection of water quality in, the reduction of the loss of fresh water from, and the improvement of the environment of the South Florida ecosystem and to achieve and maintain the benefits to the natural system and human environment described in the Plan, and required pursuant to this section, for as long as the project is authorized.
(B) INTEGRATION- In carrying out the Plan, the Secretary shall integrate the activities described in subparagraph (A) with ongoing Federal and State projects and activities in accordance with section 528(c) of the Water Resources Development Act of 1996 (110 Stat.

3769). Unless specifically provided herein, nothing in this section shall be construed to modify any existing cost share or responsibility for projects as listed in subsection (c) or (e) of section 528 of the Water Resources Development Act of 1996 (110 Stat. 3769).

(2) SPECIFIC AUTHORIZATIONS-

(A) IN GENERAL-

(i) PROJECTS- The Secretary shall carry out the projects included in the Plan in accordance with subparagraphs (B), (C), (D), and (E).

(ii) CONSIDERATIONS- In carrying out activities described in the Plan, the Secretary shall--

(I) take into account the protection of water quality by considering applicable State water quality standards; and

(II) include such features as the Secretary determines are necessary to ensure that all ground water and surface water discharges from any project feature authorized by this subsection will meet all applicable water quality standards and applicable water quality permitting requirements.

(iii) REVIEW AND COMMENT- In developing the projects authorized under subparagraph (B), the Secretary shall provide for public review and comment in accordance with applicable Federal law.

(B) PILOT PROJECTS- The following pilot projects are authorized for implementation, after review and approval by the Secretary, at a total cost of $69,000,000, with an estimated Federal cost of $34,500,000 and an estimated non-Federal cost of $34,500,000:

(i) Caloosahatchee River (C-43) Basin ASR, at a total cost of $6,000,000, with an estimated Federal cost of $3,000,000 and an estimated non-Federal cost of $3,000,000.

(ii) Lake Belt In-Ground Reservoir Technology, at a total cost of $23,000,000, with an estimated Federal cost of $11,500,000 and an estimated non-Federal cost of $11,500,000.

(iii) L-31N Seepage Management, at a total cost of $10,000,000, with an estimated Federal cost of $5,000,000 and an estimated non-Federal cost of $5,000,000.

(iv) Wastewater Reuse Technology, at a total cost of $30,000,000, with an estimated Federal cost of $15,000,000 and an estimated non-Federal cost of $15,000,000.

(C) INITIAL PROJECTS- The following projects are authorized for implementation, after review and approval by the Secretary, subject to the conditions stated in subparagraph (D), at a total cost of $1,100,918,000, with an estimated Federal cost of $550,459,000 and an estimated non-Federal cost of $550,459,000:

(i) C-44 Basin Storage Reservoir, at a total cost of $112,562,000, with an estimated Federal cost of $56,281,000 and an estimated non-Federal cost of $56,281,000.

(ii) Everglades Agricultural Area Storage Reservoirs--Phase I, at a total cost of $233,408,000, with an estimated Federal cost of $116,704,000 and an estimated non-Federal cost of $116,704,000.

(iii) Site 1 Impoundment, at a total cost of $38,535,000, with an estimated Federal cost of $19,267,500 and an estimated non-Federal cost of $19,267,500.

(iv) Water Conservation Areas 3A/3B Levee Seepage Management, at a total cost of $100,335,000, with an estimated Federal cost of $50,167,500 and an estimated non-Federal cost of $50,167,500.

(v) C-11 Impoundment and Stormwater Treatment Area, at a total cost of $124,837,000, with an estimated Federal cost of $62,418,500 and an estimated non-Federal cost of $62,418,500.

(vi) C-9 Impoundment and Stormwater Treatment Area, at a total cost of $89,146,000, with an estimated Federal cost of $44,573,000 and an estimated non-Federal cost of $44,573,000.

(vii) Taylor Creek/Nubbin Slough Storage and Treatment Area, at a total cost of $104,027,000, with an estimated Federal cost of $52,013,500 and an estimated non-Federal cost of $52,013,500.

(viii) Raise and Bridge East Portion of Tamiami Trail and Fill Miami Canal within Water Conservation Area 3, at a total cost of. $26,946,000, with an estimated Federal cost of $13,473,000 and an estimated non-Federal cost of $13,473,000.

(ix) North New River Improvements, at a

total cost of $77,087,000, with an estimated Federal cost of $38,543,500 and an estimated non-Federal cost of $38,543,500.

(x) C-111 Spreader Canal, at a total cost of $94,035,000, with an estimated Federal cost of $47,017,500 and an estimated non-Federal cost of $47,017,500.

(xi) Adaptive Assessment and Monitoring Program, at a total cost of $100,000,000, with an estimated Federal cost of $50,000,000 and an estimated non-Federal cost of $50,000,000.

(D) CONDITIONS-

(i) PROJECT IMPLEMENTATION REPORTS- Before implementation of a project described in any of clauses (i) through (x) of subparagraph (C), the Secretary shall review and approve for the project a project implementation report prepared in accordance with subsections (f) and (h).

(ii) SUBMISSION OF REPORT- The Secretary shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate the project implementation report required by subsections (f) and (h) for each project under this paragraph (including all relevant data and information on all costs).

(iii) FUNDING CONTINGENT ON APPROVAL- No appropriation shall be made to construct any project under this paragraph if the project implementation report for the project has not been approved by resolutions adopted by the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate.

(iv) MODIFIED WATER DELIVERY- No appropriation shall be made to construct the Water Conservation Area 3 Decompartmentalization and Sheetflow Enhancement Project (including component AA, Additional S-345 Structures; component QQ Phase 1, Raise and Bridge East Portion of Tamiami Trail and Fill Miami Canal within WCA 3; component QQ Phase 2, WCA 3 Decompartmentalization and Sheetflow Enhancement; and component SS, North New River Improvements) or the Central Lakebelt Storage Project (including components S and EEE, Central Lake Belt Storage Area) until the completion of the project to improve water deliveries to Everglades National Park authorized by section 104 of the Everglades National Park Protection and Expansion Act of 1989 (16 U.S.C. 410r-8).

(E) MAXIMUM COST OF PROJECTS- Section 902 of the Water Resources Development Act of 1986 (33 U.S.C. 2280) shall apply to each project feature authorized under this subsection.

(c) ADDITIONAL PROGRAM AUTHORITY

(1) IN GENERAL- To expedite implementation of the Plan, the Secretary may implement modifications to the Central and Southern Florida Project that--

(A) are described in the Plan; and

(B) will produce a substantial benefit to the restoration, preservation and protection of the South Florida ecosystem.

(2) PROJECT IMPLEMENTATION REPORTS- Before implementation of any project feature authorized under this subsection, the Secretary shall review and approve for the project feature a project implementation report prepared in accordance with subsections (f) and (h).

(3) FUNDING-

(A) INDIVIDUAL PROJECT FUNDING-

(i) FEDERAL COST- The total Federal cost of each project carried out under this subsection shall not exceed $12,500,000.

(ii) OVERALL COST- The total cost of each project carried out under this subsection shall not exceed $25,000,000.

(B) AGGREGATE COST- The total cost of all projects carried out under this subsection shall not exceed $206,000,000, with an estimated Federal cost of $103,000,000 and an estimated non-Federal cost of $103,000,000.

(d) AUTHORIZATION OF FUTURE PROJECTS-

(1) IN GENERAL- Except for a project authorized by subsection (b) or (c), any project included in the Plan shall require a specific authorization by Congress.

(2) SUBMISSION OF REPORT- Before seeking congressional authorization for a project under

paragraph (1), the Secretary shall submit to Congress--

(A) a description of the project; and

(B) a project implementation report for the project prepared in accordance with subsections (f) and (h).

(e) COST SHARING-

(1) FEDERAL SHARE- The Federal share of the cost of carrying out a project authorized by subsection (b), (c), or (d) shall be 50 percent.

(2) NON-FEDERAL RESPONSIBILITIES- The non-Federal sponsor with respect to a project described in subsection (b), (c), or (d), shall be--

(A) responsible for all land, easements, rights-of- way, and relocations necessary to implement the Plan; and

(B) afforded credit toward the non-Federal share of the cost of carrying out the project in accordance with paragraph (5)(A).

(3) FEDERAL ASSISTANCE-

(A) IN GENERAL- The non-Federal sponsor with respect to a project authorized by subsection (b), (c), or (d) may use Federal funds for the purchase of any land, easement, rights-of-way, or relocation that is necessary to carry out the project if any funds so used are credited toward the Federal share of the cost of the project.

(B) AGRICULTURE FUNDS- Funds provided to the non-Federal sponsor under the Conservation Restoration and Enhancement Program (CREP) and the Wetlands Reserve Program (WRP) for projects in the Plan shall be credited toward the non-Federal share of the cost of the Plan if the Secretary of Agriculture certifies that the funds provided may be used for that purpose. Funds to be credited do not include funds provided under section 390 of the Federal Agriculture Improvement and Reform Act of 1996 (110 Stat. 1022).

(4) OPERATION AND MAINTENANCE- Notwithstanding section 528(e)(3) of the Water Resources Development Act of 1996 (110 Stat. 3770), the non-Federal sponsor shall be responsible for 50 percent of the cost of operation, maintenance, repair, replacement, and rehabilitation activities authorized under this section. Furthermore, the Seminole Tribe of Florida shall be responsible for 50 percent of the cost of operation, maintenance, repair, replacement, and rehabilitation activities for the Big Cypress Seminole Reservation Water Conservation Plan Project.

(5) CREDIT-

(A) IN GENERAL- Notwithstanding section 528(e)(4) of the Water Resources Development Act of 1996 (110 Stat. 3770) and regardless of the date of acquisition, the value of lands or interests in lands and incidental costs for land acquired by a non-Federal sponsor in accordance with a project implementation report for any project included in the Plan and authorized by Congress shall be--

(i) included in the total cost of the project; and

(ii) credited toward the non-Federal share of the cost of the project.

(B) WORK- The Secretary may provide credit, including in-kind credit, toward the non-Federal share for the reasonable cost of any work performed in connection with a study, preconstruction engineering and design, or construction that is necessary for the implementation of the Plan if--

(i)(I) the credit is provided for work completed during the period of design, as defined in a design agreement between the Secretary and the non-Federal sponsor; or

(II) the credit is provided for work completed during the period of construction, as defined in a project cooperation agreement for an authorized project between the Secretary and the non-Federal sponsor;

(ii) the design agreement or the project cooperation agreement prescribes the terms and conditions of the credit; and

(iii) the Secretary determines that the work performed by the non-Federal sponsor is integral to the project.

(C) TREATMENT OF CREDIT BETWEEN PROJECTS- Any credit provided under this paragraph may be carried over between authorized projects in accordance with subparagraph (D).

(D) PERIODIC MONITORING-

(i) IN GENERAL- To ensure that the contributions of the non-Federal sponsor equal 50 percent proportionate share for projects in the Plan, during each 5-year period, beginning with commencement of

design of the Plan, the Secretary shall, for each project--

(I) monitor the non-Federal provision of cash, in-kind services, and land; and

(II) manage, to the maximum extent practicable, the requirement of the non-Federal sponsor to provide cash, in-kind services, and land.

(ii) OTHER MONITORING- The Secretary shall conduct monitoring under clause (i) separately for the preconstruction engineering and design phase and the construction phase.

(E) AUDITS- Credit for land (including land value and incidental costs) or work provided under this subsection shall be subject to audit by the Secretary.

(f) EVALUATION OF PROJECTS-

(1) IN GENERAL- Before implementation of a project authorized by subsection (c) or (d) or any of clauses (i) through (x) of subsection (b)(2)(C), the Secretary, in cooperation with the non-Federal sponsor, shall complete, after notice and opportunity for public comment and in accordance with subsection (h), a project implementation report for the project.

(2) PROJECT JUSTIFICATION-

(A) IN GENERAL- Notwithstanding section 209 of the Flood Control Act of 1970 (42 U.S.C. 1962-2) or any other provision of law, in carrying out any activity authorized under this section or any other provision of law to restore, preserve, or protect the South Florida ecosystem, the Secretary may determine that--

(i) the activity is justified by the environmental benefits derived by the South Florida ecosystem; and

(ii) no further economic justification for the activity is required, if the Secretary determines that the activity is cost-effective.

(B) APPLICABILITY- Subparagraph (A) shall not apply to any separable element intended to produce benefits that are predominantly unrelated to the restoration, preservation, and protection of the natural system.

(g) EXCLUSIONS AND LIMITATIONS- The following Plan components are not approved for implementation:

(1) WATER INCLUDED IN THE PLAN-

(A) IN GENERAL- Any project that is designed to implement the capture and use of the approximately 245,000 acre-feet of water described in section 7.7.2 of the Plan shall not be implemented until such time as--

(i) the project-specific feasibility study described in subparagraph (B) on the need for and physical delivery of the approximately 245,000 acre-feet of water, conducted by the Secretary, in cooperation with the non-Federal sponsor, is completed;

(ii) the project is favorably recommended in a final report of the Chief of Engineers; and

(iii) the project is authorized by Act of Congress.

(B) PROJECT-SPECIFIC FEASIBILITY STUDY- The project-specific feasibility study referred to in subparagraph (A) shall include--

(i) a comprehensive analysis of the structural facilities proposed to deliver the approximately 245,000 acre-feet of water to the natural system;

(ii) an assessment of the requirements to divert and treat the water;

(iii) an assessment of delivery alternatives;.

(iv) an assessment of the feasibility of delivering the water downstream while maintaining current levels of flood protection to affected property; and

(v) any other assessments that are determined by the Secretary to be necessary to complete the study.

(2) WASTEWATER REUSE-

(A) IN GENERAL- On completion and evaluation of the wastewater reuse pilot project described in subsection (b)(2)(B)(iv), the Secretary, in an appropriately timed 5-year report, shall describe the results of the evaluation of advanced wastewater reuse in meeting, in a cost-effective manner, the requirements of restoration of the natural system.

(B) SUBMISSION- The Secretary shall submit to Congress the report described in subparagraph (A) before congressional authorization for advanced wastewater reuse is sought.

(3) PROJECTS APPROVED WITH LIMITATIONS- The following projects in the Plan are approved for implementation with limitations:

(A) LOXAHATCHEE NATIONAL WILDLIFE REFUGE- The Federal share for

land acquisition in the project to enhance existing wetland systems along the Loxahatchee National Wildlife Refuge, including the Strazzulla tract, should be funded through the budget of the Department of the Interior.

(B) SOUTHERN CORKSCREW REGIONAL ECOSYSTEM- The Southern Corkscrew regional ecosystem watershed addition should be accomplished outside the scope of the Plan.

(h) ASSURANCE OF PROJECT BENEFITS-

(1) IN GENERAL- The overarching objective of the Plan is the restoration, preservation, and protection of the South Florida Ecosystem while providing for other water-related needs of the region, including water supply and flood protection. The Plan shall be implemented to ensure the protection of water quality in, the reduction of the loss of fresh water from, the improvement of the environment of the South Florida Ecosystem and to achieve and maintain the benefits to the natural system and human environment described in the Plan, and required pursuant to this section, for as long as the project is authorized.

(2) AGREEMENT-

(A) IN GENERAL- In order to ensure that water generated by the Plan will be made available for the restoration of the natural system, no appropriations, except for any pilot project described in subsection (b)(2)(B), shall be made for the construction of a project contained in the Plan until the President and the Governor enter into a binding agreement under which the State shall ensure, by regulation or other appropriate means, that water made available by each project in the Plan shall not be permitted for a consumptive use or otherwise made unavailable by the State until such time as sufficient reservations of water for the restoration of the natural system are made under State law in accordance with the project implementation report for that project and consistent with the Plan.

(B) ENFORCEMENT-

(i) IN GENERAL- Any person or entity that is aggrieved by a failure of the United States or any other Federal Government instrumentality or agency, or the Governor or any other officer. of a State instrumentality or agency, to comply with any provision of the agreement entered into under subparagraph (A) may bring a civil action in United States district court for an injunction directing the United States or any other Federal Government instrumentality or agency or the Governor or any other officer of a State instrumentality or agency, as the case may be, to comply with the agreement.

(ii) LIMITATIONS ON COMMENCEMENT OF CIVIL ACTION- No civil action may be commenced under clause (i)—

(I) before the date that is 60 days after the Secretary and the Governor receive written notice of a failure to comply with the agreement; or

(II) if the United States has commenced and is diligently prosecuting an action in a court of the United States or a State to redress a failure to comply with the agreement.

(C) TRUST RESPONSIBILITIES- In carrying out his responsibilities under this subsection with respect to the restoration of the South Florida ecosystem, the Secretary of the Interior shall fulfill his obligations to the Indian tribes in South Florida under the Indian trust doctrine as well as other applicable legal obligations.

(3) PROGRAMMATIC REGULATIONS-

(A) ISSUANCE- Not later than 2 years after the date of enactment of this Act, the Secretary shall, after notice and opportunity for public comment, with the concurrence of the Governor and the Secretary of the Interior, and in consultation with the Seminole Tribe of Florida, the Miccosukee Tribe of Indians of Florida, the Administrator of the Environmental Protection Agency, the Secretary of Commerce, and other Federal, State, and local agencies, promulgate programmatic regulations to ensure that the goals and purposes of the Plan are achieved.

(B) CONCURRENCY STATEMENT- The Secretary of the Interior and the Governor shall, not later than 180 days from the end of the public comment period on proposed programmatic regulations, provide the Secretary with a written statement of concurrence or nonconcurrence. A failure to provide a written statement of concurrence or nonconcurrence within such time frame will be

deemed as meeting the concurrency requirements of subparagraph (A)(i). A copy of any concurrency or nonconcurrency statements shall be made a part of the administrative record and referenced in the final programmatic regulations. Any nonconcurrency statement shall specifically detail the reason or reasons for the nonconcurrence.

(C) CONTENT OF REGULATIONS-

(i) IN GENERAL- Programmatic regulations promulgated under this paragraph shall establish a process--

(I) for the development of project implementation reports, project cooperation agreements, and operating manuals that ensure that the goals and objectives of the Plan are achieved;

(II) to ensure that new information resulting from changed or unforeseen circumstances, new scientific or technical information or information that is developed through the principles of adaptive management contained in the Plan, or future authorized changes to the Plan are integrated into the implementation of the Plan; and

(III) to ensure the protection of the natural system consistent with the goals and purposes of the Plan, including the establishment of interim goals to provide a means by which the restoration success of the Plan may be evaluated throughout the implementation process.

(ii) LIMITATION ON APPLICABILITY OF PROGRAMMATIC REGULATIONS- Programmatic regulations promulgated under this paragraph shall expressly prohibit the requirement for concurrence by the Secretary of the Interior or the Governor on project implementation reports, project cooperation agreements, operating manuals for individual projects undertaken in the Plan, and any other documents relating to the development, implementation, and management of individual features of the Plan, unless such concurrence is provided for in other Federal or State laws.

(D) SCHEDULE AND TRANSITION RULE-

(i) IN GENERAL- All project implementation reports approved before the date of promulgation of the programmatic regulations shall be consistent with the Plan.

(ii) PREAMBLE- The preamble of the programmatic regulations shall include a statement concerning the consistency with the programmatic regulations of any project implementation reports that were approved before the date of promulgation of the regulations.

(E) REVIEW OF PROGRAMMATIC REGULATIONS- Whenever necessary to attain Plan goals and purposes, but not less often than every 5 years, the Secretary, in accordance with subparagraph (A), shall review the programmatic regulations promulgated under this paragraph.

(4) PROJECT-SPECIFIC ASSURANCES-

(A) PROJECT IMPLEMENTATION REPORTS-

(i) IN GENERAL- The Secretary and the non-Federal sponsor shall develop project implementation reports in accordance with section 10.3.1 of the Plan.

(ii) COORDINATION- In developing a project implementation report, the Secretary and the non-Federal sponsor shall coordinate with appropriate Federal, State, tribal, and local governments.

(iii) REQUIREMENTS- A project implementation report shall--

(I) be consistent with the Plan and the programmatic regulations promulgated under paragraph (3);

(II) describe how each of the requirements stated in paragraph (3)(B) is satisfied;

(III) comply with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);.

(IV) identify the appropriate quantity, timing, and distribution of water dedicated and managed for the natural system;

(V) identify the amount of water to be reserved or allocated for the natural system necessary to implement, under State law, subclauses (IV) and (VI);

(VI) comply with applicable water quality standards and applicable water quality permitting requirements under subsection (b)(2)(A)(ii);

(VII) be based on the best available science; and

(VIII) include an analysis concerning the cost-effectiveness and engineering feasibility of the project.

(B) PROJECT COOPERATION AGREEMENTS-

(i) IN GENERAL- The Secretary and the non-Federal sponsor shall execute project cooperation agreements in accordance with section 10 of the Plan.

(ii) CONDITION- The Secretary shall not execute a project cooperation agreement until any reservation or allocation of water for the natural system identified in the project implementation report is executed under State law.

(C) OPERATING MANUALS-

(i) IN GENERAL- The Secretary and the non-Federal sponsor shall develop and issue, for each project or group of projects, an operating manual that is consistent with the water reservation or allocation for the natural system described in the project implementation report and the project cooperation agreement for the project or group of projects.

(ii) MODIFICATIONS- Any significant modification by the Secretary and the non-Federal sponsor to an operating manual after the operating manual is issued shall only be carried out subject to notice and opportunity for public comment.

(5) SAVINGS CLAUSE-

(A) NO ELIMINATION OR TRANSFER- Until a new source of water supply of comparable quantity and quality as that available on the date of enactment of this Act is available to replace the water to be lost as a result of implementation of the Plan, the Secretary and the non-Federal sponsor shall not eliminate or transfer existing legal sources of water, including those for--

(i) an agricultural or urban water supply;

(ii) allocation or entitlement to the Seminole Indian Tribe of Florida under section 7 of the Seminole Indian Land Claims Settlement Act of 1987 (25 U.S.C. 1772e);

(iii) the Miccosukee Tribe of Indians of Florida;

(iv) water supply for Everglades National Park; or

(v) water supply for fish and wildlife.

(B) MAINTENANCE OF FLOOD PROTECTION- Implementation of the Plan shall not reduce levels of service for flood protection that are--

(i) in existence on the date of enactment of this Act; and

(ii) in accordance with applicable law.

(C) NO EFFECT ON TRIBAL COMPACT- Nothing in this section amends, alters, prevents, or otherwise abrogates rights of the Seminole Indian Tribe of Florida under the compact among the Seminole Tribe of Florida, the State, and the South Florida Water Management District, defining the scope and use of water rights of the Seminole Tribe of Florida, as codified by section 7 of the Seminole Indian Land Claims Settlement Act of 1987 (25 U.S.C. 1772e).

(i) DISPUTE RESOLUTION-

(1) IN GENERAL- The Secretary and the Governor shall within 180 days from the date of enactment of this Act develop an agreement for resolving disputes between the Corps of Engineers and the State associated with the implementation of the Plan. Such agreement shall establish a mechanism for the timely and efficient resolution of disputes, including--

(A) a preference for the resolution of disputes between the Jacksonville District of the Corps of Engineers and the South Florida Water Management District;

(B) a mechanism for the Jacksonville District of the Corps of Engineers or the South Florida Water Management District to initiate the dispute resolution process for unresolved issues;

(C) the establishment of appropriate timeframes and intermediate steps for the elevation of disputes to the Governor and the Secretary; and (D) a mechanism for the final resolution of disputes, within 180 days from the date that the dispute resolution process is initiated under subparagraph (B).

(2) CONDITION FOR REPORT APPROVAL- The Secretary shall not approve a project Implementation report under this section until the agreement established under this subsection has been executed.

(3) NO EFFECT ON LAW- Nothing in the agreement established under this subsection shall alter or amend any existing Federal or State law,

or the responsibility of any party to the agreement to comply with any Federal or State law.

(j) INDEPENDENT SCIENTIFIC REVIEW-

(1) IN GENERAL- The Secretary, the Secretary of the Interior, and the Governor, in consultation with the South Florida Ecosystem Restoration Task Force, shall establish an independent scientific review panel convened by a body, such as the National Academy of Sciences, to review the Plan's progress toward achieving the natural system restoration goals of the Plan.

(2) REPORT- The panel described in paragraph (1) shall produce a biennial report to Congress, the Secretary, the Secretary of the Interior, and the Governor that includes an assessment of ecological indicators and other measures of progress in restoring the ecology of the natural system, based on the Plan.

(k) OUTREACH AND ASSISTANCE-

(1) SMALL BUSINESS CONCERNS OWNED AND OPERATED BY SOCIALLY AND ECONOMICALLY DISADVANTAGED INDIVIDUALS- In executing the Plan, the Secretary shall ensure that small business concerns owned and controlled by socially and economically disadvantaged individuals are provided opportunities to participate under section 15(g) of the Small Business Act (15 U.S.C. 644(g)).

(2) COMMUNITY OUTREACH AND EDUCATION-

(A) IN GENERAL- The Secretary shall ensure that impacts on socially and economically disadvantaged individuals, including individuals with limited English proficiency, and communities are considered during implementation of the Plan, and that such individuals have opportunities to review and comment on its implementation.

(B) PROVISION OF OPPORTUNITIES- The Secretary shall ensure, to the maximum extent practicable, that public outreach and educational opportunities are provided, during implementation of the Plan, to the individuals of South Florida, including individuals with limited English proficiency, and in particular for socially and economically disadvantaged communities.

(l) REPORT TO CONGRESS- Beginning on October 1, 2005, and periodically thereafter until October 1, 2036, the Secretary and the Secretary of the Interior, in consultation with the Environmental Protection Agency, the Department of Commerce, and the State of Florida, shall jointly submit to Congress a report on the implementation of the Plan. Such reports shall be completed not less often than every 5 years. Such reports shall include a description of planning, design, and construction work completed, the amount of funds expended during the period covered by the report (including a detailed analysis of the funds expended for adaptive assessment under subsection (b)(2)(C)(xi)), and the work anticipated over the next 5-year period. In addition, each report shall include--

(1) the determination of each Secretary, and the Administrator of the Environmental Protection Agency, concerning the benefits to the natural system and the human environment achieved as of the date of the report and whether the completed projects of the Plan are being operated in a manner that is consistent with the requirements of subsection (h);

(2) progress toward interim goals established in accordance with subsection (h)(3)(B); and

(3) a review of the activities performed by the Secretary under subsection (k) as they relate to socially and economically disadvantaged individuals and individuals with limited English proficiency.

(m) REPORT ON AQUIFER STORAGE AND RECOVERY PROJECT- Not later than 180 days after the date of enactment of this Act, the Secretary shall transmit to Congress a report containing a determination as to whether the ongoing Biscayne Aquifer Storage and Recovery Program located in Miami-Dade County has a substantial benefit to the restoration, preservation, and protection of the South Florida ecosystem.

(n) FULL DISCLOSURE OF PROPOSED FUNDING-

(1) FUNDING FROM ALL SOURCES- The President, as part of the annual budget of the United States Government, shall display under the heading `Everglades Restoration' all proposed funding for the Plan for all agency programs.

(2) FUNDING FROM CORPS OF ENGINEERS CIVIL WORKS PROGRAM- The President, as part of the annual budget of the United States Government, shall display under the accounts

`Construction, General' and `Operation and Maintenance, General' of the title `Department of Defense--Civil, Department of the Army, Corps of Engineers--Civil', the total proposed funding level for each account for the Plan and the percentage such level represents of the overall levels in such accounts. The President shall also include an assessment of the impact such funding levels for the Plan would have on the budget year and long-term funding levels for the overall Corps of Engineers civil works program.

(o) SURPLUS FEDERAL LANDS- Section 390(f)(2)(A)(i) of the Federal Agriculture Improvement and Reform Act of 1996 (110 Stat. 1023) is amended by inserting after `on or after the date of enactment of this Act' the following: `and before the date of enactment of the Water Resources Development Act of 2000'.

(p) SEVERABILITY- If any provision or remedy provided by this section is found to be unconstitutional or unenforceable by any court of competent jurisdiction, any remaining provisions in this section shall remain valid and enforceable.

APPENDIX F: South Florida Ecosystem Restoration Task Force Charter

SOUTH FLORIDA ECOSYSTEM RESTORATION TASK FORCE
Task Force Charter August 1, 1997

1. AUTHORIZATION. The South Florida Ecosystem Restoration Task Force was established by section 528(f) of Public Law 104-303, the Water Resources Development Act of 1996 (hereinafter referred to as the Act), enacted October 12, 1996.

2. DUTIES. The Task Force was established to:

a. Consult with, and provide recommendations to, the Secretary of the Army and the non-Federal project sponsor in developing a comprehensive plan for the purpose of restoring, preserving, and protecting the South Florida ecosystem, in accordance with sections 528(b)(1) and 528(f)(2)(A) of the Act.

b. Coordinate the development of consistent policies, strategies, plans, programs, projects, activities, and priorities for addressing the restoration, preservation, and protection of the South Florida ecosystem, as provided in section 528(f)(2)(B) of the Act. Such coordination shall include cooperation with the Secretary of the Army and the non-Federal project sponsor in determining whether a critical restoration project for the South Florida ecosystem will produce independent, immediate, and substantial restoration, preservation, and protection benefits, and will be generally consistent with the "Conceptual Plan for the Central and Southern Florida Project Restudy" prepared by the Governor's Commission for a Sustainable South Florida, in accordance with section 528(b)(3)(A) of the Act.

c. Exchange information regarding programs, projects, and activities of the agencies and entities represented on the Task Force to promote ecosystem restoration and maintenance, as provided in section 528(f)(2)(C) of the Act.

d. Establish a Florida-based working group to formulate, recommend, coordinate, and implement the policies, strategies, plans, programs, projects, activities, and priorities of the Task Force, in accordance with section 528(f)(2)(D) of the Act.

e. Facilitate the resolution of interagency and intergovernmental conflicts associated with the restoration of the South Florida ecosystem among agencies and entities represented on the Task Force, as provided in section 528(f)(2)(F) of the Act.

f. Coordinate scientific and other research associated with the restoration of the South Florida ecosystem, as provided in section 528(f) (2)(G) of the Act.

g. Provide assistance and support to agencies and entities represented on the Task Force in their restoration activities, as provided in section 528(f) (2) (H) of the Act.

h. Prepare an integrated financial plan and recommendations for coordinated budget requests for the funds proposed to be expended by agencies and entities represented on the Task Force for the restoration, preservation, and protection of the South Florida ecosystem, as provided in section 528(f)(2)(I) of the Act.

i. Submit a biennial report to Congress that summarizes the activities of the Task Force; the policies, strategies, plans, programs, projects, activities, and priorities planned, developed, or implemented for the restoration of the South Florida ecosystem; and progress made toward the restoration, as provided in section 528(f)(2)(J) of the Act.

3. POWERS. The Task Force may -

a. Establish advisory bodies as it deems necessary to assist the Task Force in its duties, including advisory bodies on public policy and scientific issues, in accordance with section 528(f)(2)(E)(i) of the Act.

b. Select as an advisory body any entity, such as the Governor's Commission for a Sustainable South Florida, that represents a broad variety of public and private interests, as provided in section 528(f)(2)(E)(ii) of the Act.

c. Seek advice and input from any interested, knowledgeable, or affected party as it determines necessary to perform its duties, as provided in section 528(f)(3)(B).
South Florida Ecosystem Restoration
Task Force Charter

4. MEMBERSHIP.

a. The Task Force consists of 14 members, as follows, pursuant to section 528(f) (1) of the Act:
(1) Seven Federal members, each of whom may be

represented by a designee at the level of assistant secretary or the equivalent:

(i) The Secretary of the Interior, who shall serve as chairperson.

(ii) The Secretary of Commerce.

(iii) The Secretary of the Army.

(iv) The Attorney General.

(v) The Administrator of the Environmental Protection Agency.

(vi) The Secretary of Agriculture.

(vii) The Secretary of Transportation.

(2) One member from each the following Indian Tribes, each of whom shall be appointed by the Secretary of the Interior based on the recommendations of the respective tribal chairman:

(i) The Seminole Tribe of Florida.

(ii) The Miccosukee Tribe of Indians of Florida.

(3) Two representatives of the State of Florida appointed by the Secretary of the Interior based on the recommendations of the Governor.
(4) One representative of the South Florida Water Management District appointed by the Secretary of the Interior based on the recommendations of the Governor.
(5) Two representatives of local government in the State of Florida to be appointed by the Secretary of the Interior based on the recommendations of the Governor.

b. There is no time limit for the term of any member. A person's membership shall terminate after leaving the office from which that member was appointed or designated. Any of the federal officials listed in subparagraph 4.a. (1), above, may at any time designate a substitute member at the level of assistant secretary or the equivalent. Any member appointed by the Secretary of the Interior based on the recommendation of the Governor may be removed or replaced by the Secretary of the Interior based on the recommendation of the Governor. Any member appointed by the Secretary of the Interior based on the recommendation of a tribal chairman may be removed or replaced by the Secretary of the Interior based on the recommendation of the chairman of the same Tribe.

c. Any vacancy on the Task Force shall be filled in the same manner in which the original appointment was made.

d. A member shall receive no additional compensation for service on the Task Force, in accordance with section 528(f) (4) of the Act.

5. ADMINISTRATION.
a. An Executive Director shall assist the Secretary of the Interior and the Task Force in carrying out their administrative and procedural duties, including the requirements in section 528(f)(3)(ii) of the Act. The Executive Director shall be appointed by the Secretary of the Interior, and shall be an employee of the United States Department of the Interior.

b. The Task Force will meet at the call of the Chairperson or of a majority of the members, but not less often than semi-annually.
c. A majority of the members then serving will constitute a quorum.

d. Travel expenses incurred by a member of the Task Force in the performance of services for the Task Force shall be paid by the agency, tribe, or government that the member represents, as provided in section 528(f)(5) of the Act.

e. The Task Force is not considered an advisory committee subject to the Federal Advisory Committee Act, and it may seek advice or input from interested, knowledgeable, or affected parties without being subject to the Federal Advisory Committee Act, pursuant to section 528(f)(3)(C) of the Water Resources Development Act of 1996.

f. The Task Force shall implement procedures to facilitate public participation in its functions. Those procedures shall include providing advance notice of meetings, providing adequate opportunity for public input and comment, maintaining appropriate records, and making a record of the proceedings of meetings available for public inspection, as required by section 528(f)(3)(A)(i) of the Act.

g. The Task Force may adopt principles and operational guidelines to set forth the required procedures for public participation and for any other purpose necessary or convenient for the accomplishment of the duties of the Task Force.

h. In the absence of procedures adopted by the Task Force, the Executive Director may establish protocols for accomplishment of the duties of the Task Force.

The Executive Director will promptly notify all members of the protocols. Such protocols may be amended by the Task Force.

i. Nothing in this Charter shall be construed to prejudice the appointments of members already made pursuant to the Act, or the activities of the Task Force since October 12, 1996.

6. PERSONNEL.

a. The Executive Director shall provide staff support to the Task Force.

b. The Executive Director may be assisted by a permanent staff of the executive directorate; personnel on temporary assignment to the executive directorate from agencies, governments, or tribes represented on the Task Force or the Working Group; by members of the Task Force or Working Group or the staffs of such members; or by contractors. The Task Force may authorize the Executive Director to request, from the head of any Federal agency not represented on the Task Force, personnel to be detailed to assist the Executive Director or the Task Force.

7. TERMINATION. The Task Force shall continue to exist only for so long as it is authorized by Federal law.

Signed By:
Secretary of the Interior - Bruce Babbitt

Coordinating Success and Tracking Success

For further information on this document please contact:
South Florida Restoration Task Force
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Miami, Florida 33199
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For more information on the
South Florida Ecosystem Restoration Program
or to view this document on-line, please visit
http://www.sfrestore.org

Coordinating and Tracking Success

Coordinating Success

Strategy for Restoration of the South Florida Ecosystem

Tracking Success

Biennial Report for FY 2002-2004 of the South Florida Ecosystem Restoration Task Force Integrated Financial Plan

to the
U.S. Congress,
Florida Legislature,
Seminole Tribe of Florida
and Miccosukee Tribe
of Indians of Florida

Volume
2 of 2

South Florida Ecosystem Restoration Organization

Task Force

U.S. Department of the Interior (Chair)

U.S. Department of Agriculture

U.S. Department of the Army

U.S. Department of Commerce

U.S. Department of Justice

U.S. Department of Transporation

U.S. Environmental Protection Agency

Miccosukee Tribe of Indians of Florida

Seminole Tribe of Florida

Florida Department of Environmental Protection

South Florida Water Management District

Florida Governor's Office

Two Local Governments - Cities of Sweetwater and South Bay

Working Group

U.S. Department of the Interior: National Park Service, Bureau of Indian Affairs, U.S. Fish & Wildlife, U.S. Geological Survey; U.S. Department of Agriculture: Natural Resources Conservation Service; U.S. Department of the Army: U.S. Army Corps of Engineers; U.S. Department of Commerce: National Oceanic and Atmospheric Administration, National Marine Fisheries Service, National Ocean Service; Florida Keys National Marine Sanctuary; U.S. Department of Justice; U.S. Environmental Protection Agency; U.S. Department of Transportation; Miccocukee Tribe of Indians of Florida; Seminole Tribe of Florida; State of Florida: Florida Office of the Governor, Florida Department of Environmental Protection, South Florida Water Management District, Florida Fish and Wildlife Conservation Commission, Florida Department of Community Affairs, Florida Department of Agriculture and Consumer Services, Florida Department of Transporation. No more than five representatives of local governments or regional planning councils.

Science Coordination Group

U.S. Department of the Interior: National Park Service, U.S. Fish and Wildlife, U.S. Geological Survey; U.S. Department of Agriculture: Natural Resources Conservation Service, Agricultural Research Service; U.S. Department of Commerce: National Oceanic and Atmospheric Administration, National Marine Fisheries Service - SEFSC, Ocean and Atmospheric Research - AOML; U.S. Department of the Army: U.S. Army Corps of Engineers; U.S. Environmental Protection Agency; Miccosukee Tribe of Indians of Florida; Seminole Tribe of Florida; Florida Fish and Wildlife Conservation Commission; Florida Department of Agriculture and Consumer Services; Florida Department of Environmental Protection; South Florida Water Management District; Miami-Dade Department of Environmental Resource Management; Palm Beach County; Florida Atlantic University.

TRACKING SUCCESS:

2004 INTEGRATED FINANCIAL PLAN FOR THE SOUTH FLORIDA ECOSTSTEM RESTORATION TASK FORCE

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All photos in this document are provided courtesy the South Florida Water Management District or U.S. Army Corps of Engineers

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2004 INTEGRATED FINANCIAL PLAN

PURPOSE

The purpose of the Integrated Financial Plan (IFP) is to provide detailed information about the federal, state, tribal and local restoration projects that contribute to the accomplishment of the vision, goals, subgoals, and objectives of the Task Force Strategy found in Volume 1.

In 1996 Congress directed the Task Force to prepare an integrated financial plan for the restoration, preservation and protection of the South Florida Ecosystem. The IFP is updated annually and posted on the South Florida Ecosystem Restoration Task Force website. Every two years it is published along with the Task Force Strategy and Biennial Report.

BACKGROUND

The overall premise of restoration is that the ecosystem must be managed from a systemwide perspective. Rather than dealing with issues independently, the challenge is to seek out the interrelationships that exist between all the components of the ecosystem. The same issues that are critical to the natural environment — getting the water right and restoring, preserving, and protecting diverse habitats and species — are equally critical to maintaining a quality built environment and lifestyle for South Florida's residents and visitors.

The success of this comprehensive approach will depend upon the coordination and integration of hundreds of individual restoration projects carried out by various agencies at all levels of government, and with input from many stakeholders. Each agency brings its own authority, jurisdiction, capabilities, and expertise to this initiative and applies them through its individual programs, projects, and activities.

CRITERIA AND ASSUMPTIONS

The IFP is a compilation of project information provided by the members of the Task Force. The cost estimating protocols, fiscal year cycles, time frames and methodologies used by the members vary widely. As such, the IFP reflects the criteria and assumptions used by the reporting Task Force entities and does not follow a single format. Specific criteria and assumptions for each project are annotated with footnotes.

For policy reasons, the Florida Department of Environmental Protection (FDEP) and SFWMD do not make individual project cost projections on future non-CERP land acquisitions for habitat preservation and conservation purposes listed under Goal 2. The cost of lands already purchased for habitat preservation and conservation purposes are the actual costs. An estimate of future land costs for non-CERP Goal 2 land acquisition is provided in the Total Cost Estimate in Appendix B of Volume 1.

The following criteria and assumptions apply to all of the project financial information as provided in the Task Force's 2004 Strategy and Biennial Report, Volume 1, Appendix A and the Volume 2, Integrated Financial Plan:

- Federal agencies and the South Florida Water Management District (SFWMD) operate and report financial activities on an October 1 to September 30 fiscal year, while other State of Florida agencies operate on a July 1 to June 30 fiscal year.
- The U.S. Army Corps of Engineers (USACE), in seeking project authorizations, uses constant year dollars to develop cost estimates. Once a project is authorized, the USACE revises their estimate at their next annual budget submission to a fully funded level using current year dollars. Fully funded is defined as a cost estimate that reflects projected costs through the period of construction using applicable OMB inflation factors. USACE project costs are reported as follows:

a) CERP: The Project Implementation Report (PIR) is the decision document used to obtain approval and/or authorization of CERP projects and completion of the final PIR is normally the time when all costs are updated. At present, most PIR's remain incomplete and, as such, all project cost estimates reported assume a 50% Federal and 50 % Non-Federal cost share and are reported in 1999 dollars, with the following exceptions: the Indian River Lagoon-South project, which has a completed Final PIR and is reported in 2003 dollars; and several Water Preserve Area (WPA) projects which reflect construction costs in 1999 dollars and land cost estimates that were updated to 2001 dollars during the WPA feasibility study. None of the CERP projects are fully funded.
b) Central & Southern Florida (C&SF) South Dade County C-111, C&SF West Palm Beach STA 1 East/ C-51 West, Kissimmee River Restoration, Everglades and South Florida Ecosystem Restoration Critical Projects costs are reported in 2003 dollars, fully funded.
c) Southwest Florida Feasibility Study: study cost estimate is reported in 2000 dollars.
d) Florida Bay/Florida Keys Feasibility Study: study cost estimate is reported in 2001 dollars.

- The SFWMD project costs are reported as follows:
  a) Lake Okeechobee Protection Plan – project cost estimate is reported in 2003 dollars.
  b) Everglades Construction Projects – project cost estimates are escalated values and are derived from construction industry-accepted cost databases and compared with similar previous SFWMD completed projects. Escalated value is defined as the value of when that component is expected to be constructed, including the estimated cost of inflation.
  c) Water Supply Plans – cost estimates are reported in 1999 dollars.

- The Project Summary Table and IFP report actual or estimated costs for construction projects initiated or scheduled to be completed between the years 1990-2036

- The Project Summary Table and IFP report costs for land acquisition projects generally initiated or scheduled to be completed between the years 1990-2036. A few of the project sheets reflect costs for land acquisitions dating back to 1945

- Reporting agencies needed to presume annual levels of Congressional and State of Florida appropriations to develop project completion schedules. If the actual appropriations vary from presumed levels, then project completion schedules and estimated projects costs may change.

- The Project Summary Table and IFP do not include operational costs or agency programmatic costs that would be incurred regardless of the restoration initiatives. For example, the National Park Service costs to operate and maintain Everglades National Park, Fish and Wildlife Service costs to provide for Endangered Species Act consultation and South Florida Water Management District costs to operate and maintain water delivery infrastructure are not included herein.

- The Project Summary Table and IFP do not include the costs of land development and associated infrastructure as well as infrastructure improvements in existing urban areas including but not limited to redeveloping declining urban areas, wastewater and storm water management systems construction and improvements, schools, roadways, utilities, government services, and light rail.

- The Project Summary Table and IFP do not include any current or future costs for science/research projects or studies.

- The Project Summary Table and IFP do not include any costs or future resource needs projected for environmental and system-wide monitoring programs (For example, the $100 million funded over ten years for the CERP monitoring programs is not included).

- The Project Summary Table and IFP do not include any post-construction operations and maintenance costs in the total cost estimate.

HOW TO USE THE IFP PROJECT SUMMARY TABLE

The Integrated Financial Plan Summary Table provides a great deal of useful information for those interested in project details at a glance and describes how the projects link to the overall strategic goals, subgoals and objectives of the Task Force. This same table is repeated in Volume 1, Appendix A.

Each column of the table has a specific purpose to assist in finding information quickly and aggregating different information components:

Column 1 identifies the goal and subgoal the project is designed to achieve or partially achieve

Column 2 assigns a unique project number linked to the Task Force goals, subgoals, and objectives. The first digit is a goal number (1, 2, or 3). The second digit is the subgoal/objective number. For the purpose of assigning project numbers, the objectives under each goal have been numbered consecutively regardless of their subgoal. For example, project 1104 would be a project that supports objective 1-A.1, while project 1504 would be a project that supports objective 1-B.1 (the fifth objective under goal 1). The third and fourth digits reflect the order of listing of the projects under each subgoal/objective. For example, project 1104 would be the 4th project on the list for that objective.

Column 3 is the project name. The staff strives to use the same project name used by all agencies, although at times this is quite challenging. Some of the project names changed from year to year as projects are grouped together or split apart in the CERP adaptive management process. For example the Lake Istokpoga Project, which was a separate project in 2002, has since been included in the Lake Okeechobee Watershed Project. These types of actions affect the restoration endpoints and total outputs measured by some of the objectives, and as a result some of the restoration endpoints have changed.

Column 4 identifies the lead agency

Column 5 and 6 identify the reported start and Completion dates

Column 7 identifies the current estimated cost estimate

Column 8 identifies the financial resources appropriated to date

Column 9 identifies the measurable output (e.g., acre-feet of storage, miles modified, etc.) that collectively add up to the restoration endpoint identified for achieving the objectives of each subgoal

Columns 10 and 11 identify the primary and secondary objectives that the project outputs support. The staff identified the primary and secondary objectives based on input from the reporting agency. Some projects provide outputs supporting more than one objective. Thus, they are listed in more than one section with different outputs. For example, the Lake Okeechobee Watershed Project (project 1104) provides acres of stormwater treatment for Objective 1.B.1 and acre-feet of storage for Objective 1.A.1. Such projects are numbered according to the primary objective identified for the project, and the same number is maintained when the project is repeated to identify the secondary benefit.

Column 12 identifies the page number in Volume 2 where the detailed project sheet can be located.

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
GOAL 1. GET THE WATER RIGHT											
SUB-GOAL 1.A.GET THE HYDROLOGY RIGHT (Quantity, Timing & Distribution)											
1.A.1		**SURFACE WATER STORAGE PROJECTS**						**Acre Feet**			
	1100	C&SF: CERP Acme Basin B Discharge (CERP Project # WBS 38)	USACE	2002	2009	20,100,000	1,657,000	3,800	1.A.1		25
	1101	C&SF: CERP Indian River Lagoon South, C-23/C-24/C-25/Northfork and Southfork Storage Reservoirs (UU), and C&SF: CERP C-44 Basin Storage Reservoir (B) (CERP Project # WBS 07)	USACE/ SFWMD	2002	2033	1,210,608,000	93,970,000	190,000	1.A.1		26
	1102	C&SF: CERP Everglades Agricultural Storage Reservoir Phase I (CERP Project # WBS 08)	USACE/SF WMD	2001	2009	233,408,000	12,565,000	240,000	1.A.1		28
	1103	C&SF: CERP Everglades Agricultural Storage Reservoir Phase II (GP2) (CERP Project # WBS 09)	USACE/ SFWMD	2006	2014	203,240,000	356,000	120,000	1.A.1		29
	1104	C&SF: CERP Lake Okeechobee Watershed (CERP Project # WBS 01)	USACE/ SFWMD	2001	2013	455,878,000	11,114,000	250,000	1.A.1	1.B.1, 2.A.3	30
	1105	C&SF: CERP North Lake Belt Storage Area (Phase I & II) (CERP Project # WBS 25)	USACE/ SFWMD	2017	2036	500,346,000	902,000	90,000	1.A.1		32
	1106	C&SF: CERP Palm Beach County Agricultural Reserve Reservoir and ASR (CERP Project # WBS 20 and 21)	USACE/ SFWMD	2006	2020	121,359,000	216,000	20,000	1.A.1	1.A.2	33
	1107	C&SF: CERP Site 1 Impoundment and Aquifer Storage and Recovery (CERP Project # WBS 22 and 40)	USACE/ SFWMD	2002	2024	131,379,000	6,091,000	15,000	1.A.1	1.A.2	34
	1108	C&SF:CERP Bird Drive Recharge Area (U) (CERP Project # WBS 43)	USACE/ SFWMD	2010	2018	124,083,000	608,000	11,500	1.A.1		35

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	1109	C&SF:CERP C-43 Basin Storage Reservoir and ASR (CERP Project # WBS 04 and 05)	USACE/ SFWMD	2001	2019	440,195,000	6,726,000	160,000	1.A.1	1.A.2	36
	1110	C&SF:CERP Central Lake Belt Storage Area (CERP Project # WBS 26)	USACE/ SFWMD	2017	2035	466,725,000	844,000	190,000	1.A.1	1.B.1	37
	1111	Critical Ecosystems Restoration Projects - Ten Mile Creek	USACE/ SFWMD	1997	2005	40,589,000	20,609,000	5,000	1.A.1	2.A.3	38
1.A.2		**AQUIFER STORAGE & RECOVERY (ASR) PROJECTS**						**BGD**			
	1109	C&SF:CERP C-43 Basin Storage Reservoir and ASR (CERP Project # WBS 05)	USACE/ SFWMD	2001	2013	*Footnote 1*	*Footnote 1*	0.22	1.A.1	1.A.2	36
	1200	C&SF: CERP North Palm Beach County - Part 2 (CERP Project # WBS 18)	USACE/ SFWMD	2010	2021	127,291,000	328,000	0.17	1.A.2		39
	1201	C&SF: CERP Lake Okeechobee ASR (GG)(CERP Project # WBS 03)	USACE/ SFWMD	2013	2028	1,097,312,000	1,918,000	1	1.A.2		40
	1106	C&SF: CERP Palm Beach County Agricultural Reserve Reservoir and ASR (CERP Project # WBS 21)	USACE/ SFWMD	2010	2020	*Footnote 1*	*Footnote 1*	0.075	1.A.1	1.A.2	33
	1107	C&SF: CERP Site 1 Impoundment and Aquifer Storage and Recovery (CERP Project # WBS 40)	USACE/ SFWMD	2002	2024	*Footnote 1*	*Footnote 1*	0.15	1.A.1	1.A.2	34
1.A.3.		**MODIFY IMPEDIMENTS TO SHEETFLOW PROJECTS**						**Miles Modified**			
	1300	Canal 111	USACE/ SFWMD	1994	2008	274,670,000	211,170,000	4	1.A.3	3.B.1	41
	1301	C&SF: CERP WCA -3 Decompartmentalization and Sheetflow Enhancement (AA)(QQ)(SS) (CERP Project # WBS 12 and 13)	USACE/ SFWMD	2001	2019	211,687,000	7,967,000	240	1.A.3	2.A.3	42
	1302	C&SF:CERP Florida Keys Tidal Restoration (CERP Project # WBS 31)	USACE/ SFWMD	2001	2018	3,874,600	1,891,000	0.6	1.A.3		43
	1303	Critical Projects Southern CREW	USACE	1999	2005	33,312,000	6,184,000		1.A.3		44

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	1304	East WCA-3A Hydropattern Restoration	SFWMD	1994	2004	5,040,571	5,040,571	8.5	1.A.3		45
	1305	Kissimmee Prairie	FDEP/ SFWMD	1996	1997	*Footnote 1*	*Footnote 1*	39.3	1.A.3	2.A.1	46
	1306	Kissimmee River Restoration Project	USACE/ SFWMD	1994	2010	572,400,000	306,329,000	22	1.A.3	2.A.3	47
	1307	Modified Water Deliveries to Everglades National Park *(Footnote 3)*	NPS	1990	2008	191,000,000	154,884	21	1.A.3		48
OTHER RELATED HYDROLOGY PROJECTS								**TBD**			
	1400	Critical Projects Additional Water Conveyance Structures Under Tamiami Trail	USACE/ SFWMD	1998	2006	7,678,000	4,878,000				50
	1401	Biscayne Bay Feasibility Study	USACE/ M-DADE	1996	2006	6,370,000	2,937,000				51
	1403	C&SF: CERP Broward County Secondary Canal System (CERP Project # WBS 24)	USACE/ SFWMD	2001	2016	12,898,000	45,000				52
	1404	C&SF: CERP C-111N Spreader Canal (CERP Project # WBS 29)	USACE/ SFWMD	2000	2010	94,035,000	6,376,000				53
	1405	C&SF: CERP – Water Preserve Area Conveyance (BB)(CERP Project # WBS 49)	USACE/ SFWMD	2002	2017	18,778,000	211,000				54
	1406	Critical Projects East Coast Canal Structures (C-4) - *Completed*	USACE/ SFWMD	1999	2003	3,683,000	3,683,000				55
	1408	C&SF: CERP Loxahatchee National Wildlife Refuge Internal Canal Structures (CERP Project # WBS 14)	USACE/ SFWMD	2014	2020	7,669,000	1,000				56
	1503	C&SF: CERP North Palm Beach County PIR Part 1 (CERP Project # WBS 17)	USACE/ SFWMD	2001	2019	*Footnote 1*	*Footnote 1*		1.B.1		83
	1409	C&SF: CERP Seminole Tribe Big Cypress Water Conservation Plan (CERP Project # WBS 96)	USACE/ Seminole	2015	2022	30,090,000	0				57

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	1410	C&SF:CERP Biscayne Bay Coastal Wetlands (CERP Project # WBS 28)	USACE/ SFWMD	2001	2022	299,583,000	5,554,000				58
	1411	C&SF:CERP Caloosahatchee R. (C-43) Basin ASR Pilot Project (CERP Project # WBS 33)	USACE/ SFWMD	2001	2008	6,000,000	2,305,000				59
	1412	C&SF:CERP Diverting WCA-2 and WCA-3 Flows to Central Lake Belt Storage Area (CERP Project # WBS 47 and 48)	USACE/ SFWMD	2018	2025	76,921,000	357,000				60
	1413	C&SF:CERP Everglades Rain Driven Operations	USACE/ SFWMD	TBD	TBD	TBD	TBD				61
	1414	C&SF:CERP Henderson Creek/Belle Meade Restoration (CERP Project # WBS 93)	USACE	2002	2018	4,806,000	454,000			1.B.1	62
	1415	C&SF:CERP L-31 N Improvements for Seepage Management and S-356 Structures (CERP Project # WBS 27)	USACE/ SFWMD	2009	2014	184,845,000	322,000				63
	1416	C&SF:CERP L-31 N Seepage Management Pilot Project (CERP Project # WBS 36)	USACE/ SFWMD	2001	2008	10,000,000	2,533,000				64
	1417	C&SF:CERP Lake Belt (In-Ground Reservoir) Technology - Pilot Project (CERP Project # WBS 35)	USACE/ SFWMD	2001	2017	23,000,000	1,689,000				65
	1418	C&SF:CERP Lake Okeechobee Aquifer Storage and Recovery Pilot Project (CERP Project # WBS 32)	USACE/ SFWMD	2000	2008	19,000,000	7,130,000				66
	1419	C&SF:CERP Lake Okeechobee Regulation Schedule (CERP Project # WBS)	USACE/ SFWMD	TBD	TBD	TBD	0				67
	1420	C&SF:CERP Modified Holeyland Wildlife Management Area Operation Plan (CERP Project # WBS 15)	USACE/ SFWMD	2007	2011	150,000	0				68
	1421	C&SF:CERP Modified Rotenberger Wildlife Management Area Operation Plan (CERP Project # WBS 16)	USACE/ SFWMD	2007	2009	150,000	0				69

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE											
Goals Column 1	**Strategic Plan Project Number** Column 2	**Project Name** Column 3	**Lead Agency** Column 4	**Start** Column 5	**End** Column 6	**Cost Estimate** Column 7	**Appropriated to Date 2004** Column 8	**Measurable Outputs** Column 9	**Primary Objective** Column 10	**Secondary Objectives** Column 11	**PG#** Col 12
	1422	C&SF:CERP Operational Modification to Southern Portion of L-31N and C-111 (CERP Project # WBS)	USACE/ SFWMD	TBD	TBD	TBD	0				70
	1423	C&SF:CERP Site 1 Impoundment and Aquifer Storage and Recovery Pilot Project (CERP Project # WBS 34)	USACE/ SFWMD	2000	2008	9,000,000	3,314,000				71
	1424	C&SF:CERP Southern Golden Gates Estates Restoration (CERP Project # WBS 30)	USACE/ SFWMD	2001	2008	45,654,000	15,708,000				72
	1425	Critical Projects Seminole Big Cypress Reservation Water Conservation Plan	Seminole/ USACE	1997	2008	48,783,000	18,862,000				73
	1426	Florida Bay and The Florida Keys Feasibility Study	USACE	2001	2012	6,300,000	2,290,000				74
	1428	Indian River Lagoon Restoration Feasibility Study **(Completed)**	USACE/ SFWMD	1996	2002	6,150,000	6,150,000				249
	1430	Rotenberger Restoration	SFWMD	1994	2002	5,002,111	3,587,645				75
	1431	Southwest Florida Feasibility Study	USACE	2001	2005	12,000,000	6,131,000				76
	1432	WCA-2A Hydropattern Restoration	SFWMD	1994	2006	6,000,962	4,944,200				77
	1433	West WCA-3A Hydropattern Restoration	SFWMD	1994	2006	10,492,653	7,261,490				78
SUB-GOAL 1.B GET THE WATER QUALITY RIGHT											
1.B.1		**STORMWATER TREATMENT AREA (STA) PROJECTS**						**Acres**			
	1104	C&SF: CERP Lake Okeechobee Watershed (CERP Project # WBS 01)	USACE/ SFWMD	2001	2014	*Footnote 1*	*Footnote 1*	11,875	1.A.1	1.B.1	30

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE											
Goals Column 1	**Strategic Plan Project Number** Column 2	**Project Name** Column 3	**Lead Agency** Column 4	**Start** Column 5	**End** Column 6	**Cost Estimate** Column 7	**Appropriated to Date 2004** Column 8	**Measurable Outputs** Column 9	**Primary Objective** Column 10	**Secondary Objectives** Column 11	**PG#** Col 12
	1500	C&SF: CERP Big Cypress/L-28 Interceptor Modifications (CCC) (CERP Project # WBS 10)	USACE/ SFWMD	2011	2019	42,751,000	74,000	1,900	1.B.1		79
	1501	C&SF: CERP - Broward County WPA - C-9 Stormwater Treatment Area/Impoundment (R) and Western C-11 Diversion Impoundment and Canal and Water Conservation Areas 3A and 3B Levee Seepage Management (O) (Q) (CERP Project # WBS 45)	USACE/ SFWMD	2002	2011	313,690,000	3,503,000	4,100	1.B.1		80
	1502	C&SF: CERP Miccosukee Tribe Water Management Plan (CERP Project # WBS 90)	USACE / Miccosukee	2003	2010	24,459,000	624,000	0	1.B.1		82
	1503	C&SF: CERP North Palm Beach County PIR Part 1 (CERP Project # WBS 17)	USACE/ SFWMD	2001	2019	464,994,000	11,054,000	1,260	1.B.1	Other	83
	1505	C&SF:CERP Caloosahatchee Backpumping with Stormwater Treatment (CERP Project # WBS 06)	USACE/ SFWMD	2011	2020	82,895,000	144,000	5,000	1.B.1		84
	1110	C&SF:CERP Central Lake Belt Storage Area(CERP Project # WBS 26)	USACE	2017	2035	*Footnote 1*	*Footnote 1*	640	1.A.1	1.B.1	37
	1414	C&SF:CERP Henderson Creek/Belle Meade Restoration (CERP Project # WBS 93)	USACE	2002	2007	*Footnote 1*	*Footnote 1*	10	Other	1.B.1	62
	1506	Critical Projects: Lake Okeechobee Water Retention/ Phosphorus Removal	USACE/ SFWMD	1997	2006	23,306,000	9,177,000	940	1.B.1		85
	1507	Miccosukee Tribe Water Management Area	Miccosukee	TBD	TBD	42,113,000	0	900	1.B.1		86
	1508	STA-1 West Works and Outflow Pump Station (G-310)	SFWMD	1994	2003	97,516,089	79,401,066	6,700	1.B.1		87
	1509	STA-2 Works and Outflow Pump Station (G-335)	SFWMD	1994	2004	113,595,331	98,990,934	6,430	1.B.1		88
	1510	STA-3/4 Works	SFWMD	1994	2005	219,338,858	192,137,984	16,600	1.B.1		89
	1511	STA-5 Works	SFWMD	1994	2005	47,891,842	38,547,097	4,118	1.B.1		90
	1512	STA-6 (includes sections 1 and 2)	SFWMD	1994	2006	23,066,387	13,042,587	2,222	1.B.1		91
	1513	West Palm Beach Canal (C-51) and STA-1E	USACE/ SFWMD	1994	2014	244,574,100	218,283,200	6,500	1.B.1		92

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE											
Goals Column 1	**Strategic Plan Project Number** Column 2	**Project Name** Column 3	**Lead Agency** Column 4	**Start** Column 5	**End** Column 6	**Cost Estimate** Column 7	**Appropriated to Date 2004** Column 8	**Measurable Outputs** Column 9	**Primary Objective** Column 10	**Secondary Objectives** Column 11	**PG#** Col 12
1.B.2.		**TOTAL MAXIMUM DAILY LOAD (TMDL) PLAN DEVELOPMENT**						**Completed Plans**			
	1600	Total Maximum Daily Load (TMDL) for South Florida	FDEP	2000	TBD	*Footnote 2*	3,800,000		1.B.2		93
OTHER RELATED WATER QUALITY PROJECTS											
	1700	Chapter 298 Districts/Lease 3420 Improvements	SFWMD	1994	2004	22,817,145	21,924,656				94
	1701	Comprehensive Integrated Water Quality Plan	USACE	2001	2008	8,100,000	1,350,000				95
	1702	Critical Projects Lake Trafford	USACE	1999	2005	25,678,000	5,440,000			2.A.3	96
	1703	Critical Projects Western C-11 Water Quality Treatment	USACE	1997	2005	18,259,000	17,205,000				97
	1704	Development of Best Management Practices Related to the Land Application of Residuals and Chicken Manure in the Lake Okeechobee Watershed	SFWMD	2000	2006	657,000	557,000				98
	1705	Everglades National Park Water & Wastewater	NPS	1997	TBD	18,965,000	18,965,000				99
	1706	Everglades Stormwater Program	SFWMD	1998	2016	*Footnote 1*	38,575,000				100
	1707	Florida Aquifer Restoration	NRCS	2002	2008	1,209,000	170,000				101
	1708	Lake Okeechobee Sediment Removal Feasibility Study and Pilot Project	SFWMD	2000	2003	*Footnote 2*	2,009,301				102
	1709	Lake Okeechobee Tributary Sediment Removal Pilot Project	SFWMD	2000	2004	440,000	440,000				103
	1710	Miccosukee Water Resources Management	Miccosukee	TBD	TBD	25,200,000	0				104
	1713	S-5A Basin Runoff Diversion Works	SFWMD	1994	2005	14,210,274	11,622,799				105
	1714	Seminole Tribe Best Management Practices for the Big Cypress Reservation	Seminole	1996	2008	4,779,000	955,800				106
	1715	Seminole Tribe Best Management Practices for the Brighton Reservation	Seminole	1998	2008	338,000	96,000				107

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	1716	Seminole Tribe Comprehensive Surface Water Management System for the Brighton Reservation	Seminole	1999	2010	15,818,000	20,000				108
	1717	Seminole Tribe Water Conservation Project for Big Cypress Reservation	Seminole	2002	2012	49,000,000	0				109
	1719	STA-1 Inflow and Distribution Works	SFWMD	1994	2005	13,001,613	11,340,813				110
		TOTAL FOR GOAL 1				**9,422,782,837**	**1,592,814,027**				
Goal 2 Restore Preserve and Protect Natural Habitats and Species											
SUB-GOAL 2.A. RESTORE, PRESERVE AND PROTECT NATURAL HABITATS											
2.A.1.		**HABITAT PROTECTION LAND ACQUISITION PROJECTS**						**Acres**			
STATE LAND ACQUISITIONS (FLORIDA FOREVER PRIORITY LIST)											
	2100	Allapattah Flats/Ranch *(Footnote 5)*	FDEP	1997	TBD	TBD	3,775,844	35,999	2.A.1	1.A.1	113
	2101	Atlantic Ridge Ecosystem *(Footnote 5)*	FDEP/ SFWMD	1995	TBD	TBD	47,254,082	15,698	2.A.1		114
	2102	Babcock Ranch	FDEP	2001	TBD	TBD	0	91,361	2.A.1		115
	2103	Barfield Farms	SFWMD	1998	TBD	TBD	0	1,367	2.A.1		116
	2104	Belle Meade	FDEP	1993	TBD	TBD	36,183,158	28,506	2.A.1		117
	2105	Big Bend Swamp/Holopaw Ranch	FDEP	2000	TBD	TBD	0	59,849	2.A.1		118
	2106	Biscayne Coastal Wetlands *(Footnote 5)*	SFWMD/ M-DADE	1998	TBD	TBD	0	2,241	2.A.1		119
	2107	Bombing Range Ridge	FDEP	1998	TBD	TBD	12,003,388	41,748	2.A.1		120
	2108	Caloosahatchee Ecoscape	FDEP	1998	TBD	TBD	1,948,038	18,497	2.A.1		121
	2109	Catfish Creek	FDEP	1990	TBD	TBD	47,442,266	14,901	2.A.1		122
	2111	Charlotte Harbor Estuary/ Flatwoods/Cape Haze	FDEP	1986	TBD	TBD	17,781,504	15,054	2.A.1		123
	2112	Corkscrew Regional Ecosystem Watershed	FDEP	1991	TBD	TBD	40,024,343	64,103	2.A.1		124

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE											
Goals Column 1	**Strategic Plan Project Number** Column 2	**Project Name** Column 3	**Lead Agency** Column 4	**Start** Column 5	**End** Column 6	**Cost Estimate** Column 7	**Appropriated to Date 2004** Column 8	**Measurable Outputs** Column 9	**Primary Objective** Column 10	**Secondary Objectives** Column 11	**PG#** Col 12
	2114	Coupon Bight/ Key Deer/ Big Pine Key	FDEP	1985	TBD	TBD	17,734,013	3,638	2.A.1		125
	2172	Cypress Creek/Loxahatchee	SFWMD	2002	TBD	TBD	47,112,325	4,347	2.A.1		126
	2115	Cypress Creek/Trail Ridge *(Footnote 5)*	SFWMD	1997	TBD	TBD	968,857	13,788	2.A.1		127
	2183	Devils Garden	FDEP	1998	TBD	TBD	0	82,508	2.A.1		128
	2117	East Coast Buffer/Water Preserve Areas *(Footnote 5)*	FDEP/ SFWMD	1994	TBD	TBD	120,745,323	66,809	2.A.1		129
	2118	Estero Bay	FDEP	1985	TBD	TBD	44,720,290	15,572	2.A.1		130
	2119	Everglades Agricultural Area (EAA) / Talisman *(Footnote 5)*	SFWMD/ DOI	1997	TBD	TBD	3,390,353	51,210	2.A.1		131
	2120	Fakahatchee Strand	FDEP	1980	TBD	TBD	24,743,638	80,332	2.A.1		132
	2121	Fisheating Creek	SFWMD/ FDEP	1999	TBD	TBD	101,928,563	176,760	2.A.1		133
	2122	Florida Keys Ecosystem	FDEP	1992	TBD	TBD	35,940,928	8,566	2.A.1		134
	2123	Frog Pond/L-31 N	FDEP/ SFWMD	1994	TBD	TBD	83,623,264	10,450	2.A.1		135
	2185	Half Circle L Ranch	SFWMD	2003	TBD	TBD	0	10,500	2.A.1		136
	2175	Hen Scratch Ranch	SFWMD	2002	TBD	TBD	0	2,880	2.A.1		137
	2124	Indian River Lagoon Blueway	FDEP	1998	TBD	TBD	21,927,795	5,136	2.A.1		138
	2125	Juno Hills /Dunes	FDEP	1994	TBD	TBD	42,009,592	590	2.A.1		139
	2176	Jupiter Ridge	FDEP	1991	TBD	TBD	25,412,200	287	2.A.1		140
	2126	Kissimmee - St. John Connector	FDEP	2001	TBD	TBD	0	9,463	2.A.1		141
	2127	Kissimmee River (Lower Basin)	SFWMD	1985	2005	TBD	56,406,882	68,332	2.A.1		142
	2128	Kissimmee River (Upper Basin)	SFWMD	1990	2005	TBD	70,825,219	36,763	2.A.1		143
	2129	Lake Wales Ridge Ecosystem	FDEP	1992	TBD	TBD	24,564,760	13,848	2.A.1		144
	2132	Loxahatchee Slough Land Acquisition	SFWMD	1996	TBD	TBD	35,920,793	15,200	2.A.1		145
	2133	McDaniel Ranch Land Acquisition	SFWMD	2000	TBD	TBD	0	7,000	2.A.1		146
	2134	Miami-Dade County Archipelago	FDEP	1994	TBD	TBD	23,524,235	858	2.A.1		147
	2135	Model Lands *(Footnote 5)*	SFWMD/	1994	2007	TBD	2,119,701	42,402	2.A.1		148

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE											
Goals Column 1	**Strategic Plan Project Number** Column 2	**Project Name** Column 3	**Lead Agency** Column 4	**Start** Column 5	**End** Column 6	**Cost Estimate** Column 7	**Appropriated to Date 2004** Column 8	**Measurable Outputs** Column 9	**Primary Objective** Column 10	**Secondary Objectives** Column 11	**PG#** Col 12
			M-DADE								
	2138	North Fork St Lucie River *(Footnote 5)*	FDEP/ SFWMD	1988	TBD	TBD	0	3,800	2.A.1		149
	2139	North Key Largo Hammocks	FDEP	1983	TBD	TBD	75,272,465	4,513	2.A.1		150
	2140	North Savannas	SFWMD	1997	TBD	TBD	0	930	2.A.1		151
	2141	Okaloacoochee Slough	FDEP/ SFWMD	1996	TBD	TBD	20,570,673	37,210	2.A.1		152
	2142	Okeechobee Battlefield	FDEP	2001	TBD	TBD	0	56	2.A.1		153
	2143	Osceola Pine Savannas	FDEP	1995	TBD	TBD	310,000	1,374	2.A.1		154
	2144	Pal-Mar *(Footnote 5)*	FDEP/ SFWMD	1992	TBD	TBD	23,987,087	36,745	2.A.1		155
	2145	Panther Glades	FDEP	2001	TBD	TBD	75,049,836	53,894	2.A.1		156
	2146	Paradise Run	SFWMD	1998	TBD	TBD	4,908,095	4,265	2.A.1		157
	2147	Lake Hatchineha Watershed/ Parker-Poinciana	SFWMD	1996	TBD	TBD	0	6,437	2.A.1		158
	2148	Pineland Site Complex	FDEP	1996	TBD	TBD	1,751,874	206	2.A.1		159
	2178	Ranch Reserve	SFWMD		TBD	TBD	39,286	2,217	2.A.1		160
	2149	Rookery Bay	FDEP	1980	TBD	TBD	44,960,833	18,721	2.A.1		161
	2150	Rotenberger/Holey Land Tract	FDEP	1984	TBD	TBD	20,114,395	79,170	2.A.1		162
	2151	Shingle Creek	SFWMD	1987	TBD	TBD	6,465,800	7,655	2.A.1		163
	2152	Six Mile Cypress I & II Land Acquisition	SFWMD	1987	TBD	TBD	6,903,701	1,966	2.A.1		164
	2154	South Savannas	FDEP/ SFWMD	1981	TBD	TBD	20,902,290	6,046	2.A.1		165
	2155	Southern Glades *(Footnote 5)*	SFWMD/M-DADE	1964	TBD	TBD	6,951,829	37,620	2.A.1		166
	2156	Southern Golden Gate Estates *(Footnote 5)*	FDEP	1984	TBD	TBD	632,659	55,247	2.A.1		167
		STA 1 W, 2,3/4, 5, and 6 (See project IDs 1508-1512)	SFWMD			TBD	126,772,412	41,089	2.A.1		
	2158	Twelve Mile Slough	SFWMD	1998	TBD	TBD	11,000,000	15,653	2.A.1		168

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	2159	Upper Lakes Basin Watershed	SFWMD	1995	TBD	TBD	12,343,957	47,300	2.A.1		169
	2186	Upper Econ Mosaic	FDEP		TBD	TBD	0	16,595	2.A.1		170
	2160	Water Conservation Areas 2, and 3	SFWMD	1948	TBD	TBD	10,572,395	721,433	2.A.1		171
FEDERAL LAND ACQUISITIONS (AUTHORIZED FEDERAL PROJECTS)											
	2162	A.R. M. Loxahatchee National Wildlife Refuge	USFWS	1955	2005	30,119,000	119,000	145,567	2.A.1		172
	2163	Big Cypress National Preserve Addition	NPS	1989	2005	48,793,000	46,225,000	146,117	2.A.1		173
	2164	Big Cypress National Preserve Private Inholdings *(Footnote 4)*	NPS	1974	TBD	243,982,000	222,105,000	574,449	2.A.1		174
	2165	Complete Land Acquisition for Biscayne National Park	NPS	1968	TBD	33,699,000	31,851,000	172,924	2.A.1		175
	2166	Crocodile Lake National Wildlife Refuge	USFWS	1979	2005	14,319,000	13,093,000	7,100	2.A.1		176
	2167	East Everglades Addition to Everglades National Park	NPS	1990	2005	102,535,000	90,278,000	109,504	2.A.1		177
	2168	Florida Keys National Wildlife Refuge Complex	USFWS	1960	2005	35,028,000	31,168,000	415,436	2.A.1		178
	2169	Florida Panther National Wildlife Refuge	USFWS	1989	TBD	10,692,000	10,682,000	61,573	2.A.1		179
	2170	Hobe Sound National Wildlife Refuge	USFWS	1968	2004	5,818,000	18,000	1,130	2.A.1		180
	2171	J.N. "Ding" Darling National Wildlife Refuge	USFWS	1945	2005	12,145,000	9,035,000	10,275	2.A.1		181
COMPLETED STATE LAND ACQUISITION PROJECTS											
	2110	Cayo Costa	FDEP	1980	2004	28,337,346	28,337,346	1,954	2.A.1		240
	2113	Corkscrew Regional Mitigation Bank	SFWMD	1995	1999	2,600,000	2,600,000	633	2.A.1		241
	2116	Dupuis Reserve	SFWMD	1985	1986	23,016,601	23,016,601	21,875	2.A.1		242
	1305	Kissimmee Prairie	FDEP	1996	1997	21,953,790	21,953,790	38,282	2.A.1		46
	2130	Lake Walk-In-Water	SFWMD	1995	1998	3,950,000	3,950,000	4,009	2.A.1		243
	2131	Loxahatchee River Land Acquisition	SFWMD	1984	2001	13,074,703	13,074,703	1,936	2.A.1		244
	2137	Nicodemus Slough	SFWMD	1981	1988	1,894,501	1,894,501	2,231	2.A.1		245

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	2153	South Fork St. Lucie River Land Acquisition	SFWMD	1995	1995	2,480,000	2,480,000	184	2.A.1		246
	2180	Ten Mile Creek	SFWMD	1990	2004	5,332,000	5,332,000	913	2.A.1		38
	2157	Tibet-Butler Preserve	SFWMD	1988	1999	3,601,900	3,601,900	439	2.A.1		247
	2161	Yamato Scrub	FDEP	1992	1996	25,932,850	25,932,850	207	2.A.1		248
		STA 1 E (See project ID1513)	SFWMD			46,000,000	46,000,000	6503	2.A.1		92
2.A.2.		**CORAL REEF PROTECTION PROJECTS**						**% Reef Protected**			
	2200	Planning and Implementation of the Tortugas Ecological Reserve	NOAA	1998	2001	*Footnote 2*	32,000,000	10%	2.A.2		182
2.A.3		**IMPROVE NATURAL AREAS HABITAT QUALITY PROJECTS**						**Acres**			
	Note – The April 1999 USACE Central and Southern Florida Project Comprehensive Review Study Final Integrated Feasibility Report and Programmatic Environmental Impact Statement included an extensive environmental evaluation of habitat units that would be improved through implementation of the CERP projects. Table 7-18 in this publication identifies in detail which projects are anticipated to achieve this objective. However, appropriate measures by project are currently being developed through the establishment of interim goals. There are some projects included in our tracking matrix that exemplify how this objective will be achieved.										
	2300	C&SF: CERP Protect and Enhance Existing Wetland Systems along LNWR (Strazzulla Tract) (CERP Project # WBS 39)	USACE/ SFWMD	2002	2008	52,772,000	869,000	10,000	2.A.3		183
	2301	C&SF: CERP Winsburg Farms Wetland Restoration (CERP Project # WBS 91)	USACE	2000	2014	14,140,000	950,000	175	2.A.3		184
	2302	C&SF:CERP Lake Park Restoration (CERP Project # WBS 94)	USACE/ Lee Co.	1999	2014	5,166,000	220,000	40	2.A.3		185
	2303	C&SF:CERP Restoration of pineland and hardwood hammocks in C-111 Basin (CERP Project # WBS 92)	USACE	2016	2022	600,000	0	50	2.A.3		186
	3802	C&SF:CERP Wastewater Reuse Technology Pilot Project(CERP Project # WBS 37)	USACE/ SFWMD	2001	2013	*Footnote 1*	*Footnote 1*	1,500	3.C.2	2.A.3	229
	1301	C&SF: CERP WCA -3 Decompartmentalization and Sheetflow Enhancement (AA)(QQ)(SS)(CERP Project # WBS 12 and 13))	USACE/ SFWMD	2001	2019	*Footnote 1*	*Footnote 1*		1.A.3	2.A.3	42
	1111	Critical Ecosystems Restoration Projects - Ten Mile Creek	USACE/ SFWMD	1997	2003	*Footnote 1*	*Footnote 1*	2,740	1.A.1	2.A.3	38

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	1702	Critical Projects Lake Trafford	USACE	1999	2004	*Footnote 1*	*Footnote 1*			2.A.3	96
	2606	Hole-in-the-Donut	NPS	1994	2017	*Footnote 1*	*Footnote 1*	6,000		2.A.3	202
	1306	Kissimmee River Restoration Project	USACE/ SFWMD	1994	2010	*Footnote 1*	*Footnote 1*	27,000	1.A.3	2.A.3	47
	2304	A.R.M. Loxahatchee NWR Prescribed fire program	USFWS	2002	TBD	*Footnote 1*	602,640	TBD	2.A.3		187
	2305	Loxahatchee Impoundment Landscape Assessment (LILA)	USFWS	2002	2012	6,050,000	3,369,000	TBD	2.A.3		188
OTHER NATURAL HABITAT AND SPECIES PROJECTS											
	2400	Big Cypress National Preserve Mineral Rights	NPS	2000	TBD	TBD	0				189
	2401	C&SF: CERP- Flow to Northwest and Central WCA -3A (II)(RR) (CERP Project # WBS 11)	USACE/ SFWMD	2002	2018	30,877,000	66,000				190
	1307	Modified Water Deliveries to Everglades National Park	NPS	1990	2008	*Footnote 1*	*Footnote 1*		1.A.3		48
	2402	South Florida Multi-Species Recovery Plan	USFWS	1994	2010	386,991,000	109,843,000				191
	2403	WCA-2A Regulation Schedule Review	USACE	TBD	TBD	TBD	0				193
	2404	C&SF: Manatee Pass Gates	USACE/ SFWMD	2001	2007	14,000,000	6,720,000				194
SUB-GOAL 2.B. CONTROL INVASIVE PLANT AND ANIMAL SPECIES											
2.B.1		**INVASIVE EXOTIC PLANT SPECIES MANAGEMENT PLAN DEVELOPMENT**						**Completed Plans**			
	2500	Coordinate the development of management plans for top 20 south Florida exotic pest plants	NEWTT	2001	2011	600,000	0	20	2.B.1		195
2.B.2		**EXOTIC PLANT SPECIES MAINTENANCE CONTROL PROJECTS**									

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	2600	Achieve "Maintenance Control" status for Brazilian Pepper, Melaleuca, Australian pine and Old world climbing fern in all natural areas statewide by 2020	SFWMD	2002	2020	139,078,000	70,400,000	4	2.B.2		196
	2601	Integration of Federal, State, and Local Agency Invasive Exotic Control Programs into Florida-wide Strategy	FDEP	2000	2005	*Footnote 2*	415,090,000		2.B.2		197
	2602	C&SF:CERP- Melaleuca Eradication Project and other Exotic Plants (CERP Project # WBS 95)	USACE	2003	2013	5,772,000	145,000		2.B.2		198
	2603	Estero Bay Aquatic Preserve and Buffer Reserve Enhancement and Exotic Removal Project	FDEP	1998	2004	*Footnote 1*	1,100,000		2.B.2		199
	2604	Everglades National Park Exotic Control Program	NPS	2002	TBD	2,150,000	2,150,000		2.B.2		200
	2605	Exotic Species Removal	Seminole	1998	2010	988,000	280,000		2.B.2		201
	2606	Hole-in-the-Donut	NPS	1994	2017	123,750,000	41,529,000		2.B.2	2.A.3	202
	2607	Melaleuca Control (Critical) Big Cypress National Preserve	NPS	1998	TBD	4,000,000	3,200,000		2.B.2		203
	2608	Aquatic and Upland Invasive Plant Management	FDEP	TBD	TBD	*Footnote 2*	73,276,500		2.B.2		204
2.B.3.		**INVASIVE EXOTIC PLANT SPECIES PREVENTION PLAN DEVELOPMENT**									
	2700	Complete an Invasive Exotics Plant Prevention, Early Detection and Eradication Plan by 2005	NEWTT/ DEP/ NPS	2001	2003	5,000,000	0		2.B.3		205
	2701	Melaleuca Quarantine Facility	USDA/ ARS	1997	2004	6,200,000	6,200,000		2.B.3		206
		TOTAL FOR GOAL 2				**3,495,047,772**	**2,860,298,772**				
GOAL 3. FOSTER COMPATIBILITY OF THE BUILT AND NATURAL SYSTEM											
SUB-GOAL 3.A. USE AND MANAGE LAND COMPATIBLE WITH RESTORATION											
3.A.1		**DESIGNATE OR AQUIRE LAND FOR FLORIDA GREENWAYS AND TRAILS SYSTEM**						**Acres**			
	3100	Florida Greenways and Trails Designation Project	FDEP/ OGT	2000	2009	4,500,000	TBD	480,000	3.A.1		209

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	3102	Lake Okeechobee Scenic Trail	FDEP	2003	TBD	25,000,000	12,500,000		3.A.1		210
3.A.2		**AGRICULTURE LANDS CONSERVATION MANAGEMENT PROJECTS**						**Acres**			
	3201	Technical Assistance to Seminole and Miccosukee Indian Reservations	NRCS	1998	2011	7,928,526	960,000	107,000	3.A.2		211
	3203	2002 Farm Bill	NRCS	2002	2007	*Footnote 2*	51,700,000	*see project sheet*	3.A.2		212
3.A.3		**FLORIDA PARK, RECREATION AND OPEN SPACE LANDS PROJECTS**						**Acres**			
	3301	Florida Keys Overseas Heritage Trail	FDEP	TBD	TBD	40,000,000	14,555,841	TBD			213
3.A.4		**BROWNFIELDS REHABILITATION AND REDEVELOPMENT PROJECTS**									
	3400	Eastward Ho! Brownfields Partnership	SFRPC	1998	2010	*Footnote 2*	63,982,000		3.A.4		217
3.A.5		**INCREASE COMMUNITY UNDERSTANDING OF RESTORATION PROJECTS**									
	3500	USDA-NRCS/South Florida Ecosystem Restoration Council & Committee Earth Team Project	USDA	2004	TBD	1,550,000	0		3.A.5		218
	3501	South Florida Ecosystem Restoration Non Point Source Pollution and Disease Prevention Project	USDA	2004	TBD	15,000,000	0		3.A.5		219
SUB-GOAL 3.B FLOOD PROTECTION COMPATIBLE WITH ECOSYSTEM RESTORATION											
3.B.1		**FLOOD PROTECTION COMPATIBLE WITH ECOSYSTEM RESTORATION PROJECTS**						**Flood Protection**			
	3600	C-4 Flood Mitigation Projects	SFWMD	2001	2004	44,500,000	44,500,000		3.B.1		220
	1300	Canal 111	USACE/ SFWMD	1994	2008	*Footnote 1*	*Footnote 1*		1.A.3	3.B.1	41
SUB-GOAL 3.C PROVIDE SUFFICIENT WATER RESOURCES FOR BUILT AND NATURAL SYSTEMS											
3.C.1		**WATER RESOURCE DEVELOPMENT PROJECTS**						**MGD**			
	3700	Kissimmee Basin Water Supply Plan	SFWMD	2003	2008	477,000	152,000	71.2	3.C.1		222
	3701	Lower East Coast Water Supply Plan	SFWMD	2000	2008	12,480,000	2,128,000	154.7	3.C.1		223

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE

Goals Column 1	Strategic Plan Project Number Column 2	Project Name Column 3	Lead Agency Column 4	Start Column 5	End Column 6	Cost Estimate Column 7	Appropriated to Date 2004 Column 8	Measurable Outputs Column 9	Primary Objective Column 10	Secondary Objectives Column 11	PG# Col 12
	3702	Lower West Coast Water Supply Plan	SFWMD	2004	2008	6,235,000	740,000	189.6	3.C.1		224
	3703	Upper East Coast Water Supply Plan	SFWMD	2004	2008	634,000	134,000	63	3.C.1		225
3.C.2		**INCREASE VOLUME OF WATER RESOURCE PROJECTS**						**MGD**			
	3800	C&SF:CERP-South Miami-Dade County Reuse (CERP Project # WBS 98)	USACE/ M-DADE	2013	2023	363,024,000	0	131	3.C.2		226
	3801	C&SF:CERP-West Miami-Dade County Reuse (CERP Project # WBS 97)	USACE/ M-DADE	2013	2023	437,237,000	0	100	3.C.2		227
	3802	C&SF:CERP Wastewater Reuse Technology Pilot Project (CERP Project # WBS 37)	USACE/ SFWMD	2001	2013	30,000,000	2,248,000		3.C.2	2.A.3	228
	3803	Lower West Coast Regional Irrigation Distribution System Master Plan Study	SFWMD	2004	2008	*Included in Project #3702*	200,000		3.C.2		229
	3804	Northern Palm Beach County and Southern Martin County Reclaimed Water Master Plan	SFWMD	2002	TBD	*Included in Project #3701*	140,000		3.C.2		230
	3805	Orlando/Kissimmee Area Regional Reclaimed Water Optimization Plan	SFWMD	2002	2004	*Included in Project #3700*	80,000		3.C.2		231
	2301	C&SF: CERP Winsburg Farms Wetland Restoration (CERP Project # WBS 91)	Palm Beach County	1999	2003	*Footnote 1*	*Footnote 1*		2.A.3	3.C.2	184
3.C.3		**ALTERNATIVE WATER SUPPLY PROJECTS**						**MGD**			
	3900	Alternative Water Supply Grant	SFWMD	1996	TBD	*Footnote 1*	45,056,000	200	3.C.3		232
OTHER BUILT AND NATURAL SYSTEM COMPATIBILITY PROJECTS											
	4100	Critical Project Keys Carrying Capacity Study	FDCA/ USACE	1997	2003	6,000,000	6,000,000				233
	4101	BMPs for Agriculture	NRCS	1997	2011	77,584,000	30,053,000				234

2004 INTEGRATED FINANCIAL PLAN SUMMARY TABLE											
Goals Column 1	**Strategic Plan Project Number** Column 2	**Project Name** Column 3	**Lead Agency** Column 4	**Start** Column 5	**End** Column 6	**Cost Estimate** Column 7	**Appropriated to Date 2004** Column 8	**Measurable Outputs** Column 9	**Primary Objective** Column 10	**Secondary Objectives** Column 11	**PG#** Col 12
	4102	Monitoring of Organic Soils in the Everglades	NRCS	1998	2017	1,236,000	36,000				235
	4103	Soil Survey Update for the Everglades Agricultural Area	NRCS	2004	2008	1,500,000	0				236
	4104	Soil Survey Update for the Everglades National Park, Big Cypress National Preserve and Water Conservation Areas	NRCS	2005	2010	5,600,000	0				237
		TOTAL FOR GOAL 3				**1,277,223,526**	**297,664,841**				

Project specific footnotes:

The following information is project specific and is provided in reference to it's appearance as a numbered notation on the project summary table:

[1]This is a multiple objective project, funding is listed in other objective.

[2]Available funding through project completion is not provided on the project sheet, due to the uncertainty of the annual Federal and State appropriations process. For the purposes of calculating Goal subtotals for all projects, only the dollars appropriated to date have been used for this project.

[3]The $191 million cost for the Modified Water Deliveries project reflects the currently approved National Park Service Capital Asset Plan for the project. The funding necessary to complete this project is under evaluation by USDOI and USACE.

[4]Consistent with authorizing Big Cypress legislation.

[5]The cost information for this project reflects the adjusted total cost information provided on the project sheet.

Project change notations from the 2002 edition:

The following projects from the 2002 Edition have been deleted or merged in the 2004 update of the Project Summary Table and IFP:

Project ID 1504: Western C-11 Diversion Impoundment & WCA3A&B Levee Seepage Management was combined with 1501: C-9 STA and Impoundment. The new project name is 1501: Broward County WPA- C-9 STA/Impoundment and Western C-11 Diversion Impoundment and Canal and Water Conservation Areas 3A and 3B Levee Seepage Management.
Project ID 1407: Lake Istokpoga Regulation Schedule was merged into the Lake Okeechobee Watershed project 1104.
Project ID 1429: Northern L-8 Basin Improvements was deleted.
Project ID 1718: South Florida Water Quality Protection Program and CERP Numeric Targets and Loading Analyses was deleted as the grant no longer exists.
Project ID 1402: The WPA Feasibility Study was deleted.
Project ID 1427: Herbert Hoover Dike was deleted.
Project ID 3200: Agricultural Land Stewardship was deleted
Project ID 4000: Mobile Irrigation Lab was deleted.

STRATEGIC GOALS AND OBJECTIVES OF THE SOUTH FLORIDA ECOSYSTEM RESTORATION TASK FORCE

GOAL 1: GET THE WATER RIGHT

Subgoal 1-A: Get the hydrology right

Objective 1-A.1: Provide 1.3 million acre-feet of surface water storage by 2036
Objective 1-A.2: Develop aquifer storage and recovery (ASR) systems capable of storing 1.6 billion gallons per day by 2028
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 69,000 acres of stormwater treatment areas by 2035
Objective 1-B.2: Prepare plans, with strategies and schedules for implementation, to comply with total maximum daily loads for 100 percent of impaired water bodies by 2011

GOAL 2: RESTORE, PRESERVE, AND PROTECT NATURAL HABITATS & SPECIES

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

Objective 2-A.1: Complete acquisition of 5.8 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 2011
Objective 2-B.2: Achieve maintenance control of Brazilian pepper, melaleuca, Australian pine, and Old World Climbing Fern on South Florida's public conservation lands by 2020
Objective 2-B.3: Complete an invasive exotic plant species 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 compatible with ecosystem restoration

Objective 3-A.1: Designate or acquire 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 Programs 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 improve 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 built and natural systems

Objective 3-C-1: Increase the water available by target of 478.5 million gallons per day by 2008
Objective 3-C.2: Increase volumes of reuse on a regional basis
Objective 3-C.3: Increase water made available through the SFWMD Alternative Water Supply Development Program

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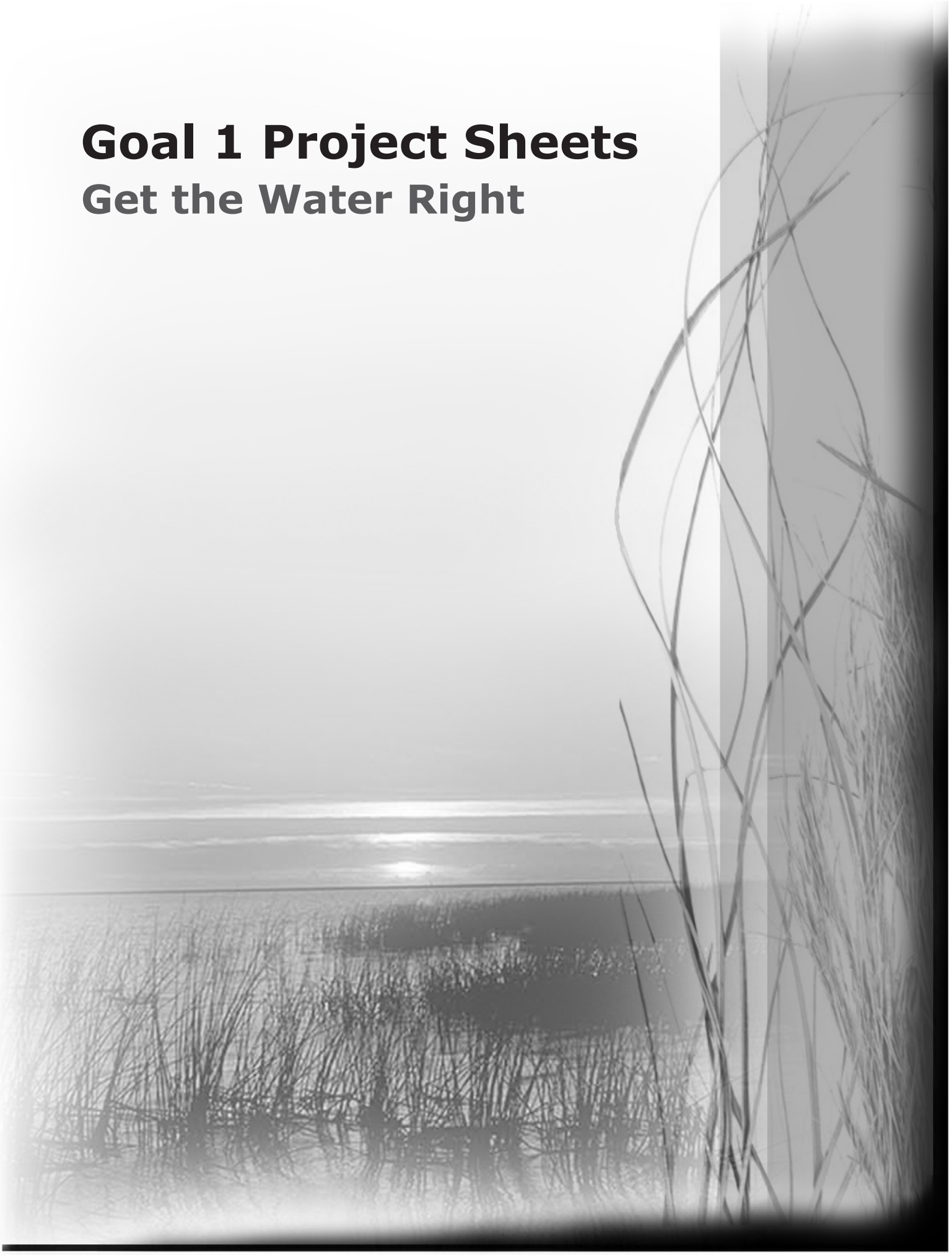
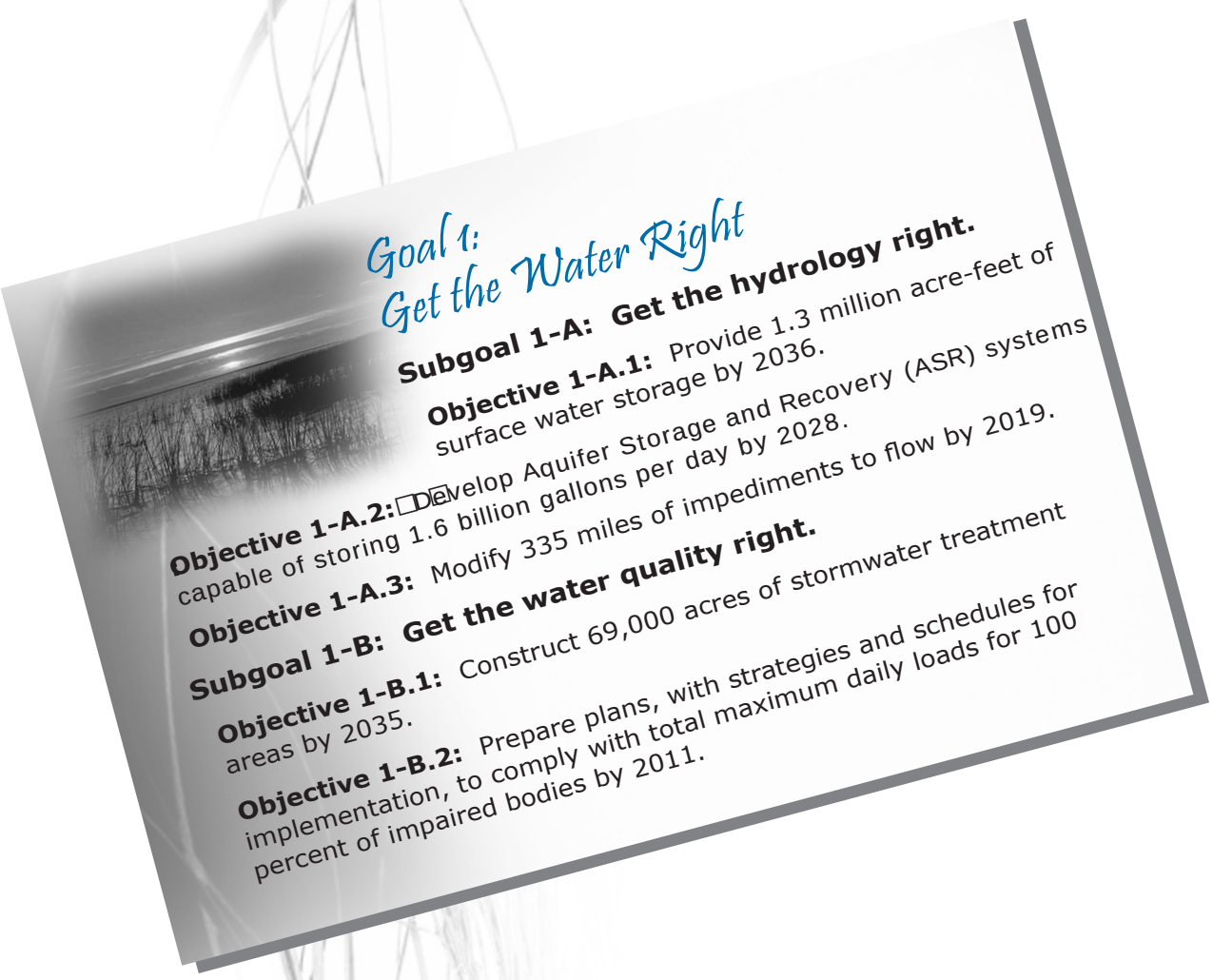
Goal 1 Project Sheets

Get the Water Right





Goal 1: Get the Water Right

Subgoal 1-A: Get the hydrology right.

Objective 1-A.1: Provide 1.3 million acre-feet of surface water storage by 2036.

Objective 1-A.2: Develop Aquifer Storage and Recovery (ASR) systems capable of storing 1.6 billion gallons per day by 2028.

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 69,000 acres of stormwater treatment areas by 2035.

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

Program Name: Infrastructure
Project Name: C&SF: CERP – Acme Basin B Discharge (OPE)
Project ID: 1100 (CERP Project # WBS 38)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: 1.A.1

Measurable Output(s): 3,800 ac-ft storage capacity and STA

Project Synopsis: This feature includes the construction of a wetland or chemical treatment area and a storage reservoir with a combined total storage capacity of 3,800 ac-ft located adjacent to the Loxahatchee National Wildlife Refuge in Palm Beach County. The initial design for the treatment area and reservoir assumed 310 acres with the water level fluctuating up to 4 feet above grade, and 620 acres with water levels fluctuating up to 8 feet above grade. The final size, depth, and configuration of these facilities will be determined through more detailed planning and design. The purpose of this feature is to provide water quality treatment and stormwater attenuation for runoff from Acme Basin "B" prior to discharge to the Loxahatchee National Wildlife Refuge or alternative locations. Excess available water may be used to meet water supply demands in central and southern Palm Beach County.

Cost:

Total	$20,100,000
Project Development	$797,000
Land Acquisition (estimated 930 acres)	$8,500,000
Implementation	$10,803,000
Operations and maintenance	$594,000

Project Schedule:
Start Date: 2002
Finish Date: 2009

	2002	2003	2004	2005	2006	2007	2008	2009
PIR/Plans and Specs								
Real Estate								
Construction								

Detailed Project Budget Information ($1000)

	Thur2003	2004	2005	2006	2007	2008	2009	Total
USACE	463	500	500	500	2,695	2,696	2,696	$10,050
SFWMD	194	500	500	500	2,785	2,786	2,785	$10,050
Total	657	1,000	1,000	1,000	5,480	5,482	5,481	$20,100

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_38_acme.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP – Indian River Lagoon South - C-23/C-24/C-25/Northfork and Southfork Storage Reservoirs (UU) and C-44 Basin Storage Reservoir (B)
Project ID: 1101 (CERP Project # WBS 07)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: 1.A.1

Measurable Output(s): Reservoir storage, natural storage, structures, improved hydrology, water quality treatment, muck removal, habitat restoration, water supply

Project Synopsis: The C-23/C-24/C-25 North Fork and South Fork Storage Reservoirs and the C-44 Basin Storage Reservoir are components of the Indian River Lagoon – South project. Overall, the project, as detailed in the Project Implementation Report, includes building and operating approximately 12,000 acres of new inland reservoirs, approximately 9,000 acres of new stormwater treatment areas, restoring hydrology on about 90,000 acres of lands in the watershed, and improving freshwater flows to 3,100 acres of floodplain wetlands in the North Fork of the St. Lucie River. The plan also includes building pumps, levees, canals, and other structures to operate and interconnect project features and provide a mechanism for re-directing freshwater discharges to the North Fork of the St. Lucie River; and muck removal and habitat restoration actions within the estuaries. These features would significantly reduce harmful discharges into the receiving waters, provide water quality treatment, provide water storage in the natural system, and provide an additional source of agricultural water supply, while maintaining current Central and Southern Florida Project purposes.

Cost:

Total	$1,210,608,000
Project Development	$52,098,000
Land Acquisition (estimated 117,200 acres)	$698,936,190
Implementation	$459,573,810
Operations and maintenance	$5,592,727

Project Schedule:
Start Date: 2002
Finish Date: 2033

C-44 Basin	2004	2005	2006	2007	2008	2009	2010	2011
Planning & Design								
Real Estate								
Construction								

C23 & C24	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Planning & Design										
Real Estate										
Construction										

Project 1101 - Page 1 of 2

C25, North & South	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Planning & Design										
Real Estate										
Construction										

Detailed Project Budget Information ($1000)

	Thru 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009-2033 Balance to Complete**	**Total**
USACE	1,147	2,000	8,000	8,000	10,000	15,000	561,157	605,304
SFWMD	823	90,000	70,000	50,000	50,000	50,000	294,481	605,304
Total	**1,970**	**92,000**	**78,000**	**58,000**	**60,000**	**65,000**	**855,638**	**1,210,608**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_07_irl_south.cfm
Contact: USACE

Project 1101 - Page 2 of 2

ProgramName: Infrastructure
Project Name: C&SF: CERP - Everglades Agricultural Area Storage Reservoirs Phase I (G P1)
Project ID: 1102 (CERP Project # WBS 08)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 1.A-1

Measurable Output(s): 240,000 ac-ft surface storage

Project Synopsis: This project is the first part of the Everglades Agricultural Area (EAA) Storage Reservoirs component. It includes two aboveground reservoirs with a total storage capacity of approximately 240,000 acre-feet located on land associated with the Talisman Land acquisition in the EAA. Conveyance capacity increases for the Miami, North New River, Bolles, and Cross Canals are also included in the design of the project. The initial design for the reservoir(s) assumed 40,000 acres, divided into two equally sized compartments with water levels fluctuating up to six feet above grade in each compartment. However, actual design and construction of this first phase may result in multiple reservoirs by maximizing the use of the land acquired through the Farm Bill land acquisition agreements, which encompass up to 50,000 acres. This project will improve timing of environmental deliveries to the Water Conservation Areas (WCAs) by reducing damaging flood releases from the EAA to the WCAs, reducing Lake Okeechobee regulatory releases to estuaries, meeting supplemental agricultural irrigation demands, and increasing flood protection within the EAA.

Cost:

Total	$233,408,000
Project Development	$16,035,000
Land Acquisition	$0
Implementation	$217,373,000
Operations and maintenance	$7,229,205

Project Schedule:
Start Date: 2001
Finish Date: 2009

	2002	2003	2004	2005	2006	2007	2008	2009
PIR/ Plans & Specs								
Real Estate								
Construction								

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008	2009	Total
USACE	2,731	1,900	25,870	20,725	20,725	20,725	24,028	$116,704
SFWMD	1,911	6,023	25,870	20,725	20,725	20,725	20,725	$116,704
Total	**4,642**	**7,923**	**51,740**	**41,450**	**41,450**	**41,450**	**44,753**	**$233,408**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_08_eaa_phase_1.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Everglades Agricultural Area Storage Reservoirs Phase II (G P2)
Project ID: 1103 (CERP Project # WBS 09)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: 1.A.1

Measurable Output(s): 120,000 ac-ft surface storage

Project Synopsis: This project is the second part of the Everglades Agricultural Area (EAA) Storage Reservoirs component. It includes an aboveground reservoir with a total storage capacity of approximately 120,000 acre-feet located in the EAA in western Palm Beach County. The initial design for the reservoir assumed 20,000 acres, which would make up the third compartment of the storage of the Everglades Agricultural reservoir, with water levels fluctuating up to six feet above grade. The need for this compartment will be determined through more detailed planning and design after Phase 1 is completed. The purpose of the project is to further improve the timing of environmental deliveries to the Water Conservation Areas (WCAs), including reducing damaging flood released from the EAA to the WCA, and reducing Lake Okeechobee regulatory releases to the estuaries.

Cost:

Total	$203,240,000
Project Development	$8,018,000
Land Acquisition (estimated 17,500 acres)	$86,536,000
Implementation	$108,686,000
Operations and maintenance	$7,229,205

Project Schedule:
Start Date: 2006
Finish Date: 2014

	2006	2007	2008	2009	2010	2011	2012	2013	2014
PIR/ Plans & Specs									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Thru 2003*	2006	2007	2008	2009	2010	2011-2014 Balance to complete	Total
USACE	178	573	572	573	11,390	11,389	76,945	$101,620
SFWMD	178	572	573	572	11,389	11,390	76,946	$101,620
Total	**356**	**1,145**	**1,145**	**1,145**	**22,779**	**22,779**	**153,891**	**$203,240**

*programmatic costs

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_09_eaa_phase_2.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: Lake Okeechobee Watershed (A, W, OPE)
Project ID: 1104 (CERP Project # WBS 01)
Lead Agency: USACE / SFWMD
Authority: WRDA 1996, WRDA 2000, WRDA 2004 (scheduled)

Strategic Plan Goal(s) Addressed: **Primary:** 1.A.1, Other **Secondary**: 1.B.1 2.A.3

Measurable Output(s): 17,500 acres of reservoir and 2,500 acres of STA (200,000 ac-ft/storage)
5,000 acres of reservoir and 5,000 acres of STA (50,000/20,000 ac-ft)
4,375 acres reservoir-assisted STA
Restoration of 3,500 acres of wetlands
Removal of 150 tons of phosphorous from 10 miles of primary canals
Balance fish and wildlife benefits with long-term management

Project Synopsis: The Lake Okeechobee Watershed project consists of four separable components: North of Lake Okeechobee Storage Reservoir; Taylor Creek/Nubbin Slough Storage and Treatment Area; Lake Okeechobee Watershed Water Quality Treatment Facilities; and Lake Okeechobee Tributary Sediment Dredging. These components were combined for an opportunity to generate a more efficient design of the components and address the interdependencies and tradeoffs between the components. In August 2003, the Lake Istokpoga Regulation Schedule was added to the project.

a) **North of Lake Okeechobee Storage Reservoir -** This feature includes an aboveground reservoir and a 2,500-acre stormwater treatment area. The total storage capacity of the reservoir is approximately 200,000 acre-feet and is located in the Kissimmee River Region, north of Lake Okeechobee. The specific location of this facility has not been identified, however, it is anticipated that the facility will be located in Glades, Highlands, or Okeechobee Counties. The initial design of this feature assumed a 20,000-acre facility (17,500-acre reservoir and 2,500-acre treatment area) with water levels in the reservoir fluctuating up to 11.5 feet above grade. The final size, depth and configuration of this facility will be determined through more detailed planning, land suitability analyses, and design. Future detailed planning and design activities will also include an evaluation of degraded water bodies within the watersheds of the storage/treatment facility to determine appropriate pollution load reduction targets, and other water quality restoration targets for the watershed.

b) **Taylor Creek/Nubbin Slough Storage and Treatment Area** - This feature includes an aboveground reservoir with a total storage capacity of approximately 50,000 acre-feet and a stormwater treatment area with a capacity of approximately 20,000 acre-feet in the Taylor Creek/Nubbin Slough Basin. The initial design of this feature assumed a reservoir of 5,000 acres with water levels fluctuating up to 10 feet above grade and a stormwater treatment facility of approximately 5,000 acres. The final size, depth and configuration of this feature will be determined through more detailed planning, land suitability analysis and design.

c) **Lake Okeechobee Watershed Water Quality Treatment Facilities** - This feature includes two reservoir-assisted stormwater treatment areas and plugging of select local drainage ditches. The initial design of these reservoir-assisted stormwater treatment areas assumes a 1,775-acre facility in the S-154 Basin in Okeechobee County and a 2,600-acre facility in the S-65D sub-basin of the Kissimmee River Basin in Highlands and Okeechobee Counties. The plugged drainage ditches will result in restoration of approximately 3,500 acres of wetlands throughout the Lake Okeechobee watershed basin. This feature is also consistent with the recommendations of the South Florida Ecosystem Restoration Working Group's Lake Okeechobee Issue Team for achieving water quality restoration objectives in the Lake and should provide significant long-term water quality benefits for the Lake.

d) **Lake Okeechobee Tributary Sediment Dredging -** This feature includes the dredging of sediments from 10 miles of primary canals within an 8-basin area in the northern watershed of Lake Okeechobee. The initial design assumes that the dredged material will contain approximately 150 tons of phosphorus.

e) **Lake Istokpoga Regulation Schedule -** This feature includes development of a plan to address water resource problems in the Lake Istokpoga Basin. Lake Istokpoga is a natural lake located in Highlands County, a tributary of Lake Okeechobee and the Kissimmee River. The major focus of this plan is to create a balance between the environmental needs, water supply and flood control in the Lake Istokpoga drainage basin, to examine Lake

Istokpoga Basin with a view towards enhancing fish and wildlife benefits, and to develop a long-term comprehensive management plan.

Cost:

Total:	$455,878,000
Project Development:	$ 15,236,000
Land Acquisition (38,195 acres)	$224,395,000
Implementation:	$216,247,000
Operations and maintenance:	$ 6,281,245

Project Schedule:

Start Date: 2001
Finish Date: 2013

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
PIR /Plans & Specs													
Real Estate													
Construction													

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	Balance to complete 2008-2013	Total
USACE	3,044	3,000	3,000	22,475	22,475	173,945	227,939
SFWMD	2,070	3,000	3,000	22,475	22,475	174,919	227,939
Total	**5,114**	**6,000**	**6,000**	**44,950**	**44,950**	**348,864**	**$455,878**

Note: The Corps is not currently tracking this project by components.

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_01_lake_o_watershed.cfm
Contact: USACE

Project 1104 page 2 of 2

Program Name: Infrastructure
Project Name: C&SF: CERP - North Lake Belt Storage Area (Phase I & II) (XX)
Project ID: 1105 (CERP Project # WBS 25)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 1.A.1

Measurable Output(s): 90,000 ac-ft. reservoir

Project Synopsis: This feature includes canals, pumps, water control structures, and an in-ground storage reservoir with a total capacity of approximately 90,000 acre-feet located in Miami-Dade County. The initial design of the reservoir assumed 4,500 acres with the water level fluctuating from ground level to 20 feet below grade. A subterranean seepage barrier will be constructed around the perimeter to enable draw down during dry periods, to prevent seepage losses, and to prevent water quality impact due to the high transmissivity of the Biscayne Aquifer in the area. The reservoir will be located within an area proposed for rock mining. A pilot test of this component will be conducted prior to final design to determine construction technologies, storage efficiencies, impacts upon local hydrology, and water quality effects. The water quality assessment will include a determination as to whether the in-ground reservoir with perimeter seepage barrier will allow storage of untreated runoff without concerns of groundwater contamination.

Cost:	**Total**	**Phase I**	**Phase II**
Total	$500,346,000	$250,173,000	$250,173,000
Project Development	$ 10,474,000	$ 5,237,000	$ 5,237,000
Land Acquisition*	$154,868,000	$ 77,434,000	$ 77,434,000
Implementation	$335,004,000	$167,502,000	$167,502,000
Operations & Maintenance	$ 1,241,234		

*(Land acquisition estimated at 5,861 acres)

Project Schedule:
Start Date: 2017
Finish Date: 2036

Phase I	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning & Design													
Real Estate													
Construction													

Phase II	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Planning & Design												
Real Estate												
Construction												

Detailed Project Budget Information ($1000)

	Thru 2003*	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023-2036 Balance to complete**	**Total**
USACE	451	327	327	327	13,233	13,232	13,233	209,043	$250,173
SFWMD	451	327	327	327	13,232	13,233	13,232	209,044	$250,173
Total	**902**	**654**	**654**	**654**	**26,465**	**26,465**	**26,465**	**418,087**	**$500,346**

*programmatic costs

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_25_north_lake_belt.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Palm Beach Co. Agricultural Reserve Reservoir & ASR (VV)
Project ID: 1106 (CERP Project # WBS 20 and 21)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 1.A-1 **Secondary:**1.A-2

Measurable Output(s): 20,000 ac-ft. reservoir
0.075 bgd of ASR wells

Project Synopsis: This feature includes an aboveground reservoir with a total storage capacity of approximately 20,000 acre-feet located in the western portion of the Palm Beach County Agricultural Reserve. Aquifer storage and recovery wells with a capacity of 75 million gallons per day and associated pre- and post- water quality treatment facilities located adjacent to the reservoir will also be a part of this feature. The initial design for the reservoir assumed 1,660 acres with water levels fluctuating up to 12 feet above grade. The final size, depth and configuration of these facilities will be determined through more detailed planning and design. The initial design of the wells assumed 15 well clusters, each with a capacity of 5 million gallons per day as well as chlorination for pre-treatment and aeration for post-treatment. The source of water to be injected is surficial ground water adjacent to the reservoir. The level and extent of treatment and number of the aquifer storage and recovery wells may be modified based on findings from a proposed aquifer storage and recovery.

Cost:

Total	$121,359,000
Project Development	$1,825,000
Land Acquisition (estimated 1,660 acres)	$57,657,000
Implementation	$61,877,000
Operations and maintenance	$1,019,500

Project Schedule:
Start Date: 2006
Finish Date: 2020

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
PIR/Plans & Specs															
Real Estate															
Construction															

Detailed Project Budget Information ($1000)

	Thru 2003*	2006	2007	2008	2009	2010	2011	2012	2013-2020 Balance to complete	Total
USACE	108	83	83	83	5,849	5,848	5,849	5,848	36,928	$60,679
SFWMD	108	83	83	83	5,848	5,849	5,848	5,849	36,929	$60,680
Total	**216**	**166**	**166**	**166**	**11,697**	**11,697**	**11,697**	**11,697**	**73,857**	**$121,359**

*programmatic costs

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_20_pbc_asr_1.cfm
Hyperlink: http://www.evergladesplan.org/pm/projects/proj_21_pbc_asr_2.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Site 1 Impoundment and Aquifer Storage and Recovery (M)
Project ID: 1107 (CERP Project # WBS 22 and 40)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 1.A.1 **Secondary:** 1.A.2

Measurable Output(s): 15,000 ac-ft. reservoir; 150 mgd of ASR wells

Project Synopsis: This feature includes an aboveground reservoir with a total storage capacity of approximately 15,000 acre-feet located in the Hillsboro Canal Basin in southern Palm Beach County. A series of aquifer storage and recovery wells with a total capacity of approximately 150 million gallons per day and associated pre- and post-water quality treatment will also be a part of this feature located adjacent to the reservoir or along the Hillsboro Canal. The initial design of the reservoir assumed 2,460 acres with water levels fluctuating up to 6 feet above grade. The final size, depth and configuration of these facilities will be determined through more detailed planning and design as a part of the Project Implementation Report. The initial design of the aquifer storage and recovery facility assumed 30 well clusters, each with a capacity of 5 million gallons per day with chlorination for pre-treatment and aeration for post-treatment.

Cost:	Total	Phase I	Phase II
Total	$131,379,000	$38,535,000	$92,844,000
Project Development	$8,024,000	$1,027,000	$6,997,000
Land Acquisition (estimated 1,658 acres)	$8,385,000	$8,385,000	$0
Implementation	$99,803,000	$13,956,000	$85,847,000
RE Adjustment	$15,167,000	$15,167,000	
Operations and maintenance	$2,052,608		

Project Schedule:
Start Date: 2002
Finish Date: 2024

Phase I	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Planning & Design								
Real Estate								
Construction								

Phase II	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Planning & Design								
Real Estate **N/A**								
Construction								

Detailed Project Budget Information ($1000)

Phase I	**Thru 2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**Total**
USACE	286	700	5,000	3,320	3,321	3,320	3,321	$19,268
SFWMD	143	4,800	4,700	2,406	2,406	2,406	2,406	$19,267
Total	**429**	**5,500**	**9,700**	**5,726**	**5,727**	**5,726**	**5,727**	**$38,535**

Phase II	**Thru 2003***	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023-2024**	**Total**
USACE	81	583	583	583	583	583	11,314	32,112	$46,422
SFWMD	81	583	583	583	583	583	11,313	32,113	$46,422
Total	**162**	**1,166**	**1,166**	**1,166**	**1,166**	**1,166**	**22,627**	**64,225**	**$92,844**

*programmatic costs
Hyperlink: http://www.evergladesplan.org/pm/projects/proj_40_site_1_impoundment.cfm
Hyperlink: http://www.evergladesplan.org/pm/projects/proj_22_hillsboro_asr_2.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP – Bird Drive Recharge Area (U)
Project ID: 1108 (CERP Project # WBS 43)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 1.A.1

Measurable Output(s): 11,500 ac-ft. storage; pumps, water control structures, and canals

Project Synopsis: This feature includes pumps, water control structures, canals, and an aboveground recharge area with a total storage capacity of approximately 11,500 acre-feet located in Miami-Dade County. The initial design of the recharge feature assumed 2,877 acres with the water level fluctuating up to 4 feet above grade. Final design will seek to enhance and maintain the continued viability of wetlands within the basin. The size, depth and configuration of these facilities will be determined through more detailed planning and design to be completed as a part of the Project Implementation Report and will address appropriate pollution load reduction targets necessary to protect downstream receiving surface waters.

Cost:

Total	$124,083,000
Project Development	$3,603,000
Land Acquisition (estimated 3,996 acres)	$71,625,000
Implementation	$48,855,000
Operations and maintenance	$1,470,869

Project Schedule:
Start Date: 2010
Finish Date: 2018

	2010	2011	2012	2013	2014	2015	2016	2017	2018
PIR/Plans & Specs									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Thru 2003*	2010	2011	2012	2013	2014-2018 Balance to complete	Total
USACE	166	300	9,000	9,000	7,000	36,576	$62,042
SFWMD	42	300	9,000	9,000	7,000	36,699	$62,041
Total	**208**	**600**	**18,000**	**18,000**	**14,000**	**73,275**	**$124,083**

*programmatic costs

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_43_bird_drive.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - C-43 Basin Storage Reservoir and ASR (D)
Project ID: 1109 (CERP Project # WBS 04 and 05)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 1.A.1 **Secondary:** 1.A.2

Measurable Output(s): 160,000 ac-ft storage
0.220 bgd (44 ASR wells)

Project Synopsis: This feature includes aboveground reservoir(s) with a total storage capacity of approximately 160,000 acre-feet, aquifer storage and recovery wells with a capacity of approximately 0.220 billion gallons per day, and associated pre- and post-water quality treatment located in the C-43 Basin in Hendry, Glades, or Lee Counties. The initial design of the reservoir(s) assumed 20,000 acres with water levels fluctuating up to 8 feet above grade. The final size, depth and configuration of this facility will be determined through more detailed planning and design. The initial design of the wells assumed 44 wells, each with the capacity of 5 million gallons per day with chlorination for pre-treatment and aeration for post-treatment. The level and extent of treatment and number of the aquifer storage and recovery wells may be modified based on findings from an authorized aquifer storage and recovery pilot project.

Cost:

Total	$440,195,000
Project Development	$21,543,000
Land Acquisition (estimated 20,000 acres)	$132,621,000
Implementation	$286,031,000
Operations and maintenance	$6,707,889

Project Schedule:
Start Date: 2001
Finish Date: 2019

	2001-2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
PIR/Plans & Specs																
Real Estate																
Construction																

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008	2009-2019 Balance to complete	Total
USACE	2,054	1,000	2,000	2,000	20,000	15,000	178,043	$220,097
SFWMD	1,672	2,000	2,000	2,000	20,000	15,000	177,426	$220,098
Total	**3,726**	**3,000**	**4,000**	**4,000**	**40,000**	**30,000**	**355,469**	**$440,195**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_04_c43_basin_1.cfm
Hyperlink: http://www.evergladesplan.org/pm/projects/proj_05_c43_asr_2.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Central Lake Belt Storage Area (S)
Project ID: 1110(CERP Project # WBS 26)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 1.A.1 **Secondary**: 1.B.1

Measurable Output(s): 190,000 ac-ft. storage, 640 acres STA

Project Synopsis: This feature includes pumps, water control structures, a stormwater treatment area, and a combination aboveground and in-ground storage reservoir with a total storage capacity of approximately 190,000 acre-feet located in Miami-Dade County. The initial design of the reservoir assumed 5,200 acres with the water level fluctuating from 16 feet above grade to 20 feet below grade. A subterranean seepage barrier will be constructed around the perimeter to enable drawdown during dry periods and to prevent seepage losses. A pilot test of this technology will be conducted prior to final design of this component to determine construction technologies, storage efficiencies, impacts upon local hydrology, and water quality effects. Since this facility is to be located within the protection area of Miami-Dade County's northwest wellfield, the pilot test will also be designed to identify and address potential impacts to the County's wellfield which may occur during construction and/or operation. The stormwater treatment area was assumed to be 640 acres with the water level fluctuating up to 4 feet above grade.

Cost:	**Total**	**Phase I**	**Phase II**
Total	$466,725,000	$346,793,000	$119,932,000
Project Development	$10,872,000	$8,154,000	$2,718,000
Land Acquisition (estimated 5,770 acres)	$100,359,000	$75,269,000	$25,090,000
Implementation	$355,494,000	$263,370,000	$92,124,000
Operations and maintenance	$1,964,519		

Project Schedule:
Start Date: 2017
Finish Date: 2035

Phase I	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
PIR/Plans & Specs													
Real Estate													
Construction													

Phase II	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
PIR/Plans and Specs											
Real Estate											
Construction											

Detailed Project Budget Information ($1,000)

	Thru 2003*	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024-2035 Balance to complete**	**Total**
USACE	422	509	510	509	13,055	13,054	13,055	510	191,739	$233,363
SFWMD	422	510	509	510	13,054	13,055	13,054	509	191,739	$233,362
Total	**844**	**1,019**	**1,019**	**1,019**	**26,109**	**26,109**	**26,109**	**1,019**	**383,478**	**$466,725**

*programmatic costs
Hyperlink: http://www.evergladesplan.org/pm/projects/proj_26_central_lake_belt.cfm
Hyperlink: http://www.evergladesplan.org/pm/projects/proj_26_central_lake_belt.cfm
Contact: USACE

Program Name: Land Acquisition & Infrastructure
Project Name: Critical Projects – Ten Mile Creek
Project ID: 1111
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: Primary: 1.A.1 **Secondary:** 2.A.3

Measurable Output(s): Water preserve area and polishing cell, 2,740 acres enhanced by project, 5,000 acre feet of storage provided on 550 acres of land.

Project Synopsis: This project consists of the acquisition of approximately 1,559 acres of land in the eastern portion of the Ten Mile Creek Basin and the construction of an aboveground impoundment for stormwater detention purposes on this property. It also includes construction of a pump station and several control structures for circulation and discharge within the project. A constructed wetland or flow-through marsh has been added for additional water quality improvement purposes. The construction of a water preserve area and polishing cell will attenuate flows and improve water quality discharge into St. Lucie Estuary. Construction is underway.

Cost:

Total	$40,589,000
Project Development	$2,500,000
Land Acquisition (est. 913 acres)	$5,332,000
Implementation	$32,757,000

Project Schedule:
Start Date: 1997
Finish Date: 2005

	1997	1998	1999	2000	2001	2002	2003	2004	2005
Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	Total
USACE	3,244	9,879	7,172	$20,295
SFWMD	0	7,486	12,808	$20,294
Total	**3,244**	**17,365**	**19,980**	**$40,589**

Hyperlink: http://www.saj.usace.army.mil/projects/lprproj11.htm
Contact: USACE

Program Name Infrastructure
Project Name: C&SF: CERP – North Palm Beach County – Part 2 (LL, K Pt2)
Project ID: 1200(CERP Project # WBS 18)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 1.A.2

Measurable Output(s): 0.17 bgd

Project Synopsis: This feature includes a series of aquifer storage and recovery wells with a capacity of 0.17 billion gallons per day as well as associated pre- and post- water quality treatment to be constructed along the C-51 Canal in Palm Beach County. The initial design of the wells assumed 34 well clusters, each with a capacity of 5 million gallons per day with chlorination for pre-treatment and aeration for post-treatment. The level and extent of treatment and number of the aquifer storage and recovery wells may be modified based on findings from an ongoing aquifer storage and recovery pilot project.

Cost:

Total	$127,291,000
Project Development	$3,363,000
Land Acquisition (estimated 34 acres)	$9,945,000
Implementation	$113,983,000
Operations and maintenance	$1,496,000

Project Schedule:
Start Date: 2010
Finish Date: 2021

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
PIR/Plans and Specs												
Real Estate												
Construction												

Detailed Project Budget Information ($1000)

	Thru 2003*	2010	2011	2012	2013	2014	2015	2016	2017-2021 Balance to complete	Total
USACE	164	240	240	240	1,483	1,483	1,483	10,982	47,330	$63,645
SFWMD	164	240	240	240	1,483	1,483	1,483	10,982	47,331	$63,646
Total	**328**	**480**	**480**	**480**	**2,966**	**2,966**	**2,966**	**21,964**	**94,661**	**$127,291**

*programmatic costs

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_18_npbc_2.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Lake Okeechobee Aquifer Storage and Recovery (GG)
Project ID: 1201(CERP Project # WBS 03)
Lead Agency: USACE / SFWMD
Authority: Not authorized.

Strategic Plan Goal(s) Addressed: Primary: 1.A.2

Measurable Output(s): 1 bgd in 200 ASR wells

Project Synopsis: This feature includes a series of aquifer storage and recovery wells adjacent to Lake Okeechobee with a capacity of one billion gallons per day and associated pre- and post- water quality treatment in Glades and Okeechobee Counties. The initial design assumes 200 wells, each with the capacity of five million gallons per day with eight ultrafiltration water quality pre-treatment facilities and aeration for post-treatment. Based on information for existing aquifer storage and recovery facilities, it is assumed that recovery of aquifer-stored water would have no adverse effects on water quality conditions in Lake Okeechobee. In fact, some level of nutrient load reduction may occur as a result of aquifer storage, which would be a long-term benefit to in-lake water quality conditions. The level and extent of treatment and number of the aquifer storage and recovery wells may be modified based on findings from an ongoing aquifer storage and recovery pilot project. The pilot project is also investigating changes to water chemistry resulting from aquifer storage and identify post-retrieval water quality treatment requirements, if any, necessary to implement aquifer storage and recovery facilities. The Implementation Plan (Section 10) includes pilot studies to investigate the proposed facilities, including water quality changes associated with aquifer storage and recovery.

Cost:

Total	$1,097,312,000
Project Development	$76,174,000
Land Acquisition (estimated 300 acres)	$7,515,000
Implementation	$1,013,623,000
Operations and maintenance	N/A

Project Schedule:
Start Date: 2013
Finish Date: 2028

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PIR/Plans & Specs																
Real Estate																
Construction																

Detailed Project Budget Information ($1000)

	Thru 2003*	2013	2014	2015	2016	2017	2018	2019	2020-2028 Balance to Complete	Total
USACE	959	2,539	2,539	2,539	2,539	2,880	2,881	2,880	528,900	$548,656
SFWMD	959	2,539	2,539	2,539	2,539	2,881	2,880	2,881	528,899	$548,656
Total	**1,918**	**5,078**	**5,078**	**5,078**	**5,078**	**5,761**	**5,761**	**5,761**	**1,057,799**	**$1,097,312**

* programmatic costs
Hyperlink: http://www.evergladesplan.org/pm/projects/proj_03_lake_o_asr.cfm
Hyperlink: http://www.evergladesplan.org/pm/projects/proj_03_lake_o_asr.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: Canal C-111
Project ID: 1300
Lead Agency: USACE / SFWMD
Authority: FCA 1962 and WRDA 1996

Strategic Plan Goal(s) Addressed: 1.A.3

Measurable Output(s): Canals, levees, 5 pump stations, and replacement of an existing bridge

Project Synopsis: The goal of the C-111 project modifications is restoration of the Taylor Slough and eastern panhandle of Everglades National Park (ENP), while maintaining flood protection within the C-111 basin east of L-31N and C-111. The project plan consists of both structural and nonstructural modifications to the existing project works within the C-111 basin. Structural components of the plan include: construction or modification of nine canals, construction of an L-31 tieback levee and S-332D tieback levee, removal of existing spoil material along the south side lower C-111, construction of five pump stations, and replacement of an existing bridge over Taylor Slough in ENP. The project requires the acquisition of lands in the Frog Pond; the Rocky Glades Agricultural Area (L-31N lands); and additional lands in the Southern Glades. These modifications will widen the areal extent of water distribution capability, thereby restoring more natural hydrology in 128 square miles of the Taylor Slough and its headwaters in the Rocky Glades.

The goal of this project is to restore more natural timing, distribution, and quantity of freshwater flows to Taylor Slough and the wetlands in the panhandle of ENP. Restoring the natural hydroperiods will help restore and maintain natural vegetation communities in these regions of ENP. The detention/retention area will also contribute to improving the water quality of waters delivered to ENP.

Cost:

Total	$274,670,000
Project Development	$48,098,000
Land Acquisition (est. 24,988 acres)	$92,271,000
Implementation	$134,301,000

Project Schedule:
Start Date: 1994
Finish Date: 2008

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Planning & Design											
Real Estate											
Construction											

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008	Total
USACE	73,166	53,837	2,583	2,583	2,583	2,583	$137,335
SFWMD	52,115	32,052	12,512	12,512	12,512	15,632	$137,335
Total	**125,281**	**85,889**	**15,095**	**15,095**	**15,095**	**18,215**	**$274,670**

Hyperlink: http://www.saj.usace.army.mil/
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF:CERP – WCA 3 Decompartmentalization and Sheetflow Enhancement (AA)(QQ)(SS)
Project ID: 1301 (Phase I and II) (CERP Project # WBS 12and 13)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000, future WRDA

Strategic Plan Goal(s) Addressed: Primary: 1.A.3 **Secondary**: 2.A.3

Measurable Output(s): 240 miles modification or removal of levees, canals & water control structures

Project Synopsis: These features include the construction of new water control structures and the modification or removal of levees, canals, and water control structures in Water Conservation Area 3A and 3B located in western Broward County. Sheetflow obstructions will be removed with the backfilling of the Miami Canal and southern 7.5 miles of L-67A Borrow Canal, removal of the L-68A, L-67C, L-29, L-28, and L-28 Tieback Levees and Borrow Canals, and elevating of Tamiami Trail. Water supply deliveries to Miami-Dade County, previously made through the Miami Canal, will be rerouted through an expanded North New River Canal and southern conveyance system. Eight passive weir structures to be located along the entire length of L-67A will also promote sheetflow from Water Conservation Area 3A and 3B during high flow conditions.

Cost:	Total	Phase I	Phase II
Total	$211,687,000	$106,030,000	$105,657,000
Project Development	$12,737,000	$7,338,000	$5,399,000
Land Acquisition (estimated 255 acres)	$18,403,000	$18,403,000	$0
Implementation	$180,547,000	$80,289,000	$100,258,000
Operations and maintenance	$740,111		

Project Schedule:
Start Date: 2001
Finish Date: 2019

Phase I	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
PIR/Plans & Specs										
Real Estate										
Construction										

Phase II	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
PIR/Plans & Specs														
Real Estate														
Construction														

Detailed Project Budget Information ($1000)

Phase I	**Thru 2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009-2010 Balance to complete**	**Total**
USACE	1,404	512	5,000	8,000	7,000	7,000	24,099	$53,015
SFWMD	863	5,000	5,000	8,000	7,000	7,000	20,152	$53,015
Total	**2,267**	**5,512**	**10,000**	**16,000**	**14,000**	**14,000**	**44,251**	**$106,030**

Phase II	**Thru 2003***	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013-2019 Balance to complete**	**Total**
USACE	94	385	386	385	386	385	10,411	10,411	29,985	$52,828
SFWMD	94	386	385	386	385	386	10,411	10,411	29,985	$52,829
Total	**188**	**771**	**771**	**771**	**771**	**771**	**20,822**	**20,822**	**59,970**	**$105,657**

*programmatic costs
Hyperlink: http://www.evergladesplan.org/pm/projects/proj_12_wca3_1.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Florida Keys Tidal Restoration (OPE)
Project ID: 1302(CERP Project # WBS 31)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 1.A.3

Measurable Output(s): Bridges and culverts

Project Synopsis: This project will restore a historic flow way between the Atlantic Ocean and the Gulf of Mexico, which was blocked during the construction of US Highway 1. An existing tidal creek restoration project in the vicinity of the proposed restoration project was fully successful. One tidal creek in the vicinity of Marathon, Florida has been selected for restoration. Culverts will be located and sized to maximize flow and placed under US 1 to allow tidal exchange and flushing. The site of the flow way to be restored is between Fat Deer Key and Long Point Key (MM56). Monitoring of water quality, benthic community composition, and sediment particle size will be performed before construction and 0.5 and 1 year after construction. Additional tidal flow way restoration projects will be identified in the future based upon results of this initial restoration project.

Cost:

Total	$3,874,600*
Project Development	$2,705,600
Land Acquisition (estimated 5 acres)	$51,000
Implementation	$1,118,000

Project Schedule:
Start Date: 2001
Finish Date: 2018

	2011	2012	2013	2014	2015	2016	2017	2018
PIR/Plans & Specs								
Real Estate								
Construction								

Detailed Project Budget Information ($1000)

	Thru 2003	2011	2012	2013	2014	2015	2016	2017	2018	Total
USACE	761	147	147	147	147	147	147	147	147	$1,937
SFWMD	139	224	224	224	224	224	224	224	230	$1,937
Total	**900**	**371**	**371**	**371**	**371**	**371**	**371**	**371**	**377**	**$3,874**

* This cost includes the PIR costs in the approved PMP.

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_31_fl_keys_tidal.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: Critical Projects - Southern CREW
Project ID: 1303
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: 1.A.3

Measurable Output(s): Structural modifications

Project Synopsis: Removal of canal and road berms, house pads and ditches will allow historic sheetflow to be re-established in the Southern Corkscrew Regional Ecosystem Watershed (CREW). The SFWMD is acquiring land for this project.

Cost:

Total	$33,312,000
Project Development	$537,000
Implementation	$32,775,000

Project Schedule:

Start Date: 1999
Finish Date: 2005

	1999	2000	2001	2002	2003	2004	2005
Design							
Construction							

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	Total
USACE	273	2,887	13,496	$16,656
SFWMD	0	3,024	13,632	$16,656
Total	**273**	**5,911**	**27,128**	**$33,312**

Hyperlink: http://pillar.saj.usace.army.mil/projects/proj9.htm
Contact: USACE

Program Name: Restoration Program: Hydrological Restoration
Project Name: East WCA-3A Hydropattern Restoration
Project ID: 1304
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: Getting the Water Right

Measurable Output(s): Improve the volume, timing and distribution of water entering the Everglades

Project Synopsis: The existing L-5 levees and borrow canal will be modified to result in a sheet flow approximation along the northerly perimeter of WCA-3A adjacent to STA 3/4. This modification will extend from the North New River Canal westerly to the west line of STA 3/4, a total distance of approximately 48,000 feet. The East WCA-3A Hydropattern Restoration plan component includes, but is not limited to, the following physical works: removal of existing North and South Levee L-5 all along the southerly perimeter of STA 3/4, enlargement of the L-5 Borrow Canal for increased conveyance to the North New River Canal.

*** Cost (Estimate):**

Total	$ 5,040,571
(1) Project Development:	$ 313,967
Land Acquisition:	$ -
(2) Implementation:	$ 4,726,604
Operations and Maintenance:	$ -

Project Schedule:

Expected Completion Date: May 2004

	FY 1994-FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development						
Land Acquisition						
Implementation						
Operations and Maintenance						

*** Detailed Project Budget Information (1000s)**

	Actual FY 94-03	Projected FY 2004	Projected FY 2005	Projected FY 2006	Projected FY 2007	Balance to complete	Total
Federal							
State	$4,853.4	$187.1	-	-	-	-	$5,040.6
Tribal							
Local							
Other							
Total	$4,853.4	$187.1	-	-	-	-	$5,040.6

- Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections.

(1) Project Development includes Design Phase [contracts & staff costs] costs.
(2) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Mary Lou Cariello, (561) 682-6454

Program Name: Restoration Program: Hydrological Restoration, Habitat and Species
Project Name: Kissimmee Prairie Ecosystem
Project ID: 1305
Lead Agency: Florida Department of Environmental Protection/South Florida Water Management District
Authority: CARL/Save Our Rivers

Strategic Plan Goal(s) Addressed: 1.A.3 and 2.A.1

Measurable Output(s): 38,282 Acres Acquired

Project Synopsis: This project involves acquisition and restoration of wetland and dry prairie habitat in Okeechobee County. The SFWMD and FDEP purchased 38,282 acres of land in 1997 for conservation as the Kissimmee Prairie State Preserve. Restoration has been initiated on the Preserve as well as the adjacent 7,315-acre Ordway-Whittell Kissimmee Prairie Sanctuary owned and managed by the National Audubon Society. The project will restore 13,100 acres of wetlands that were over drained or over impounded by agricultural activities. In addition, the project will enhance another 2,625 acres of wetlands and 9,500 acres of associated dry prairie habitat. Restoration will be accomplished by removing 39.3 miles of ditches and dikes to return sheet flow across the land. Enhancement will include removal of unwanted or invasive vegetation from wetland and dry prairie habitats.

The purpose of the land acquisition project is to preserve the unique wetland and dry prairie habitats that were in agriculture and cattle land use and, using a five-year federal grant, restore and enhance these lands. Approximately 5,000 acres of the project hydraulically linked with the Kissimmee River will be reconnected, thereby restoring wetland habitat to regain historical biological diversity. The remaining 40,000 acres of the project in the project area contain extensive wetland habitats and excellent examples of the dry-prairie community type, which is recognized by the Florida Natural Areas Inventory as endangered at state and global levels. Because of the conversion of similar lands to citrus and improved pasture throughout central Florida, the Kissimmee Prairie Ecosystem, in combination with the adjacent Air Force's Avon Park Bombing Range and Audubon's Kissimmee Prairie Sanctuary, will form the largest region of dry prairie in public ownership in the State. Its preservation is the most important step in the recovery of the federally endangered Florida grasshopper sparrow. The endangered whooping crane, Everglades snail kite, and the woodstork utilize the habitats of the project area. Protection of these lands will also provide habitat for the following threatened species: southern bald eagle, Audubon's caracara, Florida scrub jay, and the eastern indigo snake. In addition, the project area contains habitat that supports over 800 species of plants and animals.

Cost:
Total: Project size 38,282 acres.
38,282 acres have been acquired at a cost of $22 million
Project Development
Land Acquisition: **Project completed**
Implementation

Project Schedule:
Start Date: 1996
Finish Date: 1997

Detailed Project Budget Information (1000s)

	Through 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal								
State	$22,000						0	$22,000
Tribal								
Local								
Other								
Total	**$22,000**						**0**	**$22,000**

Hyperlink: N/A
Contact: N/A

Program Name: Infrastructure
Project Name: Kissimmee River, Florida
Project ID: 1306
Lead Agency: USACE / SFWMD
Authority: WRDA 1986,1988, 1992

Strategic Plan Goal(s) Addressed: **Primary:** 1.A.3 **Secondary**: 2.A.3

Measurable Output(s): 27,000 acres of floodplain wetlands, 43 miles of contiguous river channel, 40 square miles of the river/floodplain ecosystem; Lower Basin Land Acquisition (SFWMD 68,332 acres), Upper Basin Land Acquisition (SFWMD 36,763 acres).

Project Synopsis: The project includes 3,000 square miles stretching from Orlando to Lake Okeechobee in central Florida and involves the ecosystem restoration of the historic floodplain to reestablish wetland conditions through modifications to the operation of the lakes, modification of Structure 65, enlargement of canals 36 and 37, backfilling of 22 miles of C-38, excavation of about nine miles of new river channel, removal of two water control structures and locks, and land acquisition. The project will restore the ecological integrity of the historical Kissimmee River/floodplain ecosystem by recreating approximately 40 square miles of the river/floodplain ecosystem, including 43 miles of contiguous river channel and 27,000 acres of floodplain wetlands.

Cost:

Total	$572,400,000
Project Development	$70,255,000
Land Acquisition	$170,784,000
Implementation	$331,361,000

Project Schedule:
Start Date: 1994
Finish Date: 2010

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Design																	
Real Estate																	
Construction																	

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006-2010 Balance to complete	Total
USACE	171,131	20,329	20,329	74,411	$286,200
SFWMD	94,540	20,329	20,329	151,002	$286,200
Total	**265,671**	**40,658**	**40,658**	**225,413**	**$572,400**

Hyperlink: http://www.saj.usace.army.mil/dp/Kissimmee/Kissimmee2.html
Contact: USACE

Program Name: Infrastructure
Project Name: Modified Water Deliveries to Everglades National Park
Project ID: 1307
Lead Agency: National Park Service
Authority: Everglades National Park Protection and Expansion Act of 1989 (Public Law 101-229)

Strategic Plan Goal(s) Addressed: Primary: 1.A.3 **Secondary:** Other

Measurable Output(s): modification of flow impediments; acres of wetland habitat restored; acres of flood damage mitigation

Project Synopsis: This project is funded from the Construction Account managed by the National Park Service and the Department of the Interior. The authorized project consists of structural features with the intended purpose of restoring more natural hydrological conditions in Water Conservation Area (WCA) 3 and Shark River Slough within Everglades National Park. Hydrological improvements are crucial to restoring ecosystem productivity in the southern Everglades and maintaining adequate freshwater inflow to the downstream estuaries along the Gulf of Mexico and Florida Bay.

This project involves construction of modifications to the Central and Southern Florida (C&SF) Project water management system and related operational changes to provide improved water deliveries to Everglades National Park (ENP). The Corps of Engineers 1992 General Design Memorandum (GDM) project design for the Modified Water Deliveries (MWD) Project and subsequent supplements to the GDM specify the construction of structural features with the intended purpose of restoring conveyance between water conservation areas north of ENP and the Shark River Slough within the park. The documents also specify project features to provide flood mitigation to the 8.5 Square Mile Area, a residential area adjacent to the park expansion boundary in East Everglades. For management purposes, the project is described in four categories: 8.5 Square Mile Area, Conveyance and Seepage Control, Tamiami Trail and Project Implementation Support (ENP requirements, Experimental Program, Environmental Monitoring, the Combined Structural and Operational Plan or CSOP and Osceola Camp). Since the completion of the 1992 GDM, investigations associated with the Comprehensive Everglades Restoration Plan (CERP) resulted in the identification of revised ecosystem restoration requirements and the identification of potential design problems associated with the original 1992 project features. This, in turn, has resulted in the completion of Supplemental NEPA documents for the 8.5 SMA component (completed July 2000), the Tamiami Trail component (completed December 2003), the Conveyance features (projected completion date June 2004) and CSOP (projected completion date June 2006). As a result, modifications are proposed to the 1996 baseline cost and schedule. The revised cost and schedule are summarized below, which the NPS and OMB must approve before adoption.

This project is being implemented in conjunction with acquisition of 109,504 acres in the East Everglades as part of the Everglades National Park expansion. Acquisition of land within the East Everglades Addition is necessary to limit further losses suffered by the park due to habitat destruction outside former boundaries and to restore natural water flow patterns that are critical to the ecological integrity and long-term viability of park resources.

Hyperlink: N/A
Contact: N/A

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Cost:
Total $191,000,000*

Project Schedule:
Start Date: 1990
Finish Date: 2008

	< 2004	2004	2005	2006	2007	2008[1]
Design						
Real Estate						
Construction						

[1]Project Close-out

Detailed Project Budget Information ($1,000)

Planned Expenditures	Thru 2002	2003	2004	2005	2006	Balance to complete	Total
Federal	91,055	6,003	57,826			36,116	191,000*

***This number reflects the currently approved Capital Asset Plan for the project. The funding necessary to complete this project is under evaluation by USDOI and USACE.**

Project 1307 Page 2 of 2

Program Name: Infrastructure
Project Name: Critical Projects – Additional Water Conveyance Structures Under Tamiami Trail
Project ID: 1400
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s):

Project Synopsis: Improvement in the natural sheetflow of surface water within the watersheds of the Ten Thousand Islands National Wildlife Refuge & Aquatic Preserve, Southern Golden Gate Estates, Fakahatchee Strand State Preserve, Big Cypress National Preserve and Everglades National Park. By creating a more diffuse flowway beneath the Tamiami Trail, a more natural hydropattern will be established north and south of this highway. Improvement of the natural hydrology will also enhance biological restoration of the region. This project will directly support objectives for several other south Florida projects such as the Levee 28 modification and restoration of Southern Golden Gate Estates.

This Project consists of two phases. The Phase I involves planning, project design and construction of 62 culverts under US 41 and 15 under Loop Road between SR 92 and Collier / Miami-Dade County line. The Phase II involves resurfacing of the roadway of the Tamiami Trail pursuant to construction of the culverts. State Road 29 West is being completed as part of the Southern Golden Gate Estates Hydrologic Restoration.

Cost:

Total:	$7,678,000
Project Development	$1,212,000
Implementation	$6,466,000

Project Schedule:

Start Date: 1998
Finish Date: 2006

	2002	2003	2004	2005	2006
Design					
Construction					

Detailed Project Budget Information ($1,000)

	Thru 2003	2004	2005	2006	Total
USACE	2,601	438	400	400	3,839
SFWMD	692	1,147	1,000	1,000	3,839
Total	**3,293**	**1,585**	**1,400**	**1,400**	**$7,678**

Hyperlink: http://pillar.saj.usace.army.mil/projects/proj2.htm
Contact: USACE

Program Name: Infrastructure
Project Name: Biscayne Bay Feasibility Study
Project ID: 1401
Lead Agency: USACE / Miami-Dade County
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: **Primary:** Other

Measurable Output(s): Report

Project Synopsis: Biscayne Bay is a shallow, well-mixed estuary located along the southeastern coast of Florida. It includes most of Biscayne National Park, and adjacent lands provide fresh surface or groundwater to Biscayne Bay. The Central and Southern Florida (C&SF) Project is believed to have changed the timing, distribution and amount of freshwater reaching the bay. This impacts the natural salinity patterns and ecology of that bay. The Comprehensive Everglades Restoration Plan (CERP) is modifying the C&SF project to improve flows needed for the environment, including Biscayne Bay. Proposed modifications to this hydrologically-connected system may impact Biscayne Bay. This study allows resource managers to assess those impacts and determine if further studies of Biscayne Bay are needed.

Cost:

Total	$6,370,000
Project Development	$6,370,000

Project Schedule:

Start Date	1996
Finish Date	2006

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Planning & Design											
Real Estate											
Construction											

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	Total
USACE	1,048	895	738	739	$3,420
Miami-Dade Co.	443	551	978	978	$2,950
Total	**1,491**	**1,446**	**1,716**	**1,717**	**$6,370**

Hyperlink:
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Broward County Secondary Canal System (CC)
Project ID: 1403(CERP Project # WBS 24)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Water control structures, pumps, canal improvements

Project Synopsis: This project includes a series of water control structures, pumps, and canal improvements located in the C-9, C-12 and C-13 Canal Basins and east basin of the North New River Canal in central and southern Broward County. The purpose of this project is to reduce water discharges by recharging local wellfields and stabilizing the saltwater interface. Excess water in the basins will be pumped into the coastal canal systems to maintain canal stages at optimum levels. When basin water is not sufficient to maintain canal stages, the canals will be maintained from other construction projects such as the Site 1 Impoundment and the North Lake Belt Storage Area and then from Lake Okeechobee and the Water Conservation Areas.

Cost:

Total	$12,898,000
Project Development	$754,000
Land Acquisition (estimated 245 acres)	$1,920,000
Implementation	$10,224,000
Operations and maintenance	$418,017

Project Schedule:
Start Date: 2001
Finish Date: 2016

	2008	2009	2010	2011	2012	2013	2014	2015	2016
PIR/Plans & Specs									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Thru 2003	2008	2009	2010	2011	2012	2013	2014-2016 Balance to Complete	Total
USACE	8	115	900	900	900	900	900	1,826	$6,449
SFWMD	37	85	900	900	900	900	900	1,827	$6,449
Total	**45**	**200**	**1,800**	**1,800**	**1,800**	**1,800**	**1,800**	**3,653**	**$12,898**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_24_broward_canal.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - C-111 Spreader Canal (WW)
Project ID: 1404(CERP Project # WBS 29)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Levees, canals, pumps, water control structures, and a STA

Project Synopsis: This feature includes levees, canals, pumps, water control structures, and a stormwater treatment area to be constructed, modified or removed in the Model Lands and Southern Glades (C-111 Basin) area of Miami-Dade County. This feature enhances the C-111 Project design for the C-111 Spreader Canal with the construction of a stormwater treatment area, the enlarging of pump station S-332E and the extension of the canal under U.S. Highway 1 and Card Sound Road into the Model Lands. The initial design of this feature pumps water from the C-111 and the C-111E Canals into a stormwater treatment area prior to discharging to Southern Everglades and Model Lands. This features also calls for filling in the southern reach of the C-111 Canal and removal of structures S-18C and S-197. The final size, depth, location and configuration of this feature will be determined through more detailed planning and design.

Cost:

Total	$94,035,000
Project Development	$3,317,000
Land Acquisition (estimated 15,559 acres)	$45,766,000
Implementation	$44,952,000
Operations and maintenance	$59,586

Project Schedule:
Start Date: 2000
Finish Date: 2010

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008	2009	2010	Total
USACE	1,154	1,000	6,000	4,500	4,500	9,954	9,955	9,955	$47,018
SFWMD	722	3,500	3,500	4,500	4,500	10,098	10,099	10,098	$47,017
Total	**1,876**	**4,500**	**9,500**	**9,000**	**9,000**	**20,052**	**20,054**	**20,053**	**$94,035**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_29_c111.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP – Water Preserve Area Conveyance (BB)
Project ID: 1405(CERP Project # WBS 49)
Lead Agency: USACE / SFWMD
Authority: WRDA 1996, WRDA 2000

Strategic Plan Goal(s) Addressed: **Primary:** Other

Measurable Output(s): Water control structures, levee modifications

Project Synopsis: This feature includes water control structures and modifications to the Dade-Broward Levee and associated conveyance system located in Miami-Dade County. The size and configuration of these facilities are being determined through planning and design as a part of the Project Implementation Report. The purpose of this feature is to reduce seepage losses to the east from the Pennsuco Wetlands and southern Water Conservation Area 3B, enhance hydroperiods in the Pennsuco Wetlands, and provide recharge to Miami-Dade County's Northwest Wellfield.

Cost:

Total	$18,778,000
Project Development	$693,000
Land Acquisition (est. 10,000 acres)	$8,676,000
Implementation	$9,409,000
Operations and maintenance	$105,871

Project Schedule:
Start Date: 2002
Finish Date: 2017

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Thru 2003	2009	2010	2011	2012	2013	2014-2017 Balance to Complete	Total
USACE	211	0	1,000	1,000	1,000	1,000	5,178	$9,389
SFWMD	0	0	1,000	1,000	1,000	1,000	5,389	$9,389
Total	**211**	**0**	**2,000**	**2,000**	**2,000**	**2,000**	**10,567**	**$18,778**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_49_wpa.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: Critical Projects – East Coast Canal Structures (C-4)
Project ID: 1406
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Water control structures

Project Synopsis: This project calls for the construction of a gated water control structure (S-380) on the C-4 canal in Dade County, Florida. This structure will be located immediately southeast of the Pennsuco Wetlands. The purpose of the structure is to maintain stages to create and preserve wetlands as well as aquifer recharge. The construction for this project is complete.

Cost:

Total	$3,683,000
Project Development	
Land Acquisition (est. 2 ac)	
Implementation	
Operations and Maintenance	

Project Schedule:
Start Date: 1999
Finish Date: 2003

	1999	2000	2001	2002	2003
Planning & Design					
Real Estate					
Construction					

Detailed Project Budget Information ($1000)

	Thru 2003	Total
USACE	1,841	$1,841
SFWMD	1,842	$1,842
Total	**3,683**	**$3,683**

Hyperlink: http://www.saj.usace.army.mil/projects/proj1.htm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Loxahatchee National Wildlife Refuge Internal Canal Structures (KK)
Project ID: 1408(CERP Project # WBS 14)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Water control structure

Project Synopsis: This feature includes two water control structures in the northern ends of the perimeter canals encircling the Loxahatchee National Wildlife Refuge (Water Conservation Area 1) located in Palm Beach County. The purpose of this feature is to improve the timing and location of water depths within the Refuge. It is assumed that these structures will remain closed except to pass Stormwater Treatment Area 1 East and Stormwater Treatment Area 1 West outflows and water supply deliveries to the coastal canals.

Cost:

Total	$7,669,000
Project Development	$503,000
Land Acquisition (estimated 5 acres)	$345,000
Implementation	$6,821,000
Operations and maintenance	$42,045

Project Schedule:
Start Date: 2014
Finish Date: 2020

	2014	2015	2016	2017	2018	2019	2020
PIR/Plans & Specs							
Real Estate							
Construction							

Detailed Project Budget Information ($1000)

	Thru 2003*	2014	2015	2016	2017	2018	2019	2020	Total
USACE	1	500	500	500	500	500	667	667	$3,835
SFWMD	0	500	500	500	500	500	667	667	$3,834
Total	**1**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,334**	**1,334**	**$7,669**

*programmatic costs

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_14_loxahatchee.cfm
Contact : USACE

Program Name: Infrastructure
Project Name: C&SF: CERP – Seminole Tribe Big Cypress Water Conservation Plan (East) (OPE)
Project Name: 1409(CERP Project # WBS 96)
Lead Agency: USACE / Seminole Tribe
Authority: Not authorized.

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Construction of conveyance systems, major canal bypass structures, irrigation storage cells, and water resource areas

Project Synopsis: This feature includes construction of water control, management and treatment facilities in the Big Cypress Reservation. The construction elements include conveyance systems, major canal bypass structures, irrigation storage cells, and water resource areas. The purpose of this feature is to improve the quality of water and runoff from phosphorous generating agricultural sources within the Reservation. The area is traversed by the L-28 and L-28I Borrow Canals and the North and West Feeder Canals, all of which were constructed as part of the Central & South Florida Project. This comprehensive watershed management system is designed to achieve environmental restoration on the Reservation, the Big Cypress Preserve, and the Everglades Protection Area. In addition, the project will reduce flood damage and promote water conservation. This is the second component of the overall plan with the first component being completed under the Critical Projects Program.

Cost:
Total $30,090,000
Project Development
Land Acquisition (estimated 3,800 acres)
Implementation
Operations and maintenance

Project Schedule:
Start Date: 2015
Finish Date: 2022

	2015	2016	2017	2018	2019	2020	2021	2022
Planning & Design								
Real Estate								
Construction								

Detailed Project Budget Information ($1000)

	2015	2016	2017	2018	2019-2022 Balance to complete	Total
USACE	250	250	250	250	14,045	$15,045
Tribe	250	250	250	250	14,045	$15,045
Total	**500**	**500**	**500**	**500**	**28,090**	**$30,090**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_96.cfm
Contact: USACE

Program Name Infrastructure
Project Name: C&SF: CERP - Biscayne Bay Coastal Wetlands (FFF)(OPE)
Project ID: 1410(CERP Project # WBS 28)
Lead Agency: USACE / SFWMD
Authority: Not authorized.

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Pump stations, spreader swales, stormwater treatment areas, flowways, levees, culverts, and backfilling canals

Project Synopsis: The feature includes pump stations, spreader swales, stormwater treatment areas, flowways, levees, culverts, and backfilling canals located in southeast Miami-Dade County and covers 13,600 acres from the Deering Estate at C-100C, south to the Florida Power and Light Turkey Point power plant, generally along L-31E.

Cost:

Total	$299,583,000
Project Development	$6,452,000
Land Acquisition (estimated 13,950 acres)	$205,655,000
Implementation	$87,476,000
Operations and maintenance	$923,300

Project Schedule:
Start Date: 2001
Finish Date: 2022

Phase 1*	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
PIR/Plans & Specs													
Real Estate													
Construction													

Phase 2*	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2021	2022
PIR/Plans & Specs															
Construction															

*Currently evaluating combination into one PIR.

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008	2009-2022 Balance to Complete	Total
USACE	980	2,000	2,000	2,000	2,000	2,000	138,812	$149,792
SFWMD	574	2,000	2,000	2,000	2,000	2,000	139,217	$149,791
Total	**1,554**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**278,029**	**$299,583**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_28_biscayne_bay.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Caloosahatchee R. (C-43) Basin Aquifer Storage & Recovery – Pilot Project (D)
Project ID: 1411(CERP Project # WBS 33)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Report

Project Synopsis: The Caloosahatchee (C-43) River ASR Pilot Project consists of the assessment of the hydrogeological characteristics of the Hawthorn and Floridan aquifers and water quality in the vicinity of the C-43 Basin Storage Reservoir. Suitable sites and optimal configurations of wells will be determined during this project. The quality of the source water to be recharged also will be assessed as part of this project.

Cost:

Total	$6,000,000
Project Development	$500,000
Land Acquisition (0 acres)	$0
Implementation	$5,000,000
Monitoring	$500,000

Project Schedule:
Start Date: 2001
Finish Date: 2008

	2002	2003	2004	2005	2006	2007	2008
Feasibility & Design							
Construction							
Monitoring							

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008	Total
USACE	735	400	940	700	90	135	$3,000
SFWMD	470	700	640	800	200	190	$3,000
Total	**1,205**	**1,100**	**1,580**	**1,500**	**290**	**325**	**$6,000**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_33_cal_river_c43_asr_pilot.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Diverting WCA 2 and WCA 3 Flows to Central Lake Belt Storage Area (YY)(ZZ) (S P1)
Project ID: 1412 (CERP Project # WBS 47 and 48)
Lead Agency: USACE / SFWMD
Authority: Not Authorized.

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Pumps, water control structures, canals, and canal improvements

Project Synopsis: This feature includes pumps, water control structures, canals, and conveyance improvements located adjacent to Water Conservation Areas 2 and 3 in Broward County. The size and configuration of these facilities will be determined through more detailed planning and design completed as a part of the Project Implementation Report. The purpose of this project is to attenuate high stages in Water Conservation Areas 2 and 3 and transport this excess water to Central Lake Belt Storage Area where it will be stored to meet downstream demands in Shark River Slough, Water Conservation Area 3B, or Biscayne Bay.

Cost:

Total	$76,921,000
Project Development	$1,822,000
Land Acquisition (estimated 664 acres)	$16,798,000
Implementation	$58,301,000
Operations and maintenance	$146,635

Project Schedule:
Start Date: 2018
Finish Date: 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Planning & Design								
Real Estate								
Construction								

Detailed Project Budget Information ($1000)

	Thru 2003*	2012	2013	2014	2015	2016	2017	2018	Total
USACE	356	5,000	5,000	5,000	8,000	5,035	5,035	5,035	$38,461
SFWMD	1	5,000	5,000	5,000	8,000	5,153	5,153	5,153	$38,460
Total	**357**	**10,000**	**10,000**	**10,000**	**16,000**	**10,188**	**10,188**	**10,188**	**$76,921**

*programmatic cost

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_48_wca_2b.cfm
Hyperlink: http://www.evergladesplan.org/pm/projects/proj_47_wca_3a_3b.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Everglades Rain-Driven Operations (H)
Project ID: 1413
Lead Agency: USACE / SFWMD
Authority: No Congressional action is required

Strategic Plan Goal(s) Addressed: **Primary:** Other

Measurable Output(s): Revised Water Conservation Area regulation schedule

Project Synopsis: Modifications to the regulation schedules for Water Conservation Areas 2A, 2B, 3A, 3B and the current Rainfall Delivery Formula for Everglades National Park will be made to implement rain-driven operations for all of these areas. These new operational rules are intended to improve timing and location of water depths in the Water Conservation Areas and Everglades National Park and to restore more natural hydropatterns. A plan for this will be developed following completion of the initial CERP update.

Cost:

Total	TBD
Project Development	
Land Acquisition	
Implementation	
Operation and maintenance	

Project Schedule:

Start Date:	TBD*
Finish Date:	

* Implement when appropriate as other facilities come on-line.

Detailed Project Budget Information

No budget information available, as project has not started.

Hyperlink: www.evergladesplan.org
Contact USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Henderson Creek/Belle Meade Restoration (OPE)
Project ID: 1414 (CERP Project # WBS 93)
Lead Agency: USACE / FDEP
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: Other **Secondary:** 1.B.1

Measurable Output(s): 10-acre stormwater lake/marsh filtering system, four culverts, a swale and spreader system, and the removal of the Road-to-Nowhere

Project Synopsis: This feature combines multiple individual elements to complement each other to form a larger-scale combined effect. This feature includes a 10-acre stormwater lake/marsh filtering system; four culverts under State Road 951; hydrologic restoration around Manatee Basin including culverts, ditching, removal of some roadbed; invasive, exotic plant removal; a public access point and interpretive boardwalk; construction of a swale and spreader system; and removal of the Road-to-Nowhere. This southwest Florida feature is located in Collier County. The area known locally as Belle Meade is the primary drainage basin for the Henderson Creek Estuary, which drains into Rookery Bay.

Cost:

Total	$4,806,000
Project Development	$260,000
Land Acquisition (estimated 12,415 acres)	$1,029,000
Implementation	$3,517,000
Operations and maintenance	$41,000

Project Schedule:
Start Date: 2002
Finish Date: 2018

	2012	2013	2014	2015	2016	2017	2018
PIR/ Plans & Specs							
Real Estate							
Construction							

Detailed Project Budget Information ($1000)

	Thru 2003	2012	2013	2014	2015	2016-2018 Balance to Complete	Total
USACE	231	208	208	208	208	1,340	$2,403
FDEP	223	210	210	210	210	1,340	$2,403
Total	**454**	**418**	**418**	**418**	**418**	**2,680**	**$4,806**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_93_henderson.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP – Everglades National Park Seepage Management (V)(FF)
Project ID: 1415(CERP Project # WBS 27)
Lead Agency: USACE / SFWMD
Authority: Not authorized

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Relocation and enhancement of L-31N, groundwater wells, and sheetflow delivery system

Project Synopsis: This feature includes relocating and enhancing L-31N, groundwater wells, and sheetflow delivery system adjacent to Everglades National Park located in Miami-Dade County. More detailed planning, design and pilot studies will be conducted to determine the appropriate technology to control seepage from Everglades National Park. These studies and tests will also determine the appropriate amount of wet season groundwater flow control that will minimize potential impacts to Miami-Dade County's West Wellfield and freshwater flows to Biscayne Bay.

Cost:

Total	$184,845,000
Project Development	$6,777,000
Land Acquisition (estimated 3,947 acres)	$94,704,000
Implementation	$83,364,000
Operations and maintenance	$4,647,234

Project Schedule:
Start Date: 2009
Finish Date: 2014

	2009	2010	2011	2012	2013	2014
PIR/ Plans & Specs						
Real Estate						
Construction						

Detailed Project Budget Information ($1000)

	Thru 2003*	2009	2010	2011	2012	2013	2014	Total
USACE	161	404	14,460	12,402	12,403	26,296	26,297	$92,423
SFWMD	161	403	14,460	12,403	12,402	26,297	26,296	$92,422
Total	**322**	**807**	**28,920**	**24,805**	**24,805**	**52,593**	**52,593**	**$184,845**

*programmatic costs

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_27_enp_seepage.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - L-31N Seepage Management – Pilot Project (V)
Project ID: 1416 (CERP Project # WBS 36)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: Goal Other

Measurable Output(s): Report and technology determination

Project Synopsis: The purpose of this feature is to reduce levee seepage flow across L-31N adjacent to Everglades National Park via a levee cutoff wall. Additionally, the feature was designed to reduce groundwater flows during the wet season by capturing groundwater flows with a series of groundwater wells adjacent to L-31N, then back pumping those flows to Everglades National Park. The pilot project is necessary to determine the appropriate technology to control seepage from Everglades National Park. The pilot project will also provide necessary information to determine the appropriate amount of wet season groundwater flow to return that will minimize potential impacts to Miami-Dade County's West Wellfield and freshwater flows to Biscayne Bay.

Cost:

Total	$10,000,000
Project Development	$500,000
Land Acquisition (0 acres)	$0
Implementation	$9,000,000
Monitoring	$500,000

Project Schedule:
Start Date: 2001
Finish Date: 2008

	2002	2003	2004	2005	2006	2007	2008
PPDR/Plans & Specs							
Construction							
Monitoring							

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008	Total
USACE	948	600	550	1,051	1,051	800	$5,000
SFWMD	485	500	900	1,107	1,108	900	$5,000
Total	**1,433**	**1,100**	**1,450**	**2,158**	**2,159**	**1,700**	**$10,000**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_36_l31n_seepage.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP – Lakebelt (In-Ground Reservoir) Technology – Pilot Project
Project ID: 1417(CERP Project # WBS 35)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Report and test site

Project Synopsis: Several features recommend the use of areas where lime rock mining will have occurred The initial design of these reservoirs includes subterranean seepage barriers around their perimeter in order to enable drawdown during dry periods, prevent seepage losses, and prevent water quality impacts due to transmissivity of the aquifer in these areas. The pilot project is required to determine construction technologies, storage efficiencies, impacts on local hydrology, and water quality effects. Water quality assessments will include a determination as to whether the in-ground reservoirs and seepage barriers will allow for storage of untreated waters without concerns of groundwater contamination.

Cost:

Total	$23,000,000
Project Development	$2,000,000
Land Acquisition (0 acres)	$0
Implementation	$20,000,000
Operations and maintenance	$1,000,000

Project Schedule:
Start Date: 2001
Finish Date: 2017

	2010	2011	2012	2013	2014	2015	2016	2017
PPDR/ Plans & Specs								
Construction								
Monitoring								

Detailed Project Budget Information ($1000)

	Thru 2003	2010	2011	2012	2013	2014	2015-2017 Balance to complete	Total
USACE	1,242	500	500	2,000	2,000	2,000	3,258	$11,500
SFWMD	447	500	500	2,000	2,000	2,000	4,053	$11,500
Total	**1,689**	**1,000**	**1,000**	**4,000**	**4,000**	**4,000**	**7,311**	**$23,000**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_35_lake_belt_pilot.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Lake Okeechobee Aquifer Storage and Recovery – Pilot Project (GG)
Project ID: 1418(CERP Project # WBS 32)
Lead Agency: USACE / SFWMD
Authority: WRDA 1999

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Report

Project Synopsis: The pilot project is necessary to identify the most suitable sites for the aquifer storage and recovery wells in the vicinity of Lake Okeechobee and to identify the optimum configuration of those wells. Additionally, the pilot project will determine the specific water quality characteristics of waters to be injected, the specific water quality characteristics and amount of water recovered from the aquifer, and the water quality characteristics of the receiving aquifer. Further information from the pilot project will provide the hydrogeological and geotechnical characteristics of the upper Floridan Aquifer System within the region and the ability of the upper Floridan Aquifer System to maintain injected water for future recover.

Cost:

Total	$19,000,000
Project Development	$1,000,000
Land Acquisition	
Implementation	$14,000,000
Monitoring	$4,000,000

Project Schedule:
Start Date: 2000
Finish Date: 2008

	2001	2002	2003	2004	2005	2006	2007	2008
PIR/Plans & Specs								
Construction								
Monitoring								

Detailed Project Budget Information ($1,000)

	Thru 2003	2004	2005	2006	2007	2008	Total
USACE	2,163	1,600	1,727	3,000	505	505	$9,500
SFWMD	2,867	500	1,923	3,000	605	605	$9,500
Total	**5,030**	**2,100**	**3,650**	**6,000**	**1,110**	**1,110**	**$19,000**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_32_lake_o_asr_pilot.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Lake Okeechobee Regulation Schedule (F)
Project ID: 1419 (CERP Project # WBS)
Lead Agency: USACE / SFWMD
Authority: No Congressional action is required

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): New Lake Okeechobee regulation schedule

Project Synopsis: The Lake Okeechobee Regulation Schedule will be modified in order to take advantage of the additional storage facilities identified in the construction features. Two additional zones will be added to the schedule. The first zone will trigger discharges to the north of Lake Okeechobee reservoir and the Everglades Agricultural Area reservoir. The second higher zone will trigger the Lake Okeechobee aquifer storage and recovery facilities to begin injecting water from the Lake. Climate based forecasting will be used to guide management decisions regarding releases to the storage facilities.

Cost:

Total	TBD
Project Development	
Land Acquisition	
Implementation	
Operation and Maintenance	

Project Schedule:

Implement when appropriate as other facilities come on-line.

Detailed Project Budget Information

No budget information available, as project has not started.

Hyperlink: www.evergladesplan.org
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Modify Holey Land Wildlife Management Area Operation Plan (DD)
Project ID: 1420 (CERP Project # WBS 15)
Lead Agency: USACE / SFWMD
Authority: No Congressional action is required

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Modified operational plan for the Holey Land

Project Synopsis: Modification to the current operating plan for Holey Land Wildlife Management Area will be made to implement rain-driven operations for this area. Water deliveries are made to Holey Land from the Rotenberger Wildlife Management Area or from Stormwater Treatment Area 3/4 if Rotenberger flows are insufficient. The deliveries are assumed to be of acceptable water quality. These new operational rules are intended to improve the timing and location of water depths within the Holey Land Wildlife Management Area.

Cost:

Total	$150,000
Project Development	$150,000
Land Acquisition	
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 2007
Finish Date: 2011

	2007	2008	2009	2010	2011
Operation Schedule					

Detailed Project Budget Information ($1000)

	2007	2008	2009	2010-2011 Balance to Complete	Total
USACE	18.75	18.75	18.75	18.75	$75
SFWMD	18.75	18.75	18.75	18.75	$75
Total	**37.5**	**37.5**	**37.5**	**37.5**	**$150**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_15_modify_holey.cfm
Contact USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Modify Rotenberger Wildlife Management Area Operation Plan (EE)
Project ID: 1421(CERP Project # WBS 16)
Lead Agency: USACE / SFWMD
Authority: No Congressional action is required

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Modified Operational Plan for the Rotenberger Land

Project Synopsis: Modification to the current operating plan for the Rotenberger Wildlife Management Area will be made to implement rain-driven operations for this area. Water deliveries are made to the Rotenberger Area from Stormwater Treatment Area 5. The deliveries are assumed to be of acceptable water quality. These new operational rules are intended to improve the timing and location of water depths within the Rotenberger Wildlife Management Area.

Cost:

Total	$150,000
Project Development	$150,000
Land Acquisition	
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 2007
Finish Date: 2009

	2007	2008	2009
Operation Schedule			

Detailed Project Budget Information ($1000)

	2007	2008	2009	Total
USACE	25	25	25	$75
SFWMD	25	25	25	$75
Total	**50**	**50**	**50**	**$150**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_16_modify_rotenberger.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Operational Modification to Southern Portion of L-31N and C-111 (OO)
Project ID: 1422
Lead Agency: SFWMD / USACE
Authority: No Congressional action is required

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Modified operations of C-111 project

Project Synopsis: Modifications to the operations of the C-111 project, currently under construction, will be made to the southern portion of L-31N Borrow Canal and C-111. These operational modifications will be made to improve deliveries to Everglades National Park and decrease flood risk of adjacent agricultural areas in the Lower East Coast Service Area. The first part of the operational changes are being implemented under the Combined Structural and Operational Plan (CSOP) analysis. The balance of change will be implemented in coordination with CERP implementation.

Cost:

Total	$0

Project Schedule:

Implement as part of C-111 project.

Detailed Budget:

Implement as part of C-111 project.

Hyperlink: http://www.evergladesplan.org
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Site 1 Impoundment and Aquifer Storage and Recovery – Pilot Project (M)
Project ID: 1423 (CERP Project # WBS 34)
Lead Agency: USACE / SFWMD
Authority: WRDA 1999

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Report and optimum design

Project Synopsis: The pilot project will address uncertainties associated with ASR technology that are proposed in the CERP. It will be designed to determine the feasibility and evaluate technical and regulatory uncertainties, as well as optimum design, of a facility prior to embarking upon full scale implementation of the ASR facilities at the Western Hillsboro site, and other sites in the lower east coast region. The formulation of alternative pilot project designs is intended to address cost effective means to address these uncertainties.

Cost:

Total	$9,000,000
Project Development	$900,000
Land Acquisition (0 acres)	$0
Implementation	$7,000,000
Monitoring	$1,100,000

Project Schedule:
Start Date: 2000
Finish Date: 2008

	2001	2002	2003	2004	2005	2006	2007	2008
PIR/Plans and Specs								
Construction								
Monitoring								

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008	Total
USACE	1,199	250	843	1,000	500	700	$4,500
SFWMD	1,615	250	643	1,000	500	500	$4,500
Total	**2,814**	**500**	**1,486**	**2,000**	**1,000**	**1,200**	**$9,000**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_34_hillsboro_asr_pilot.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP – Southern Golden Gate Estates (Picayune Strand) Hydrologic Restoration (OPE)
Project ID: 1424 (CERP Project # WBS 30)
Lead Agency: USACE / SFWMD
Authority: Not authorized

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Spreader channels, canal plugs, road removal, and pump stations. Restoration of 55,000 acres.

Project Synopsis: This project includes a combination of spreader channels, canal plugs, road removal and pump stations in the Western Basin and Big Cypress, Collier County, south of I-75 and north of U.S. 41 between the Belle Meade Area and the Fakahatchee Strand State Preserve. The purpose of this project is to restore and enhance the wetlands in Golden Gate Estates and in adjacent public lands by reducing over-drainage. Implementation of the restoration plan would also improve the water quality of coastal estuaries by moderating the large salinity fluctuations caused by freshwater point discharge of the Fahka Union Canal. The project would also aid in protecting the City of Naples' eastern Golden Gate wellfield by improving groundwater recharge.

Cost:

Total	$45,654,000
Project Development	$1,068,000
Land Acquisition	$30,104,000
Implementation	$14,482,000
Operations and maintenance	$93,000

Project Schedule:
Start Date: 2001
Finish Date: 2008

	2001	2002	2003	2004	2005	2006	2007	2008
PIR/ Plans & Specs								
Real Estate								
Construction								

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008	Total
USACE	3,376	5,000	4,365	3,362	3,362	3,362	$22,827
SFWMD	2,068	5,264	4,626	3,623	3,623	3,623	$22,827
Total	**5,444**	**10,264**	**8,991**	**6,985**	**6,985**	**6,985**	**$45,654**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_30_sgge.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: Critical Projects- Seminole Big Cypress Reservation Water Conservation Plan
Project ID: 1425
Lead Agency: USACE / Seminole Tribe of Florida
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Construction of conveyance systems, major canal bypass structures, irrigation storage cells, and water resource areas

Project Synopsis: The planned network of surface water management structures is designed to accomplish the following four objectives to get the water right through quantity, quality, timing and distribution necessary for restoration:
1. Remove phosphorus and other pollutants from water leaving the Reservation. The removal of these pollutants will be achieved using natural treatment processes, in pretreatment cells and water resource areas (WRAs). The Tribe's WRAs will take advantage of the natural treatment processes and will serve additional functions in the storage and conveyance of water.
2. Convey and store irrigation water. To make use of water provided by the District (to replace the Tribe's diverted Compact water rights), the Tribe needs to be able to take this water, when it is available, to move it and to store it. This will be accomplished through water conveyance improvements and irrigation storage cells.
3. Provide improved flood control. Stormwater must be controlled on the Reservation to prevent extended periods of flooding and limit impacts downstream. This will be accomplished by means of stormwater attenuation areas, which will detain water from large storm events.
4. Re-water Big Cypress National Preserve. The Seminole Water Conservation Project will provide the opportunity to restore more natural hydroperiods in the Big Cypress National Preserve. Bypass structures will be placed under the West Feeder Canal that will sheetflow clean water south along the length of the Feeder Canal into the Big Cypress Addition.
This project includes design and construction of water control, management, and treatment facilities for all seven basins of the Big Cypress Reservation. Basins 1-4 of the Water Conservation Project have been approved as a Critical Project under the procedures outlined by the USACE. This subset of the Water Conservation Project can be constructed and will function independently of the infrastructure required in Basins 5, 6, and 7 in the eastern portion of the Big Cypress Reservation.

Cost:

Total	$48,783,000
Project Development	$5,457,000
Land Acquisition	$3,734,000
Implementation	$39,592,000

Project Schedule:
Start Date: 1997
Finish Date: 2008

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Design												
Real Estate												
Construction												

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008	Total
USACE	4,231	3,673	3,673	3,673	3,673	5,468	24,391
Tribe	8,048	2,910	2,910	2,910	2,910	4,704	24,392
Total	**12,279**	**6,583**	**6,583**	**6,583**	**6,583**	**10,172**	**48,783**

Hyperlink: http://pillar.saj.usace.army.mil/projects/proj6.htm
Contact: USACE

Program Name: Infrastructure
Project Name: Florida Bay and the Florida Keys Feasibility Study
Project ID: 1426
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Feasibility Report

Project Synopsis: Construction of Flagler's railroad to Key West and subsequent conversion into U.S. Highway 1 involved the placement of fill material in wetlands and open water for the numerous causeways between the keys. These causeways altered tidal flows between Florida Bay and the Atlantic Ocean, resulting in adverse water quality and fish and wildlife habitat impacts. One of the House of Representatives Committee on Public Works and Transportation resolutions of 24 September 1992 requested the Corps of Engineers conduct a study of Florida Bay, including a comprehensive, coordinated ecosystem study with hydrodynamic modeling of Florida Bay and its connections to the Everglades, the Gulf of Mexico, and the Florida Keys Coral Reef ecosystem. Hydrodynamic and water quality models currently under development for Florida Bay will provide the tools necessary for evaluation of the problem in a holistic manner. A feasibility study is underway to comprehensively evaluate Florida Bay and to determine the types of modifications that are needed to successfully restore water quality and ecological conditions of the Bay.

Cost:

Total	$6,299,900
Project Development	
Land Acquisition	
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 2001
Finish Date: 2012

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Feasibility Study												

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008-2012 Balance to Complete	Total
USACE	1,049	400	150	150	150	1,251	$3,150
SFWMD	691	150	150	150	150	1,859	$3,150
Total	**1,740**	**550**	**300**	**300**	**300**	**3,110**	**$6,300**

Hyperlink: http://www.evergladesplan.org/pm/studies/fl_bay.cfm
Contact: USACE

Program Name: Restoration Program: Hydrological Restoration
Project Name: Rotenberger Restoration
Project ID: 1430
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Extent of hydropattern restored (Target: 29,000 acres).

Project Synopsis: The Rotenberger Restoration project is intended to restore hydropattern on the Rotenberger Wildlife Management Area, a total of over 29,000 acres. An inflow pump station and distribution canal are planned as part of the restoration effort to be located near the southeast corner of STA-5. Also planned are four outfall culverts, which will be placed in the east levee of the Rotenberger Wildlife Management Area to route water to the Miami Canal.

*** Cost (Estimate):**

Total:	$	5,002,111
(1) Project Development:	$	307,283
Land Acquisition:	$	-
(2) Implementation:	$	3,035,047
Operations and Maintenance:	$	1,659,781

Project Schedule:
Expected Completion Date: September 2002

	FY 1994 - FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development						
Land Acquisition						
Implementation						
Operations and Maintenance						

*** Detailed Project Budget Information ($1000s)**

	Actual FY 1994-03	Projected FY 2004	Projected FY 2005	Projected FY 2006	Projected FY 2007	Balance to complete	Total
Federal							
State	$3,486.1	$101.5	$118.5	$124	$132	$1,040	$5,002.1
Tribal							
Local							
Other							
Total	$3,486.1	$101.5	$118.5	$124	$132	$1,040	$5,002.1

Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections.

(3) Project Development includes Design Phase [contracts & staff costs] costs.
(4) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Mary Lou Cariello, (561) 682-6454

Program Name: Feasibility Studies Infrastruct
Project Name: Southwest Florida Feasibility Study
Project ID: 1431
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Feasibility Report

Project Synopsis: The Caloosahatchee River is the only portion of the C&SF Project that lies in southwest Florida. The river serves as an outlet from Lake Okeechobee to the Gulf of Mexico and is the major source of surface water supply to the Lower West Coast region. It provides agricultural and lawn irrigation, public water supplies and is used to recharge shallow wellfields. The river also provides drainage for private drainage systems and local drainage districts.

The facilities included in the Comprehensive Plan for the Caloosahatchee River Basin will help meet the needs of the basin. However, there are additional water resources problems and opportunities in southwest Florida that require studies that are beyond the scope of the Comprehensive Plan. For example, primary water quality and hydrologic data do not exist for much of the region. This lack of monitoring and assessment data information is a fundamental gap for this region of the state and greatly hinders its long-tem water resources management opportunities.

The Southwest Florida Feasibility Study will include Collier, Lee, Charlotte, Glades and Hendry Counties and provide a framework to address the health of aquatic ecosystems, water flows, water quality (including appropriate pollution reduction targets), water supply, flood protection, wildlife, and biological diversity and natural habitat. The study will also investigate non-structural alternatives.

Cost:
Total $12,000,000
Project Development
Land Acquisition
Implementation
Operations and maintenance

Project Schedule:
Start Date: 2001
Finish Date: 2005

	2001	2002	2003	2004	2005
Planning & Design					
Real Estate					
Construction					

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	Total
USACE	2,302	449	3,249	$6,000
SFWMD	2,280	1,100	2,620	$6,000
Total	**4,582**	**1,549**	**5,869**	**$12,000**

Hyperlink: http://www.evergladesplan.org/pm/studies/swfl.cfm
Contact: USACE

Program Name: Restoration Program: Hydrological Restoration
Project Name: WCA-2A Hydropattern Restoration
Project ID: 1432
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Extent of hydropattern improved (Target: 7,680 acres)

Project Synopsis: WCA-2A Hydropattern Restoration Works, consists of a modification of the L-6 levees and borrow canal to result in an approximation of sheet flow into Water Conservation Area-2A. This modification will extend from G-335, the new outflow pump station for STA-2, northeasterly to the STA-2 inflow canal from S-6, a total length of approximately 39,750 feet.

*** Cost (Estimate):**

Total:	$ 6,000,962
(1) Project Development:	$ 950,423
Land Acquisition:	$ -
(2) Implementation:	$ 4,724,671
Operations and Maintenance:	$ 325,868

Project Schedule:
Expected Completion Date: September 2006

	FY 1994 - FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development						
Land Acquisition						
Implementation						
Operations and Maintenance						

*** Detailed Project Budget Information ($1000)**

	Actual FY 1994-03	**Projected FY 2004**	**Projected FY 2005**	**Projected FY 2006**	**Projected FY 2007**	**Balance to complete**	**Total**
Federal							
State	$4,918.7	$25.5	$34.2	$798.4	$26	$198	$6,001
Tribal							
Local							
Other							
Total	**$4,918.7**	**$25.5**	**$34.2**	**$798.4**	**$26**	**$198**	**$6,001**

- Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections.

(5) Project Development includes Design Phase [contracts & staff costs] costs.
(6) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Hyperlink: Additional information available at www.sfwmd.gov under the heading "Major Projects"
Contact: Mary Lou Cariello, (561) 682-6454

Program Name: Restoration Program: Hydrological Restoration
Project Name: West WCA-3A Hydropattern Restoration
Project ID: 1433
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Improve the volume, timing and distribution of water entering the Everglades

Project Synopsis: The objective of this plan element is to restore hydroperiod along the northwest perimeter of Water Conservation Area 3A, west of the Miami Canal and east of Levee L-28. This will be accomplished through development of a sheet flow approximation along the affected three mile length. The source of the water supply for this sheet flow will be, discharges from the Rotenberger Wildlife Management Area and the outflows from STA-5 via the pump station G-404 and STA-6.

*** Cost (Estimate):**

Total:	$ 10,492,653
(1) Project Development:	$ 51,492
Land Acquisition:	$ -
(2) Implementation:	$ 7,007,931
Operations and Maintenance:	$ 3,433,230

Project Schedule:
Expected Completion Date: July 2006

	FY 1994 - FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development	[redacted]					
Land Acquisition						
Implementation	[redacted]			[redacted]		
Operations and Maintenance	[redacted]					

*** Detailed Project Budget Information ($1000)**

	Actual FY 94-03	**Projected FY 2004**	**Projected FY 2005**	**Projected FY 2006**	**Projected FY 2007**	**Balance to complete**	**Total**
Federal							
State	$7,015.6	$245.8	$186.3	$621.8	$268	$2,155	$10,492.7
Tribal							
Local							
Other							
Total	**$7,015.6**	**$245.8**	**$186.3**	**$621.8**	**$268**	**$2,155**	**$10,492.7**

- Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections.

(7) Project Development includes Design Phase [contracts & staff costs] costs.
(8) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Mary Lou Cariello, (561) 682-6454

Program Name: Infrastructure
Project Name: C&SF: CERP - Big Cypress/L-28 Interceptor Modifications (CCC)
Project ID: 1500 (CERP Project # WBS 10)
Lead Agency: USACE / SFWMD
Authority: Not Authorized.

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): 7,600 ac-ft STA
Levee degrading and canal filling

Project Synopsis: This feature includes modification of levees and canals, water control structures, pumps, and stormwater treatment areas with a total storage capacity of 7,600 acre-feet located within and adjacent to the Miccosukee and Seminole Indian Reservations in Collier and Hendry Counties. The initial design of the stormwater treatment areas assumed a total acreage of 1,900 acres with the water level fluctuating up to 4 feet above grade. Conceptual sizes of the stormwater treatment areas were based on interim phosphorus concentration targets in the conceptual plan for the Everglades Construction Project. The final size, depth and configuration of this facility, including the stormwater treatment areas, will be determined through more detailed planning and design. Design of the stormwater treatment areas will be based on water quality criteria of the Seminole Tribe and criteria applicable to Big Cypress National Preserve, as appropriate.

Cost:

Total	$ 42,751,000
Project Development	$2,477,000
Land Acquisition (estimated 1,900 acres)	$6,700,000
Implementation	$ 33,574,000
Operations and maintenance	$404,457

Project Schedule:
Start Date: 2011
Finish Date: 2019

	2011	2012	2013	2014	2015	2016	2017	2018	2019
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Thru 2003*	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018-2019 Balance to complete**	**Total**
USACE	37	177	177	847	847	847	847	4,204	13,392	$21,375
SFWMD	37	177	177	847	847	847	847	4,205	13,392	$21,376
Total	**74**	**354**	**354**	**1,694**	**1,694**	**1,694**	**1,694**	**8,409**	**26,784**	**$42,751**

*programmatic costs

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_10_big_cypress.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP – Broward County WPA - C-9 Stormwater Treatment Area/ Impoundment (R) and Western C-11 Diversion Impoundment and Canal (Q) and Water Conservation Areas 3A and 3B Levee Seepage Management (O)
Project ID: 1501 (CERP Project # WBS 45)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): 4,100 acres of treatment and storage capacity

Project Synopsis: The C-9 Stormwater Treatment Area/ Impoundment feature includes canals, levees, water control structures and a stormwater treatment area/impoundment with a total capacity of approximately 10,000 acre-feet, located in the western C-9 Basin in Broward County. The initial design of the stormwater treatment area/impoundment assumed 2,500 acres with the water level fluctuating up to 4 feet above grade. The purpose of this feature is to provide treatment of runoff stored in the North Lake Belt Storage Area, enhance the groundwater recharge within the basin, provide seepage control for Water Conservation Area 3 and buffer areas to the west, and provide flood protection for western C-9 Basin.

The Western C-11 Diversion Impoundment and Canal and Water Conservation Areas 3A and 3B Levee Seepage Management feature includes canals, levees, water control structures, and a stormwater treatment area/impoundment with a total storage capacity of 6,400 acre-feet located in western Broward County. The initial design of the stormwater treatment area/impoundment assumed 1,600 acres with water level fluctuating up to 4 feet above grade. The purpose of this feature is to divert and treat runoff from the western C-11 Basin that is presently discharged into Water Conservation Area 3A, control seepage from Water Conservation Areas 3A and 3B by improving groundwater elevations, and providing flood protection for the western C-11 Basin.

The final size, depth and configuration of these facilities were determined through more detailed planning and design completed as a part of the Draft Water Preserve Areas Feasibility Study. Detailed design of these features will address pollution load reduction targets necessary to protect receiving waters.

Cost:

Total	$313,690,000
Project Development	$5,124,000
Land Acquisition (estimated 8,907 acres)	$162,454,000
Implementation	$62,807,000
RE Adjustment	$68,131,000
Operations and maintenance	$1,399,175

Project Schedule:
Start Date: 2002
Finish Date: 2011

WCA 3A/B Seepage Mgmt	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
PIR/ Plans & Specs							
Real Estate							
Construction							

Project 1501 page 1 of 2

C-9 & C-11 Impoundments	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
PIR/ Plans & Specs								
Real Estate								
Construction								

Detailed Project Budget Information ($1000)

	Thru 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**Total**
USACE	786	500	3,500	25,390	25,391	25,390	25,391	25,390	25,107	156,845
SFWMD	217	2,000	2,000	25,391	25,390	25,391	25,390	25,391	25,675	156,845
Total	**1,003**	**2,500**	**5,500**	**50,781**	**50,781**	**50,781**	**50,781**	**50,781**	**50,782**	**313,690**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_45_broward_wpa.cfm
Contact: USACE

Project 1501 page 2 of 2

Program Name:
Project Name: C&SF: CERP - Miccosukee Tribe Water Management Plan (OPE)
Project ID: 1502 (CERP Project # WBS 90)
Lead Agency: USACE / Miccosukee Tribe
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): 900-acre constructed wetlands

Project Synopsis: This feature includes construction of a 900-acre wetland retention/detention area on the Miccosukee Tribe's Alligator Alley Reservation. The feature includes a pump station, levees, trenches and culverts to create the inflow and outflow facilities for the retention/detention area.

Cost:

Total	$24,459,000
Project Development	$1,562,000
Land Acquisition	$1,718,000
Implementation	$21,179,000
Operations and maintenance	$540,000

Project Schedule:

Start Date: 2003
Finish Date: 2010

	2003	2004	2005	2006	2007	2008	2009	2010
Planning & Design								
Real Estate								
Construction								

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008	2009	2010	Total
USACE	0	312	1,718	2,274	1,981	1,982	1,981	1,982	$12,230
Tribe	0	312	1,718	2,274	1,981	1,982	1,981	1,981	$12,229
Total	**0**	**624**	**3,436**	**4,548**	**3,962**	**3,964**	**3,962**	**3,963**	**$24,459**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_90_miccosukee.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: North Palm Beach County Part 1 (X, Y, GGG, K P1, OPE)
Project ID: 1503 (CERP Project # WBS 17)
Lead Agency: USACE / SFWMD
Authority: Not authorized.

Strategic Plan Goal(s) Addressed: Primary: 1.B.1 **Secondary:** Other

Measurable Output(s): 1,260 acres of STA

Project Synopsis: This project includes six separable elements: **a) Pal-Mar and J.W. Corbett Wildlife Management Area Hydropattern Restoration** – this element includes water control structures, canal modifications, and acquisition of 3,000 acres. The purpose of this element is to provide hydrologic connections between the Corbett Wildlife Management Area and the Moss property, the C-18 Canal, the Indian Trail Improvement District, and the L-8 borrow canal; **b) L-8 Basin Modifications** – this element involves modifications to the L-8 Basin, including a series of pumps, water control structures, and canal capacity improvements in the M Canal. The purpose of this element is to increase water supply availability while maintaining or enhancing flood protection for northern Palm Beach County areas; **c) C-51 and L-8 Reservoir** – this element includes a combination aboveground and in-ground reservoir. The purpose of this element is to increase water supply availability, attenuate discharge to the Lake Worth Lagoon, and provide ancillary drainage benefits for northern Palm Beach County areas; **d) Lake Worth Lagoon Restoration** – includes removal and trapping of sediments within the C-51 Canal and sediment removal or trapping within an area downstream of the C-51 Canal and the Lake Worth Lagoon. The purpose of this element is to improve water quality and allow for the reestablishment of sea grasses and benthic communities; **e) C-17 Backpumping and Treatment** – this element includes backpumping facilities and a stormwater treatment area with a total capacity of 2,200 acre feet located in northeastern Palm Beach County. The purpose of this element is to increase water supplies to the West Palm Beach Water Catchment Area and Loxahatchee Slough; **f) C-51 Backpumping and Treatment** – includes backpumping facilities and a stormwater treatment area with a storage capacity of 2,400 acre-feet located in Palm Beach County. The purpose of this element is to increase water supplies to the West Palm Beach Water Catchment Area and Loxahatchee Slough.

Cost:

Total	$464,994,000
Project Development	$12,840,000
Land Acquisition (est. 6,440 acres)	$63,783,000
Implementation	$388,371,000
Operations and maintenance	$4,176,046

Project Schedule:
Start Date: 2001
Finish Date: 2019

	2003-2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
PIR/ Plans & Specs														
Real Estate														
Construction														

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	2006	2007	2008-2019 Balance to complete	Total
USACE	1,109	550	7,000	15,000	15,000	193,838	232,497
SFWMD	2,395	7,000	7,000	15,000	15,000	186,102	232,497
Total	**3,504**	**7,550**	**14,000**	**30,000**	**30,000**	**379,940**	**$464,994**

Note: The Corps is not currently tracking the project components.

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_17_npbc_1.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Caloosahatchee Backpumping with Stormwater Treatment (DDD)
Project ID: 1505 (CERP Project # WBS 06)
Lead Agency: USACE / SFWMD
Authority: Not authorized.

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): 20,000 ac-ft STA

Project Synopsis: This feature includes pump stations and a stormwater treatment area with a total capacity of approximately 20,000 acre-feet located in the C-43 Basin in Hendry and Glades Counties. The initial design of the stormwater treatment area assumed 5,000 acres with the water level fluctuating up to 4 feet above grade. The final size, depth and configuration of this facility will be determined through more detailed planning and design.

Cost:

Total	$82,895,000
Project Development	$4,790,000
Land Acquisition (estimated 5,000 acres)	$13,179,000
Implementation	$64,926,000
Operations and maintenance	$2,273,076

Project Schedule:
Start Date: 2011
Finish Date: 2020

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
PIR/ Plans & Specs										
Real Estate										
Construction										

Detailed Project Budget Information ($1000)

	Thru 2003*	2011	2012	2013	2014	2015	2016-2020 Balance to complete	Total
USACE	72	342	342	342	3,637	3,637	33,075	$41,447
SFWMD	72	342	342	342	3,637	3,637	33,076	$41,448
Total	**144**	**684**	**684**	**684**	**7,274**	**7,274**	**66,151**	**$82,895**

* Programmatic Costs

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_06_cal_backpumping.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: Critical Projects: Lake Okeechobee Water Retention/Phosphorous Removal
Project ID: 1506
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: 1.B. 1

Measurable Output(s): 2 stormwater treatment areas with 940 acres

Project Synopsis: Reestablishing wetlands currently drained for agriculture. Construction of two stormwater treatment areas will reduce phosphorous loading to Lake Okeechobee. Design is underway, and construction is scheduled to begin in 2004.

Cost:

Total	$23,306,000
Project Development	$2,355,000
Land Acquisition (20,000 acres)	$4,800,000
Implementation	$16,151,000
Operations and maintenance	

Project Schedule:
Start Date: 1997
Finish Date: 2006

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Planning & Design										
Real Estate										
Construction										

Detailed Project Budget Information ($1,000)

	Thru 2003	2004	2005	2006	Total
USACE	2,373	3,979	2,088	3,213	$11,653
SFWMD	0	2,825	2,824	6,004	$11,653
Total	**2,373**	**6,804**	**4,912**	**9,217**	**$23,306**

Hyperlink: http://www.saj.usace.army.mil/projects/crproj10.htm
Contact: USACE

Program Name: Miccosukee Tribe of Indians of Florida
Project Name: Miccosukee Tribe Water Management Area
Project ID: 1507
Lead Agency: Miccosukee Tribe
Authority: Section 518 of the CWA, Miccosukee Water Quality Standards, Inherent Tribal Sovereignty.

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): 1. Reduction of total phosphorous loads to achieve a long term flow weighted average concentration of 10 parts per billion. 2. Conversion of upland acres to wetland by 900 acres, 3. Increase wetland habitat for threatened and endangered species by 900 acres, 4. Prevent urbanization / industrial development along the I-75 corridor by conversion to eco-tourism friendly use.

Project Synopsis: The Miccosukee Water Management Area is a project to construct a managed wetland (STA) on the Miccosukee Tribe's Alligator Alley Reservation. The purpose of the project is to provide water storage capacity and water quality treatment for waters which discharge into the Everglades protection Area. The project will convert approximately 900 acres of tribally owned cattle pastures into a wetland retention/detention area, which will be designated to filter out harmful nutrients contained in stormwater runoff before the water enters the Everglades Protection Area. Tribal Water Quality Standards have been approved by EPA and require 10 ppb total phosphorous for waters entering the Everglades Protection Area. This STA will be designed to achieve that standard.

Cost:
Total: $42,113,000.00
Project Development (Planning & Design): $2,528,000.00
Land Acquisition: The Miccosukee Tribe proposes to convert up to 900 acres of upland cattle pastures to be used as their share of this projects cost (This is 1/3 larger than STA-6). Land acquisition costs will be deemed equal to Capital costs of the project.
Implementation (STA Construction): $20,213,000.00
Operations and Maintenance: $19,372,000.00

Project Schedule: The project will take no more than 5 years to complete. Funding has yet to be initiated.
Start Date: 90 days after funding is secured
Finish Date: No longer than 5 years

Detailed Project Budget Information ($1000)

	Thru 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Total								**TBD**

Hyperlink: N/A
Contact: Miccosukee Tribe of Indians of Florida

Program Name: Restoration Program: Hydrological Restoration, Water Quality
Project Name: STA-1 West Works and Outflow Pump Station (G-310)
Project ID: 1508
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): Acres of stormwater treatment area (Target: 6,700 acres).

Project Synopsis: STA-1 West is located in Western Palm Beach County it serves the area tributary to Pump Station S-5A and the Loxahatchee National Wildlife Refuge (WCA-1). STA 1 West consists of almost 7,000 acres (over 10 square miles) of prior agricultural fields that have been converted to wetland treatment systems designed to reduce phosphorus loads entering the Everglades. The construction consisted of approximately 6,700 acres of wetlands, 14 miles of levees, three concrete spillways, culverts and related ancillary facilities. STA-1 West will include the current Everglades Nutrient Removal (ENR) Project, which is a demonstration project of wetland treatment technology. Over the last six years the ENR has removed over 80 metric tons of phosphorus from waters entering the Everglades. Pump Station G-310 is located at the south corner of STA-1 West and directly southwest of the existing G-251 outflow pump station for the ENR project. With a capacity of 3,040 cfs, it will provide treated water to the Loxahatchee National Wildlife Refuge, also known as, WCA 1.

*** Cost (Estimate):**

Total:	$ 97,516,089
(1) Project Development:	$ 3,120,981
Land Acquisition:	$ 22,639,867
(2) Implementation:	$ 47,055,072
Operations and Maintenance:	$ 24,700,169

Project Schedule:
Expected Completion Date: October 2003

	FY 1994 - FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development						
Land Acquisition						
Implementation						
Operations and Maintenance						

*** Detailed Project Budget Information ($1000)**

	Actual FY 1994-03	**Projected FY 2004**	**Projected FY 2005**	**Projected FY 2006**	**Projected FY 2007**	**Balance to complete**	**Total**
Federal							
State	$77,167.3	$2,233.7	$1,732	$1,643	$1,704	$13,036	$97,516
Tribal							
Local							
Other							
Total	**$77,167.3**	**$2,233.7**	**$1,732**	**$1,643**	**$1,704**	**$13,036**	**$97,516**

- Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections.

(9) Project Development includes Design Phase [contracts & staff costs] costs.
(10) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Mary Lou Cariello, (561) 682-6454

Program Name: Restoration Program: Hydrological Restoration, Water Quality
Project Name: STA-2 Works and Outflow Pump Station (G-335)
Project ID: 1509
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): Acres of stormwater treatment area (Target: 6,430 acres).

Project Synopsis: STA-2 Works is located in southern Palm Beach County including and surrounding the Brown's Farm Wildlife Management Area. This project provides a total effective treatment area of 6,430 acres serving the area tributary to pump station S-5A and S-6. Construction included approximately 28 miles of levees constructed in the inflow, interior and discharge works combined, remote controlled structures and pump station G-335. This stormwater treatment area will filter and discharge waters to Water Conservation Area -2A (WCA-2A). Sixteen remotely controlled structures will reduce operation and maintenance expenditures and will allow additional flexibility to achieve balanced flows into the treatment cells. Outflow Pump Station G-335 is located at the south east corner of STA-2. This 3,040 cubic foot per second structure will discharge treated water into Water Conservation Area 2A.

*** Cost (Estimate):**

Total:	$113,595,331
(1) Project Development:	$ 4,382,696
Land Acquisition:	$ 30,780,094
(2) Implementation:	$ 59,889,158
Operations and Maintenance:	$ 18,543,383

Project Schedule:
Expected Completion Date: September 2004

	FY 1994 - FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development						
Land Acquisition						
Implementation						
Operations and Maintenance						

*** Detailed Project Budget Information ($1000)**

	Actual FY 1994-03	**Projected FY 2004**	**Projected FY 2005**	**Projected FY 2006**	**Projected FY 2007**	**Balance to complete**	**Total**
Federal							
State	$97,121.8	$1,869.1	$1,541.4	$1,280	$1,341	$10,442	$113,595
Tribal							
Local							
Other							
Total	**$97,121.8**	**$1,869.1**	**$1,541.4**	**$1,280**	**$1,341**	**$10,442**	**$113,595**

Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections.

(11) Project Development includes Design Phase [contracts & staff costs] costs.
(12) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Contact: Mary Lou Cariello, (561) 682-6454
Hyperlink: www.sfwmd.gov under the heading "Major Projects"

Program Name: Restoration Program: Hydrological Restoration, Water Quality
Project Name: STA-3/4 Works
Project ID: 1510
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): Acres of stormwater treatment area (Target: 16,600 acres)

Project Synopsis: STA-3/4 will treat the area tributary to Pump Station S-7 and S-8 and will be constructed to provide a total effective treatment area of 16,600 acres extending generally from the Holey Land Wildlife Management Area to U.S. Highway 27. The major components of STA-3/4 are, but are not limited to the following: Inflow Pump Station G-370 and G-372, gated spillways G-371 and G-373, STA-3/4 Works, Supply Canal, and U.S. Highway 27 Bridge Relocation.

*** Cost (Estimate):**

Total:	$219,338,858
(1) Project Development:	$ 7,443,548
Land Acquisition:	$ 50,402,532
(2) Implementation:	$134,049,702
Operations and Maintenance:	$ 27,443,076

Project Schedule:
Expected Completion Date: October 2005

	FY 1994 - FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development						
Land Acquisition						
Implementation						
Operations and Maintenance						

*** Detailed Project Budget Information ($1000)**

	Actual FY 1994-03	**Projected FY 2004**	**Projected FY 2005**	**Projected FY 2006**	**Projected FY 2007**	**Balance to complete**	**Total**
Federal							
State	$161,638.6	$30,499.4	$5,709.7	$3,717.1	$1,949	$15,825	$219,338.8
Tribal							
Local							
Other							
Total	**$161,638.6**	**$30,499.4**	**$5,709.7**	**$3,717.1**	**$1,949**	**$15,825**	**$219,338.8**

- Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections.

(13) Project Development includes Design Phase [contracts & staff costs] costs.
(14) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Mary Lou Cariello, (561) 682-6454

Program Name: Restoration Program: Hydrological Restoration, Water Quality
Project Name: STA-5 Works
Project ID: 1511
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): Acres of stormwater treatment area (Target: 4,118 acres).

Project Synopsis: STA-5 is bordered by L-3 on the west and immediately east of and adjacent to the Rotenberger Wildlife Management Area in Hendry County, is intended to improve the quality of water discharged from the C-139 Basin. STA-5 will achieve a total effective treatment area of 4,118 acres. Major components of this STA include, but are not limited to the following: construction of eight gravity control structures to convey flows into and out of STA-5 treatment cells, 18 miles of canal and levee construction, eight intermediate concrete culverts with fixed wiers, modifications to the existing L-3 Levee, seepage return pump station, (2) water supply pump stations and construction of a discharge canal. This STA consists of two parallel treatment cells with flow direction from west to east.

*** Cost (Estimate):**

Total:	$ 47,891,842
(1) Project Development:	$ 1,408,508
Land Acquisition:	$ 15,498,109
(2) Implementation:	$ 20,185,165
Operations and Maintenance:	$ 10,800,060

Project Schedule:
Expected Completion Date: March 2005

	FY 1994 - FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development						
Land Acquisition						
Implementation						
Operations and Maintenance						

*** Detailed Project Budget Information ($1000)**

	Actual FY 1994-03	**Projected FY 2004**	**Projected FY 2005**	**Projected FY 2006**	**Projected FY 2007**	**Balance to complete**	**Total**
Federal							
State	$34,807	$3,740	$1,259.7	$783	$809	$6,463	$47,891.8
Tribal							
Local							
Other							
Total	**$34,807**	**$3,740**	**$1,259.7**	**$783**	**$809**	**$6,463**	**$47,891.8**

Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections.

(15) Project Development includes Design Phase [contracts & staff costs] costs.
(16) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Mary Lou Cariello, (561) 682-6454

Program Name: Restoration Program: Hydrological Restoration, Water Quality
Project Name: STA-6 (includes Sections 1 and 2)
Project ID: 1512
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): Acres of stormwater treatment area (Target: Section 1 - 812 acres; Section 2 - 1,410 acres).

Project Synopsis: STA-6 Section 1 was completed on October 31, 1997, and is located immediately west of the Rotenberger Wildlife Management Area and north of Levee L-3 in southeastern Hendry County. It was constructed to provide a total effective STA area of 870 acres. Project components included, but were not limited to, construction of various inflow and discharge structures, discharge canal and levee. STA-6 Section 2 will involve the addition of 1,410 acres of effective treatment area to treat runoff from US Sugar Corporation's Southern Division Unit 1. The improvements consist primarily of new inflow, outflow, exterior and perimeter levees, inflow structures and outflow structures, new access bridges and seepage return pump.

*** Cost (Estimate):**

Total:	$ 23,066,387
(1) Project Development:	$ 755,865
Land Acquisition:	$ 7,451,810
(2) Implementation:	$ 10,676,705
Operations and Maintenance:	$ 4,182,007

Project Schedule:
Expected Completion Date: September 2006

	FY 1994 - FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development						
Land Acquisition						
Implementation						
Operations and Maintenance						

*** Detailed Project Budget Information ($1000)**

	Actual FY 1994-03	**Projected FY 2004**	**Projected FY 2005**	**Projected FY 2006**	**Projected FY 2007**	**Balance to complete**	**Total**
Federal							
State	$10,304.2	$2,738.3	$4,753.4	$1,761.3	$391	$3,118	$23,066.3
Tribal							
Local							
Other							
Total	**$10,304.2**	**$2,738.3**	**$4,753.4**	**$1,761.3**	**$391**	**$3,118**	**$23,066.3**

Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections
.
(17) Project Development includes Design Phase [contracts & staff costs] costs.
(18) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Mary Lou Cariello, (561) 682-6454

Program Name: Restoration Program: Hydrological Restoration, Water Quality
Project Name: STA-1E / C-51 West
Project ID: 1513
Lead Agency: USACE / SFWMD
Authority: FCA 1968, WRDA 1996

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): Acres of stormwater treatment area (STA) (target: 6,500 acres)

Project Synopsis: The project is located in Palm Beach County and runs east/west from Water Conservation Area 1 (Loxahatchee National Wildlife Refuge) to West Palm Beach at Lake Worth. The authorized project will provide 30-year flood protection to the urbanized eastern basin and 10-year flood protection to the western basin. All eastern basin features have been completed. This project will operate in parallel with STA 1W to reduce the total phosphorus in runoff from both the C-51 West and S 5A basins prior to their discharge into Water Conservation Area 1. During mediation of the Everglades litigation, a technical mediated plan was developed for resolution of the litigation. The technical mediated plan included a substantially modified C-51 project. The modified plan expands the original 1,600-acre floodwater detention area into a 6,500-acre STA. In addition to the flood damage reduction benefits provided by the original project, the modified plan provides water quality treatment, reduction of damaging freshwater discharges to Lake Worth, and increased water supply for the Everglades and other users. Major project components include, but are not limited to, construction of the following: STA 1E works, pumping station S-319 and S-362, Canal C-51 enlargement, and gated structure S-155A.

Cost:

Total:	$220,672,446
Project Development:	$441,317
Land Acquisition:	$63,818,446
Implementation:	$156,412,703
Operations and Maintenance:	$23,901,652

(Not included in total above but displayed separately in budget info below)

Project Schedule:
Start Date: 1994
Finish Date: 2014

	Thru 2002	2003	2004	2005	2006	2007	2008-2014
Planning & Design							
Real Estate							
Construction							
O&M							

Detailed Project Budget Information (1000s):

	Thru 2003	2004	2005	2006	2007	2008-2014	Total
USACE	$143,057.7	$5,412.4	$4,430				$152,900
SFWMD	$20,404	$1,368.5					$ 21,772.5
DOI	$46,000						$ 46,000
Total	**$209,461.7**	**6,780.9**	**4.430**	**$1,956**	**$2,010**	**$15,971**	**220,672.4**

Hyperlink: http://www.saj.usace.army.mil/restore/projects/C-51.htm
Contact: USACE

Program Name: Water Quality
Project name: Total Maximum Daily Load (TMDL) for South Florida
Project ID: 1600
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: 403.067, F.S.

Strategic Plan Goal(s) Addressed: 1.B.2

Measurable Output(s): Basin Assessments, Identifying Impaired Waters, Supplemental Data Collection, Develop TMDLs, Implementation Plans, Verification WQ Standards have been met

Project Synopsis: During the first phase, the water quality data for each basin will be assessed in detail, including the identification of waters for which TMDLs will be developed. Once a basin assessment report and a Plan of Study are completed, intensive monitoring will be conducted in the basin to supply any additional data needed to model the impaired waters in the basin and generate TMDLs. During the third phase, TMDLs will be calculated and then allocated to individual point sources and the major categories of nonpoint sources. After TMDLs are approved, a consensus-based basin management action plan (BMAP), which will include a TMDL implementation plan, will be developed during the fourth phase. The implementation plan will include more detailed allocations to nonpoint sources, but the allocations will be voluntary if the sources are currently outside of the State's regulatory authority. Once these plans have been adopted and implemented, verification (using added WQ monitoring data, evaluations of beach closure reports, or number of fish kills, for example) will allow waters to be certified as meeting water quality standards.

Cost:

Total:	$1,000,000/yr
Project Development:	$1,000,000/yr
Land Acquisition:	Unknown
Implementation:	Unknown
Operations and maintenance:	Unknown

Project Schedule:
Start Date: July 1, 2000
Finish Date: Upon Completion (Current schedule runs to 2011)

Detailed Project Budget Information(1000s)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal								
State	400	600	600	600	600	1,000		3,800
Tribal								
Local								
Other								
Total	**400**	**600**	**600**	**600**	**600**	**1,000**		**3,800**

Hyperlink: N/A
Contact: Florida Dept. of Environmental Protection

Program Name: Restoration Program: Hydrological Restoration, Water Quality
Project Name: Chapter 298 Districts/Lease 3420 Improvements
Project ID: 1700
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Extent of reduction of total phosphorus entering Lake Okeechobee.

Project Synopsis: South Florida Water Management District is funding works of the Chapter 298 District (East Beach Water Control District, East Shore Water Control District, South Shore Drainage District and South Florida Conservancy District) for the design and construction of this diversion work as described in the Everglades Forever Act. South Florida Water Management District is also funding works of the Lessee of Lease No. 3420 (Closter Farms) for the design and construction of diversion works as described in the Everglades Forever Act. The primary objective of these improvements is to reduce total phosphorus loads discharged directly to Lake Okeechobee.

*** Cost (Estimate):**

Total:	$ 22,817,145
(1) Project Development:	$ 779,995
Land Acquisition:	$ -
(2) Implementation:	$ 22,037,150
Operations and Maintenance:	$ -

Project Schedule:
Expected Completion Date: November 2004

	FY 1994 - FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development						
Land Acquisition						
Implementation						
Operations and Maintenance						

*** Detailed Project Budget Information (1000s)**

	Actual FY 1994-03	**Projected FY 2004**	**Projected FY 2005**	**Projected FY 2006**	**Projected FY 2007**	**Balance to complete**	**Total**
Federal							
State	$17,451.4	$4,473.3	$892.5	-	-	-	$22,817.1
Tribal							
Local							
Other							
Total	**$17,451.4**	**$4,473.3**	**$892.5**	**-**	**-**	**-**	**$22,817.1**

Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections.

(19) Project Development includes Design Phase [contracts & staff costs] costs.
(20) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Mary Lou Cariello, (561) 682-6454

Program Name: Infrastructure
Project Name: Comprehensive Integrated Water Quality Feasibility Study
Project ID: 1701
Lead Agency: USACE / FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: **Primary:** Other

Measurable Output(s): Feasibility Report

Project Synopsis: The Comprehensive Plan includes a number of construction features, such as stormwater treatment areas, specifically designed to improve water quality conditions for the purpose of south Florida ecosystem restoration. Further, the plan includes other construction features, such as water storage reservoirs that could be designed to maximize water quality benefits to downstream water bodies. Optimizing the design and operation of construction features of the recommended plan to achieve water quality restoration targets is essential for achieving overall ecosystem restoration goals for south Florida.

The Comprehensive Integrated Water Quality Feasibility Study for south Florida would involve identifying pollution-impaired water bodies, quantifying types and sources of pollution, establishing interim and final pollution load reduction targets necessary to achieve ecosystem restoration, recommendations for development of potential source reduction programs, recommendations for baseline and future water quality monitoring programs to assess ecological responses to water quality changes, and recommendations for designing and constructing water quality treatment facilities, if necessary. It is also envisioned that the feasibility study will address issues of fragmented, uncoordinated water quality sampling, data quality, and climatological effects and trends; recommendations for oversight and support of improved water quality modeling efforts in south Florida; development of additional water quality restoration targets, where needed; recommendations for remediation programs to achieve those targets; recommendations for Best Management Practices in specific agricultural and urban areas where appropriate (including identifying those urban areas where participation in the NPDES municipal stormwater program is needed); and recommendations for synchronizing water quality restoration programs with the implementation schedule for the components of the recommended plan. The Comprehensive Integrated Water Quality Feasibility Study would also include recommendations for locations of water storage and treatment areas and design features for optimizing CERP components to achieve water quality restoration targets. The Comprehensive Integrated Water Quality Feasibility Study may also lead to recommendations for additional features (e.g., polishing cells, operational features) for CERP components currently lacking specific water quality performance elements.

Cost:
Total **$**8,100,000
Project Development

Project Schedule:
Start Date: 2001
Finish Date: 2008

	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Planning & Design								
Construction								

Detailed Project Budget Information ($1000)

	Thru 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Total**
USACE	385	30	1,016	1,016	1,016	1,017	$4,480
FDEP	905	30	671	671	671	672	$3,620
Total	**1,290**	**60**	**1,687**	**1,687**	**1,687**	**1,689**	**$8,100**

Hyperlink: http://www.evergladesplan.org/pm/studies/ciwq.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: Critical Projects- Lake Trafford
Project ID: 1702
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: Primary: Other **Secondary:**2.A.3

Measurable Output(s): Removal of 8.5 million cubic yards of organic material

Project Synopsis: The removal of 8.5 million cubic yards of organic material from the lake will improve water quality and reestablish native vegetation. Design is underway.

PROJECT IS ON HOLD DUE TO PROGRAM CAP BEING REACHED.

Cost:

Total	$25,678,000
Project Development	$1,007,000
Land Acquisition	$744,000
Implementation	$23,927,000
Operations and maintenance	

Project Schedule:
Start Date: 1999
Finish Date: 2005

	1999	2000	2001	2002	2003	2004	2005
Planning & Design							
Real Estate							
Construction							

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	Total
USACE	1,588	0	0	$1,588
SFWMD	0	3,852	20,238	$24,090
Total	**1,588**	**3,852**	**20,238**	**$25,678**

Hyperlink: http://www.saj.usace.army.mil/projects/proj15.htm
Contact: USACE

Program Name: Infrastructure
Project Name: Critical Projects - Western C-11 Water Quality Treatment
Project ID: 1703
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: **Primary:** Other

Measurable Output(s): Gated spillway structure, pump station

Project Synopsis: Western C-11 Basin Water Quality Treatment. The construction of gated spillway structure in the C-11 canal will separate clean seepage flows from urban stormwater drainage. A pump station has been constructed to pump this clean flow into Water Conservation Area 3A. A divide structure is under construction as the last element.

Cost:

Total	$18,259,000
Project Development	$1,440,000
Land Acquisition	
Implementation	$16,819,000
Operations and maintenance	

Project Schedule:
Start Date: 1997
Finish Date: 2005

	1997	1998	1999	2000	2001	2002	2003	2004	2005
Design									
Construction									

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2005	Total
USACE	7,607	469	1,054	$9,130
SFWMD	4,049	5,080	0	$9,129
Total	**11,656**	**5,549**	**1,054**	**$18,259**

Hyperlink: http://www.saj.usace.army.mil/projects/newrpt.htm
Contact: USACE

Program Name: Restoration Program: Water Quality
Project Name: Development of Best Management Practices Related to the Land Application of Residuals and Chicken Manure in the Lake Okeechobee Watershed
Project ID: 1704
Lead Agency: South Florida Water Management District

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Establishment of Environmentally-Sound Guidelines for Land Application of Residuals and Chicken Manure

Project Synopsis: The overall objective of this project is to assess the potential impacts of residuals (sludge) and chicken manure application on the quality of water reaching Lake Okeechobee. The specific objectives are to (1) document any exiting environmental problems associated with their use, (2) establish environmentally-sound guidelines for the land application of residuals and chicken manure, and (3) educate landowners in the watershed on the proper management and use of the waste materials.

Cost:

Total	$657,000 + (subject to contract bids and negotiations)
Project Development	$50,000 + (subject to contract bids and negotiations)
Land Acquisition	N/A
Implementation	$607,000
Operations and Maintenance	N/A

Project Schedule:
Start Date: 7/1/00
Finish Date: 2/1/06

Detailed Project Budget Information ($1000)

	Thru 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal								
State	557						100	657
Tribal								
Local								
Other								
Total	**557**						**100**	**657**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Jim Laing, (561) 682-6667

Program Name: Infrastructure
Project Name: Everglades National Park Water and Wastewater
Project ID: 1705
Lead Agency: National Park Service
Authority:

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Number of water and wastewater systems that are rehabilitated or replaced

Project Synopsis: This project will rehabilitate or replace 28 water and wastewater systems in two districts of Everglades National Park. A large percentage of the existing water and wastewater systems within the park were constructed over 35 years ago when the public health and environmental standards were not as fully evolved as they are today. While originally constructed to code, all of the systems are in non compliance with environmental regulations and standards for operating a public water supply. This rehabilitation effort would modify or replace all of the existing systems with new systems that offer the full level of public health and environmental protection that present day standards require. The final result will be potable water systems properly designed to provide safe, clean water and wastewater that is sufficiently treated to fully protect the fragile water resources within Everglades National Park.

Cost:
Total $18,965,000

Project Schedule:
Start Date: 1997
Finish Date: TBD

	1997	1998	1999	2000	2001	2002	2003	2004
Construction								

Detailed Project Budget Information ($1,000)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal	3,516	1,894	2,883	4,192	4,594	286	1,600	18,965
State								
Tribal								
Local								
Other								
Total	**3,516**	**1,894**	**2,883**	**4,192**	**4,594**	**286**	**1,600**	**18,965**

Hyperlink: N/A
Contact: Everglades National Park

Program Name: Restoration Program: Water Quality Source Controls
Project Name: Everglades Regulation Division
Project ID: 1706
Lead Agency: South Florida Water Management District
Authority: Everglades Forever Act (EFA)

Strategic Plan Goal(s) Addressed: I.B.3

Measurable Output(s): Basin Specific Water Quality Improvement Plan; Long-term Compliance Permit; Achieve State Water Quality Standards at all structures discharging to the Everglades Protection Area by December 2006

Project Synopsis: As a result of the EFA, the SFWMD established the Everglades Regulation Division. The Division includes two main sub-components of the Everglades Construction Project (ECP) and the Non-ECP, respectively, the Everglades Agricultural Area (EAA) and C-139 basin Best Management Practices (BMPs) Regulatory Program (ECP) and the Everglades Stormwater Program (Non-ECP). The EAA/C-139 BMP Program includes a regulatory program developed to decrease phosphorus loads from the EAA and C-139 basins by reducing phosphorus from permittee discharges. Permittees in the EAA have implemented a series of best management practices that have reduced phosphorus loads to the Everglades. Over the last several years, the total cumulative loads attributable to the EAA have been reduced more than the 25% reduction required compared to the calculated load that would have occurred during the pre- Best Management Practice period (adjusted for hydrologic variability). The C-139 basin BMP regulatory program is just beginning (2002), BMPs are being implemented and compliance monitoring will continue. The Everglades Stormwater Program was developed to ensure that all basins discharging into the Everglades other than those included in the EAA/C-139 meet state water quality standards. Water quality improvement strategies are being developed for each basin that discharges into the Everglades Protection Area. These strategies will include best management practices, regulatory programs, public outreach, and construction of public works projects. .

Cost:

Total	Subject to final compliance methodology
Project Development	N/A
Land Acquisition	N/A
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:
Start Date: March 1998
Finish Date: December 2016

Detailed Project Budget Information (1000s)

	Through 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**Balance to complete**	**Total**
Federal										
State	4,000	3,500	4,000	4,000	4,000	5,000	5,000	5,000		
Tribal										
Local	50	100	250	100	75	3,500	100	100		
Other										
Total	**4,050**	**3,600**	**4,250**	**4,100**	**4,075**	**8,500**	**5,100**	**5,100**		**TBD**

Hyperlink: N/A
Contact: Pam Sievers (561) 682-6901

Program Name: Management
Project name: Floridan Aquifer Restoration
Project ID: 1707
Lead Agency: USDA - NRCS
Authority: PL-46

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Reduced Aquifer Contamination

Project Synopsis: Saline aquifer water will cause well casings to corrode and eventually leak causing cross aquifer contamination caused by artesian flow. This project seeks to permanently decommission irrigation wells via plugging in St. Lucie County in order to reduce saline contamination of the Floridan Aquifer by leaking well casings transferring groundwater between aquifers.

Cost:
Total: $1,209,000
Project Development
Land Acquisition
Implementation $1,209,000
Operations and maintenance:

Project Schedule:
Start Date: 2002
Finish Date: 2008

Detailed Project Budget Information ($1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Total**
Federal	$25	$100	$100	$185	$190			$600
State	$140	$100	$100	$164	$100			$604
Tribal								
Local								
Other	$5							$5
Total	**$170**	**$200**	**200**	**$349**	**$290**			**$1,209**

Hyperlink: N/A
Contact: Donna Smith – 772-467-9779 USDA – NRCS

Program Name: Restoration Program: Water Quality, Habitat & Species
Project Name: Lake Okeechobee Sediment Removal Feasibility Study and Pilot Project
Project ID: 1708
Lead Agency: South Florida Water Management District
Authority: Chapter 373, Florida Statutes

Strategic Plan Goal(s) Addressed : Other

Measurable Output(s): Recommendation Regarding Sediment Removal from Lake Okeechobee

Project Synopsis: The goal of this project was to analyze alternatives and determine the best method of sediment management to reduce internal phosphorus loading in Lake Okeechobee. The Feasibility Study addressed alternatives such as sediment removal, processing, disposal, chemical treatment, and/or sealing sediment to achieve the project goal. The goal of the Feasibility Study was achieved using an objective methodology that allowed for review and input by experts and stakeholders throughout the study process. A pilot test of a state-of-the-art sediment removal/treatment technology train was conducted in parallel with the Feasibility Study. The pilot test included sediment removal, de-watering, treatment, and a pilot water quality treatment system. The results of the pilot test were incorporated into the Feasibility Study.

The results for the feasibility study indicated that once the TMDL is met the annual frequency of algal blooms would decrease to below a 15% annual probability of a bloom occurrence (from a current annual likelihood of approximately 20%) by 2015 and 10% by 2028. Under this "no in-lake action" alternative, steady-state lake recovery conditions would be achieved approximately 35 years from the point that external loads are reduced to the inflow load of 140 metric tons. Dredging did not prove feasible, while chemical treatment might be of value under limited conditions.

Cost:

Total	$955,069 + (subject to contract bids and negotiations)
Project Development	$955,069 + (subject to contract bids and negotiations)
Land Acquisition	N/A
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:
Start Date: 6/1/00
Finish Date: 6/1/03 (**Completed 04/03**)

Detailed Project Budget Information ($1000)

	Through1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal								
State		0	287.5	280.8	386,672			*
Tribal								
Local								
Other								
Total		**955.1**	**287.5**	**280.8**	**386,672**			*****

* Subject to contract bids

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Jorge Patino (561) 682-2731

Program Name: Restoration Program: Water Quality, Habitat & Species
Project Name: Lake Okeechobee Tributary Sediment Removal Pilot Project
Project ID: 1709
Lead Agency: South Florida Water Management District
Authority: Chapter 373, Florida Statutes

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Reduction in phosphorus loads from the Lettuce Creek drainage basin to Lake Okeechobee.

Project Synopsis: This project provides a direct comparison between two sediment removal technologies, namely, a continuous deflective separation (CDS) unit and a tributary sediment trap (TST) to determine if particulate phosphorus loading to Lake Okeechobee from Lettuce Creek drainage basin may be reduced using either of two pre-selected technologies. This project also examines the feasibility of sediment removal in a tributary as a method of reducing phosphorus loading to Lake Okeechobee. The effectiveness of the two technologies is being evaluated over a 12-month monitoring period. Initial monitoring results have indicated poor removal efficiencies for phosphorus by both units. Upon evaluation of the physical characteristics of the particles in the Lettuce Creek water, it was hypothesized that the settling velocities of the particles are too slow to allow capture of the particulate phosphorus within the relatively short residence times provided by the two units. Additional sediment management techniques are being investigated to examine if the effectiveness of these units can be improved by enhancing the settling velocity of the particles. The effectiveness of each system will be quantified using both a concentration-based and mass balance approach. The economic viability of each technology will be evaluated by comparing the present worth cost (20-yr) per kilogram of sediment and phosphorus removed by each system. If one of the tested sediment trap methods is found effective, landowners in the watershed will be encouraged to use it. The District will also use the technology wherever possible on District facilities.

Cost:

Total	$440,000
Project Design (Phase I)	$93,728
Construction, Installation and Calibration of Monitoring Instruments (Phase II)	$210,940
Post Sediment Removal Monitoring and Measuring Effectiveness of the Project (Phase III)	$135,332

Project Schedule:
Start Date: October 2000
Finish Date: June 2004

	10/2000	08/2001	01/2002	04/2002	05/2002	06/2004
Project Design						
Construction and Installation						
Monitoring and Project Evaluation						

Detailed Project Budget Information ($1000)

	2000-2001	**2001-2002**	**2002-2003**	**2003-2004**	**Balance to complete**	**Total**
Federal EPA	59.5	87.1	23.4			170
State SFWMD	71	136.6	42.4	20		270
Tribal						
Local						
Other						
Total	**130.5**	**223.7**	**65.8**	**20**		**440**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Odi Villapando (561) 682-2936

Program Name: Miccosukee Tribe of Indians of Florida
Project Name: Miccosukee Water Resources Management
Project ID: 1710
Lead Agency: Miccosukee Tribe
Authority: Inherent Tribal Sovereignty

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): 1. Allows Tribe to meaningfully participate in ecosystem restoration activities, 2. Allows development of a regulatory program to manage discharges to Tribal Reservation lands (approx. 75,000 acres), 3. Allows for Management of a Surface Water Management System (approx 10,000 acres) to include a 900 acre STA, 4. Allows for water quality monitoring of 189,000 acres of the central Everglades, 5. Allows for an aquatic weed control program on Tribal Reservation lands (approx. 75,000 acres), 6. Allows for GIS/GPS activities to integrate data collection with resource management, 7. This project provides for improved management of flows and quantity distribution as well as enhanced water quality benefits, both on and off Reservation lands.

Project Synopsis: The project involves a holistic approach to surface-water resources management within the Federal Reservation, Miccosukee Leased Lands and Miccosukee Reserved Area (approx 265,000 acres total). It includes field surveying of canals and levees, engineering design, ditch excavation, installation of water control structures, aquatic weed control, collection and analysis of water quality data, and integration of GIS/GPS data into management data bases. This project allows the Tribe to participate in a meaningful way in the restoration activities while monitoring the success of multiple agency activities (rights protection).

Cost:
Total: $25,200,000.00
Project Development :
This project cost is based on a ten (10) year program Annual
Operating for the Miccosukee Water Resources Management being $2,100,000.00
Land Acquisition:

Project Schedule: The project is based on a ten year schedule. If restoration activities extend beyond ten years, additional funding will be needed.
Start Date: No funding to date.
Finish Date: Completion of Restoration Activities

Detailed Project Budget Information ($1000)

	Thru 1999	**2000**	**2001**	**2001**	**2003**	**2004**	**Balance to complete**	**Total**
Federal								
State								
Tribal								
Local								
Other								
Total								**25,200**

Hyperlink: N/A
Contact: Gene Duncan 305-223-8380

Program Name: Restoration Program: Hydrological Restoration, Water Quality
Project Name: S-5A Basin Runoff Diversion Works
Project ID: 1713
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Reduce phosphorus levels before it enters the Everglades Protection Area (EPA).

Project Synopsis: S-5A Basin Runoff Diversion Works is located in western Palm Beach County at the confluence of the Hillsboro and Ocean Canal in the Everglades Agricultural Area (EAA). The project is required to divert flow from the S-5A Basin into STA-2 for treatment. This will require the enlargement of approximately 17 miles of the Hillsboro and Ocean Canals and the construction of a water control structure (G-341).

*** Cost (Estimate):**

Total:	$14,210,274
(1) Project Development:	$408,815
Land Acquisition:	$1,902,688
(2) Implementation:	$11,283,641
Operations and Maintenance:	$615,130

Project Schedule:
Expected Completion Date: September 2005

	FY 1994 - FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development						
Land Acquisition						
Implementation						
Operations and Maintenance						

*** Detailed Project Budget Information ($1000)**

	Actual FY 1994-03	**Projected FY 2004**	**Projected FY 2005**	**Projected FY 2006**	**Projected FY 2007**	**Balance to complete**	**Total**
Federal							
State	$11,085.3	$537.5	$2,067.5	$49	$54	$417	$14,210.3
Tribal							
Local							
Other							
Total	**$11,085.3**	**$537.5**	**$2,067.5**	**$49**	**$54**	**$417**	**$14,210.3**

Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections.
(21) Project Development includes Design Phase [contracts & staff costs] costs.
(22) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Mary Lou Cariello, (561) 682-6454

Program Name: Surface Water Management
Project Name: Seminole Tribe Best Management Practices for the Big Cypress Reservation
Project ID: 1714
Lead Agency: Seminole Tribe of Florida
Authority: Tribal Resolution

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s):
The project will result in immediate, measurable improvements in the quality of water discharged to the Everglades Protection Area. It will also provide tangible improvement of the water quality leaving the Western Basins, an area not addressed completely by the Everglades Construction Project and the Everglades Forever Act.

Project Synopsis:
The Seminole Tribe has contracted with the NRCS to implement a comprehensive system of best management practices (BMP's) for all seven basins in the Big Cypress Reservation. Enhanced water management will be accomplished through BMP's that include: conservation irrigation systems; nutrient loading reduction; application procedure training; fencing of WRA's and irrigation cells as detailed in the Water Conservation Plan; cross fencing for grazing management; livestock watering facilities; grazing management plans; closed-end irrigation systems; and will function independently of the Water Conservation Project, the two will work best together to create the most benefit for the ecosystem.

Cost:
Total: 4,779,000
Project Development:
Land Acquisition:
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: June 1996
Finish Date: December 2008

Detailed Project Budget Information ($1000)

	2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal	358.4	358.4	358.4	358.4	358.4	1,792.1	3,584.3
State							0
Tribal	119.5	119.5	119.5	119.5	119.5	597.2	1,194.7
Total	**477.9**	**477.9**	**477.9**	**477.9**	**477.9**	**2,389.3**	**4,779**

Hyperlink: N/A
Contact: Craig Tepper 954-967-3402, Seminole Tribe of Indians

Program Name: Surface Water Management
Project Name: Seminole Tribe Best Management Practices for the Brighton Reservation
Project ID: 1715
Lead Agency: Seminole Tribe of Florida
Authority: Tribal Resolution

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s):
Implementation of BMP's will provide immediate water quality benefits for the watershed which includes Lake Okeechobee. They will also compliment a comprehensive system of surface water management works planned for the Brighton Reservation.

Project Synopsis:
The Seminole Tribe has contracted with NRCS to design a comprehensive system of best management practices (BMP's) for the Brighton Reservation. Enhanced water management will be accomplished through application of field-level BMP's which might include: conservation irrigation systems; nutrient loading reduction; application procedure training; cross-fencing for grazing management; livestock watering facilities; grazing management plans; closed-end irrigation systems; and a tail-water recovery system where appropriate.

Cost:
Total $338,000
Project Development
Land Acquisition
Implementation
Operations and maintenance

Project Schedule:
Start Date: January, 1998
Finish Date: December, 2008

Detailed Project Budget Information (1000s)

	2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal	36	36	36	36	36	73.5	253.5
State						0	0
Tribal	12	12	12	12	12	24.5	84.5
Total	**48**	**48**	**48**	**48**	**48**	**98**	**338**

Hyperlink: N/A
Contact: Craig Tepper 954-967-3402, Seminole Tribe of Indians

Program Name: Surface Water Management
Project Name: Seminole Tribe Comprehensive Surface Water Management System for the Brighton Reservation
Project ID: 1716
Lead Agency: Seminole Tribe of Florida
Authority: Tribal Council by Resolution

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s):
This plan would provide positive water management benefits to the Indian Prairie Basin which discharges into Lake Okeechobee. Water quality will be improved by reducing nutrient loadings through detaining discharges from Tribal lands in each group. Flood control will be enhanced through the implementation of additional sites in each sub-basin. Storage and conveyance of surface waters will be increased and enhanced in each and between sub-basins. Re-hydration of slough systems in each group will also be accomplished.

Project Synopsis:
A comprehensive surface water management system will be designed and implemented for the Brighton Reservation which will include supplemental irrigation, storage, improved flood control, surface water conveyance and water quality treatment.

Cost:
Total 15,818,000
Project Development
Land Acquisition
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1999
Finish Date: 2010

Detailed Project Budget Information (1000s)

	2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal	20	4,344	970	679	853	1,508	8,374
State							0
Tribal	0	4,343	970	679	852	600	7,444
Total	**20**	**8,687**	**1,940**	**1,348**	**1,705**	**2,108**	**15,818**

Hyperlink: N/A
Contact: Craig Tepper 954-967-3402, Seminole Tribe of Indians

Program Name: Surface Water Management
Project Name: Seminole Tribe Water Conservation Project for the Big Cypress Reservation
Project ID: 1717
Lead Agency: Seminole Tribe of Florida
Authority: Tribal Council Resolution / USDA WRP / PL-53-866 UDSA

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s):

This network of surface water management structures will produce the following substantial restoration, preservation, and protection benefits and will do so immediately and independently of the completion of any other projects:

Remove phosphorus and other pollutants from water leaving the Reservation and flowing to the Big Cypress National Preserve into Mullet Slough to the Everglades Protection Area. The removal of these pollutants will be achieved using natural treatment processes in pretreatment cells and water resource areas (WRA's). Unlike the stormwater treatment areas in the Everglades Construction Project, the Tribe's WRA's will take advantage of the natural treatment processes and will serve additional functions of water storage and conveyance.
Rewater the Big Cypress National Preserve. This project will provide the opportunity to restore more natural hydroperiods in the Big Cypress National Preserve. The clean water sent in a sheetflow over the Preserve and into Mullet Slough will improve the hydrology in the Everglades Protection Area as well.
Convey and store irrigation water. To make use of water provided by the SFWMD to replace the Tribe's diverted Compact water rights, the Tribe needs to be able to move and store such water, when it is available. Water conveyance improvements and irrigation storage cells will move and store the Compact water converted for Everglades restoration. This diversion allowed for treatment of water flowing to the Everglades Protection Area.
Provide improved flood control. To prevent extended periods of flooding and to limit downstream impacts of flooding, stormwater must be controlled. Stormwater attenuation areas will detain water from large storm events.

Project Synopsis:

The Seminole Tribe's Big Cypress Reservation is located in Hendry and Broward Counties, directly north of the Big Cypress National Preserve. And the federal Miccouskee Reservation. This project provides for the design and construction of water control, management, and treatment facilities in Basins 5, 6 & 7 composing the eastern portion of the Big Cypress Reservation. The project elements include conveyance systems, including major canal bypass structures, irrigation storage cells, and water resources areas. This project is designed to meet 50 ppb. phosphorus, which is the current performance level designed to be achieved by the Everglades Construction Project. Should design performance levels for phosphorus become more stringent, this project is designed to be able to incorporate additional technology to meet stricter levels. This project will enhance the hydroperiod in Big Cypress National Preserve through Mullet Slough and improve the water quality in the Everglades Protection Area.

Cost:

Total	$49,000,000
Project Development	
Land Acquisition	
Implementation	
Operations and maintenance	

Project Schedule:

Start Date: 2002
Finish Date: 2012

Detailed Project Budget Information (1000s)

	2004	2005	2006	2007	2008	Balance to complete	Total
Federal	1,500	3,500	3,500	3,500	3,500	20,500	36,000
State							0
Tribal	0	1,625	1,625	1,625	1,625	6,500	13,000
Total	**1,500**	**5,125**	**5,125**	**5,125**	**5,125**	**27,000**	**49,000**

Hyperlink: N/A
Contact: Craig Tepper 954-967-3402, Seminole Tribe of Indians

Program Name: Restoration Program: Hydrological Restoration, Water Quality
Project Name: STA-1 Inflow and Distribution Works
Project ID: 1719
Lead Agency: South Florida Water Management District
Authority: Florida's Everglades Forever Act

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Reduce phosphorus levels in outflows from the STA as directed in the Everglades Forever Act.

Project Synopsis: STA-1 Inflow and Distribution Works is located in Western Palm Beach County, just north of the Water Conservation Area No. 1 (Loxahatchee National Wildlife Refuge). This project redirects the discharge from S-5A Pump Station via the L-40 and L-7 Borrow Canals to STA-1 West and STA-1 East. The project scope includes the construction of three water control structures (G-300, G-301, G-302), future water control structure G-311, and associated bypass canals, a separation levee extending from L-7 to L-40 and an inflow canal and perimeter levee leading to the STA-1W project.

*** Cost (Estimate):**

Total:	$13,001,613
(1) Project Development:	$1,090,618
Land Acquisition:	
(2) Implementation:	$11,910,995
Operations and Maintenance:	$Included with STA-1 West

Project Schedule:
Expected Completion Date: September 2005 (including structure G-311, inflow structure for STA-1E)

	FY 1994 - FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 - FY 2014
Project Development						
Land Acquisition						
Implementation						
Operations and Maintenance						

*** Detailed Project Budget Information ($1000)**

	Actual FY 1994-03	**Projected FY 2004**	**Projected FY 2005**	**Projected FY 2006**	**Projected FY 2007**	**Balance to complete**	**Total**
Federal							
State	$8,660.6	$2,680.2	$1,660.8	-	-	-	$13,001.6
Tribal							
Local							
Other							
Total	**$8,660.6**	**$2,680.2**	**$1,660.8**	**-**	**-**	**-**	**$13,001.6**

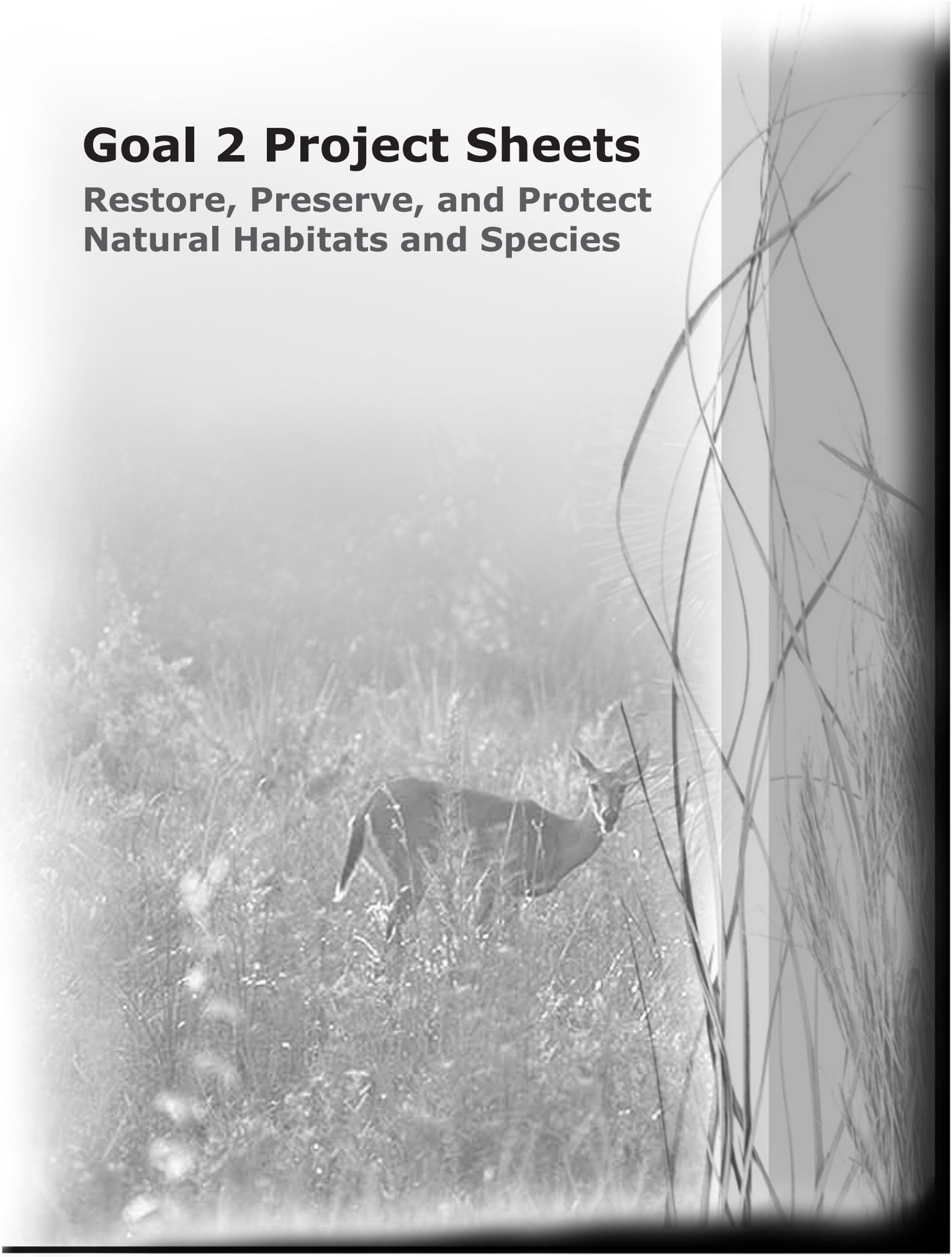
Cost data reflects actual inception-to-date expenditures through September 30, 2003 and current preliminary cost estimate projections.

(23) Project Development includes Design Phase [contracts & staff costs] costs.
(24) Implementation includes all Construction [contracts & contingency] and Construction Management [contracts & staff costs] costs.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Mary Lou Cariello, (561) 682-6210

Goal 2 Project Sheets

Restore, Preserve, and Protect Natural Habitats and Species



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 5.8 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 2011.

Objective 1-B.2: Achieve maintenance control of Brazilian pepper, melaleuca, Australian pine, and Old World Climbing Fern on South Florida's public conservation lands by 2020.

Objective 2-B-3: Complete an invasive exotic plant species prevention, early detection, and eradication plan by 2005.

Program Name: Restoration Program: Hydrological Restoration, Water Quality, Habitat and Species,
Project Name: Allapattah Flats/Ranch
Project ID: 2100
Lead Agency: Department of Environmental Protection/South Florida Water Management District
Authority: CARL/SOR

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 35,999 Acres Acquired

Project Synopsis: The Allapattah Flats/Ranch project covers 35,999 acres in western Martin County. The site is dominated by poorly drained flatwoods soils, which are saturated for much of the wet season. Historically, this area was a flatwoods matrix, interspersed with depression marshes and wet prairies. With the exception of the four northern sections that drain to Canal-23, the entire site drains slowly to the southeast to the South Fork of the St. Lucie River. Over the past 30 years, the project area has undergone a change in land use from native range grazing to improved pasture, sod farms, and row crops. Most of the understory has been cleared and planted in non-native pasture grasses. Most of the depression marshes remain; however, most of the wet prairies have been drained and the extreme western boundary. There is good species diversity and many large trees remain.

Restoration of Allapattah Flats will play a key role in the effort to reduce flows from C-23 into the St. Lucie Estuary. Regional attenuation facilities, or Water Preserve Areas, are proposed which would store discharges into the St. Lucie Estuary. After acquisition, about 8,000 acres of the project adjacent to C-23 would be converted to a reservoir to provide approximately 32,000 acre-feet of water storage. Estimates indicate that this would reduce wet season stormwater flows into the estuary by 39%. It is estimated that an additional 14% reduction in discharge to the estuary could be achieved by not draining the property. Completely eliminating stormwater discharges is not possible; however, significant reductions could probably be made by blocking existing drainage ditches.

The Florida Fresh Water Fish and Wildlife Commission would be the lead manager for the non-reservoir areas. The District will take the lead on all hydrologic restoration efforts.

Cost:

Total: Project size	35,999. (21,407 acres have been acquired)
Project Development	
Land Acquisition:	14,592 acres remain to be acquired.
Implementation	
Operations and Maintenance	

Project Schedule:
Start Date: 1997
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Through 2004	**2005**	**2006**	**2007**	**Balance to complete**	**Total**
Federal						
State	43,643					
Tribal						
Local	9,920					
Total	**53,564**					**TBD**
Adjusted Total*	**3,776**					

*A portion of the acres and costs on this project sheet overlap with Project ID 1101 in Goal 1. The **Adjusted Total** compensates for this overlap by allocating the appropriate costs to this project.

Hyperlink: http://www.dep.state.fl.us/mainpage/programs.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition
Project Name: Atlantic Ridge Ecosystem
Project ID: 2101
Lead Agency: Florida Department of Environmental Protection/South Florida Water Management District
Authority: CARL/SOR

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 15,698 Acres Acquired

Project Synopsis: The project area is located in southern Martin County, between I-95 and U.S. 1. The project area includes approximately 15,698 acres, which is extremely diverse ecologically. It contains large areas of forested sloughs and high quality flatwoods, as well as one of the largest remaining islands of coastal scrub. The current land use is mostly cattle grazing on unimproved pasture with intense agriculture and residential development occurring around the edges of the project area. However, the project also contains extensive wetland and upland systems. Currently, none of this project is in public ownership.

The purpose of this project is to conserve and protect the high quality habitats and to protect water quality of the South Fork of the St. Lucie River and the North Fork of the Loxahatchee River. The project area forms the headwaters to these rivers and the extensive wetland systems provide a source of groundwater base flow to both rivers. This project will conserve and protect significant habitat for endangered and threatened species such as the Florida scrub jay, the Florida sandhill crane, and the Florida scrub lizard. The area is extremely important for aquifer recharge and water supply to the coastal portion of Martin County.

Cost:
Total: Project size 15,698. (11,764 acres have been acquired at a cost of $80,123,486)
Project Development:
Land Acquisition: 3,934 acres remaining to be acquired
Implementation:
Operations and Maintenance:

Project Schedule:
Start Date: 1995
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Through 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	73,620						
Tribal							
Local	6,503						
Other							
Total	**80,123**						**TBD**
Adjusted Total*	**47,254**						

*A portion of the acres and costs on this project sheet overlap with Project ID 1101 in Goal 1. The **Adjusted Total** compensates for this overlap by allocating the appropriate costs to this project.

Hyperlink: http://www.dep.state.fl.us/mainpage/programs.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition
Project Name: Babcock Ranch
Project ID: 2102
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 91,361 Acres acquired

Project Synopsis: The Babcock Ranch project consists of approximately 91,361 acres in Charlotte and Lee counties. Acquisition of would assist in the creation of a wildlife corridor that would span from Lake Okeechobee to the Gulf of Mexico. The majority of the project area consists of mesic flatwoods with the center of the project dominated by Telegraph Swamp. This ten thousand acre swamp drains most of the project area. Portions of the project provide habitat for the endangered red-cockaded woodpecker, crested caracara, and numerous other plants and animals. The project is proposed primarily as a less-than-fee simple acquisition a portion of the project will be acquired in full fee title. The evaluation team visited the project on September 25, 2001.

The majority of the Babcock Ranch project lies in southeastern Charlotte County; a small part extends into northeastern Lee County. It is contiguous with Fred C. Babcock-Cecil M. Webb Wildlife Management Area (Babcock-Webb WMA) for approximately 6 miles (mostly Babcock Family Reserve portion; proposed Curry Lake conservation easement is contiguous for 0.75 mile) on the west, Fisheating Creek Florida Forever project for approximately 3 miles on the east, and Caloosahatchee Regional Park for approximately 1.5 miles on the south. Bright Hour Watershed conservation easement is situated approximately 12 miles to the north, Hall Ranch Florida Forever project (contiguous with Babcock-Webb WMA) is contiguous with the Babcock Family Reserve portion for approximately 3 miles (it is ca. 4 miles to the northwest of the proposed Curry Lake conservation easement), Hickey Creek Mitigation Park Wildlife and Environmental Area is located less than 1.5 miles to the south, Moya Sanctuary is located less than 1 mile east of the southeast boundary of the proposal, and the Caloosahatchee Ecoscape Florida Forever project and Okaloacoochee Slough State Forest lie 10.5 miles and 15 miles, respectively, to the southeast.

Cost:
Total: Project size is 91,361 acres
Project Development:
Land Acquisition: 91,361 acres remaining to be acquired.
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 2001
Finish Date: Upon completion

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	0						
Total	**0**						**TBD**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever/default.htm
Contact: John Outland 850-245-2089, FDEP

Program Name: Restoration Program: Habitat and Species
Project Name: Barfield Farms Land Acquisition
Project ID: 2103
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: Primary: 2.A.1

Measurable Output(s): Target 1,367 Acres

Project Synopsis: Barfield Farms is located in extreme southwestern Hendry County, along the edge of Okaloacoochee Slough, and immediately north of the Big Cypress National Preserve. The owner proposes two sections, approximately 1,367 acres, for sale as a conservation easement. The property consists of cypress-dominated strand swamp, deep spike rush/pickerelweed marshes, and maple/cabbage palm hydric hammocks. The owner reports that panthers frequently use the property, and Florida Fish and Wildlife Conservation Commission has designated it Priority 1 panther habitat. The total project acreage is 1,367 acres. No acreage has been acquired to date.

Cost:

Total:	SFWMD does not make cost projections on SOR projects
Project Development:	N/A
Land Acquisition:	SFWMD does not make cost projections on SOR projects
Implementation:	N/A
Operations and Maintenance:	N/A

Project Schedule:

Start Date:	1998
Finish Date:	Upon completion

Detailed Project Budget Information (1000s)

	Through 1999	2000	2001	2002	2003	2004	Balance to Complete	Total
Federal								
State								
Tribal								
Local								
Other								
Total	**0**							**TBD**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition
Project Name: Belle Meade
Project ID: 2104
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 28,506 Acres acquired

Project Synopsis: This area of 28,506 acres includes some of the most extensive examples of mature old-growth hydric pine flatwoods in southwest Florida not within other CARL projects. The hydrology of the hydric pine flatwoods and dwarf cypress communities within the project is relatively intact. Three archaeological sites have been recorded within the project boundaries, and additional sites may be present. The area is vulnerable to changes in the timing and amount of water flowing through it. Residential and commercial development spreading from Naples threatens it.

Cost:
Total: Project size 28,506 acres. (17,812 acres have been acquired at a cost of $36,183,158 million)
Project Development:
Land Acquisition:
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 1993
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	$36,183						
Tribal							
Local							
Other							
Total	**36,183**						**TBD**

Hyperlink: http://www.dep.state.fl.us/mainpage/programs.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/Florida Forever
Project Name: Big Bend Swamp/Holopaw Ranch
Project ID: 2105
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 59,849 Acres acquired

Project Synopsis: Many kinds of wildlife in the expanses of palmetto prairies, pine flatwoods, and cypress swamps in Osceola County. The Big Bend Swamp project will acquire certain rights from landowners to maintain a link of natural lands between the Bull Creek and Three Lakes Wildlife Management Area, and help the ensure survival of caracara, red-cockaded woodpeckers, sandhill cranes, and other wildlife that require these large natural areas.

Cost:
Total: Project size 59,849 acres with none acquired.
Project Development:
Land Acquisition:
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 2000
Finish Date: TBD

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	0						
Tribal							
Local							
Other							
Total	**0**						**TBD**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever/default.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Hydrological Restoration, Water Quality, Habitat and Species
Project Name: Biscayne Coastal Wetlands Land Acquisition
Project ID: 2106
Lead Agency: Miami-Dade County, Florida Communities Trust, South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 2,241 Acres

Project Synopsis: The Biscayne Coastal Wetlands are divided into three units that total 2,241 acres. The units lie east of L-31E canal, and adjacent to other protected lands acquired as part of Biscayne National Park and Homestead Bayfront Park. All are a mixture of red, black and white mangroves. The three units appear to be in good condition and relatively exotic-free, except along the western edge and along mosquito ditches, where there are Brazilian Pepper and Australian Pine. Acquisition of these areas would add another layer of protection to Biscayne National Park and provide opportunities for a better distribution of fresh water from L-31E. Miami-Dade has acquired 67 acres and has received a matching grant from the Florida Communities Trust. The SFWMD is an acquisition partner with the County and has acquired 77 acres. Some of the properties in this land acquisition project are necessary for the L-31E Flow Redistribution Project. This project falls within the conceptual boundary of the CERP - Biscayne Bay Coastal Wetlands project.

Cost:
Total** $2,091,668
(Miami-Dade County estimate; SFWMD does not make cost projections on SOR projects)
Project Development N/A
Land Acquisition $2,091,668
(Miami-Dade County estimate; SFWMD does not make cost projections on SOR projects)
Implementation N/A
Operations and Maintenance N/A

Project Schedule:
Start Date: 1998
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Through 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to Complete**	**Total***
Federal								
State			$153.5				$846.5	$1,000
Tribal								
Local	$566.1				$525.6			$1,091.7
Other								
Total	$566.1		$153.5		$525.6		$846.5	$2,091.7
Adjusted Total*	0							

*A portion of the acres and costs on this project sheet overlap with Project ID 1410 in Goal 1. The **Adjusted Total** compensates for this overlap by allocating the appropriate costs to this project.
** Miami-Dade County estimate; SFWMD does not make cost projections on SOR projects--the maximum funding currently authorized for this project is $1 million.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition/ Florida Forever
Project Name: Bombing Range Ridge
Project ID: 2107
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 41,748 Acres acquired

Project Synopsis: Public acquisition of the 41,748 acre Bombing Range Ridge project will conserve and protect significant habitat for native species and endangered and threatened species. Additionally, public acquisition will provide areas, including recreational trails for natural resource based recreation.

Cost:
Total: Project size 41,748 with (5,293 acquired at a cost of $12,003,388.)
Project Development
Land Acquisition: Estimated tax assessed value of $13,674,995
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1998
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	12,003						
Tribal							
Local							
Other							
Total	**12,003**						**TBD**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/Florida Forever
Project Name: Caloosahatchee Ecoscape
Project ID: 2108
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 18,497 acres acquired

Project Synopsis: The project encompasses a mosaic of wet prairie, cypress basin and dome swamp, mesic flatwoods, wet flatwoods, depressional marshes and scrub. Clearing and drainage from improved pasture development or farming have impacted the majority of the natural communities on the site. Despite the disturbed plant communities, the project provides important habitat for a variety of listed wildlife species. Most of the land is within the Barron Water Control District and canals have altered the natural hydrology to the extent that no significant natural water resources remain. Eleven archaeological sites are known from the project area; some with material dated to the archaic period.

Cost:
Total: Project size 18,497 acres.(3,180 acres acquired at a cost of $1,948,038)
Project Development
Land Acquisition: 15,317 acres remaining to be acquired
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1998
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	$1,948						
Tribal							
Local							
Other							
Total	**1,948**						**TBD**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/CARL
Project Name: Catfish Creek
Project ID: 2109
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 14,901 Acres acquired

Project Synopsis: Catfish Creek is a divers natural area extending over high scrub ridges, interspersed with lakes, next to the pristine shore of Lake Pierce. Natural communities include sandhill, scrub, scrubby flatwoods, mesic flatwoods, xeric hammock, bottomland hardwood forest, basin swamp, sandhill upland lake, wet flatwoods, blackwater stream, seepage slopes, and floodplain swamp, all are in excellent condition. The tract harbors at least 18 state listed rare plant and animal species. Rare or endangered animals include the bald eagle, wood stork, gopher tortoise, and scrub jay.

Cost:
Total: Project size 14,901 acres. 10,184 acres have been acquired at a cost of $47.4 million.
Project Development
Land Acquisition: 4,717 acres remain to be acquired.
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1990
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	$47,442						
Tribal							
Local							
Other							
Total	**$47,442**						**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/Florida Forever
Project Name: Charlotte Harbor Estuary/Flatwoods/Cape Haze
Project ID: 2111
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 15,054 Acres acquired

Project Synopsis: The project area, located northwest of Fort Myers in Charlotte and Lee Counties, includes 18,708 acres containing the largest and highest quality slash-pine flatwoods left in Southwest Florida. The area contains pockets of old growth that provide habitat for red-cockaded woodpeckers, black bears, and bald eagles, and an occasional Florida panther ranges in the area. Additionally, the tract provides habitat for rare plant communities. Several drainages flow through these flatwoods into the Charlotte Harbor Aquatic Preserve.

Cost:
Total: Project size 15,054. 10,603 acres acquired at a cost of $17,781,504
Project Development:
Land Acquisition: 4,451 acres remaining to be acquired
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 1986
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	$17,174						
Tribal							
Local	607						
Other							
Total	**$17,781**						**TBD**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Water Quality, Hydrological Restoration, Habitat and Species
Project Name: Corkscrew Regional Ecosystem Watershed (CREW)
Project ID: 2112
Lead Agency: Florida Department of Environmental Protection/South Florida Water Management District
Authority: CARL/SOR

Strategic Plan Goal(s) Addressed: 1, and 2, Getting the Water Right
Restore, Preserve and Protect the Natural Habitat and Species

Measurable Output(s): Target 64,103 Acres

Project Synopsis: CREW covers 64,103 acres in Lee and Collier counties and is located at the top of the western Big Cypress watershed. It conveys surface water to private, state, and federally protected natural areas, including Corkscrew Swamp Sanctuary, Florida Panther National Wildlife Refuge, and the Everglades National Park. The area supports populations of at least two species of rare and endangered orchids and includes an unusual stand of dwarf bald cypress. Land management will be carried out the SFWMD and the Florida Fish and Wildlife Commission under contract with the SFWMD. The SFWMD has acquired 25,644 acres.

Hydrologic restoration of CREW will restore and protect important habitat for the Florida panther and black bear and will protect the quality of water delivered to Corkscrew Swamp Sanctuary, Florida Panther National Wildlife Refuge, ENP, and Estero Bay. NOTE: Lee County has agreed to cost share this project by purchasing properties equaling the $10,000,000 appropriated. These properties have been turned over to SFWMD for management.

Cost:

Total*	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:

Start Date:	1991
Finish Date:	Upon completion

Detailed Project Budget Information (1000s)

	Through 2003	2004	2005	2006	2007	2008	Balance to complete	Total
Federal	$3,927.1	$785.6						$4,712.7
State	$20,256.6	$2,628.4						$22,885
Tribal								
Local	10,000	10,000						$10,000
Other**	$2,409.6	$17						$2,426.6
Total	**$36,593.3**	**$3,431**						**TBD**

*This total includes Critical CREW project lands.
** Mitigation funds

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/CARL
Project Name: Coupon Bight/Key Deer/Big Pine Key
Project ID: 2114
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 3,638Acres acquired

Project Synopsis: The project encompasses virtually all of the undeveloped land between the Coupon Bight Aquatic Preserve and the National Key Deer Refuge on Big Pine Key. It includes the only significant sources of freshwater in the lower Keys which are critical to the survival of the endangered Key Deer. The Pine Rocklands are the best remaining anywhere. The project is habitat for 24 FNAI special plant species and 41 FNAI listed animal species.

Cost:
Total: Project size 3,638 acres. (1,453 acres have been acquired at a cost of $17,734,013)
Project Development
Land Acquisition: 2,185 acres remaining to be acquired
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1985
Finish Date: Upon completion

Detailed Project Budget Information(1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	17,734						
Tribal							
Local							
Other							
Total	**17,734**						**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Habitat and Species
Project Name: Cypress Creek/Loxahatchee
Project ID: 2172
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 4,347 Acres

Project Synopsis: Cypress Creek/Loxahatchee project is located in southern Martin and northern Palm Beach Counties, near lands recently acquired in Pal-Mar, and adjacent to Jonathan Dickinson State Park. It is a mixture of land uses and community types. Nearly 3,000 acres are mostly undisturbed natural area, containing a mixture of pine flatwoods, cypress swamps, depression marshes, and wet prairies. This area forms the headwaters of Cypress Creek, which drains to the Northwest Fork of the Loxahatchee River. The remainder of the site is cleared and drained for intense agriculture, including row crops and citrus. Palm Beach County has acquired 1026 acres of the project area under the county's Conservation Lands program. The County was a cost share partner with the SFWMD on 599 of those acres, contributing an 83% share of the acquisition costs. The SFWMD has acquired 3,250 acres.

Cost:

Total	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:

Start Date: November 2002
Finish Date: Until completed

Detailed Project Budget Information (1000s)

	Through 1999	2002	2003	2004	2005	2006	Balance to Complete	Total
Federal								
State			$28,527.3					28,527.3
Tribal								
Local			$7,833	$10,752				$18,585
Other								
Total			**$36,360.3**	**$10,752**				**TBD**

Refer to CERP component for acquisition schedule.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: Cypress Creek/Trail Ridge Land Acquisition
Project ID: 2115
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 13,788 Acres

Project Synopsis: Cypress Creek/Trail Ridge is in southwestern St. Lucie County. It is divided into three major tracts that lie north and south of State Road 70. Two tracts (Cypress Creek portion) are contiguous and the third (Trail Ridge) is not. The project gets its name from a large forested wetland system that once extended along the entire eastern edge of the Orlando Ridge south of Indian River County, through Allapattah Flats, and drained into the South Fork St. Lucie River. The Cypress Creek portion is also a CARL project. In 1998, St. Lucie County acquired 3,285 acres through their environmentally sensitive lands program. The total project size is 13,788 acres of which 10,503 acres has been acquired by the state. SFWMD will handle this acquisition project as part of the CERP IRL Project, Cypress Creek Trail Ridge Component.

Cost:

Total	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:
Start Date: 1997
Finish Date: Upon Completion

Detailed Project Budget Information (1000s)

	Through 2004	2005	2006	2007	2008	2009	Balance to Complete	Total
Federal								
State	1,691							
Tribal								
Local*	1,720							
Other								
Total	**3,411**							**TBD**
Adjusted Total	**968**							

Refer to CERP component for acquisition schedule.
*A portion of the acres and costs on this project sheet overlap with Project ID 1101 in Goal 1. The **Adjusted Total** compensates for this overlap by allocating the appropriate costs to this project.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition/Florida Forever
Project Name: Devils Garden
Project ID: 2183
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 82,508 acres acquired

Project Synopsis: The Devil's Garden project is located in Hendry and Collier Counties, and is approximately 82,508 acres. This vast project is being proposed to fill a gap in a corridor that will provide a large landscape for the federally endangered Florida panther. There are numerous records of panther use of the property for several years as well as numerous other rare and threatened plants and animals.

Cost:

Total:	82,508 acres needed.
Project Development:	
Land Acquisition:	82,508 acres remaining to be acquired
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 2002
Finish Date: When completed

Detailed Project Budget Information

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	$0						
Tribal							
Local							
Other							
Total	**0**						**TBD**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Water Quality, Hydrological Restoration, Habitat and Species
Project Name: East Coast Buffer/Water Preserve Areas
Project ID: 2117
Lead Agency: Florida DEP/SFWMD/U.S. Department of the Interior
Authority: CARL/ SOR

Strategic Plan Goal(s) Addressed:2.A.1

Measurable Output(s): Target 66,809 Acres

Project Synopsis: The East Coast Buffer/Water Preserve Areas project involves acquisition of land located along the eastern side of the Everglades Protection Area in western Palm Beach, Broward, and Miami-Dade Counties. Most of the lands in this project area are undeveloped and include a considerable amount of wetland habitat. Current land uses include very low intensity development, pastureland, and limestone mining. The original East Coast Buffer footprint was based on a land suitability analysis which selected lands primarily on the basis of those needed for controlling seepage from the Everglades.
In addition, these lands are needed to implements several components of the Everglades Restoration Plan developed under the C&SF Project Comprehensive Review Study (CERP). As part of the implementation plan, portions of the project will be used to create a series of surface-water areas that are interconnected and managed as a system of marshlands, reservoirs, water quality treatment areas, and/or aquifer recharge basins. The overall purposes of the CERP projects are to: (1) hold more water in the system by controlling seepage from the Everglades; (2) capture, store, and clean up excess stormwater currently lost to tide; (3) provide a buffer between the urban area and the Everglades; and (4) protect and conserve wetlands and habitat values outside the remaining Everglades. Restoration benefits include improved water supply for restoring hydropatterns of the Everglades, improved water quality and preservation of wetland habitat.
Because of the extreme development pressure in this area, it is critical that this project be completed as quickly as possible before target parcels are developed or permitted for development. The SFWMD has acquired 21,680 acres of land within the project area.

Cost:

Total	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:

Start Date:	1994
Finish Date:	Upon completion

Detailed Project Budget Information (1000s)

	Through 2004	2005	2005	2007	2008	Balance to complete	Total
Federal	72,483.740						72,483.740
State	272,928.640						272,928.640
Tribal							
Local**	14,912,406						14,912,406
Other***							
Total	**360,324.786**						**TBD**
Adjusted Total	**120,745**						

*A portion of the acres and costs on this project sheet overlap with Project ID 1405 in Goal 1. The **Adjusted Total** compensates for this overlap by allocating the appropriate costs to this project.
**Includes $8,276,165 of land acquisitions by Palm Beach County; and $4,224,440 of funding from Broward County.
***Mitigation Funds
Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/CARL
Project Name: Estero Bay
Project ID: 2118
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 15,572 Acres acquired

Project Synopsis: Much of the Estero Bay Project is comprised of wetlands fronting Estero Bay (mangrove swamp, salt marsh, and salt flats). These communities provide nutrients to the Bay, contributing substantially to its biological productivity. The Bay, one of the most productive estuaries in the State, supports a diversity of wildlife, including the federally endangered bald eagle. These communities provide an important nutrient for the Bay, thus contributing to biological productivity. The wetlands are in a natural condition and help maintain high quality of water in the Estero Bay Aquatic Preserve. The project also includes the largest remaining block of rosemary scrub in southwest Florida. Several archaeological sites attributed to the Calusa Indians and their prehistoric ancestors are known to be within the project area. The project is threatened by the rapid residential development in the area.

Cost:
Total: Project size 15,572 acres. (9,045 acres have been acquired at a cost of $ 44,720,290).
Project Development
Land Acquisition: 6,528 acres to be acquired
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1985
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	44,720						
Tribal							
Local							
Other							
Total	**44,720**						**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Water Quality, Hydrological Restoration
Project Name: Everglades Agricultural Area (EAA) / Talisman Land Acquisition
Project ID: 2119
Lead Agency: South Florida Water Management District/U.S. Department of the Interior
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 51,210 Acres

Project Synopsis: The District has acquired 50,784 acres in the EAA, purchased at fair market value from willing sellers. The purpose of this project was to acquire strategically located lands in the EAA to be used for regional water storage, detention, and water quality treatment facilities. Ecosystem restoration benefits include: regional water storage that would reduce water currently lost to tide and make it available for hydropattern restoration in the Everglades; pollution prevention through reduction of phosphorus loads; reduced loading of nutrients and other pollutants through implementation of water quality treatment facilities; reduced subsidence; and avoidance of adverse flooding of WCAs and tribal lands during wet years.

Cost:

Total*	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:

Start Date:	1997
Finish Date:	Upon Completion

Detailed Project Budget Information (1000s)

	Through 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total***
Federal	103,557.459							103,557.459
State	31817.443							31817.443
Tribal								
Local								
Other								
Total	**135,374,902**							**TBD**
Adjusted Total	**3,390**							

*A portion of the acres and costs on this project sheet overlap with Project ID 1103 in Goal 1. The **Adjusted Total** compensates for this overlap by allocating the appropriate costs to this project.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition/Florida Forever
Project Name Fakahatchee Strand
Project ID: 2120
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 80,332 Acres acquired

Project Synopsis: Fakahatchee Strand is located in Collier County. Of the subtropical swamps in South Florida, Fakahatchee Strand is perhaps the most significant, being the richest in orchids and other rare tropical plants. It is the most critical to the survival of the Florida panther, and the most important for the mangrove swamps of the Ten Thousand Islands. The project area is probably the best example of the strand swamp found in the United States. It is linked hydrologically to the Everglades system and is important to the estuarine ecosystem of the Ten Thousand Islands.

Cost:
Total: Project size 80,332. 60,902 acres have been acquired at a cost of $24,743,638
Project Development:
Land Acquisition: 19,430 acres remaining to be acquired
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 1980
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**Balance to complete**	**Total**
Federal				
State	$24,743			
Tribal				
Local				
Other				
Total	**24,743**			**TBD**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/CARL
Project Name: Fisheating Creek
Project ID: 2121
Lead Agency: Department of Environmental Protection and South Florida Water Management District
Authority: CARL/SOR

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 176,760 Acres Acquired

Project Synopsis: Fisheating Creek, the only free-flowing tributary to Lake Okeechobee, is an extensive riverine swamp flowing through Glades County and emptying into the Lake. The total project area is 168,360 acres. Currently, none of this acreage is in public ownership. The project area contains relatively undisturbed upland and wetland habitats that serve as habitat for the endangered Florida Panther and a number of threatened species, including the Florida black bear, the bald eagle, the Florida scrub jay, and the Florida sandhill crane. The federally listed wood stork and state listed white ibis are known to use the area.

This acquisition will preserve the water quality and critical habitat of this large watershed. Additionally, the acquisition will provide both hydrologic and water quality benefits for Lake Okeechobee, located downstream. When states in Lake Okeechobee are high, Fisheating Creek serves as an important feeding area for wading birds, which typically use the lake marshes. Restoration requirements would be minimal if any, as most of the property remains in a natural state.

Cost:
Total: Project size 176,760 acres. (59,910 acres have been acquired at a cost of $101,928,563)
Project Development:
Land Acquisition: 116,850 remaining to be acquired
Implementation:
Operations and Maintenance:

Project Schedule:
Start Date: 1999
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Through 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	$101,928						
Tribal							
Local							
Other							
Total	**$101,928**						**TBD**

Hyperlink:http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition/CARL
Project Name: Florida Keys Ecosystem
Project ID: 2122
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 8,566 Acres acquired

Project Synopsis: This project, in conjunction with the Complete National Key Deer Refuge proposal, includes the remaining 8,566 acres of tropical hardwood hammocks and pine rocklands of significant size and quality remaining in the Florida Keys from southern Key Largo to Sugarloaf Key.

Cost:
Total: Project size 8,566 acres. (1,818 acres have been acquired at a cost of $35,940,928.)
Project Development:
Land Acquisition: 6,748 acres remaining to be acquired
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 1992
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	$35,941						
Tribal							
Local							
Other							
Total	**$35,941**						**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/CARL
Project name: Frog Pond/L31N
Project ID: 2123
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 10,450 Acres acquired

Project Synopsis: Lands border Everglades National Park and are considered critical to the Park's ecosystem, particularly Shark River Slough. The project's water storage capacity helps to prevent excessive flooding and serves as a recharge area for well fields in South Dade. The area is highly vulnerable to development pressure.

Cost:
Total: Project size 10,450 acres. (9,713 acres have been acquired at a cost of $83.6 million)
Project Development:
Land Acquisition: 737 acres remaining to be acquired.
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 1982
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal	$4,700						
State	$78,923						
Tribal							
Local							
Other							
Total	**$83,623**						**TBD**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/Florida Forever
Project Name: Half Circle L Ranch
Project ID: 2185
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever Program

Strategic Plan Goal(s) Addressed: 2.A.1.

Measurable Output(s): 10,500 Acres acquired

Project Synopsis: Located in Collier & Hendry Counties the project is approximately 10,500 acres. There are two owners and sponsored by Turrell and Associates. The project is proposed for fee simple acquisition. FNAI ranks the biological conservation priority for the project as medium high. The project is located within primary habitat zones for the Florida panther and the Florida Black bear, and compliments ongoing conservation efforts in the region.

Cost:
Total: 10,500 acres needed.
Project Development:
Land Acquisition: 10,500 acres remaining to be acquired.
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 2003
Finish Date: when completed

Detailed Project Budget Information (1000s)

	Thru 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal								
State	$0							
Tribal								
Local								
Other								
Total	**0**							**TBD**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Habitat and Species
Project Name: Hen Scratch Ranch
Project ID: 2175
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: Restore, Preserve and Protect the Natural Habitat and Species

Measurable Output(s): Target 2,880 Acres

Project Synopsis: This 2,880-acre project is located approximately 2.5 miles west of Lake June-in-Winter in Highlands County, and lies within the tributary watershed of Fisheating Creek. The site contains a variety of habitat community types, including pine flatwoods, scrub, baygall, prairie hammock, and seepage slope. A large stand of cutthroat grass, and endangered plant species, exists in a seep in Section 31. In addition, scrub jays and gopher tortoises are present. There is excellent habitat for sandhill cranes, swallowtail kites, and numerous wading birds. The natural communities are in good condition and fall within strategic habitat conservation areas for several species as identified in the Florida Fish and Wildlife Conservation Commission's 1994 Closing the Gap Report. No acres have been acquired to date.

Cost:
Total: SFWMD does not make cost projections on SOR projects
Project Development: N/A
Land Acquisition: SFWMD does not make cost projections on SOR projects
Implementation: N/A
Operations and Maintenance: N/A

Project Schedule:
Start Date: 2002
Finish Date: Upon Completion

Detailed Project Budget Information (1000s)

	Through 1999	2000	2001	2002	2003	2004	Balance to Complete	Total
Federal								
State								
Tribal								
Local								
Other								
Total								**TBD**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition/CARL
Project Name: Indian River Lagoon Blueway
Project ID: 2124
Lead Agency: Department of Environmental Protection and South Florida Water Management District
Authority: CARL/SOR

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 5,136 Acres Acquired

Project Synopsis: This project consists of two tracts on Hutchinson Island, in St. Lucie County, totaling 5,136 acres. Approximately 87% of the two tracts are wetlands, dominated by red and black mangroves, with a few freshwater wetlands.

This acquisition is part of a larger effort by several counties in both the SFWMD and St. Johns River WMD to protect, preserve and restore the Indian River Lagoon. These lands represent the only two undeveloped parcels along the Indian River in St. Lucie County that are not in public ownership. Mosquito control impoundments are present on both tracts. Public ownership of these parcels would allow installation of operable water control structures that allow flushing of the mosquito control impoundments during most of the year. This flushing will provide an important source of mangrove detrital matter, which is critical to the health of the estuary. Public ownership will also prevent aerial applications of chemical pesticides for mosquito control.

In 1997, protection was expanded to include lands in Martin County as well.

Cost:
Total: Project size 5,136 acres. 1,619 acres have been acquired by the state at a cost of $18,594,773 million and $3,333,022 federal contribution
Project Development:
Land Acquisition: 3,517 acres remaining to be acquired
Implementation:
Operations and Maintenance:

Project Schedule:
Start Date: 1998
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Through 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal	$3,333							
State	$18,594							
Tribal								
Local								
Other								
Total	**$21,927**							**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/CARL
Project name: Juno Hills/Dunes
Project ID: 2125
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 590Acres acquired

Project Synopsis: This 440-acre site in Palm Beach County contains one of the largest and best remaining examples of the now rare coastal scrub. The extremely rare four-petal pawpaw, known only from a few sites in the Southeast Florida coastal scrub, and at least three other rare species of scrub plants occur in the Juno Hills project. Such rare animals as the scrub jay, scrub lizard, gopher tortoise, and red widow spider also inhabit the scrub here. Endangered sea turtles nest on the Atlantic beach/dune portion of the property. A remnant portion of coastal hammock is located west of the dune system. Scrubby slash pine flatwoods, disturbed basin swamps, and estuarine tidal swamps cover parts of the project area.

Cost:
Total: Project size 590 acres. (336 acres have been acquired at a cost of $42,009,592)
Project Development:
Land Acquisition: 254 acres remaining to be acquired
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 1994
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	15,140						
Tribal							
Local	26,869						
Other							
Total	**42,009**						**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/Florida Forever
Project Name: Jupiter Ridge
Project ID: 2176
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Acres acquired

Project Synopsis: The Jupiter Ridge Natural Area is one of the best remaining examples of the Florida Scrub ecosystem in Palm Beach County. Less than 2% of the historic Florida scrub still exists in the county, making preservation of this endangered natural community extremely important. This 271-acre natural area is located in the Town of Jupiter. It is bordered on the north by commercial development, on the east by U.S. Highway 1, on the west by the Intracoastal Waterway, and on the south by the Bluffs residential development. Small areas of scrubby flatwoods, mangrove swamp and freshwater wetland ecosystems also are present. These diverse habitats support many threatened and endangered species.

Cost:

Total:	$23,912,240
Project Development:	$343,447
Land Acquisition:	$23,100,000
Implementation:	$423,793
Operations and maintenance:	$45,000 (annually)

Project Schedule: On-going
Start Date: 12/1991
Finish Date: Target 12/2005 for acquisition of additional 4 acres.

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**2009**	**Balance to complete**	**Total**
Federal								
State	$11,047.6							$11,047.6
Tribal								
Local	$12,819.6	$1,545						$14,364.6
Other								
Total	**$23,867.2**	**$1,545**						**$25,412.2**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/Florida Forever
Project name: Kissimmee-St. Johns Connector
Project ID: 2126
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 9,463Acres acquired

Project Synopsis: Encompassing the watersheds of the Kissimmee and St. Johns Rivers, the Kissimmee-St. Johns Connector project will provide an approximately 9,463 acre hydrological and habitat connection. Though most of the area has been farmed and ranched for years many of the natural communities are in fair condition. Portions of the project provide habitat for Florida sandhill crane, crested caracara, hand ferns and numerous other plants and animals. The project is proposed primarily as a less-than-fee simple acquisition.

The project lies in northeastern Okeechobee and southwestern Indian River counties. It is contiguous with the Ordway-Whittell Kissimmee Prairie Sanctuary (OWKPS) to the west and the Fort Drum Marsh Conservation Area to the east. Kissimmee Prairie Preserve State Park lies immediately to the west of the OWKPS.

Cost:
Total: The project consists of approximately 9,463 acres.
Project Development:
Land Acquisition: 9,463 acres remaining to be acquired.
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 2001
End Date: TBD

Detailed Project Budget Information ($1000)

	Exp Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State							
Total	**$0**						**TBD**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Hydrological Restoration
Project Name: Kissimmee River (Lower Basin) Land Acquisition
Project ID: 2127
Lead Agency: South Florida Water Management District
Authority: Florida Forever Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 68,332 Acres

Project Synopsis: The Lower Basin project includes those lands in the historic river floodplain and along the C-38 canal in Pools B, C and D; Pool A, Chandler Slough, and Istokpoga Canal Basin; all of which are components of the Kissimmee River Restoration Project. The total project size is 68,332 acres of which 52,023 acres have been acquired.

Cost:
Total* SFWMD does not make cost projections on SOR projects
Project Development N/A
Land Acquisition SFWMD does not make cost projections on SOR projects
Implementation N/A
Operations and Maintenance N/A

Project Schedule:
Start Date: 1985
Finish Date: 2005

Detailed Project Budget Information (1000s)

	Through 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total***
Federal								
State	$55,856	$551			.			$56,407
Tribal								
Local								
Other								
Total	**$55,856**	**$551**						**TBD**

*Total includes lands for several components of the Kissimmee River Restoration project.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Hydrological Restoration
Project Name: Kissimmee River (Upper Basin) Land Acquisition
Project ID: 2128
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: Getting the Water Right

Measurable Output(s): Target 36,763 Acres

Project Synopsis: In the early 1990s it was determined that not enough water would be available in the upper chain of lakes to provide year round base flow for the restored Kissimmee River. As a result the scope of the Kissimmee River Restoration project includes the acquisition of land around the shoreline of the Kissimmee Chain of Lakes between elevations 52.5' and 54.0', comprising approximately 37,000 acres of land of which 34,981 acres have been acquired. This land is needed to support the KRR Headwaters Revitalization Regulation Schedule, which will raise the seasonal high stage in Lakes Kissimmee, Hatchineha and Cypress 1.5' to 54.0' NGVD.

Cost:

Total*	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:
Start Date: 1990
Finish Date: 2005

Detailed Project Budget Information(1000s)

	Through 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total***
Federal								
State	$70,812	$14						$70,825
Tribal								
Local								
Other								
Total	**$70,812**	**$14**						**TBD**

*The total includes Kissimmee River Restoration Project Lands.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition/CARL
Project name: Lake Wales Ridge Ecosystem
Project ID: 2129
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2

Measurable Output(s): 13,848 Acres acquired

Project Synopsis: The proposed refuge was authorized in November 1992 and would comprise 12,770 in Osceola and Polk Counties. The area forms the headwaters boundary between the Kissimmee River basin and the Peace River basin. It is the oldest terrestrial ecosystem in the southeast region of the US, and is probably the most threatened ecosystem in South Florida due to citrus conversion, residential housing construction, and commercial development. It supports 24 species of endangered, threatened, and candidate plant species as well as four threatened or endangered animal species. 9,864 acres have been acquired to date.

Cost:

Total:	Project size 13,848 acres.9,864 acres acquired at a cost of $24,564,760
Project Development	
Land Acquisition:	3,984 acres remaining to be acquired.
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 1992
Finish Date: Upon completion

Detailed Project Budget Information ($1000)

	Exp Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal	$3,280						
State	21,285						
Tribal							
Local							
Other							
Total	**$24,565**						**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Hydrological Restoration, Habitat and Species
Project Name: Loxahatchee Slough Land Acquisition
Project ID: 2132
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 15,200 Acres

Project Synopsis: The Loxahatchee Slough Project is located in Palm Beach County and covers approximately 15,200 acres. It contains a mixture of habitat types, including pine flatwoods, cypress forest, and wet prairie. The present land use is native range. These lands are adjacent to the Loxahatchee Slough Corridor, an area that has been pledged for protection by the current landowner. The District has acquired 1,488 acres; and Palm Beach County has acquired more than 13,693 acres within their Loxahatchee Slough and Hungryland Slough Natural Areas, purchased through their Environmentally Sensitive Lands program and the Unit 11 Regional Offsite Mitigation Area (ROMA). Palm Beach County will lead the land management effort for this project.

The purpose of this project is to provide additional wetland and upland buffer to the Loxahatchee Slough Corridor and to preserve critical foraging and nesting sites for wildlife in an area that is undergoing rapid urban development. This system is important for storing surface water runoff and providing groundwater base flow to Canal 18 and the Loxahatchee River. The slough, which is the initial headwaters of the Loxahatchee River, can also spill over to the south and contribute to the Everglades watershed under certain hydrologic conditions.

Cost:

Total	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:
Start Date: 1996
Finish Date: Upon Completion

Detailed Project Budget Information ($1000)

	Through 2003	2004	2005	2006	2007	2008	Balance to complete	Total
Federal								
State	$6,476							$ 6,756
Tribal								
Local	$23,624	$5,540						$29,164
Other								
Total	**$30,099.1**	**$5,540**						**TBD**

Hyperlink:www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Water Quality, Habitat and Species
Project Name: McDaniel Ranch Land Acquisition
Project ID: 2133
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: **Primary**: 2.A.1

Measurable Output(s): Target 7,000 Acres acquired

Project Synopsis: McDaniel Ranch covers nearly 23,000 acres in southeastern Hendry County. Total project acreage is 7,000 acres. The property owners have approached the District about selling a conservation easement in conjunction with an application for a surface water management permit. As proposed, the conservation easement would include only those lands not required for the surface water management system. The easement would grant the McDaniel family the following rights: timber management, cattle grazing, lease hunting and eco-tourism. No acreage has been acquired to date.

Cost:

Total	SFWMD does not make cost projections on SOR project
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR project
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:
Start Date: 2000
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Through 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal								
State								
Tribal								
Local								
Other								
Total								**TBD**

Hyperlink:www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition/CARL
Project name: Dade County Archipelago
Project ID: 2182
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 858 Acres acquired

Project Synopsis: This project includes 858 acres in Miami-Dade County and contains some of the most outstanding examples of rockland hammock that remain in Miami-Dade County, as well as the best remaining examples of the highly endangered pine rockland natural community outside of Everglades National Park. The Miami Rockridge Pinelands sites located within the County's urban development boundary are considered upland and developable. All sites are zoned residential, agricultural, or general use. The trees and endemics are also sensitive to adjacent development and agricultural activities.

Cost:
Total: Project size 858 acres. (505 acres have been acquired at a cost of $23,524,235)
Project Development:
Land Acquisition: 353 acres remaining to be acquired
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 1994
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal								
State	11,524							
Tribal								
Local	12,000							
Other								
Total	**23,524**							**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Hydrological Restoration, Habitat and Species
Project Name: Model Lands Land Acquisition
Project ID: 2135
Lead Agency: South Florida Water Management District, Miami-Dade County
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: **Primary**: 2.A.1

Measurable Output(s): Target 42,402 acres

Project Synopsis: The Model Lands project is located in Miami-Dade County and encompasses the lands between US 1 and Biscayne National Park. The project area of 42,402 acres includes a variety of habitats, both freshwater and estuarine. Lands within the project were identified in the Restudy as necessary for treatment of stormwater from the north and L-31E Canal prior to releasing it to tide or into other project lands to the south. Most of the project lands will be included in the Biscayne Bay Coastal Wetland and C-111 North Spreader Canal, CERP projects. The SFWMD and Miami-Dade County partner in the acquisition of lands for the project. The SFWMD has acquired 6,840 acres and Miami-Dade County has acquired 7,959 acres under their Environmentally Endangered Lands program. The northern portions of the project and the areas near canals, roads, and other areas of disturbance are heavily infested with Australian Pine and Brazilian Pepper. The majority of the project area is undisturbed fresh and saltwater wetlands. These lands form a contiguous habitat corridor with Everglades National Park, Southern Glades SOR project, Biscayne National Park, Crocodile Lakes National Wildlife Refuge, and John Pennekamp State Park.

Cost:

Total	SFWMD does not make cost projections on SOR projects.
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:
Start Date: 1994
Finish Date: 2007

Detailed Project Budget Information ($1000)

	Through 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal								
State	$6,242	$362						$6,603
Tribal								
Local*	$6,279	$183						$6,462
Other								
Total	**$12,520**	**$545**						**TBD**
Adjusted Total	**2,119.7**							

*A portion of the acres and costs on this project sheet overlap with Project IDs 1404 and 1415 in Goal 1. The **Adjusted Total** compensates for this overlap by allocating the appropriate costs to this project.

* Miami-Dade acquisitions as of June 30, 2004

Hyperlink:www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: North Fork St. Lucie River
Project ID: 2138
Lead Agency: Florida Department of Environmental Protection/South Florida Water Management District
Authority: Florida Forever Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 3,800 Acres Acquired

Project Synopsis: This 3,800-acre project includes a stretch of the North Fork approximately 6 miles long, extending from the White City bridge to Canal 24. This project will extend the boundary of the existing publicly owned St. Lucie River Aquatic preserve. More than 80 percent of the project area is comprised of wetlands within the river floodplain. In addition to the river floodplain, this project includes 175 acres of high quality uplands habitat such as high hammock, pine flatwoods, and sand pine scrub.

The purpose of this project is to preserve the floodplain habitat and to protect the water quality of the St. Lucie River from the rapidly encroaching urban development. Floodplain wetlands help decrease current velocities in the river, thereby attenuating flood waters. This action also facilitates recharge of the surficial aquifer and filters out nutrients, pollutants and suspended solids. This stretch of the river is classified as an Outstanding Florida Water. Boating, fishing and canoeing are actively pursued on this part of the river.

Cost:
Total: Project size 3,800 acres. (474 acres have been acquired at a cost of $4,727,047)
Project Development
Land Acquisition: 3,326 acres remaining to be acquired
Implementation
Operations and Maintenance

Project Schedule:
Start Date: 1988
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Through 2004	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal								
State	2,962							2,962
Tribal								
Local	1,765							1,765
Other								
Total	**4,727**							**TBD**
Adjusted Total	**0**							

*A portion of the acres and costs on this project sheet overlap with Project ID 1101 in Goal 1. The **Adjusted Total** compensates for this overlap by allocating the appropriate costs to this project.

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/Florida Forever
Project Name: North Key Largo Hammocks
Project ID: 2139
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 4,513 Acres acquired

Project Synopsis: The hammocks of north Key Largo form the largest stand of West Indian tropical forest in the United States. This rapidly disappearing forest, which is called Rockland forest, supports a wide diversity of rare plant and animal species. Degraded water quality is becoming an increasing issue in Florida Bay and the Florida Keys, as natural lands are converted to residential housing and commercial development. The project area has over 10 miles of shoreline that directly influences the adjacent waters of John Pennekamp Coral Reef State Park. As in other parts of the Keys, development seriously threatens this area.

Cost:
Total: Project size 4,513 acres. (3,538 acres have been acquired at a cost of $75,272,465)
Project Development
Land Acquisition: 975 acres to be acquired
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1983
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	75,272						
Tribal							
Local							
Other							
Total	**75,272**						**TBD**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Habitat & Species
Project Name: North Savannas Land Acquisition
Project ID: 2140
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 930 Acres

Project Synopsis: The site contains a 930-acre remnant of the historical savannas community type in St. Lucie County. Based on an evaluation conducted for the Florida Natural Areas Inventory, this area was found to have excellent natural community diversity. Seven upland and wetland community types, including a small area of sand pine scrub, are on the property. Important water management functions of this project area include attenuating peak discharges during major storm events and water quality improvement. The site promotes recharge to the surficial aquifer, which is the primary source of potable water in St. Lucie County. The water table at this location is extremely shallow and results in the aquifer being vulnerable to surface contamination.

Acquisition of this land will help in promoting recharge and protection of the surficial aquifer from surface contamination. Once acquired, sheetflow would be improved if several shellrock roads were removed. Further, acquisition will conserve and protect feeding and breeding habitat for a number of endangered and threatened species, including the wood stork, the Florida sandhill crane, and the osprey. This site also includes the world's only known population of an undescribed mint plant (*Dicerandra sp.*). No acreage has been acquired to date by the District.

The Florida Fresh Water Fish and Wildlife Commission would be the lead manager for the non-reservoir areas. The District will take the lead on all hydrologic restoration efforts.

Cost:

Total	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:
Start Date: 1997
Finish Date: Upon Completion

Detailed Project Budget Information (1000s)

	Through 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal								
State								
Tribal								
Local								
Other								
Total								**TBD**

Hyperlink:www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: Okaloacoochee Slough
Project ID: 2141
Lead Agency: Florida Department of Environmental Protection
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 37,210 Acres

Project Synopsis: This site contains more than 37, 210 acres in Hendry and Collier Counties. It is a major tributary to Fakahatchee Strand and Big Cypress National Preserve. It is dominated by a central slough, consisting of sawgrass marshes and wet prairies, with fringes of live oak/cabbage palm hydric hammocks. Most of the pines have been logged, but otherwise the site is pristine. Okaloacoochee Slough is critical habitat for the Florida panther. The District has acquired 34,982 acres within the project.

Some exotic treatment is needed to control minor infestations of Brazilian pepper and melaleuca. Hydrologically, the property remains undisturbed.

Cost:

Total: Total	SFWMD does not make cost projections on SOR projects.
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:

Start Date: 1996
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Through 1999	2000	2001	2002	2003	2004	Balance to complete	Total
Federal								
State	$20,411	$160						$20,570.7
Tribal								
Local								
Other								
Total	**$20,411**	**$160**						**TBD**

Hyperlink:www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition/Florida Forever
Project Name: Okeechobee Battlefield
Project ID: 2142
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target - 56 Acres acquired

Project Synopsis: The Okeechobee Battlefield project represents a portion of one of the last battles of the Second Seminole Indian war. The 56-acre project consists of improved pasture and freshwater marsh, and provides the backdrop for a yearly reenactment of the battle. The site is home to bald eagles, and offers potential habitat for the crested caracara and wood stork. The evaluation team visited the project on September 24, 2001.

The project is situated adjacent to U.S. Highway 441/98 along the northeastern rim of Lake Okeechobee, approximately five miles southeast of the town of Okeechobee in southern Okeechobee County. There are no adjacent or close by conservation lands in the FNAI database, however South Florida Water Management District lands Paradise Run and Kissimmee River are approximately 8 and 12 miles to the west, respectively. St. Lucie County's Bluefield Ranch and St. Lucie Pinelands are approximately 8.5 miles to the east, and 12 miles to the northeast, respectively.

Cost:
Total: Project size is 56 acres.
Project Development
Land Acquisition: 56 acres remaining to be acquired.
Implementation
Operations and maintenance

Project Schedule:
Start Date: 2001
Finish Date: Upon completion

Detailed Project Budget Information ($1000)

	Exp Thru 2003	2004	2005	2006	2007	2008	Balance to complete	Total
Federal								
State								
Total	**$0**							**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition/CARL
Project name: Osceola Pine Savannas
Project ID: 2143
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 1,374 Acres acquired

Project Synopsis: The project covers an area of old beach ridges and intervening swales, with high-quality, longleaf pine flatwoods interrupted by cypress strands, cypress domes, and wet prairies. There are also extensive dry prairies and patches of oak or sand pine scrub, all of which are natural communities of the Kissimmee Prairie. Six FNAI-listed animals occur on the site, including sandhill crane, wood storks, and crested caracara.

Cost:
Total: Project size 1,374 acres. 1,333 acres have been acquired
Project Development
Land Acquisition: 41 acres remaining to be acquired.
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1995
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal								
State	$310							
Tribal								
Local								
Other								
Total	**310**							**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Habitat & Species
Project Name: Pal Mar
Project ID: 2144
Lead Agency: Florida Department of Environmental Protection/South Florida Water Management District
Authority: CARL/SOR

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 36,745 Acres Acquired

Project Synopsis: Pal-Mar is located in Palm Beach and Martin Counties, east of the J.W. Corbett Wildlife Management Area and west of Jonathan Dickinson State Park. The total project encompasses 36,745 acres, including some of the highest quality pine flatwoods in southern Florida in an ecotone between pine flatwoods and the treeless Everglades. It also includes high quality prairie and savanna habitat. The first purchase of 1,922 acres was completed in 1992.

The primary purpose of this project is to conserve and protect environmentally unique lands that contain native, relatively unaltered flora and fauna. Acquisition of this project will form an extensive wildlife corridor connecting Jonathan Dickinson State Park, Pal-Mar, J.W. Corbett Wildlife Management Area, and DuPuis Reserve. By protecting native flatwoods, prairies, and marshes, this project will protect critical habitat for at least four endangered bird species, including the Florida sandhill crane and Everglades snail kite, and for the endangered Florida panther.

Cost: Total: Project size 36,745 acres. (20,786 acres have been acquired at a cost of $23,994,013)
Project Development
Land Acquisition: 6,419 acres remaining to be acquired
Implementation
Operations and Maintenance

Project Schedule:
Start Date: 1992
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Through 2004	**2005**	**2006**	**2007**	**Balance to complete**	**Total**
Federal						
State	$11,554					
Tribal						
Local	12,439					
Other						
Total	**23,994**					**TBD**
Adjusted Total	**23,987**					

*A portion of the acres and costs on this project sheet overlap with Project ID 1101 in Goal 1. The **Adjusted Total** compensates for this overlap by allocating the appropriate costs to this project.

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition
Project name: Panther Glades
Project ID: 2145
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Acres acquired

Project Synopsis: The area consists of a landscape mosaic of forested uplands interspersed among forested wetland communities. The ecosystem encompassed by the project is a large landscape and watershed in south-central Hendry County that includes portions of both the Big Cypress and Kissimmee Billy Strand. The Panther Glades project is important to many wildlife species, particularly those that require extensive areas of habitat to maintain viable populations.

Cost:

Total:	Project size 53,894. 21,724 acres have been acquired at a cost of $75,049,836
Project Development	
Land Acquisition:	32,170 acres remaining to be acquired
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 2001
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal								
State	$75,050							
Tribal								
Local								
Other								
Total	**$75,050**							**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Hydrological Restoration, Habitat and Species
Project Name: Paradise Run Land Acquisition
Project ID: 2146
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 4,265 Acres

Project Synopsis: This 4,265 acre project lies west of canal C-38, between Water Control Structure S-65E and Lake Okeechobee in Glades and Okeechobee Counties. Current land use is predominantly improved pasture and cattle grazing but agricultural activities in the area are intensifying as exemplified by new, nearby row crops (potatoes), sod extraction, and citrus. The remnant river run and adjacent wetlands remain largely intact but have no continuous water flow; hence water quality (especially dissolved oxygen) has become poor and organics have accumulated deeply in the remnant river run. This area consistently has greater wading bird and waterfowl use than most any area of the Kissimmee River. Its close proximity to Lake Okeechobee puts it in foraging flight distance of the large wading bird rookeries. Restoration would be fairly simple because the remnant river run and wetlands are largely intact, and water could gravity flow from Pool E (elevation 21 feet msl) one-half mile to Paradise Run (elevation 16 feet msl). The C-38 canal would be bypassed. The District has acquired 3,328 acres.

Cost:

Total*	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:

Start Date:	1998
Finish Date:	2001

Detailed Project Budget Information (1000s)

	Through 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total***
Federal							
State	$4,908						$4,908
Tribal							
Local							
Other							
Total	**$4,908**						**TBD**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Hydrological Restoration, Habitat and Species
Project Name: Lake Hatchineha Watershed/ Parker-Poinciana
Project ID: 2147
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 6,437 Acres

Project Synopsis: Parker – Poinciana is located in Osceola and Polk counties, and is located between the Disney Wilderness Preserve and District owned lands already acquired as part of the Kissimmee Chain of Lakes SOR project along the north shore of Lake Hatchineha. It contains a variety of community types, including mesic flatwoods, a large cypress/bay head, logged over flatwoods and hydric hammock along the Lake Hatchineha shoreline. The total project acreage is 6,437 acres. No acreage has been acquired to date.

Cost:

Total	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:

Start Date: 1996
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Through 1999	2000	2001	2002	2003	2004	Balance to Complete	Total
Federal								
State								
Tribal								
Local								
Other								
Total								**TBD**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition
Project name: Pineland Site Complex
Project ID: 2148
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 206 Acres acquired

Project Synopsis: This internationally significant archaeological site was inhabited by the Calusa for over a thousand years, and includes substantial midden mounds, a burial mound, remnants of an Indian-engineered canal, and buried deposits containing organic remains. Natural habitats within the project area include tidal saltern, a tidal creek, intertidal shoreline, and a large tract of mangrove wetland. Ponds on the site are important to white ibis, egrets, herons, and wood stork.

Cost:
Total: Project size 250 acres. 57 acres have been acquired at a cost of $1,751,874
Project Development:
Land Acquisition: 149 acres to be acquired
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 1996
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	1,355						
Tribal							
Local	396.9						
Other							
Total	**1,751**						**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition
Project Name: Ranch Reserve
Project ID: 2178
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Acres acquired

Project Synopsis: The project consists of four cattle ranches on the Osceola Plain west of and above the St. Johns River marshes. Mesic flatwoods interrupted by depression marshes cover about 40 percent of the project area. Swamps and hammocks make up much of the remaining natural communities. At least 24 FNAI-listed animals are known or reported from the project, including red-cockaded woodpeckers and one of the best populations of sandhill cranes in Florida.

Cost:
Total:
Project Development:
Land Acquisition: 2,217 acres of a much larger project (36,116 acres) lie with the boundary of the SFWMD. 67 acres of the 2, 217 acres have been acquired at a cost of $39,286 leaving 2,150 acres remaining to be acquired within the SFWMD..
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1997
Finish Date: TBD

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**2009**	**Balance to complete**	**Total**
Federal								
State	$39,286							
Tribal								
Local								
Other								
Total	**$39,286**							**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition
Project name: Rookery Bay
Project ID: 2149
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2 - Restore and Enhance the Natural System

Measurable Output(s): 18,721 acres acquired

Project Synopsis: This project consists of 18,721 acres in Collier County and provides an outstanding example of a subtropical estuarine system. Its mangroves shelter important nesting colonies of water birds, and feed and protect many aquatic animals, which are the foundation of a commercial and sport fishery. The natural communities associated with the estuary are relatively undisturbed and range from mangrove and marsh to flatwoods and maritime hammock. As part of the national estuarine research reserve system, Rookery Bay is representative of the West Indian biogeographic type. The area is believed to have good potential for archaeological investigations. The area is threatened by dredging and filling associated with the rapid development of the area.

Cost:
Total: Project size 18,721 acres. 18,576 acres have been acquired at a cost of $44,960,833
Project Development
Land Acquisition: 145 acres remaining to be acquired
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1980
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal								
State	$44,960							
Tribal								
Local								
Other								
Total	**$44,960**							**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Land Acquisition
Project name: Rotenberger-Holey land Tract
Project ID: 2150
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 79,170 Acres acquired

Project Synopsis: The Rotenberger/Holey Lands were historically an integral part of the Everglades hydrological system. The natural communities of the project consisted of shallow sawgrass marshes with tree islands interspersed. Much of the area has been disturbed. Restoration of the area is important to the restoration of the water quality and quantity to the Everglades.

Cost:
Total: Project size 79,170 acres. 70,833 acres have been acquired at a cost of $20,114,395
Project Development
Land Acquisition: 8,337 acres remaining to be acquired
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1984
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	20,114						
Tribal							
Local							
Other							
Total	**20,114**						**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Hydrological Restoration
Project Name: Shingle Creek Land Acquisition
Project ID: 2151
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 7,655 Acres

Project Synopsis: Shingle Creek Swamp is located in southern Orange and northern Osceola counties. It is a major receiving body for stormwater runoff from areas south and southwest of Orlando. The Orange County portion of the swamp is more than 1.5 miles wide, and is dominated by Cypress, Loblolly Bay, and Red Maple. Shingle Creek itself was channelized in the 1920s and it borders the eastern edge of the swamp. Most to the floodplain in Osceola County is intact, but adjacent uplands, which historically were wiregrass/longleaf pine-dominated systems, have been cleared and planted as improved pasture. As mitigation for the Orlando Beltway Southern Connector, a hydrologic restoration plan was implemented in 1995, which equalizes water levels and sheetflow across the Orange County portion of Shingle Creek Swamp. The project is 7,655 acres of which 1,333 have been acquired by the District. In June 2003, Osceola County acquired an additional 124 acres within the project, granting the District a conservation easement for funding $1,275,000 of the land acquisition cost.

Cost:

Total	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:
Start Date: 1987
Finish Date: Upon completion

Detailed Project Budget Information ($1000)

	Through 2003	2004	2005	2006	2007	2008	Balance to Complete	Total
Federal								
State								
Tribal								
Local**	$3,825							$3,825
Other*	$2,619	21						$2,640
Total	**$6,444**	**21**						**TBD**

** Coordination with Osceola County of the Babb property acquisition is required; This is an estimate of the land costs contributed based on file comments indicating that the District funded 25% of the acquisition $1,275,000.
*Mitigation Funds/Donations

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Hydrological Restoration, Water Quality, and Habitat and Species
Project Name: Six Mile Cypress I & II Land Acquisition
Project ID: 2152
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 1,966 Acres

Project Synopsis: Six Mile Cypress Slough is located in Lee County southeast of the City of Fort Myers. It extends from State Road 82 southwesterly for approximately nine miles to Ten Mile Canal. The Slough averages 1,500 feet in width, and consists of Cypress swamps, interspersed with numerous open ponds. It is ringed with pine flatwoods, transitional hardwoods, wet prairies, and stands of Melaleuca. The total project size is 1,966 acres. The SFWMD has acquired 842 acres and Lee County has acquired an additional 1,011 acres within the project.*

Cost:

Total	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:
Start Date: 1987
Finish Date: Upon completion

Detailed Project Budget Information ($1000)

	Through 2003	2004	2005	2006	2007	200	Balance to Complete	Total
Federal								
State	$1,770.3							$1,770.3
Tribal								
Local	5,133.38							5,133.38
Other*								
Total	**$6,903.7**							**TBD**

*Coordination with Lee County is required to determine acres and costs of acquisitions.

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: South Savannas Land Acquisition
Project ID: 2154
Lead Agency: Florida Department of Environmental Protection
Authority: Save Our Rivers (SOR), Conservation and Recreation Lands (CARL)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s):6,046 Acres Acquired

Project Synopsis: The Savannas forms a chain of marshes and lakes that separate the inland pine flatwoods from the coastal scrub on the Atlantic Ridge in St. Lucie and Martin Counties. The State has acquired most of the lands within the project through the CARL program. The District in partnership with Martin County acquired ownership of a single 77-acre tract and transferred title to the property to the State of Florida in 1999. It is now and will continue to be managed by the Department of Environmental Protection as the Savannas Preserve.

Cost:

Total:	The project totals 6,046 acres which 5,182 acres have been acquired at a cost of $20,902,290 Project Development
Land Acquisition:	864 acres remaining to be acquired.
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:

Start Date: 1981
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Through 2003	2004	2005	2006	2007	2008	Balance to Complete	Total*
Federal								
State	19,902							
Tribal								
Local	1,000							
Other								
Total	**$20,902**							**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Hydrological Restoration
Project Name: Southern Glades Land Acquisition
Project ID: 2155
Lead Agency: South Florida Water Management District, Miami-Dade County
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: **Primary:** 2.A.1

Measurable Output(s): Target 37,620 Acres

Project Synopsis: This 37,620-acre project is located adjacent to the C-111 Canal, between U.S. 1 and Everglades National Park. The project land is dominated by Everglades sawgrass marsh and tropical hardwood hammock. Land management will be carried out by the Fish and Wildlife Conservation Commission and the land is currently open for public use. This land is needed for the C-111 Canal project and C-111 Spreader Canal CERP project. These projects will benefit the flow of water into Everglades National Park and Northeast Florida Bay. The SFWMD has been acquired 32,499 acres and Miami-Dade County has acquired 1,077 acres within the project.

Cost:

Total	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:
Start Date: 1964
Finish Date: Upon completion

Detailed Project Budget Information ($1000)

	Through 2003	2004	2005	2006	2007	2008	Balance to complete	Total*
Federal								
State	$12,898.4							$12,898.4
Tribal								
Local**	$1,472.7							$1,472.7
Other								
Total	**$14,371.1**							**TBD**
Adjusted Total*	**6,951.8**							

*A portion of the acres and costs on this project sheet overlap with Project ID 1404 in Goal 1. The **Adjusted Total** compensates for this overlap by allocating the appropriate costs to this project.
** Coordination with Miami-Dade County through May 31, 2004

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition
Project name: Southern Golden Gate Estates
Project ID: 2156
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 55,247 Acres acquired

Project Synopsis: The Southern Golden Gate Estates (SGGE) encompasses an approximately 94 square mile area of sensitive environmental landscape in South Central Collier County. It is an important surface water storage and aquifer recharge area with a unique ecology of cypress, wet and dry prairie, pine flatwoods and hardwood hammock swamp communities; and includes three flowways that contribute freshwater input to the Ten Thousand Island estuary of the western Everglades watershed. The area supports a diversity of wildlife, including at least a dozen endangered and threatened vertebrates as well as a large variety of rare orchids and other air plants. The area is linked hydrologically to the Everglades ecosystem and contains remnants of two large cypress strands, the Lucky Lake and Picayune Strands. The rapid urbanization of southwest Florida is posing a continuous and increasing threat to the wildlife habitat and maintenance of water quality within SGGE. Acquisition of lands within SGGE will preserve large pieces of the South Florida ecosystem. Ultimately, this will contribute to the formation of a continuous public conservation area extending across South Florida from the Gulf Coast to approximately 10 miles from the Atlantic Ocean, protecting the Everglades ecosystem from the encroachment of residential, commercial, and industrial developments.

Cost:
Total: Project size 55,247 acres. 54,282 acres have been acquired at a cost of $110,795,988
Project Development
Land Acquisition: 965 acres remaining to be acquired.
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1984
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal	32,794						
State	78,002						
Tribal							
Local							
Other							
Total	**110,795**						**TBD**
Adjusted Total	**632.6**						

*A portion of the acres and costs on this project sheet overlap with Project ID 1424 in Goal 1. The **Adjusted Total** compensates for this overlap by allocating the appropriate costs to this project.

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Habitat and Species
Project Name: Twelve Mile Slough
Project ID: 2158
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 15,653 Acres

Project Synopsis: This site contains 15,653acres in Hendry County and is tributary to the much larger and regionally significant Okaloacoochee Slough. It contains a mosaic of uplands and wetlands, as well as improved pasture areas which appear to be reverting to native range. Based on a 1993 FGFWFC report, this single-owner tract provides habitat for the endangered Florida panther. Significant restoration on the site is necessary to correct overdrainage of the wetland communities. 7,486 acres has been acquired to date.

Restoration and protection is important because the Twelve Mile Slough is a headwater tributary to Okaloacoochee Slough, which supplies a major source of water for Fakahatchee Strand State Preserve and Big Cypress National Preserve. Surface water storage in the numerous wetlands provides for ground-water recharge of the underlying surficial aquifer and provides surface water supply to the Caloosahatchee River.

Cost:

Total:	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition :	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:

Start Date:	1998
Finish Date:	TBD

Detailed Project Budget Information ($1000)

	Through 2004	**2005**	**2006**	**2007**	**2008**	**2009**	**Balance to complete**	**Total**
Federal								
State	11,000							
Tribal								
Local								
Other								
Total	**11,000**							**TBD**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: Upper Lakes Basin Watershed
Project ID: 2159
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 47,300 Acres

Project Synopsis: This 47,300-acre project is located at the headwaters of the Kissimmee-Okeechobee-Everglades ecosystem in Polk and Osceola Counties. The project area includes a substantial portion of Reedy Creek and Lake Marion Creek drainage basins. The land contains large expanses of endangered scrub, mesic and wet flatwoods, hydric hammock, and floodplain forest, including habitat for several threatened and endangered plants and animals. The SFWMD in partnership with Polk County has acquired 12,550 acres. SFWMD is the lead land manager.

The primary purpose of this project is to preserve this watershed which is a critical link in the restoration of the Kissimmee-Lake Okeechobee-Everglades ecosystem. Reedy Creek is the headwater drainage for Lake Russel and Cypress Lake. Peak Discharges from major storm events are modified and stored within the swamp and provide year-round base flow to these downstream lakes. The Lake Marion Creek portion of the project is of critical importance to the recharge of the Floridan Aquifer. Lake Marion serves as the headwaters to lake Marion Creek, which combines with Snell and Horse Creeks to provide a constant supply of high-quality water to Lake Hatchineha, which in turn discharges to Lake Kissimmee, and eventually the Kissimmee River and Lake Okeechobee. All three of these water bodies are primary components of the SFWMD's water management system.

Cost:

Total	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:

Start Date:	1995
Finish Date:	TBD

Detailed Project Budget Information ($1000s)

	Through 2003	2004	2005	2006	2007	2008	Balance to complete	Total
Federal								
State	$9,257.9							
Tribal	0							
Local	$836							
Other***	2,250							
Total	**$12,343.9**							**TBD**

**Dollars contributed by Polk County
*** 332 acres of lands acquired in June 2003 with Mitigation funds.
Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition
Project Name: Upper Econ Mosaic
Project ID: 2186
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 16,595 Acres Acquired

Project Synopsis: 16,595 acres in a region facing overwhelming threats from residential and commercial growth. Provides a large habitat in the upper Kissimmee Basin region supporting a mosaic of high quality natural communities. The project encompasses the Econlockhatchee River Swamp, an Outstanding Florida Water and headwaters of the Econlockhatchee River, which flows north and east into the St. Johns River through Orange and Seminole Counties. The project is the site of several plants of conservation concern including scrub bay, nodding pinweed, and Florida bear-grass. Rare animals include red-cockaded woodpecker, Sherman's fox squirrel, Florida sandhill crane, Florida scrub jay, and a large population of gopher tortoise.

Cost:
Total: Project size 16,595. 918 acres acquired.
Project Development:
Land Acquisition: 15,677 acres remaining to be acquired.
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1996
Finish Date: Upon completion

Detailed Project Budget Information (1000s)

	Thru 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal								
State	$0							
Tribal								
Local								
Other								
Total								**TBD**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: John Outland 850-245-2089

Program Name: Restoration Program: Habitat and Species
Project Name: Water Conservation Areas 2 and 3
Project ID: 2160
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 103,635 Acres of outstanding fee interests

Project Synopsis: The WCAs encompass approximately 867,000 acres in Broward, Dade, and Palm Beach counties in which the SFWMD holds a combination of fee and easement interests. The SOR project is designed to complete the public acquisition of the outstanding fee interests in the project area, estimated to total 50,717 acres. The SFWMD has already acquired 52,918 acres of the original estimated 103,635 acres of outstanding fee interests. Land management is carried out by the Florida Fish and Wildlife Commission and the U.S. Fish and Wildlife Service, under contract to the SFWMD.

The general purpose of these lands is to store floodwater from developed areas adjacent to the WCAs for later use during the dry season. Releases of water from the WCA's during the dry seasonal and, particularly during drought conditions are considered vital to the maintenance of adequate water levels in the coastal canals, wellfields, and Everglades national Park and for the prevention of saltwater intrusion.

Cost:

Total	SFWMD does not make cost projections on SOR projects
Project Development	N/A
Land Acquisition	SFWMD does not make cost projections on SOR projects
Implementation	N/A
Operations and Maintenance	N/A

Project Schedule:

Start Date:	1948
Finish Date:	Upon Completion

Detailed Project Budget Information (1000s)

	Through 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal								
State*	$10,474.4	$98						$10,572.4
Tribal								
Local								
Other								
Total	**$10,474.4**	**$98**						**TBD**

*2004 Dollars reflect purchases associated with 980 acres of outstanding fee interest

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Land Acquisition
Project name: A.R. M. Loxahatchee National Wildlife Refuge
Project Number: 2161
Lead Agency: U.S. Fish and Wildlife Service
Authority: Migratory Bird Conservation Act of 1929

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 145,567 Acres

Project Synopsis: The Arthur R. Marshall Loxahatchee NWR was established in 1951 through an agreement between the South Florida Water Management District and the U.S. Fish and Wildlife Service under the Migratory Bird Conservation Act of 1929. Acquisition is for the purposes of providing buffer to the refuge, Everglades habitats, water recharge and storage, and for habitat protection. Increasing population growth is rapidly changing the landscape, converting farmland to residential neighborhoods. Acquisition support both refuge wildlife management goals as well as CERP restoration goals.

Cost:

Total	$30,119,000
Project Development	
Land Acquisition	$30,119,000
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 1955
Finish Date: 2005

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 2004	**2005**	**2006**	**2007**	**2008**	**2009**	**Balance to complete**	**Total**
Federal	$119						30,000	$30,119
SFWMD								
Total	**119**							**30,119**

Hyperlink: N/A
Contact: N/A

Program Name: Land Acquisition
Project name: Big Cypress National Preserve Addition
Project ID: 2163
Lead Agency: National Park Service
Authority: Public Law 100-301

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 146,117 acres

Project Synopsis: On April 29, 1988, Public Law 100-301 established the Big Cypress National Preserve (BCNP) Addition. At that time, I-75 was being designed in such a way as to improve the natural water flow to Everglades National Park, which had been disrupted by State Road 84 (commonly known as Alligator Alley). This provided an opportunity to enhance protection of Everglades National Park, to promote protection of the endangered Florida panther, and to provide for public recreational use and enjoyment of public lands by expanding the BCNP to include those lands adjacent to Interstate 75 in Collier County north and east of the Preserve, west of the Broward County line, and south of the Hendry County line.
The purpose of the Federal acquisition is to provide significant public benefits by limiting development pressures on lands which are important both in terms of fish and wildlife habitat supporting endangered species and of wetlands which are the headwaters of the Preserve. Additionally public ownership of the lands adjacent to the Preserve would enhance the protection of the Everglades National Park while providing recreational opportunities and other public uses currently offered by the Big Cypress.
The Act provided for expansion of the Big Cypress by 146,119 acres, of which approximately 32,557 acres have been acquired by the State of Florida. The authorizing legislation allows the Secretary of the Interior to purchase lands within the preserve boundaries and stipulates that no improved property, as defined by the Act, nor oil and gas rights, shall be acquired without the consent of the owner, unless that property is subject to, or threatened with, uses which are, or would be, detrimental to the purposes of the Preserve. The NPS will acquire the remaining private lands, excluding qualifying exempt property, using fair market value appraisals, consistent with the enabling Act.

Cost:

Total	$48,793,000
Project Development	
Land Acquisition	$48,793,000
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 1989
Finish Date: 2005

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 2004	**2005**	**2006**	**2007**	**2008**	**2009**	**Balance to complete**	**Total**
Federal	46,226						2,567	48,793
Total	**46,226**						**2,567**	**48,793**

All acquisitions will be consistent with authorizing Big Cypress Legislation.
Hyperlink: N/A
Contact: Carol Clark (941) 695-1102

Program Name: Land Acquisition
Project Name: Big Cypress National Preserve Private Inholdings
Project ID: 2164
Lead Agency: National Park Service
Authority: Public Law 93-440

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 845 acres

Project Synopsis: On October 11, 1974, Public Law 93-440 established the Big Cypress National Preserve in order to assure the preservation, conservation, and protection of the natural, scenic, hydrologic, floral and faunal, and recreational values of the Big Cypress Watershed. The total size of the Preserve is 574,449 acres. The State of Florida donated 186,340 acres to establish the Big Cypress. The Federal government has acquired all but 845 acres of the remaining 388,109 acres in the original Preserve boundaries. The authorizing legislation allows the Secretary of the Interior to purchase lands within the Preserve boundaries and stipulates that no improved property, as defined in the Act, nor oil and gas rights, shall be acquired without the consent of the owner, unless that property is subject to, or threatened with, uses which are, or would be, detrimental to the purposes of the Preserve.

The 179 privately owned tracts are scattered throughout the Preserve. The National Park Service will acquire those tracts, excluding qualifying exempt property, using fair market value appraisals consistent with the Act.

Cost:

Total	$243,982,000
Project Development	
Land Acquisition	$243,982,000
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 1974
Finish Date: open

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 2004	**2005**	**2006**	**2007**	**2008**	**2009**	**Balance to complete**	**Total**
Federal	222,105						21,877	243,982
SFWMD								
Total	**222,105**						**21,877**	**243,982**

All Acquisitions will be consistent with authorizing Big Cypress Legislation.

Hyperlink: N/A
Contact: Carol Clark (941) 695-1102

Program Name: Land Acquisition
Project Name: Biscayne National Park
Project ID: 2165
Lead Agency: National Park Service
Authority: Public Law 96-287

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 172,924 acres

Project Synopsis: This project includes acquisition of three Ragged Keys (326 acres), one tract of submerged lands only (20 acres) and two on-shore tracts (36 acres) in Biscayne National Park. The Ragged Keys are five islands immediately adjacent to the most popular use area in the park, Boca Chita Key. Two islands were acquired through 1999. Two of the three islands remaining to be acquired are natural habitat on the islands and in the surrounding shallows. Least terns nest on land and endangered sea turtles nest on the shoreline. Both nesting sites are greatly disturbed by overflow public use of the area and developers for resort and recreational facilities have repeatedly targeted the islands. A total of 382 acres remains to be acquired.

Cost:

Total	$33,699,000
Project Development	
Land Acquisition	$33,698,612
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 1968
Finish Date: Open

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal	$31,851	$0	$0	$0	$0		$1,848	$33,699
SFWMD								
Total	**$31,851**						**$1,848**	**$33,699**

Hyperlink: N/A
Contact: Damon Doumlele305-224-4200

Program Name: Land Acquisition
Project name: Crocodile Lake National Wildlife Refuge
Project Number: 2166
Lead Agency: U.S. Fish and Wildlife Service
Authority: Endangered Species Act of 1973

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 7,100 acres

Project Synopsis: Crocodile Lake National Wildlife Refuge was established on April 2, 1980 to preserve mangrove wetlands, tropical West Indian hardwood hammocks and open water areas on Key Largo, which are critical feeding and nesting habitat for the endangered American crocodile. The Refuge is within the designated Critical Habitat for the species and contains one-third of all crocodile nests found in Florida. The Refuge consists of about 5,300 acres of mangrove swamp, 1,200 acres of upland hardwood hammock, and 300 acres of open water. The uplands are vegetated with the last remaining remnants of unspoiled West Indian Hardwoods in the United States. The Refuge is inhabited by a number of other endangered or threatened species, most notably the eastern indigo snake, the bald eagle, the Key Largo woodrat, the Key Largo cottonmouse, and the Schaus swallowtail butterfly. The major threat to this habitat is conversion of the uplands to residential or commercial developments. The crocodile has little tolerance to human activities. Wetlands areas are less threatened, but severe alteration and damage has occurred.

Cost:

Total	$14,319,000
Project Development	
Land Acquisition	$14,319,000
Implementation	
Operations and maintenance:	

Project Schedule:
Start Date: 1979
Finish Date: 2005

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 2003	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal	$13,319						1,226	$14,319
SFWMD								
Total	$13,093						1,226	$14,319

Hyperlink:N/A
Contact:N/A

Program Name: Land Acquisition
Project Name: East Everglades Addition to Everglades National Park
Project ID: 2167
Lead Agency: National Park Service
Authority: Everglades National Park Protection and Expansion Act of 1989 (Public Law 101-229)

Strategic Plan Goal(s) Addressed: Primary: 2.A.1

Measurable Output(s): Target 109,504 acres
Project Synopsis: In 1989, Congress authorized the addition to Everglades National Park involving approximately 109,504 acres of an area known as Northeast Shark Slough and the East Everglades. The act also directed the Army Corps of Engineers to modify water management structures to allow the sheetflow of water and extend the hydroperiod to more closely resemble the historic Everglades. The East Everglades Addition is necessary to limit further losses suffered by the Park due to habitat destruction outside former boundaries and to restore natural water-flow patterns that are critical to the ecological integrity and long-term viability of Park resources. The acquisition of the East Everglades Addition lands and completion of the Modified Water Deliveries to Everglades National Park project are the most significant efforts underway to restore water deliveries to Shark Slough, the principal watershed in the Park. These hydrologic improvements are crucial to restoring ecosystem productivity in the southern Everglades and maintaining adequate freshwater inflow to the downstream estuaries along the Gulf of Mexico and Florida Bay.

Cost:
Total $102,535,000

Project Schedule:
Start Date: 1990
Finish Date**:** 2005

	1997	1998	1999	2000	2001	2002	2003	2004
Real Estate								

Detailed Project Budget Information ($1,000)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**2009**	**Balance to complete**	**Total**
Federal	74,006						12,257	86,263
State	16,272							16,272
Total	**90,278**						**12,257**	**102,535**

Hyperlink: N/A
Contact: Damon Doumlele305-224-4200

Program Name: Land Acquisition
Project name: Florida Keys National Wildlife Refuge (includes National Key Deer, Great White Heron, Key West refuges
Project Number: 2168
Lead Agency: U.S. Fish and Wildlife Service
Authority: Endangered Species Act (Key Deer), Executive Order 7993 (Great White Heron), Executive Order 923 (Key West)

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 415,436 acres

Project Synopsis: Acquisitions are to protect and maintain habitat extensively used by the endangered key deer. Preservation of the major habitats for this deer through acquisition contributes to the overall faunal diversity of Florida. Negotiations have been successful and with the availability of funding, acquisition of about 500 acres (30 willing sellers) within the refuge boundary would be possible. No Name and Big Pine Keys are the two most extensively used keys in the deer's range. Other rare, endangered and 'special emphasis' species are also found here. The greatest threat to key deer habitat is habitat modifications by land clearing. Residential development is rapidly proceeding as demand increases for the dwindling supply of acreage that will support construction. Unfortunately, this same land is prime deer habitat. An observable consequence of the residential development of these lands is the incidence of deer kills by vehicle traffic. An expansion of the Refuge to acquire a system of no-development corridors assure the continued existence of habitat for deer movement throughout the island.

Cost:

Total	$35,028,000
Project Development	
Land Acquisition	$35,028,000
Implementation	
Operations and maintenance	

Project Schedule:
Start Date:1960
Finish Date: 2005

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 2004	**2005**	**2006**	**2007**	**2008**	**2009**	**Balance to complete**	**Total**
Federal	31,168						3,860	35,028
SFWMD								
Total	**31,168**						**3,860**	**35,028**

Hyperlink:N/A
Contact:N/A

Program Name: Land Acquisition
Project name: Florida Panther National Wildlife Refuge (includes Ten Thousand Islands refuge)
Lead Agency: U.S. Fish and Wildlife Service
Authority: Endangered Species Act of 1973 (Florida Panther); P.L. 100-696 (Ten Thousand Islands)
Project Number: 2169

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 61,573 acres

Project Synopsis: The Florida panther is one of the most endangered mammals in the Nation, with less than 80 individuals inhabiting the Big Cypress-Everglades region. The target lands are valuable for flood water retention, water purification, and aquifer recharge, while providing high quality habitat for a wide variety of flora and fauna in addition to the panther. Most of the area is relatively inaccessible and is one the few remaining retreats for the Florida black bear. The area is diverse and interesting botanically containing rare orchids, large oaks, cypress, maples, cabbage palms and a diversity of tropical trees which form a dense canopy. The increasing human population in South Florida with its consequent urban expansion is jeopardizing the area's ecological integrity. Thus essential habitat for the survival of the Florida panther is being threatened by conversion for agricultural projects, residential development, oil field activities, lumbering and road construction. A preliminary project proposal has been developed for expansion of the Florida Panther Refuge. The ecosystem within the target boundary is absolutely essential to the survival of the Florida panther.

Cost:

Total	$10,692,000
Project Development	
Land Acquisition	$10,692,000
Implementation	
Operations and maintenance	

Project Schedule:

Start Date: 1989
Finish Date: open

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal	$10,682						$10	10,692
SFWMD								
Total	**$10,682**						**$10**	**10,692**

Hyperlink: N/A
Contact: Layne Hamilton (239) 353-8442 x227

Program Name: Land Acquisition
Project name: Hobe Sound National Wildlife Refuge
Project Number: 2170
Lead Agency: U.S. Fish and Wildlife Service
Authority: Endangered Species Act of 1973

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 1,130 Acres

Project Synopsis: Hobe Sound National Wildlife Refuge was established in 1969 and presently includes 1,027 acres of coastal sand dunes, mangrove and sand pine-scrub habitat. The primary objective of the refuge is to maintain habitat for some of the most productive nesting areas of the endangered leatherback, green and threatened loggerhead sea turtles. Hobe Sound provides habitat and protection to eight plan and animal species listed as federal threatened or endangered. The South Florida Ecosystem Plan highlights the importance of beaches to sea turtles. One of the Plan's objectives is to prevent the further decline of candidate, threatened, and endangered species and prevent further degradation of their habitats. This project is supported by the State and local governments, the public and conservation groups, with no know opposition. There are many willing sellers of high priority habitat. Nonprofit conservation groups are involved in this project.

Cost:

Total	$5,818,000
Project Development	
Land Acquisition	$5,818,000
Implementation	
Operations and maintenance	

Project Schedule:

Start Date: 1968
Finish Date: 2004

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal	$18						$5,800	$5,818
SFWMD								
Total	**$18**						**$5,800**	**$5,818**

Hyperlink: N/A
Contact: N/A

Program Name: Land Acquisition
Project name: J.N. "Ding" Darling National Wildlife Refuge (includes Caloosahatchee, Island Bay, Matlacha Pass & Pine Island refuges
Project Number: 2170
Lead Agency: U.S. Fish and Wildlife Service
Authority: Migratory Bird Conservation Act; Executive Order 3299; Executive Order 943

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): Target 10,275 acres

Project Synopsis: The J.N. "Ding" Darling National Wildlife Refuge was established in 1945 and is located in Lee County, Florida on Sanibel Island. The island is 12 miles long and is fringed with mangrove trees, shallow bays and white sandy beaches. Tourism and seasonal residential development threatened to envelop the islands private lands until a growth plan was instituted. Caloosahatchee NWR is located in Fort Myers and acquisition of lands here is necessary for the protection of the endangered West Indian Manatee. Island Bay NWR is located in the Cape Haze area of Charlotte County and includes portions of three islands. All wetlands are protected by Federal or State ownership. Matlacha Pass NWR's acquisition boundary includes all islands, wetlands and uplands lying south of the north boundary line of Township 44 South, crossing the Caloosahatchee River and running southerly and easterly to Bunch Beach. Pine Island NWR generally lies between the western boundary of Pine Island and the Coastal Islands of Cayo Costs, North Captiva and Sanibel.

Cost:

Total	$12,145,000
Project Development	
Land Acquisition	$12,145,000
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 1945
Finish Date: 2005

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Balance to complete**	**Total**
Federal	9,035							3,310	12,145
SFWMD									
Total	**9,035**							**3,310**	**12,145**

Hyperlink: N/A
Contact: N/A

Program Name: NOAA South Florida Program
Project Name: NOAA South Florida Program
Project ID: 2200
Lead Agency: NOAA
Authority: Magnuson Stevens Fisheries Wildlife Conservation Act, Marine Mammal Protection Act. NMSA (16 U.S.C. §§ 1431 *et seq*.), FKNMSPA (PL 101-605), and Executive Order 13089 (Coral Reef Protection)

Strategic Plan Goal(s) Addressed: 2.A.2

Measurable Output(s): Physical, Water Quality and Biological Data input to CERP Monitoring and Assessment Plan, Hydrodynamic Model for South Florida Coastal Waters (Florida Bay boundary), Assessment of Critical Indicator Species (both commercial and recreational fisheries), marine mammal population health and status, research publications and contributions to the Florida Bay and Adjacent Marine Waters Syntheses and biannual symposia

Project Synopsis: Ongoing program initiated in FY96 including research, monitoring and modeling components as well as a specific Education/Outreach Component. Includes three NOAA line organizations (NOS, NMFS and OAR) as well as Florida Sea Grant.

Cost:
Total: FY05 total $5,300,000
Project Development:
Land Acquisition:
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1997
Finish Date: Ongoing

Detailed Project Budget Information (1000s)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total to Date**
Federal	15,200	4,200	4,200	4,200	4,200	4,200	ongoing	32.0M
State	-	-	-	-	-	.4	.4 (FY05)	-
Tribal	-							
Local								
Other (Corps)						.7	Ongoing	Ongoing
Total	**15,200**	**4,200**	**4,200**	**4,200**	**4,200**	**5,300**	**Ongoing**	**Ongoing**

Hyperlink: N/A
Contact: N/A

Program Name: Infrastructure
Project Name: C&SF: CERP –Strazzulla Wetlands (OPE)
Project ID: 2300 (CERP Project # WBS 39)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: 2.A.3

Measurable Output(s): Water control structures

Project Synopsis: The purpose of this feature is to provide a hydrological and ecological connection to the Loxahatchee National Wildlife Refuge and expand the spatial extent of protected natural areas. This land will act as a buffer between higher water stages to the west and lands to the east that must be drained. This increase in spatial extent will provide vital habitat connectivity for species that require large unfragmented tracts of land for survival. It also contains the only remaining cypress habitat in eastern Everglades and one of the few remaining sawgrass marshes adjacent to the coastal ridge. This is a unique and endangered habitat that must be protected as it provides essential heterogeneity function.

Cost:

Total	$52,772,000
Project Development	$261,000
Land Acquisition (estimated 3,384 acres)	$12,226,000
Implementation	$3,539,000
RE Adjustment	$36,746,000
Operations and maintenance	$90,000

Project Schedule:
Start Date: 2002
Finish Date: 2010

	2005	2006	2007	2008	2009	2010
PIR/ Plans & Specs						
Real Estate						
Construction						

Detailed Project Budget Information ($1000)

	Thru 2003	2005	2006	2007	2008	2009	2010	Total
USACE	99	500	500	4,219	8,429	8,429	4,210	$26,386
SFWMD	40	500	500	4,220	8,448	8,449	4,229	$26,386
Total	**139**	**1,000**	**1,000**	**8,439**	**16,877**	**16,878**	**8,439**	**$52,772**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_39_strazzulla.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: Winsberg Farm Wetlands Restoration (OPE)
Project ID: 2301 (CERP Project # WBS 91)
Lead Agency: USACE / Palm Beach County
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 2.A.3

Measurable Output(s): 175 acres of wetlands

Project Synopsis: This feature includes the construction of a 175-acre wetland east of Loxahatchee Wildlife Preserve in Palm Beach County. The feature will reduce the amount of treated water from the Southern Region Water Reclamation Facility wasted in deep injection wells by further treating and recycling the water.

Cost:

Total	$14,140,000
Project Development	$687,000
Land Acquisition	$4,140,000
Implementation	$9,313,000
Operations and maintenance	$200,000

Project Schedule:
Start Date: 2000
Finish Date: 2014

	2007	2008	2009	2010	2011	2012	2013	2014
Planning & Design								
Real Estate								
Construction								

Detailed Project Budget Information ($1000)

	Thru 2003	2007	2008	2009	2010-2014 Balance to Complete	Total
USACE	938	500	500	500	4,632	$7,070
Palm Bch Co.	1,355	500	500	500	4,215	$7,070
Total	**2,293**	**1,000**	**1,000**	**1,000**	**8,847**	**$14,140**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_91_winsberg.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Lakes Park Restoration (OPE)
Project ID: 2302 (CERP Project # WBS 94)
Lead Agency: USACE / Lee County
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: 2.A.3

Measurable Output(s): 40 acres marsh/flowway

Project Synopsis: This feature includes the construction of a 40-acre marsh/flowway in an abandoned rock mine, removal of exotic vegetation, and planting native vegetation on 11 acres of uplands and 9 acres of littoral zone. This feature is located in the Lee County Lakes Regional Park, upstream of Estero Bay.

Cost:

Total	$5,166,000
Project Development	$343,000
Land Acquisition (estimated 40 acres)	$166,000
Implementation	$4,657,000
Operations and maintenance	$62,000

Project Schedule:
Start Date: 1999
Finish Date: 2014

	2009	2010	2011	2012	2013	2014
Planning & Design						
Real Estate						
Construction						

Detailed Project Budget Information ($1000)

	Thru 2003	2009	2010	2011	2012 – 2014 Balance to Complete	Total
USACE	216	263	250	250	1,604	$2,583
Lee County	254	250	250	250	1,579	$2,583
Total	**470**	**513**	**500**	**500**	**3,183**	**$5,166**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_94_lakes_park.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Restoration of Pineland & Hardwood Hammocks in C-111 Basin (OPE)
Project ID: 2303 (CERP Project # WBS 92)
Lead Agency: USACE
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 2.A.3

Measurable Output(s): Approximately 50 acres pine rockland and tropical hardwood hammock

Project Synopsis: This feature includes restoring south Florida slash pine and hardwood hammock species on a 200-foot wide strip on each side of two miles of SR 9336 from the C-111 Canal to the L-31W Borrow Canal (approximately 50 acres) and the establishment of two one-acre hammocks in low-lying areas on each side of the road located in Miami-Dade County.

Cost:

Total	$600,000
Project Development	$41,000
Land Acquisition (estimated 13,950 acres)	$0
Implementation	$559,000
Operations and maintenance	$0

Project Schedule:
Start Date: 2016
Finish Date: 2022

	2016	2017	2018	2019	2020	2021	2022
PIR/ Plans and Specs							
Real Estate N/A							
Construction							

Detailed Project Budget Information ($1000)

	2016	2017	2018	2019	2020-2022 Balance to Complete	Total
USACE	25	25	25	50	175	$300
Sponsor	25	25	25	50	175	$300
Total	**50**	**50**	**50**	**100**	**350**	**$600**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_92_rest_pineland.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: A.R.M. Loxahatchee NWR Prescribed fire program
Project ID: 2304
Lead Agency: USFWS A.R.M. Loxahatchee NWR
Authority:

Strategic Plan Goal(s) Addressed: 2.A.3

Measurable Output(s): Acres of habitat improved including contribution to invasive exotic control.

Project Synopsis: Fire is a natural part of the Everglades ecosystem. Fire also can be used to help control invasive exotic species. The natural fire patterns in the Everglades and in A.R.M. Loxahatchee NWR have been altered. A prescribe fire program will help to improve habitats by reducing fuel loads and mimicking natural fire frequencies and intensities where appropriate. The overall result will be an improvement in wildlife habitat on the refuge.

Cost:
Total:
Project Development:
Land Acquisition:
Implementation $200,000
Operations and maintenance $200,000 (each year)

Project Schedule:
Start Date 2002
Finish Date: recurring

Detailed Project Budget Information (1000s)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal			$190.5	$131.5	$127.7	$153		
State								
Tribal								
Local								
Other								
Total			**$190.5**	**$131.5**	**$127.7**	**$153**		**TBD**

Hyperlink: N/A
Contact: N/A

Program Name: Infrastructure
Project Name: Loxahatchee Impoundment Landscape Assessment (LILA)
Project ID: 2305
Lead Agency: SFWMD / USFWS A.R.M. Loxahatchee NWR
Authority:

Strategic Plan Goal(s) Addressed: 2.A.3

Measurable Output(s): Reports outlining quantitative targets for CERP performance measures. Educational kiosk.

Project Synopsis: The objective of LILA is to support CERP by defining hydrologic regimes that sustain a healthy Everglades Ridge and Slough ecosystem and reduce uncertainty in predicting the ecosystem response. LILA will address the effects of water depth, hydroperiod, and flow rate on wading birds, tree islands, marsh plant communities, marsh fishes and invertebrates, and peat soils. In addition, LILA supports refuge and CERP public outreach by providing opportunities to observe ongoing investigations and results. It will provide educational opportunities through on-site demonstrations, kiosks as well as a forum for discussion of restoration designs.

	SFWMD	USFWS/A.R.M. Lox NWR
Cost:		
Total :	$4,010,000	$2,040,000 *
		*($1,900,000 is contribution of land 64 acres)
Project Development:		
Land Acquisition:		
Implementation	$1,399,000	$70,000
Operations and maintenance	$2,611,000	$70,000

Project Schedule:
Start Date: 2002
Finish Date**:** 2012

Detailed Project Budget Information (1000s)

	2002	**2003**	**2004**	**2005**	**Balance to complete**	**Total**
Federal	$1,900*	$60	$10		$70	$2,040
State	$700	$338	$361		$2,611	$4,010
Tribal						
Local						
Other						
Total	**$2,600**	**$398**	**$371**		**2,681**	**6,050**

***$1,900,000 is contribution of land 64 acres**

Hyperlink: N/A
Contact: N/A

Program Name: Mineral Rights Acquisition
Project Name: Big Cypress National Preserve Mineral Rights
Project ID: 2400
Lead Agency: National Park Service

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Acres Acquired

Project Synopsis: Acquire the non-Federal mineral rights on approximately 729,000 acres in the Big Cypress National Preserve. The President has made an announcement of the intent to purchase the rights from Collier Resources. The Collier family is the primary holder of mineral rights in the Preserve. The President's announcement did not include acquisition of other mineral rights.

Acquisition of mineral rights would protect wetlands habitat from oil and gas development activities. The goal is acquisition of all mineral rights which would preclude surface disturbance associated with mineral exploration and development in relatively pristine wetlands.

Cost:

Total breakdown is unknown. For the Collier acquisition (which includes other land management agencies) the total amount included in the FY 2005 budget request is $40 million.

Project Schedule:

Start Date: 2000
Finish Date**:** open

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Appraisal											
Acquisition											

Detailed Project Budget Information

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**Balance to complete**	**Total**
Federal											TBD
Total											**TBD**

Hyperlink: http//www.nps.gov\bicy
Contact: Carol A. Clark, Acting Superintendent, Big Cypress National Preserve (239) 695-1103

Program Name: Infrastructure
Project Name: C&SF: CERP - Flow to Northwest and Central Water Conservation Area 3A (II)(RR)
Project ID: 2401(CERP Project # WBS11)
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: 2.A.4

Measurable Output(s): Increased Capacity at P.S. G-404 / S-140; Spreader Canal at S-140

Project Synopsis: This feature includes relocation and modifications to pump stations and development of a spreader canal system located in the northwest corner and west-central portions of Water Conservation Area 3A in western Broward County. Additional flows will be directed to the northwest corner and west-central portions of Water Conservation Area 3A by increasing the capacity of the G-404 pump station, currently a part of the Everglades Construction Project, and increasing the capacity and relocating the S-140 pump station. A spreader canal system at S-140 will establish sheetflow to the west-central portion of Water Conservation Area 3A. Water quality treatment strategies were developed to fulfill the non-Everglades Construction Project requirements of the Everglades Forever Act. If additional treatment is determined to be required as a result of future detailed planning and design work, those existing facilities would be modified to provide the necessary treatment.

Cost:

Total	$30,877,000
Project Development	$2,121,000
Land Acquisition (0 acres)	$0
Implementation	$28,756,000
Operations and maintenance	$1,102,327

Project Schedule:
Start Date: 2002
Finish Date: 2018

	2010	2011	2012	2013	2014	2015	2016	2017	2018
PIR/ Plans & Specs									
Construction									

Detailed Project Budget Information ($1000)

	Thru 2003	2010	2011	2012	2013	2014	2015-2018 Balance to complete	Total
USACE	59	200	200	200	4,000	2,695	8,085	$15,439
SFWMD	7	200	200	200	4,000	2,708	8,123	$15,438
Total	**66**	**400**	**400**	**400**	**8,000**	**5,403**	**16,208**	**$30,877**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_11_flow_nw_central.cfm
Contact: USACE

Program Name: South Florida Ecological Services Office Threatened and Endangered Species Program
Project Name: South Florida Multi-Species Recovery Plan
Project ID: 2402
Lead Agency: USFWS
Authority: Endangered Species Act of 1973 (16 U.S.C. 1531-1543)

Strategic Plan Goal(s) Addressed: Primary: **2.A.4**

Measurable Output(s): Number of species delisted, number of species reclassified, number of species status improving

Project Synopsis: A Multi-Species Recovery Plan (MSRP) for the threatened and endangered species of South Florida was completed in May 1999. This document was prepared to fulfill a major element of the South Florida Ecosystem Restoration Initiative. It contains information on the biology, ecology, status, trends, management, and recovery actions for 68 federally-listed species that occur in South Florida, as well as the ecology and restoration needs of 23 natural communities in this region. Implementation of the Recovery Plan is underway through the Multi-Species Recovery Implementation Team (MERIT). The focus of MERIT is on developing an implementation strategy for South Florida to prioritize the recovery and restoration actions as identified in the Multi-Species Recovery Plan, and on recommending and funding on-the-ground recovery and restoration activities. To accomplish the task of developing an implementation strategy, MERIT formed four subteams: a *Landscape Subteam* with expertise on GIS mapping and analysis, land conservation; a *Species/Communities Subteam* that provides expertise on the life history of the species and ecology of the natural communities; a *Conservation Incentives Subteam* that assists with strategies for accomplishing implementation; and a *Florida Panther Sub-team* to assist in developing a conservation strategy specific for the panther.

Two of the most significant recovery actions identified in the MSRP are the acquisition of selected acreage of land for five National Wildlife Refuges in South Florida and control of invasive exotic species such as melaleuca, Brazilian pepper, Australian pine and Old World climbing fern. Additional lands for Archie Carr NWR, J.N.Ding Darling NWR, Pelican Island NWR, Lake Wales Ridge NWR and Crocodile Lake NWR as well as conservation easements for the Florida panther, are necessary for the recovery of threatened and endangered species in South Florida. The other critical component of restoration is the control of invasive exotic species which when present can render the lands unsuitable for their intended uses. Currently, over 100,000 acres of National Wildlife Refuge lands are infested with over 30 species of exotic vegetation. Over 70,000 acres of A.R.M. Loxahatchee NWR is infested with melaleuca and Old world climbing fern. These areas must be cleared of infestations for the lands to provide the necessary habitat for threatened and endangered species.

Cost:

Total:	$386,991,000
Project Development:	$8,000,000
Land Acquisition:	$309,973,000 (Nat'l Wildlife Refuge)
Implementation:	$27,160,000
Operations and maintenance:	$49,850,000 (Exotic plant control on NWRs)

Project Schedule:
Start Date: 1994
Finish Date: 2010

Detailed Project Budget Information ($1000)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**Balance to complete**	**Total**
Federal Project implementation*	$8,000	$1,560	$1,560	$1,560	$1,560	$1,560	$1,560	$9,800	$27,160
Land acq[1]	$56,800	$785	$3,588	$3,000	$7,010	$10	$10	$238,770	$309,973
O&M[2]	$350	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500	$22,500	$49,850
State									
Tribal									
Local									
Other									
Total	**$65,150**	**$6,845**	**$9,648**	**$9,060**	**$13,070**	**$6,070**	**$6,070**	**$271,070**	**$386,983**

*Only funds for Project Development and Implementation- USFWS
[1] Lands acquisition for National Wildlife Refuges (NWR)
[2] Invasive plant and animal control on NWRs

Hyperlink: N/A
Contact: Bob Doren 305-348-1660

Project 2402 Page 2 of 2

Program Name: Infrastructure
Project Name: WCA 2A Regulation Schedule Review
Project ID: 2403
Lead Agency: USACE
Authority: WRDA

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Revised WCA-2A Regulation Schedule

Project Synopsis: A revised regulation schedule was implemented for Water Conservation Area 1 (WCA 1) (Loxahatchee National Wildlife Refuge) in 1995. The schedule was modified to improve water conditions for wading bird and snail kite habitat. Implementation of the revised regulation schedule has already shown benefits. When the WCA 1 regulation schedule modifications were approved, it was agreed that the WCA 2A regulation should also be reviewed to evaluate opportunities for similar benefits.

The purpose of the project is to evaluate the feasibility of modifying operational modifications for WCA 2A to benefit its fish and wildlife resources, without adversely impacting the area's ability to satisfy its flood control and water supply purposes. The study can be implemented with existing operational and maintenance authority. It can be funded through ongoing O&M appropriations for the Corps of Engineers. This project will be done in coordination with the Rain-Driven Operations.

Cost:

Total:	TBD
Project Development:	
Land Acquisition:	
Implementation:	
Operation and maintenance:	

Project Schedule:
Start Date: TBD
Finish Date:

Detailed Project Budget Information ($1000)

No budget information available, as project has not started.

Hyperlink: http://www.saj.usace.army.mil/
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: Manatee Pass Gates
Project ID: 2404
Lead Agency: USACE / SFWMD
Authority: WRDA 1994

Strategic Plan Goal(s) Addressed:

Measurable Output(s): Other

Project Synopsis: The purpose of this project is to develop and install Manatee Protection Devices on vertical lift gates and sector gates at specific navigation and flood control structures.

Cost: $14,000,000

Project Schedule:
Start Date: 2001
Finish Date: 2007

	Thru 2004	**2005**	**2006**
PIR/ Plans & Specs			
Real Estate			
Construction			

Detailed Project Budget Information ($1000)

	Thru 2004	**2005**	**2006**	**Total**
USACE	6287	2000	3363	11,650
SFWMD	433	849	1068	2,350
Total	**6720**	**2849**	**4431**	**14,000**

Hyperlink: N/A
Contact: USACE

Program Name: Invasive Exotic Species Management
Project Name: Coordinate the development of management plans for top 20 south Florida exotic pest plants
Project ID: 2500
Lead Agency: NEWTT (Noxious Exotic Weed Task Team)

Goal(s) Addressed: 2.B.1

Measurable Output(s): Species assessments, prioritized list of species, develop control methods, research reports on basic species biology, management plans, assessment of success, acres of invasion reduced

Project Synopsis: Each priority species will have a management plan developed. Existing plans that have proven effective will serve as examples. Plans will be developed through multi-agency coordination and planning. Two plans will be started each year and the plans will take 18 months to complete. All twenty plans will be completed within 10-12 years. As individual plans are completed they will be incorporated into the broader invasive exotic plant strategy. Multi-agency approval of each plan will be required to ensure support and funding. Accomplishments to date have included an assessment of the key species and priorities for plan development. No new plans are being developed at this time as no funding or agency leadership for developing these plans has been identified. In addition, FDEP has expressed that additional plans for control of the key invasive species is not needed and thus the development of such plans is in question.

Cost:

Total	$600,000
Project Development	$30,000 per plan
Land Acquisition	N/A
Implementation Unknown	
Operations and maintenance Unknown	

Project Schedule:

Proposed Start Date: Spring 2001
Finish Date: 2011

Detailed Project Budget Information (1000s)

	Thru 1999	2000	2001	2002	2003	2004	Balance to complete	Total
Federal								
State								
Tribal								
Local								
Other								
Total								**$600**

Hyperlink:N/A
Contact: N/A

Program Name: Invasive Exotic Species Management
Project Name: Achieve "maintenance control*" status for Brazilian pepper, melaleuca, Australian pine and Old World climbing fern in all natural areas statewide by 2020.
Project ID: 2600
Lead Agency: SFWMD/DEP/USFWS

Goal(s) Addressed: **Primary**: 2.B.2

Measurable Output(s): Completed plans for Old World climbing fern and Australian pine, agency integration and coordination for control of most wide-spread and serious species, implementation of all plans for these species as a coordinated program, development of control methods for Old World climbing fern, full implementation of biological control programs for Old World climbing fern, melaleuca, and Australian pine, reduction total acreage covered statewide, maintenance control for hydrilla, water hyacinth, water lettuce, Brazilian pepper, Australian pine, Old World climbing fern on all public lands, biennial assessments of success, application of planning and control techniques to additional species as plans are developed.

Project Synopsis: : The Old World climbing fern management plan was completed in 2001. The Lygodium Task Force of the Florida Exotic Pest Plant Council completed the plan and in May of 2004 updated the plan using new research and modeling information. New herbicide trials and biological control elements of the plan have been underway and are showing some progress in understanding how to possibly manage this serious pest. However, no significant inroads into control of Old World climbing fern have been made except at very local levels in small park areas. No plan exists for Australian pine. There is still a large gap in acquiring sufficient funding to implement the multi-species control program with multi-agency integration. Partial funding through the SFWMD, FLDEP and USFWS for public lands in south Florida has been allocated for melaleuca and Old World climbing fern; and maintenance control has been achieved for melaleuca on SFWMD, NPS and identified DEP upland control sites.

Cost:

Total	$139,078,000
Project Development	N/A
Land Acquisition	N/A
Implementation	$5,000,000 per year for 15 years
Operations and maintenance	$2,000,000 per year thereafter for maintenance control

Project Schedule:
Proposed Start Date: 2002
Finish Date: Achieve maintenance control 2020

Detailed Project Budget Information (1000s)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal				10.3				
State				39.8				
Tribal								
Local				20.6				
Other								
Total				**70.7**			**$68,338**	**$139,078**

*Maintenance Control is simply defined in SS.369.22(1)(d), F.S., as applying management techniques on a continuous basis to keep non-indigenous plant populations at the lowest feasible levels.

Hyperlink: N/A
Contact: Bob Doren (305) 348-6721

Program Name: Invasive Exotic Species Management
Project Name: Integration of Federal, State, and Local Agency Invasive Exotic Control Programs into Florida-wide Strategy
Project ID: 2601
Lead Agency: National Park Service

Goal(s) Addressed: **Primary:** 2.B.2

Measurable Output(s): The ratio of acres under maintenance control to total acres (by species)

Project Synopsis: Compilation of all Federal, State, and Local Agency programs participating in NEWTT (Noxious Exotic Weed Task Team) to develop statewide assessment and strategy for control of invasive exotic plants. Includes 5 Federal Agencies, 6 State Agencies, Actual cost reports for 26 reporting counties, estimated cost reports for 23 non-reporting counties, and one city government. This project incorporates the integration of all these Agencies under the current development and future implementation of the Strategic Plan for Managing Invasive Exotic Plants in Florida. This is the first integration of programmatic and budgetary information on a statewide basis. It includes all invasive exotic plant management programs statewide, including those related to South Florida Ecosystem Restoration, and incorporates the previous individually identified projects and programs that were part of the South Florida Ecosystem Restoration Strategic Planning effort.

Project includes the development of the Strategic Plan for Invasive Exotic Plant Management, Development of an Implementation Plan, and the first 5 years integration of individual agency programs and of implementation of the plan. Invasive exotic plant management does not have a completion date per se as management will continue as long as species are extant. However, it is estimated that the key elements of the Strategy can be implemented within 5 years and the greater proportion of the strategy should be able to be in place within 10 years with some individual recommendations taking longer. The COE is funding a special report on the Federal role in invasive species management that will include the implementation planning elements of the strategic plan for federal agencies.

Cost:

Total	TBD
Project Development	
Land Acquisition	
Implementation	$60,850,000 (Annual Requirement)
Operations and maintenance	$76,418,000 (Annual Requirement)

Project Schedule:
Proposed Start Date: 2000
Finish Date: 2005 – This date is used as a guidepost to implement the key elements of the strategic plan.

Detailed Project Budget Information ($1000)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal*		$30,782	$30,782	$30,782	$30,782	$30,782	$40,900	TBD
State**		$22,436	$22,436	$33,436	$33,436	$33,436	$19,750***	TBD
Tribal		Not Reported					Not Reported	
Local		$23,200	$23,200	$23,200	$23,200	$23,200	Not Reported	
Total		**$76,418**	**$76,418**	**$87,418**	**$87,418**	**$87,418**	**$60,650*** **	**TBD**

*Current Costs for Federal Agencies may be assumed for following years
**Current Costs for State Agencies may be assumed for following years, except FLDEP has received their requested increase for 2002
***Balance to Complete would be reduced by ~ $11 Million in 2002 as FLDEP receives their increase that year.
****The TOTAL figure is going to be conservative as some agencies could only estimate their expenditures, others did not report theirs, and still other did not estimate shortfalls needed to complete (see below).

Florida DOF did not report estimated costs for control. The USACOE, Florida FWCC, FDOF, Local Governments, did not identify shortfalls for balance to complete.

Hyperlink: N/A
Contact: Walter Chavez (305) 242- 7700

Program Name: Infrastructure
Project Name: C&SF: CERP - Melaleuca Eradication Project and other Exotic Plants (OPE)
Project ID: 2602 (CERP Project # WBS 95)
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: Primary: 2.B.2

Measurable Output(s): Increase effectiveness of biological control technologies

Project Synopsis: This feature includes: 1) upgrading and retrofitting the current quarantine facility in Gainesville, and 2) large-scale rearing of approved biological control organisms for release at multiple sites within the south Florida ecosystem.

Cost:

Total	$5,772,000
Project Development	$397,000
Land Acquisition	$0
Implementation	$5,375,000
Operations and maintenance	$5,000

Project Schedule:
Start Date: 2003
Finish Date: 2013

	2012	2013
PIR		

Detailed Project Budget Information ($1000)

	Thru 2003	2012	2013	Total
USACE	145	1,370	1,371	2,886
SFWMD	0	1,443	1,443	2,886
Total	**145**	**2,813**	**2,814**	**5,772**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_95_melaleauca.cfm
Contact: USACE

Program Name: Invasive Exotic Species Management
Project Name: Estero Bay Aquatic Preserve and Buffer Enhancement and Exotic Removal Project
Project ID: 2603
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Chapter 403, Florida Statutes

Strategic Plan Goal(s) Addressed: 2.B.2

Measurable Output(s): Acres of exotic plants removed

Project Synopsis:
I. Melaleuca removal: Treatment, removal, monitoring and follow-up treatment of 708 acres of Melaleuca within the 10,405 acre Estero Bay Preserve State Park – ONGOING PROJECT

II. Dog Key Exotic Removal: Treatment, removal, monitoring and follow-up treatment of exotic vegetation on Dog Key, a 24 acre island within the Estero Bay Aquatic Preserve and part of the Estero Bay State Buffer Preserve with documented Calusa Indian middens/mounds – PROJECT COMPLETED

Cost: Total: $1.05 million

Project Development:

I. Melaleuca Removal – The initial aerial treatment of 708 acres of melaleuca was completed through funding by the Bureau of Invasive Plant Management (BIPM) at a cost of approximately $100,000.00. Only the heavily infested monoculture areas were treated, leaving untreated buffers around native plant communities. It will be necessary to hand treat these buffer areas and any unsuccessful initial treatment areas. It is anticipated that $600,000.00 will be needed for this work. Monitoring and follow-up treatment of this large-scale treatment still needs funding. Smoke from a prescribed fire within these treatment areas (dead) would be a major problem in the Estero development area so actual removal of dead or live trees off site would be preferable. In this case, costs could exceed the $600,000.00 figure.

Implementation:
I - initial treatment completed in 2001. On the ground treatment of the buffer areas (edges of the treated areas) and any unsuccessful treatment areas should also occur toward the end of 2001 or beginning of 2002. Monitoring and follow-up treatment to continue through 2004 at an estimated cost of $300,000.00.
Operations and maintenance: Total =2,852 acres treated at a cost $1,129,214
Estimated at $40,000.00 through 2004.

Project Schedule:
Start Date: 1998
Finish Date: 2004

Detailed Project Budget Information (1000s)

	Thru 2003	2004	2005	2006	2007	2008	Balance to complete	Total
Federal								
State	$1,100							
Tribal								
Local								
Other								
Total	**$1,100**							**TBD**

Hyperlink: N/A
Contact: N/A

Program Name: Invasive Exotic Species Management
Project Name: Everglades National Park Exotic Control Program
Project ID: 2604
Lead Agency: National Park Service

Strategic Plan Goal(s) Addressed: 2.B.2

Measurable Output(s): Acres infested with Exotic Plants

Project Synopsis: Exotic plants are the single most serious long-term threat to Everglades National Park. Over 200,000 acres of the park and 500,000 acres of adjacent lands are infested. Without control and management, these plants can and will continue to replace all native plant communities in the park. Funds are needed for control efforts and determining effective means of dealing with the many exotic species.

The program will (1) complete the initial treatment of melaleuca and Australian pine in the East Everglades; (2) perform retreatment of Old World climbing fern along the Gulf Coast; (3) complete the initial treatment of Australian pine in the southeastern panhandle; (4) perform retreatment of Asiatic colubrina sites along the northern fringe of Florida Bay; (5) perform the annual reconnaissance flight across the park to monitor and document exotic plant occurrence, (6) perform initial treatment and/or retreatment of localized populations of exotic Ardisia, Schinus, and other exotic pest plants in all the park's districts, and (7) support the essential monitoring and maintenance control programs in treated zones..

Cost:
Total: $2,150,000

Project Schedule:
Start Date: 2002
Finish Date: To be determined

	1997	1998	1999	2000	2001	2002	2003	2004
Operation/Management								

Detailed Project Budget Information ($1,000)

	Thru 1999	2000	2001	2002	2003	2004	Balance to complete	Total
Federal				1,300	600	250		TBD
Total				**1,300**	**600**	**250**		**TBD**

Hyperlink: N/A
Point of Contact: Margaret Garvin (305) 242-7721

Program Name: Invasive Exotic Species Management
Project Name: Exotic Species Removal
Project ID: 2605
Lead Agency: Seminole Tribe of Florida/BIA
Authority: Tribal Resolution

Strategic Plan Goal(s) Addressed: 2.B.2

Measurable Output(s): Eradication and control of exotic species.

Project Synopsis:
Control growth of exotic species on the Big Cypress and Brighton reservations.

Cost:
Total 988,000
Project Development
Land Acquisition
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1998
Finish Date: 2010

Detailed Project Budget Information (1000s)

	2002	**2003**	**2004**	**2005**	**2006**	**Balance to complete**	**Total**
Federal	30	60	30	30	30	254	434
State							0
Tribal	20	70	70	70	70	254	554
Total	**50**	**130**	**100**	**100**	**100**	**508**	**988**

Hyperlink: N/A
Contact: N/A

Program Name: Invasive Exotic Species Management
Project Name: Hole-in-the-Donut
Project ID: 2606
Lead Agency: National Park Service

Strategic Plan Goal(s) Addressed: **Primary**: 2.B.2 **Secondary:** 2.A.3

Measurable Output(s): Acres infested with Brazilian pepper

Project Synopsis: This project will restore approximately 5,000 – 6,000 acres of wetlands within Everglades National Park by removing Brazilian pepper, an invasive exotic plant species, and the disturbed substrate to limestone bedrock. Invasive exotic plants are one of the greatest long-term threats to the Everglades ecosystem. As a result of this project, approximately 6,000 acres will be restored to natural wetlands within the park as mitigation for development projects in other areas of Dade County. A vast seed source with the potential to invade and disturb other areas of the Everglades will be eradicated.

Cost:
Total: $123,750,000

Project Schedule:
Start Date: 1994
Finish Date**:** 2017

	1997	1998	1999	2000	2001	2002	2003	2004
Construction								

Detailed Project Budget Information ($1,000)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Dade Co.	8,353	3,229	3,738	2,743	9,574	9,804	37,559	75,000
Total	**8,353**	**3,229**	**3,738**	**2,743**	**9,574**	**13,892**	**82,221**	**123,750**

Hyperlink: N/A
Point of Contact: Walter Chavez (305) 242- 7700

Program Name: Invasive Exotic Species Management
Project Name: Melaleuca Control (Critical) on Big Cypress National Preserve
Project ID: 2607
Lead Agency: National Park Service

Strategic Plan Goal(s) Addressed: 2.B.2

Measurable Output(s): Acres infested with Melaleuca

Project Synopsis: Treatment, re-treatment and subsequent monitoring and evaluation of *Melaleuca quinquenervia*, an introduced species from Australia that is recognized as a serious threat to the Big Cypress/Everglades ecosystem. Removal of Melaleuca from sensitive Preserve wetlands will permit the re-establishment of native plant communities. Efforts to date (March 2004) have involved treatment of more than 150 square miles of Big Cypress wetlands. Maintenance control activities and funding for melaleuca is anticipated to continue at a level sufficient to keep melaleuca under control within BICY.

Cost:
Total through 2008 $4,000,000

Project Schedule:
Start Date: 1998
Finish Date: Ongoing

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Treatment												
Re-Treatment												
Monitoring												

Detailed Project Budget Information

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total
Federal												2,000
Local												2,000
Total	**450**	**450**	**600**	**650**	**650**	**200**	**200**	**200**	**200**	**200**	**200**	**4,000**

Hyperlink: N/A
Point of Contact: Carol A. Clark, Acting Superintendent, Big Cypress National Preserve (239) 695-1103

Program Name: Invasive Exotic Species Management
Project Name: Aquatic and Upland Invasive Plant Management
Project ID: 2608
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Chapter 369, F.S.

Strategic Plan Goal(s) Addressed: 2.B.2

Measurable Output(s): Acres of upland and aquatic invasive plants controlled[1]

Acres Controlled:

Aquatics Program	40,040
Uplands Program	26,830

Project Synopsis: The Bureau of Invasive Plant Management is the lead agency in Florida responsible for coordinating and funding two statewide programs controlling invasive aquatic and upland plants on public conservation lands and waterways throughout the state. The aquatic plant management program designs, funds, coordinates, and contracts invasive non-native aquatic plant control efforts in Florida's 1.25 million acres of public waters. The upland plant management program coordinates and funds invasive plant removal projects on 11 million acres of public conservation lands, which include federal, state, and local government owned lands.

Cost:
Total (operations and maintenance):

Aquatics Program	$22,751,281
Uplands Program	$5,287,050

Project Schedule:

Start Date:	annual
Finish Date:	continuous

Detailed Project Budget Information (1000s):

	2002	2003	Proposed 2004	2005	2006	2007	Total
Federal	400	795.5	944				
State[2]	20,536.9	28,038.3	22,122.8				
Tribal	0	0	0				
Local	54.3	255.7	129				
Other	0	0	0				
Total	**20,991.3**	**29,089.5**	**23,195.8**				**TBD**

[1]Within the 16-county SFWMD region during the previous state fiscal year
[2]Includes $1 million match from SFWMD for melaleuca control

Hyperlink http://www.dep.state.fl.us/lands/invaspec/index.htm
Contact: Bob Doren 305-348-1665

Program Name: Invasive Exotic Species Management
Project Name: Complete an Invasive Exotic Plant Prevention, Early Detection and Eradication Plan by 2005
Project ID: 2700
Lead Agency: NEWTT/NPS/DEP

Goal(s) Addressed: 2.B.3

Measurable Output(s): "Early Warning" system for Florida to identify exotic species invasion risk, and locations of new infestations of new species or species under maintenance control, roving invasive species strike teams to assist in locating and eradicating localized population of invasive exotic species, risk-assessment system to support current state prohibitions lists and coordination with USDS-APHIS for prohibitions, support for existing control programs through identification of re-infestation of sites by existing species in maintenance control areas.

Project Synopsis: Preventing the introduction of invasive species is the only absolute means to control them, but absolute prohibitions and exclusions are impractical. An "early warning" program for potentially invasive species, a risk-assessment for evaluating possible invasiveness prior to introduction, methods for early detection of incipient populations of new species, predictive tools to assist in determining where plants may invade, and the ability to eradicate incipient populations are needed. NPS & FLDEP teams are operating and jointly funded. Additional agencies are being recruited to expand team support and coverage. Early-warning system and risk assessment protocols have not been funded. While the need for Early-Detection Rapid Response program are identified by several agencies none are being funded or implemented in any agency programs at this point.

Cost:

Total	$5,000,000 plus O&M
Project Development	$4,000,000 one time
Land Acquisition	
Implementation	$1,000,000 one time
Operations and maintenance	$2,500,000 per year

Project Schedule:
Proposed Start Date: 2001
Finish Date: Invasive Plant Strike Teams in place 2002, Completed "early-warning" system 2003, Risk-assessment system, 2004, operations and maintenance of completed system and teams 2004

Detailed Project Budget Information

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal								
State								
Tribal								
Local								
Other								
Total								TBD

Hyperlink:N/A
Contact: Bob Doren - (305) 348-6721

Program Name: Invasive Exotic Species Management
Project Name: Melaleuca Quarantine Facility
Project ID: 2701
Lead Agency: U.S. Department of Agriculture – Agricultural Research Service
Authority: ARS

Strategic Plan Goal(s) Addressed: 2.B.3

Measurable Output(s): Number Biological Agents Approved

Project Synopsis. Biological control agents have the potential of providing greater efficiency and improved economy. Ultimately, they may prove to be the only truly effective large-scale means of reversing and halting the effects of non-native species on the South Florida habitat. This project consists of constructing a quarantine facility to enable the testing of candidate organisms for biological control and reversal of the spread of exotic plant species. The quarantine facility is nearing completion; however some construction delays and cost overruns have resulted in the facility not being ready within the original timeframes. It is currently expected to be open later in 2004.

Cost:

Total:	$6,200,000
Project Development:	$1,000,000
Land Acquisition:	$0 (long term lease - University of Florida)
Implementation:	$5,200,000
Operations and maintenance:	not yet included in budget

Project Schedule:
Start Date: 1997
Finish Date: 2003

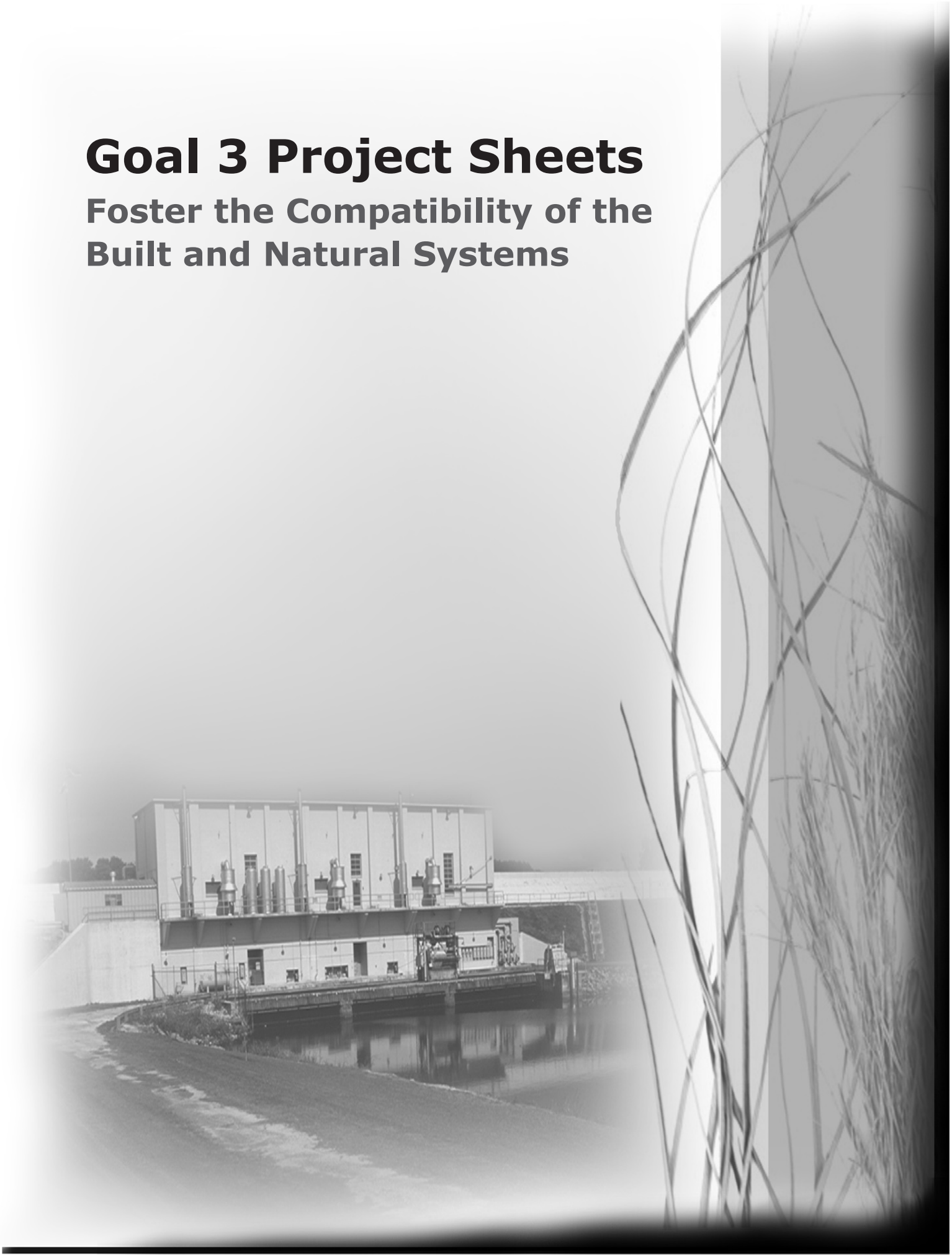
Detailed Project Budget Information ($1000)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal	$1,000		$600	$3,200	$1,400			$6,200
State								
Tribal								
Local								
Other								
Total	**$1,000**		**$600**	**$3,200**	**$1,400**			**$6,200**

Hyperlink:N/A
Point of Contact: Ted Center, 954-475-0541 (USDA – ARS)

Goal 3 Project Sheets

Foster the Compatibility of the Built and Natural Systems



Goal 3: Foster the Compatibility of the Built and Natural Systems

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

Objective 3-A.1: Designate or acquire 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 Programs by 230,000 acres by 2014.

Objective 3-A.3: Acquire an additional 2,500 acres of park, recreation, and open spaces by 2006.

Objective 3-A.4: Compile five brownfield rehabilitation and redeelopment projects by 2006.

Objective 3-A.5: Increase community understanding of ecosystem restoration.

Subgoal 3-B: Maintain or improve existing 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 built and natural systems.

Objective 3-C.1: Increase the water available by target of 478.5 million gallons per day by 2008.

Objective 3-C.2: Increase volume of reuse on a regional basis.

Objective 3-C.3: Increase water made available through the SFWMD Alternative Water Supply Development Program.

Program Name: Florida Greenways and Trails
Project Name: Florida Greenways and Trails Program
Project ID: 3100
Lead Agency: FDEP-Florida Office of Greenways and Trails
Authority: Designation: Chapter 260, F.S.; 62S-1.400, 62S-1.450, F.A.C
Acquisition: Florida Forever Act, Section 259.105, Florida Statutes

Strategic Plan Goals(s) Addressed: 3.A.1

Measurable Output(s): Target 480,000 acres

Project Synopsis: The Florida Office of Greenways and Trails is guiding a statewide initiative to create a system of greenways and trails connecting communities and conservation areas. When completed the trail system will connect one end of the state to the other, from Key West to Pensacola. The criteria for a designated land or waterway are that it must (1) protect and/or enhance natural, recreational, cultural or historic resources and (2) either provide linear open space or a hub or site, or promote connectivity between or among conservation lands, communities, parks, other recreational facilities, cultural sites, or historic sites.

The Office of Greenways and Trails primarily designates lands for the system as most of the lands needed for the greenways and trails system is already in state, regional, or local ownership. The designation program encourages voluntary partnerships in conservation, development, and management of greenways and trails, provides recognition for individual components of the system and the partners involved, and raises public awareness of the conservation and recreation benefits of greenways and trails.

In addition, the Florida Forever Act authorizes a land acquisition program for the statewide trail system. This is a competitive program that provides funding for local and regional land acquisition projects that will facilitate the establishment of a statewide system of greenways and trails. The primary mission of this program is to facilitate the establishment of a statewide system of greenways and trails for recreation and conservation purposes. Once acquired, the property is owned by the Board of Trustees of the Internal Improvement Trust Fund (Governor and Cabinet) and managed by the state, regional and local governments.

Cost:

Total	$4.5 million for land acquisition (statewide) No direct cost to the state for designation
Project Development	
Land Acquisition	$4.5 million (statewide)
Implementation	
Operations and maintenance	

Project Schedule:
Start Date: 2000
Finish Date: 2009

South Florida Acres
Through Fiscal Year 2003 227,094 acres plus 75 linear miles
Through Fiscal Year 2004 298,774 acres plus 147 linear miles (add 71,680 acres & 72 linear miles)

Money Spent $FY 03-04 - no land acquisition dollars spent

Hyperlink: http://www.florida greenwaysandtrails.com
Contact: Heather Pence (designations) 850-245-2052
Cindy Radford (acquisitions) 850-245-2052

Program Name: Florida Greenways and Trails Program
Project Name: Lake Okeechobee Scenic Trail
Project ID: 3102
Lead Agency: Office of Greenways and Trails
Authority: Department of Environmental Protection

Strategic Plan Goal(s) Addressed: 3.A.1

Measurable Output(s): Designated miles of trails
Project Synopsis: The LOST will consist of an 11 foot wide paved trail with 3 foot wide grassed shoulder on the lake side. It will accommodate pedestrians, backpackers, bicyclists, equestrians, sightseers, naturalists, skaters, picnickers, campers and fishermen. The trail will be approximately 110 miles long.

Cost:
Total: $25,000,000
Project Development:
Land Acquisition:
Implementation:
Operations and maintenance: $ 100,000.00 a year when completed

Project Schedule:
Start Date: 7/1/03
DOT Segment One is complete between the Kissimmee River and the St. Lucie Canal (26 miles)
DOT Segment Two is underway between Moore Haven and Pahokee (36 miles)
Finish Date: Completion date will depend on monies from D.E.P.

Detailed Project Budget Information (1000s)

	2003	**2004**	**2005**	**2006**	**2007**	**Balance to complete**	**Total**
Federal	6,250	6,250					12,500
State						12,500.	
Tribal							
Local							
Other							
Total	6,250	6,250				**12,500**	**25,000**

Hyperlink: http://www.florida greenwaysandtrails.com
Contact: FDEP

Program Name: Watershed Management Assistance
Project Name: Technical Assistance to Seminole and Miccosukee Indian Reservations
Project ID: 3201
Lead Agency: Natural Resources Conservation Service
Authority: Public Law 46 & Public Law 566

Strategic Plan Goal(s) Addressed: 3.A.2

Measurable Output(s): Target 107,000 Acres

Project Synopsis: From a watershed management perspective, assist the Seminole and Miccosukee Indian Reservations to plan and implement resource management systems on a voluntary basis to reduce nutrient loading. Assistance will be provided to each agricultural producer, at the direction of the Tribal Councils, to assist in their planning, design, application, cost shared installation and management of BMP's that will improve water quality and the ecological integrity of the landscape.

Cost:

Total (projected through 2006)	$7,928,526
Project Development	
Land Acquisition	
Implementation	
Operations and maintenance	
Management	$7,928,526

Project Schedule:
Start Date: 1998
Finish Date: 2011

Detailed Project Budget Information (1000s)

	2003-2003	2004	2005	2006	Balance to Complete	Total
Federal	$600	$360	$370.8	$381.9	$6,215.8	$7,928.5
State						
Tribal						
Local						
Other						
Total	**$600**	**$360**	**$370.8**	**$381.9**	**$6,215.8**	**$7,928.5**

Hyperlink: N/A
Contact: Edward Wright – 561-683-0883 (USDA – NRCS)

Program Name: Agricultural Assistance
Project Name: 2002 Farm Bill
Project ID: 3202
Lead Agency: Natural Resources Conservation Service
Authority: Farm Security and Rural Investment Act of 2002 (Farm Bill)

Strategic Plan Goal(s) Addressed: 3.A.2

Measurable Output(s): Acres Enrolled in 2002 Farm Bill Programs

Project Synopsis: The 2002 Farm Bill responds to a broad range of emerging natural resource challenges faced by farmers and ranchers, including soil erosion, wetlands, wildlife habitat, and farmland protection. Private landowners will benefit from a portfolio of voluntary assistance, including cost-share, land rental, incentive payments, and technical assistance. The 2002 Farm Bill places a strong emphasis on the conservation of working lands, ensuring that land remain both healthy and productive. The assistance includes the design, layout and consultation services associated with the conservation practice application or management guidance provided. Technical assistance is targeted towards nutrient management, water quality, and water conservation concerns associated with animal feeding, livestock grazing operations and fruit and crop production within the Everglades Ecosystem. As of 2004, a total of 173,300 acres in the sixteen-county South Florida region were enrolled in these and other Farm Bill Conservation Programs at an obligated cost of $50.6 million dollars.

Cost:
Total: TBD
Project Development:
Land Acquisition:
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 2002
Finish Date: 2007

Detailed Project Budget Information (1000)

	Through 2004	**2005**	**2006**	**2007**	**Balance to Complete**	**Total**
Federal	$51,700					$51,700
State						
Tribal						
Local						
Other						
Total	**$51,700**					**TBD**

Hyperlink: http://www.nrcs.usda.gov/programs/farmbill/2002/
Contact: Bill Reck – (352) 338-9562 (USDA – NRCS)

Program Name: Florida Greenways and Trails Program
Project Name: Florida Keys Overseas Heritage Trail
Project ID: 3301
Lead Agency: Office of Greenways and Trails
Authority: Florida Department of Environmental Protection

Strategic Plan Goal(s) Addressed: 3.A.3

Florida Keys Overseas Heritage Trail Vision
The Florida Keys Overseas Heritage Trail (FKOHT) is being developed by the FDEP/DRP, the Florida Department of Transportation (FDOT) and Monroe County as a world-class, multi-use bicycle and pedestrian facility that will traverse the Florida Keys from Key Largo to Key West. A recreational greenway, that upon completion, will include an integrated system of educational kiosks, roadside picnic areas, scenic overlooks, fishing piers, water access points, and bicycle and jogging paths serving both residents and visitors to the Florida Keys. The FKOHT will link communities by providing a safe and continuous multi-use path, offer an alternative form of transportation, help mitigate congestion, promote health opportunities, and provide a mechanism for the preservation and use of the historic Flagler Railroad Bridges. The trail will also provide outstanding educational opportunities for both residents and visitors to learn about the unique history of the Florida Keys and the importance of sustainable development, by offering cultural, historical and ecological interpretation, as users traverse the historical railroad bridges and the many conservation areas between Key Largo and Key West. The trail is supported by the Florida Governor as one of the top three trails in the State of Florida.

Measurable Output(s): Miles of trails: Existing 52, Proposed 40 additional

A recreational greenway, that upon completion, will include an integrated system of educational kiosks, roadside picnic areas, scenic overlooks, fishing piers, water access points, and bicycle and jogging paths serving both residents and visitors to the Florida Keys.

Project Synopsis:
Trail Planning and Development
Spurred by concerns in the community for the future of the Old Keys Bridges and under Executive Order, the "Old Keys Bridge Task Force" report was presented to then Governor Lawton Chiles in 1997, outlining recommendations for the old Flagler Railroad bridges as a linear greenway. A similar report had been presented in 1938, to then Governor Fred Cone by the Road and Toll Authority, the State Forestry Department and the National Park Service outlining the creation of a linear park from Key Largo to Key West. In 1998, Clean Florida Keys rallied enough local support to prepare a Florida Keys Overseas Heritage Trail Conceptual plan published in January 1999, and a Florida Keys Overseas Heritage Trail Action plan published in November 1999. With a combination of local citizen support, the Rails To Trails, National Park Service, Greenways and Trails, Monroe County, the Florida Department of Environmental Protection, the Florida Department of Transportation and many other agencies, the Florida Keys Overseas Heritage Trail Master Plan was approved in August 2000. The coordination, planning, design, construction and management of the FKOHT, is a joint effort between the FDEP/ DRP, Monroe County, and the Florida Department of Transportation (FDOT). A Memorandum of Agreement was signed in August 2001, by the FDEP/DRP to maintain FDOT right-of-way where the trail will be designed and built. The FDEP/ DRP maintains a 50-year lease on all 23 historical bridges from State of Florida, Division of State Lands.

Cost:
Total: $40 Million
Project Development:
Land Acquisition: Not applicable at this time.
Implementation:

The FDOT work program and the FDEP/DRP implementation plan outline a progression of design and build projects that will construct the Florida Keys Overseas Heritage Trail over the next six years. Construction of the FKOHT is funded in the FDOT Five Year Work Program using enhancement funds for the segments between historic bridges. Additional funding is being sought to retrofit the remaining historical bridges and fishing platforms. The FDEP/DRP is certified by the FDOT to design and build projects under the Local Agency Program (LAP) using enhancement funds.

Operations and maintenance
There are currently 52 miles of existing bike path and 40 miles of new trail programmed for construction over the next eight years. There are twenty-three bridges comprising fourteen miles of trail in various stages of completion and funding. The City of Key West currently maintains an agreement with the Florida Park Service on maintenance of the existing sections throughout the City. The Village of Islamorada signed an agreement in 2003 and the City of Marathon is in the process of developing agreements for maintenance and trail planning. The FDEP/DRP has subcontracted the maintenance of the trail in accordance with the agreement established between FDOT and the FDEP/DRP and currently maintains 35 miles of trail and manages approximately 16 miles of bridges.

Project Schedule: See table below:
TABLE 1

Year/ Maintained By	**Length**	**Trail MM**	**Status**	**Location**
City	3.8	0 – 3.8	Existing	City of Key West
M	1.4	3.8 – 5.2	Existing	Stock Island
2003/4	6.0	5.2 – 11	New	Key Haven to Big Coppitt
M	**4.0**	**11 – 15**	**Existing**	**Landscaping on Saddlebunch Keys**
2003/4	1.7	15 – 16.7	New	Lower Sugarloaf Trail
2003/4	8.0	17 – 25	New	Lower Sugarloaf to Summerland (2 miles of existing bike path)
2004/5	4.0	25 – 29	New	Ramrod to Big Pine Key
M	**2.0**	**29 – 31**	**Existing**	**Big Pine**
	2.0	31 – 33	Study Area	Big Pine
2008/9	7.0	33 – 40	New	Spanish Harbor to 7-Mile Bridge (Seven Mile Bridge excluded)
M	**11**	**47 – 58**	**Existing**	**City of Marathon**
2003/4	7.0	58 - 65	New	Grassy Key to Long Key
M	3.0	65 – 68	Existing	Long Key Bike Path
2005/6	3.0	68 - 71	New	Layton to Channel 5
2005/6	3.0	71 – 74	New	Channel 5 to Annes Beach
Village	19	72 – 91	Various	Village of Islamorada
M	15	91 – 106	Existing	Key Largo
Total (excluding 7 mile bridge)	**99 miles**			

- M – Maintenance conducted by FDEP/DRP.
- 40 Miles of new trail (38 Miles of unpaved trail, minus the Summerland bike path)
- Miles of bridges
- Miles of unpaved impervious surface at 23 bridgehead locations.
- 28 Miles of new impervious surface projected

Detailed Project Budget Information (1000s)– See Table Below

	Thru 2003	2004	2005	2006	2007	2008	Balance to complete	Total
Federal								
State								
Tribal								
Local								
Other								
Total	**7,117.7**	**7,438.2**	**2,499.9**	**5,811.8**	**1,036.1**	**2,875.5**	**12,000**	**40,000**

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Table 2

			2003
Big Coppitt Landscaping	MM 10-15	PE/CST	$677,000.00
Big Coppitt Handrails	MM 10-15	PE/CST	$ 423,000.00
Lower Sugarloaf Trail	MM 15-16.5	PE	$130,000.00
Lower Sugarloaf Trail	MM 15 - 16.5	CST,CEI	$670,000.00
Lower Sugarloaf Historic Bridge	MM 15.5	PE	$73,000.00
Lower Sugarloaf Historic Bridge	MM 15.5	CST,CEI	$213,000.00
Overseas Heritage Trail Safety Improvements	Various	PE	$175,992.00
Overseas Heritage Trail Safety Improvements	Various	CST,CEI	$ 879,957.00
Key Haven to Big Coppitt Trail	MM 5.2-11	PE	$400,673.00
Key Haven to Big Coppitt Trail	MM 5.2-11	CST,CEI	$2,871,495.00
Rockland Channel Bridge	MM 9.5	PE	$112,518.00
Rockland Channel Bridge	MM 9.5	CST,CEI	$400,000.00
Grassy Key to Long Key Trail	61.3 - 65.6	PE	$91,047.00
Year Total			**$7,117,682.00**
			2004
FKOHT Signage Master Plan	Various	PDE	$25,000.00
Grassy Key to Long Key Trail	58 - 61.3	PE	$273,079.00
Grassy Key to Long Key Trail	58 - 65.6	CST,CEI	$1,213,968.00
Tom's Harbor Bridge Platforms	MM 60.5	PE	$61,800.00
Tom's Harbor Bridge Platforms	MM 60.5	CST,CEI	$560,000.00
Tom's Harbor Cut Bridge Platforms	MM 61.7	PE	$54,075.00
Tom's Harbor Cut Bridge Platforms	MM 61.7	CST,CEI	$560,000.00
Long Key Bridge	MM 63-65	PE	$224,000.00
Lower Sugarloaf to Summerland Key Trail	MM 16.5-24.5	PE	$491,000.00
Lower Sugarloaf to Summerland Key Trail	MM 16.5-24.5	CST,CEI	$3,550,156.00
Environmental Consultant	Various	PDE	$250,000.00
Ramrod Key to Big Pine Key Trail	MM 26.2-29.9	PE	$175,081.00
Year Total			**$7,438,159.00**

			2005
Park Channel Bridge	MM 18.7	PE	$80,000.00
Park Channel Bridge	MM 18.7	CST,CEI	$ 670,000.00
Rails to Trails Project	Various	PDE	$25,000.00
Intus Property Key Largo Trailhead	MM 106	PE	$25,000.00
Ramrod Key to Big Pine Key Trail	MM 26.2-29.9	CST,CEI	$1,006,712.00
Channel 5 to Anne's Beach Trail	MM 71.8-73.5	PE	$ 315,100.00
Layton to Channel 5 Trail	MM 68.4-70.8	PE	$378,120.00
Year Total			**$ 2,499,932.00**
			2006
Long Key Bridge	MM 63 - 65	CST,CEI	$1,745,000.00
South Pine Channel Bridge	MM 29	PE	$80,753.00
Channel 5 to Anne's Beach Trail	MM 71.8-73.5	CST,CEI	$1,811,825.00
Layton to Channel 5 Trail	MM 68.4-70.8	CST,CEI	$2,174,190.00
Year Total			**$ 5,811,768.00**
			2007
South Pine Channel Bridge	MM	CST,CEI	$600,000.00
Spanish Harbor to Seven-Mile Bridge Trail	MM33.3-40.5	PE	$436,128.00
Year Total			**$1,036,128.00**
			2008
Spanish Harbor to Seven-Mile Bridge Trail	MM33.3-40.5	CST,CEI	$2,717,604.00
Ohio-Missouri Historic Bridge	MM39.1	PE	$157,882.00
Year Total			**$2,875,486.00**
			2009
Ohio-Missouri Historic Bridge	MM39.1	CST,CEI	$1,210,246.00
Year Total			**$1,210,246.00**

Hyperlink:N/A
Contact: FDEP

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Program Name: Brownfields
Project Name: Eastward Ho! Brownfields Partnership
Project ID: 3400
Lead Agency: South Florida Regional Planning Council

Strategic Plan Goal(s) Addressed: Goal 3.A.4

Measurable Output(s):

Project Synopsis: This partnership is a collaboration of local, state, regional and federal agencies with private sector, non-profit and community organizations targeting the cleanup and sustainable reuse of contaminated and abandoned/underused urban sites. The partnership has been designated a National Brownfields Showcase Community, one of 28 communities throughout the United States. This designation brings increased financial attention and resources for Brownfields work in south Florida. The target area is the portion of the Eastward Ho! corridor in Miami-Dade, Broward and Palm Beach Counties.

Federal/state/local partnership summits are held to network ideas and review local case studies. Stakeholder workshops are conducted to inform and link key players in revitalization projects. Constructive advice and additional project funding assistance are frequent outcomes of the summits. Establishment of county and city Brownfields Task Forces are encouraged to create and empower local focus on Brownfields issues. Design charrettes are conducted to consolidate local vision of future growth goals. Assistance in clarifying contamination issues at abandoned or underused properties is given to help expedite reuse considerations. The Eastward Ho! Brownfields Cleanup Revolving Loan Fund has been established to assist with site-specific cleanup activities.

The goal of this project is to facilitate discussion among the many stakeholders in formulating future growth visions and implementation that accommodates community needs while being compatible with south Florida ecosystem restoration and preservation.

Cost

Total (estimated)	TBD
Project Development	N/A
Land Acquisition	$0
Implementation	N/A
Operations and maintenance	$0

Project Schedule:
Start Date: 1998
Finish Date: 2010

Detailed Project Budget Information (1000s)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal								
EPA	2,500	790	1,050	714	771	742		
HUD	7,150	300			8,300			
Others	624				30			
State	1.5 M	312						
Tribal								
Local	23	28	15	15	30	15		
Other *		2.5			39,100			
Total	**11,800**	**1,400**	**1,065**	**729**	**48,231**	**757**		**TBD**

* Private party contributions

Hyperlink:N/A
Contact: Terry Manning, SFRPC

Program Name: Outreach
Project Name: South Florida Ecosystem Restoration Earth Team
Project ID: 3500
Lead Agency: Broward Soil and Water Conservationist District and South Florida Ecosystem Restoration Council
Authority:

Strategic Plan Goal(s) Addressed: 3.A.5

Measurable Output(s): Measured by the training of 1000+ volunteers to provide community based education focusing on the conservation of Natural Resources and the Ecosystem Restoration of South Florida (Train 100 trainers per year and educate 1, 000 people per year)

Project Synopsis: The Broward Soil and Water Conservation District and the South Florida Ecosystem Restoration Council would provide leadership in a partnership effort to train 1,000 Earth Team Volunteers to help people learn about and participate in the South Florida Ecosystem Restoration Project and to conserve, maintain, and improve our Natural Resources and Environment. The USDA-NRCS established the Earth Team to provide an effective volunteer workforce within the USDA-NRCS to help people conserve, improve, and sustain the Earth's resources and its environment.

Cost:
Total: $ 1,550,000.00
Project Development:
Land Acquisition:
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 2004
Finish Date: Ongoing

Detailed Project Budget Information (1000s)

	2004	2005	2006	2007	Balance to complete	Total
Federal						$750
State						
Tribal						
Local						
Other						$800
Total						**$1,550**

Hyperlink: N/A
Contact: Thaddeus Hamilton, 954-792-1984 (USDA – NRCS)

Program Name: Nont Point Source Pollution
Project Name: South Florida Ecosystem Restoration Non Point Source Pollution and Disease Prevention Project
Project ID: 3501
Lead Agency: Broward Soil and Water Conservation District and The South Florida Ecosystem Restoration Council in partnership with U.S. Dept. of Agriculture - Natural Resources Conservation Service
Authority: Public Law 46

Strategic Plan Goal(s) Addressed: 3.A.5

Measurable Output(s): To establish a South Florida Ecosystem Restoration Non Point Source Pollution and Disease Prevention Center. The Center will: improve the quality of storm water discharge from the C-11 Basin to the Everglades protection area; construct a permanent facility to conduct classes, seminars, field trips, and educational projects; grow pollution remediation Phytoremediation trees (1,000); conduct outreach and related volunteer and volunteer training activities and integrate Phytoremediation type trees into reforestation and Brownfield's type projects; coordinate Urban and Population Health imitative with Environmental Justice and Ecosystem Education ; deploy urban health and environmental justice initiatives to initiate efforts toward the further elimination of non point source pollution; utilizing economic empowerment and community-based employment models.

Project Synopsis: Broward Soil and Water Conservation District (BSWCD) and the South Florida Ecosystem Restoration Council (SFERC) assisted by the United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) provide leadership in a partnership effort to establish the South Florida Ecosystem Restoration Non Point Source Pollution and Disease Prevention Project. The coordination of this project will provide Phytoremediation and Reforestation tree projects; enhance neighborhood watershed siliviculture and agro-forestry projects; reduce wind and water erosion; reduce pollution Load Reduction; grow Phytoremediation trees and plants; promote live and/or distance learning classes and seminars, economic empowerment workshops, community-based reverse facilitation initiatives and educational field trips designed and promoted to enhance social wellbeing encompassed in both Urban Health and Environmental Justice programs designed to help eliminate Non Point Source Pollution.

Cost:
Total: $ 15,000,000
Project Development:
Land Acquisition:
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 2004
Finish Date: Ongoing

Detailed Project Budget Information (1000s)

	2004	2005	2006	2007	Balance to complete	Total
Federal						
State						
Tribal						
Local						
Other						
Total						**15,000**

Hyperlink: N/A
Contact: Russell M. Setti, 954-792-1984 (BSWCD)

Program Name: Flood Protection
Project Name: C-4 Flood Mitigation Projects
Project ID: 3600
Lead Agency: South Florida Water Management District

Strategic Plan Goal(s) Addressed: 3.B.1

Measurable Output(s): Improve conveyance and level of service protection in the C-4 Basin

Project Synopsis: A series of projects which will work together to raise the flood protection level in the C-4 basin from a 5 year service level to over a 10 year service level. A forward pump station at the coastal structure, raising the canal banks to prevent canal overflows into adjacent low areas, an emergency impoundment to reduce severe flood stages in the west end, and canal improvements to improve flows to tide.

The new forward pump station at S-25B rated at 600 cubic feet per second will allow for discharges from the C-4 basin when the structure can no longer pass water due to high tide or surge conditions .

The C-4 Emergency Detention Basin Phase 1 is the construction of a 669 cfs pump station, supply canal, enlargement of the C-4 Canal, access bridge and perimeter levee creating a 400 +/- Ac above ground impoundment area to provide Cities of Sweetwater and West Miami flood protection. This project removes high stages from the western end of the basin until the system has recovered to normal operating levels. Funding for this project is being provided by FEMA. Currently Phase 1 is complete and operational.

The C-4 Emergency Detention Basin Phase 2 includes an additional 800 cfs pump station, and construction of a second perimeter basin levee system to create an additional 400 Ac of above ground impoundment area. Funding for this project will be by the State of Florida. This project is currently under construction. The earthwork portion of the project (perimeter levee system) is to be completed by May of 2004, the new Inflow Pump Station will be completed by October of 2004.

The C-4 Phase 3 project involves the selective dredging of the C-4 canal to improve conveyance capacity at specific locations including 137th Ave to the Turnpike. The project is currently under design.

Sweetwater Berm. This work involves the construction of an earthen berm along the north side of the C-4 Canal within the city limits of Sweetwater. The north berm will be raised from Elevation 6 to 7.0 to Elevation 9.0. This will prevent canal overflows into the city during high canal stages and allow for a pumping system being implemented by the city to provide flood protection. This project is completed from the Turnpike to N.W. 107th Ave. The District is currently evaluating extending the berm to NW 92nd Ave.

Cost:

Total	$44,500,000*
Project Development	$3,200,000
Land Acquisition	$11,900,000
Implementation	$28,400,000
Operations and maintenance	$1,000,000

*$29.1 million is being funded by FEMA
$15.4 million is being funded by State

Project Schedule:

Start Date: March 2001
Finish Date: December 2004

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 1999	2000	2001	2002	2003	2004	Balance to complete	Total
Federal			$3,500	$4,500	$12,800	$8,300		$29,100
SFWMD								
State				$6,000	$4,000	$5,400		$15,400
Total			**$3,500**	**$10,500**	**$16,800**	**$13,700**		**$44,500**

Hyperlink:N/A
Contact: Raul Pellegrino (561) 682-6583

Project 3600 page 2 of 2

Program Name: Water Supply Planning
Project Name: Kissimmee Basin Water Supply Plan (*KB Plan*)
Project ID: 3700
Lead Agency: South Florida Water Management District
Authority: Chapter 373, Florida Statutes

Strategic Plan Goal(s) Addressed: 3.C.1

Measurable Output(s): 71.2 MGD Water Made Available by 2008

Project Synopsis: Significant water supply planning and development projects were initiated with the completion of the *Kissimmee Basin (KB) Plan* (SFWMD 2000). The *KB Plan* identified fourteen recommendations to develop facilities to provide alternative sources of water for this region. The following seven water source options were recognized to address key regional issues for this planning area that are addressed in both the *KB Plan* and in the *Five-Year Water Resources Development Work Program for FY 2003-2007*:

Minimize Floridan Aquifer Drawdown through Reduction of Demands
Minimize Floridan Aquifer Drawdown through Reduction of Demands
Optimize Use of the Floridan Aquifer and Develop Alternative Sources
Develop Alternative Water Resources
Develop a Water Management Plan for the Lake Istokpoga-Indian Prairie Basin
Coordination among Water Management Districts
Ensure Consistency between Planning and Water Use Permitting

The KB Plan will be updated in 2005.

Cost:

Total	$477,000 (FY 2004 - 2008)
Project Development	$477,000
Land Acquisition	
Implementation	
Operations and maintenance	

	2002	2003	2004	2005	2006	2007	2008
Planning & Design							
Real Estate							
Construction							

Detailed Project Budget Information ($1000)

	2004	2005	2006	2007	2008	Total
Federal						
SFWMD	$152	$325	0	0	0	$477*
Total	**$152**	**$325**	**0**	**0**	**0**	**$477***

*The *Five-Year Water Resource Development Work Program, Fiscal Year 2004-2008.* Total subject to update of the *KB Plan* in 2005.

Hyperlink: N/A
Point of Contact: Chris Sweazy (407) 858-6100

Program Name: Water Supply Planning
Project Name: Lower East Coast Regional Water Supply Plan (*LEC Plan*)
Project ID: 3701
Lead Agency: South Florida Water Management District
Authority: Chapter 373, Florida Statutes

Strategic Plan Goal(s) Addressed: 3.C.1

Measurable Output(s): 154.7 MGD Water Made Available by 2008

Project Synopsis: Significant water supply planning and development projects were initiated with the completion of the Lower East Coast) Regional Water Supply Plan (SFWMD 2000). The LEC Plan identified forty-six recommendations to develop facilities to provide alternative sources of water for this region. The following eight categories were recognized to address key regional issues in this planning area that are addressed in both the LEC Plan and in the Five-Year Water Resources Development Work Program for FY 2004-2008:

Ongoing Projects from the LEC Interim Plan
Other Federal State or SFWMD Projects
Comprehensive Everglades Restoration Plan Projects
Recommendations to the CERP from the LEC Regional Water Supply Plan
Recommendations to the CERP from the Caloosahatchee Water Management Plan
Operational Recommendations
Consumptive Use Permitting and Resource Protection Projects
Other Water Resource Projects

The LEC Plan will be updated in 2005.

Cost:

Total:	$12,480,000(FY 2004 – 2008)
Project Development:	$12,480,000
Land Acquisition:	
Implementation:	
Operations and maintenance:	

Project Schedule:

Start Date: 2000
Finish Date: 2008

	2004	2005	2006	2007	2008
Planning & Design					
Real Estate					
Construction					

Detailed Project Budget Information ($1000)

	2004	2005	2006	2007	2008	Total
Federal						
SFWMD	$2,128	$2,963	$2,463	$2,463	$2,463	$12,480*
Total	**$2,128**	**$2,963**	**$2,463**	**$2,463**	**$2,463**	**$12,480***

* The *Five-Year Water Resource Development Work Program, Fiscal Year 2004-2008.* Total subject to update of *LEC Plan* in 2005.

Hyperlink: N/A
Contact: Jim Jackson (561) 682-6334

Program Name: Water Supply Planning
Project Name: Lower West Coast Water Supply Plan (*LWC Plan*)
Project ID: 3702
Lead Agency: South Florida Water Management District
Authority: Chapter 373, Florida Statutes

Strategic Plan Goal(s) Addressed: 3.C.1

Measurable Output(s): 189.6 MGD Water Made Available by 2008

Project Synopsis: Significant water supply planning and development projects were initiated with the completion of the *Lower West Coast (LWC) Plan* (SFWMD 2000). The *LWC Plan* identified twenty-nine recommendations to develop facilities to provide alternative sources of water for this region. The following eight water source options were recognized to address key regional issues in this planning area that are addressed in both the *LWC Plan* and in the *Five-Year Water Resource Development Work Program for FY 2004-2008:*

Conservation
Ground Water Resources
Reclaimed Water
Regional Irrigation Systems
Seawater
Storage
Surface Water
Related Implementation Strategies

The LWC Plan will be updated in 2005.

Cost:

Total:	$6,235,000(FY 2004 - 2008)
Project Development:	$6,235,000
Land Acquisition:	
Implementation:	
Operations and maintenance:	

Project Schedule:

Start Date: 2004
Finish Date: 2008

	2004	2005	2006	2007	2008
Planning & Design					
Real Estate					
Construction					

Detailed Project Budget Information ($1000)

	2004	2005	2006	2007	2008	Total
Federal						
SFWMD	$740	$925	$890	$1,590	$2,090	$6,235*
Total	**$740**	**$925**	**$890**	**$1,590**	**$2,090**	**$6,235***

* The *Five-Year Water Resource Development Work Program, Fiscal Year 2004-2008* Total subject to update of *LWC Plan* in 2005.

Hyperlink: N/A
Contact: Linda Hoppes (561) 682-2213

Program Name: Water Supply Planning
Project Name: Upper East Coast Water Supply Plan (*UEC Plan*)
Project ID: 3703
Lead Agency: South Florida Water Management District
Authority: Chapter 373, Florida Statutes

Strategic Plan Goal(s) Addressed: 3.C.1

Measurable Output(s): 63.0 MGD Water Made Available by 2008

Project Synopsis: Significant water supply planning and development projects were identified and initiated with the completion of the *Upper East Coast (UEC) Plan* (SFWMD 1998). The *UEC Plan* identified thirty recommendations to develop facilities to provide alternative sources of water for this region. The following seven water source options were recognized to address key regional issues for this planning area that are addressed in both the *UEC Plan* and in the *Five-Year Water Resources Development Work Program for FY 2004-2008*:

Surface Water Storage
Aquifer Storage and Recovery
Florida Aquifer
Conservation
Wastewater Reuse
Utility Interconnects
Related Implementation Strategies

The UEC Plan will be updated in 2004.

Cost:

Total:	$634,000 (FY 2004 – 2008)
Project Development:	$634,000
Land Acquisition:	
Implementation:	
Operations and maintenance:	

Project Schedule:

Start Date: 2004
Finish Date: 2008

	2004	2005	2006	2007	2008
Planning & Design					
Real Estate					
Construction					

Detailed Project Budget Information ($1000)

	2004	2005	2006	2007	2008	Total
Federal						
SFWMD	$134	$125	$125	$125	$125	$634*
Total	**$134**	**$125**	**$125**	**$125**	**$125**	**$634***

*The *Five-Year Water Resource Development Work Program, Fiscal Year 2004-2008.* Total subject to update of *UEC Plan* in 2004.

Hyperlink: N/A
Contact: Mark Elsner (561) 682-6156

Program Name: Infrastructure
Project Name: C&SF: CERP - South Miami-Dade County Reuse (BBB)
Project ID: 3800 (CERP Project # WBS 98)
Lead Agency: USACE / Miami-Dade County
Authority: WRDA 2014 (scheduled)

Strategic Plan Goal(s) Addressed: 3.C.2

Measurable Output(s): 131 MGD Advanced WWTP

Project Synopsis: This feature includes a plant expansion to produce superior, advanced treatment of wastewater from the existing South District Wastewater Treatment Plant located north of the C-1 Canal in Miami-Dade County. The initial design of this feature assumed that the plant would have a capacity of 131 million gallons per day. More detailed analyses will be required to determine the quality and quantity of water needed to meet the ecological goals and objectives of Biscayne Bay.

Cost:

Total:	$363,024,000
Project Development:	$24,711,000
Land Acquisition: (est.13, 950 acres)	$3,324,000
Implementation:	$334,989,000
Operations and maintenance:	$47,815,000

Project Schedule:
Start Date: 2013
Finish Date: 2023

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
PIR/Plans & Specs											
Real Estate											
Construction											

Detailed Project Budget Information ($1000)

	2013	2014	2015	2016	2017	2018	2019-2023 Balance to complete	Total
USACE	2,471	2,471	4,133	2,471	2,471	41,873	125,622	$181,512
M-D Co	2,471	2,471	4,133	2,471	2,471	41,873	125,622	$181,512
Total	**4,942**	**4,942**	**8,266**	**4,942**	**4,942**	**83,746**	**251,244**	**$363,024**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_98_south_miami.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - West Miami-Dade County Reuse (HHH)
Project ID: 3801(CERP Project # WBS 97)
Lead Agency: USACE / Miami Dade County
Authority: WRDA 2014 (scheduled)

Strategic Plan Goal(s) Addressed: 3.C.2

Measurable Output(s): 100 mgd Advanced WWTP

Project Synopsis: This feature includes a wastewater treatment plant expansion to produce superior, advanced treatment of wastewater from a future West Miami-Dade Wastewater Treatment Plant to be located in the Bird Drive Basin in Miami-Dade County. The initial design assumed a potential discharge volume of 100 million gallons per day from the wastewater treatment plant. The final configuration of these facilities will be determined through more detailed planning and design. Superior water quality treatment features will be based on appropriate pollution load reduction targets necessary to protect downstream receiving surface waters.

Cost:

Total:	$437,237,000
Project Development:	$29,953,000
Land Acquisition: (est.3,947 acres)	$3,540,000
Implementation:	$403,744,000
Operations and maintenance:	$36,500,000

Project Schedule:
Start Date: 2013
Finish Date: 2023

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
PIR/ Plans & Specs											
Real Estate											
Construction											

Detailed Project Budget Information ($1000)

	2013	2014	2015	2016	2017	2018	2019-2023 Balance to complete	Total
USACE	2,995	2,995	3,880	3,880	2,995	50,468	151,406	$218,619
M-D Co	2,995	2,995	3,880	3,880	2,995	50,468	151,405	$218,618
Total	**5,990**	**5,990**	**7,760**	**7,760**	**5,990**	**100,936**	**302,811**	**$437,237**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_97_west_miami.cfm
Contact: USACE

Program Name: Infrastructure
Project Name: C&SF: CERP - Wastewater Reuse Technology – Pilot Project (HHH)(BBB)(OPE)
Project ID: 3802(CERP Project # WBS 37)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000

Strategic Plan Goal(s) Addressed: Primary: 3.C.2

Measurable Output(s): Report and pilot facility

Project Synopsis: The purpose of this project is to determine the ecological effects of using superior, advanced treated reclaimed water to replace and augment freshwater flows to Biscayne Bay and the Bird Drive Basin, and to determine the level of superior, advanced treatment required to prevent degradation of freshwater and estuarine wetlands and Biscayne Bay. The City of West Palm Beach is constructing a facility at the East Central Regional Wastewater Treatment Facility using advanced and superior wastewater treatment processes to remove nitrogen and phosphorous. After treatment, the wastewater will be used to restore 1,500 acres of wetland and to recharge the City's adjacent wellfield.

Cost:

Total:	$30,000,000
Project Development:	$3,011,000
Land Acquisition:	$2,800,000
Implementation:	$23,189,000
Monitoring:	$1,000,000

Project Schedule:
Start Date: 2001
Finish Date: 2013

	2002-2004	2010	2011	2012	2013	2014	2015	2016
PPDR/Plans & Specs								
Real Estate								
Construction								
Monitoring								

Detailed Project Budget Information ($1000)

	Thru 2003	2004	2010	2011	2012	2013	2014-2016 Balance to complete	Total
USACE	842	500	500	3,000	2,000	2,000	6,158	$15,000
SFWMD	406	500	500	3,000	2,000	2,000	6,594	$15,000
Total	**1,248**	**1,000**	**1,000**	**6,000**	**4,000**	**4,000**	**12,752**	**$30,000**

Hyperlink: http://www.evergladesplan.org/pm/projects/proj_37_wastewater_pilot.cfm
Contact: USACE

Program Name: Alternative Water Supply
Project Name: Lower West Coast Regional Irrigation Distribution System Master Plan Study
Project ID: 3803
Lead Agency: SFWMD
Authority: Chapter 373.0831 Florida Statutes

Strategic Plan Goal(s) Addressed: 3.C.2

Measurable Output(s): Study

Project Synopsis: The construction and operation of a regional irrigation distribution system (RIDS) will enable water to be transferred from areas of surplus to areas of deficit to fulfill urban irrigation needs. This system could conserve the fresh ground water sources, while maximizing the use of reclaimed water that would have otherwise been discharged to surface water or deep well injected and lost from the inventory. Storage, primarily through ASR, will be a key component to bridge the gap between the seasonal and geographic relationships of available water supplies and demands. The RIDS makes irrigation water available for local supply entities/utilities to withdraw from for distribution to meet their individual needs. In addition, the RIDS could have many different configurations, including one large regional system, several subregional systems, or a utility-by-utility basis. This study is conducted as part of the Lower West Coast Water Supply Plan.

Cost:

Total:	$3,300,000 (FY 2004 - 2008)
Project Development:	$3,300,000
Land Acquisition:	
Implementation:	
Operations and maintenance:	

Project Schedule:

Start Date: 2004
Finish Date: 2008

	2004	2005	2006	2007	2008
Planning & Design					
Real Estate					
Construction					

Detailed Project Budget Information ($1000)

	2004	2005	2006	2007	2008	Total
Federal						
SFWMD	$200	$300	$300	$1,000	$1,500	$3,300*
Total	**$200**	**$300**	**$300**	**$1,000**	**$1,500**	**$3,300***

* The *Five-Year Water Resource Development Work Program, Fiscal Year 2004-2008*

Hyperlink: N/A
Contact: Nestor Garrido (561) 682-6908

Program Name: Alternative Water Supply
Project Name: Northern Palm Beach County and Southern Martin County Reclaimed Water Master Plan
Project ID: 3804
Lead Agency: SFWMD
Authority: Chapter 373.0831 Florida Statutes

Strategic Plan Goal(s) Addressed: 3.C.2

Measurable Output(s): Study

Project Synopsis: In FY 2002, the SFWMD conducted a master plan study of the feasibility of construction and operation of a reclaimed water system for northern Palm Beach County. This study is conducted as part of the *Lower East Coast Regional Water Supply Plan*. The nine-month study included the quantification of existing and future (2020) irrigation demands in the study area, quantifying availability of local sources, and determining the unmet needs. The study evaluated different treatment and transmission options, institutional frameworks, and funding options. Local entities contributed $55,000 towards this project. The study was completed and it was determined that the project was not economically feasible.

Cost:

Total:	$140,000 (FY 2002)
Project Development:	$140,000
Land Acquisition:	
Implementation:	
Operations and maintenance:	

Project Schedule:

Start Date 2002
Finish Date 2002
Note: The North Palm Beach Feasibility Study concluded that the project is not feasible at this time.

	2002	2003	2004	2005	2006
Planning & Design					
Real Estate					
Construction					

Detailed Project Budget Information ($1000)

	2002	2003	2004	2005	2006	Total
Federal						
SFWMD	$140					$140*
Total	**$140**					**$140***

*The total cost for this project is included in the total cost for the *Lower East Coast Regional Water Supply Plan* and the *Five-Year Water Resource Development Work Program, Fiscal Year 2002-2006*

Hyperlink: N/A
Point of Contact: Nestor Garrido (561) 682-6908

Program Name: Alternative Water Supply
Project Name: Orlando/Kissimmee Area Regional Reclaimed Water Optimization Plan
Project ID: 3805
Lead Agency: SFWMD
Authority: Chapter 373.083, Florida Statutes

Strategic Plan Goal(s) Addressed: 3.C.2

Measurable Output(s): Study

Project Synopsis: During FY 2001, the SFWMD initiated four projects towards developing a regional reclaimed water optimization plan. These projects included installation of climatic and shallow aquifer monitoring stations, development of the Region Reuse Plan and Phase I of the Reclaimed Water Injection Pilot Study. Activities proposed for FY 2004 include a continuation of the climate and ground water level monitoring and the drafting/workshop process for the Regional Reclaimed Water Plan development. Phase II of the Reclaimed Water Injection Pilot Study was not continued due to lack of local support. In addition, the District supported a local reclaimed water project in Polk County. No new programs are proposed for FY 2004. These efforts are being conducted as a part of the Kissimmee Basin Water Supply Plan.

Cost:

Total:	$130,000 (FY 2004 – 2005)
Project Development:	$130,000
Land Acquisition:	
Implementation:	
Operations and maintenance:	

Project Schedule:

Start Date: 2002
Finish Date: 2004

	2002	2003	2004	2005	2006	2007
Planning & Design						
Real Estate						
Construction						

Detailed Project Budget Information ($1000)

	2004	2005	2006	2007	Total
Federal					
SFWMD	$80	$50	0	0	$130*
Total	**$80**	**$50**	**0**	**0**	**$130***

*The total cost for this project is included in the total cost for the Kissimmee Basin Water Supply Plan and the projected budget was provided by the KB Project Manager, Chris Sweazy.

Hyperlink: N/A
Contact: Chris Sweazy (407) 858-6100

Program Name: Alternative Water Supply
Project Name: Alternative Water Supply Grant
Project ID: 3900
Lead Agency: SFWMD
Authority: Chapter 373.1961, Florida Statutes

Strategic Plan Goal(s) Addressed: 3.C.3

Measurable Output(s): 102 MGD Water Made Available in FY04; over 200 MGD in the past 6 years

Project Synopsis: SFWMD began a program of cooperative funding with local governments and other entities for the development of alternative water supply systems in 1986. Alternative water supply systems are defined as supplies of water that have been reclaimed after one or more public supply, municipal, industrial, commercial, or agricultural uses, or are supplies of stormwater, or brackish or salt water, that have been treated in accordance with applicable rules and standards sufficient to supply the intended use. The Alternative Water Supply Funding Program was revised to be consistent with legislation passed in 2001 and continues the cooperative funding effort with the focus on development of alternative water supply systems in Water Resource Caution Areas

Cost:

Total:	$TBD
Project Development:	$4,500,000
Land Acquisition:	
Implementation:	
Operations and maintenance:	

Project Schedule:
Start Date: 1996
Finish Date: On-going/ annual grants

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Planning & Design									
Real Estate									
Construction									

Detailed Project Budget Information ($1000)

	Exp Thru 1999	2000	2001	2002	2003	2004	Balance to complete	Total
Federal								
SFWMD	$27,950	$4,100	$600	$3900	4,006	4500	TBD	TBD
Total	**$27,950**	**$4,100**	**$600**	**$3900**	**4006**	**4500**	**TBD**	**TBD**

Hyperlink: N/A
Contact: Jane Bucca (561) 682-6791

Program Name: Infrastructure
Project Name: Critical Projects - Florida Keys Carrying Capacity
Project ID: 4100
Lead Agency: USACE / FDCA
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: **Primary:** Other

Measurable Output(s): Report

Project Synopsis: The carrying capacity study/analysis will develop information that will improve decision-making regarding development approvals and infrastructure investments, and its impact on the ecology and natural system in the Florida Keys and Florida Bay. The development of a decision making tool will provide a comprehensive basis for coordinating and strengthening water and land related planning efforts by local, state and federal agencies. The Study was completed March 2003.

Cost:

Total:	$6,000,000
Project Development:	$6,000,000
Land Acquisition:	
Implementation:	
Operations and maintenance:	

Project Schedule:

Start Date: 1997
Finish Date: 2003

	1997	1998	1999	2000	2001	2002	2003
Planning & Design							
Real Estate							
Construction							

Detailed Project Budget Information ($1000)

	Thru 2003	Total
USACE	3,000	$3,000
FDCA	3,000	$3,000
Total	**6,000**	**$6,000**

Hyperlink: http://www.saj.usace.army.mil/projects/proj4.htm
Contact: USACE

Program Name: Agriculture
Project Name: BMP's for Agriculture
Project ID: 4101
Lead Agency: Natural Resources Conservation Service
Authority: Public Law 46

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Nutrient Load Reduction

Project Synopsis: This project provides for technical assistance to landowners and managers of agricultural lands. The goals of this project are to encourage the adoption and implementation of Best Management Practices (BMPs) that will provide for sustainable agriculture within the Everglades ecosystem that is both ecologically and economically sound. Comprehensive resource management plans are developed with the farmer/rancher to achieve their management objectives, while meeting federal, state, regional and local environmental quality criteria and standards (TMDLs).

Cost

Total:	$77,584,000
Project Development:	
Land Acquisition:	
Implementation:	
Operations and maintenance:	$77,584,000

Project Schedule:
Start Date: 1997
Finish Date: 2011

Detailed Project Budget Information (1000s)

	Through 2003	2004	2005	2006	Balance to Complete	Total
Federal	$23,834	$4,114	$4,573	$4,710	$32,567	$69,798
State	$1,385	$720	$741	$764	$4,176	$7,786
Tribal						
Local						
Other						
Total	**$25,219**	**$4,834**	**$5,314**	**$5,474**	**$36,743**	**$77,584**

Hyperlink: N/A
Point of Contact: David Legg – 561-683-0883 (USDA – NRCS)

Program Name: Soils
Project Name: Monitoring of Organic Soils in the Everglades
Project ID: 4102
Lead Agency: Natural Resources Conservation Service
Authority: Public Law 46

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Resource Assessment

Project Synopsis: This project will produce an assessment of the amount of accretion and/or subsidence that has occurred on organic soils throughout the Everglades region. ARS and IFAS have initiated work within the Everglades Agricultural Area (EAA) based upon observations taken every 5-year from 1913 – 1978. The goal of this project is to expand this assessment to the entire Everglades ecosystem, in an effort to provide scientists and land managers a tool to ascertain the effects from hydrologic condition changes upon the organic soil resource.

Cost:
Total: $1,236,000
Project Development:
Land Acquisition:
Implementation:
Operations and maintenance: $1,236,000

Project Schedule:
Start Date: 1998
Finish Date: 2017

Detailed Project Budget Information ($1000)

	Thru 1999	**2004**	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal	$25		$100	$100	$100	$100	$800	$1,225
State	$11							$11
Tribal								
Local								
Other								
Total	**$36**		**$100**	**$100**	**$100**	**$100**	**$800**	**$1,236**

Hyperlink: N/A
Point of Contact: Warren Henderson 352-338-9535 (USDA – NRCS)

Program Name: Soil Survey
Project Name: Soil Survey Update for the Everglades Agricultural Area
Project ID: 4103
Lead Agency: Natural Resources Conservation Service
Authority: Public Law 46

Strategic Plan Goal(s) Addressed: Other

Measurable Output(s): Acres Mapped

Project Synopsis: This project will produce an updated comprehensive soil survey of the Everglades Agricultural Area (EAA). The project is designed to produce a spatial representation of the soils on approximately 700,000 acres, and a detailed description of each soil's profile. The current soil survey is over 20 years old. Significant changes have occurred due to organic soil subsidence and changes in landscape features. This project will provide an effective conservation planning tool for on-farm decision making that will contribute to over-all ecosystem restoration efforts.

Cost:

Total:	$1,500,000
Project Development:	$1,500,000
Land Acquisition:	
Implementation:	
Operations and maintenance:	

Project Schedule:

Start Date: 2004
Finish Date: 2008

Detailed Project Budget Information ($1000)

	2005	**2006**	**2007**	**Balance to complete**	**Total**
Federal	$250	$500	$500	$250	$1,500
State					
Tribal					
Local					
Other					
Total	**$250**	**$500**	**$500**	**$250**	**$1,500**

Hyperlink: N/A
Point of Contact: Warren Henderson 352-338-9535 (USDA – NRCS)

Program Name: Soil Survey
Project Name: Soil Survey for Everglades National Park, Big Cypress, National Preserve, and Water Conservation Areas
Project ID: 4104
Lead Agency: NRCS
Authority: PL-46

Strategic Plan Goal(s) Addressed: **Primary** :Other

Measurable Output(s): Acres Mapped

Project Synopsis: This project will produce a comprehensive soil survey of Everglades National Park, Big Cypress National Preserve, and the Water Conservation Areas. The project is designed to produce a spatial representation of the soils on approximately 2,000,000 acres, and a detailed description of each soil's profile. Currently there is not a detailed soil survey available to land managers, modelers and planners. This project will provide an effective correlation/association tool for land managers, modelers and planners to identify, restore, and sustain natural ecological communities.

Cost:
Total: $5,600,000
Project Development: $5,600,000
Land Acquisition:
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 2005
Finish Date: 2010

Detailed Project Budget Information (1000s)

	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**Balance to complete**	**Total**
Federal	$800	$800	$800	$800	$800	$800	0	$5,600
State								
Tribal								
Local								
Other								
Total								**$5,600**

Hyperlink- N/A
Contact: Warren Henderson –352-338-9535 USDA – NRCS

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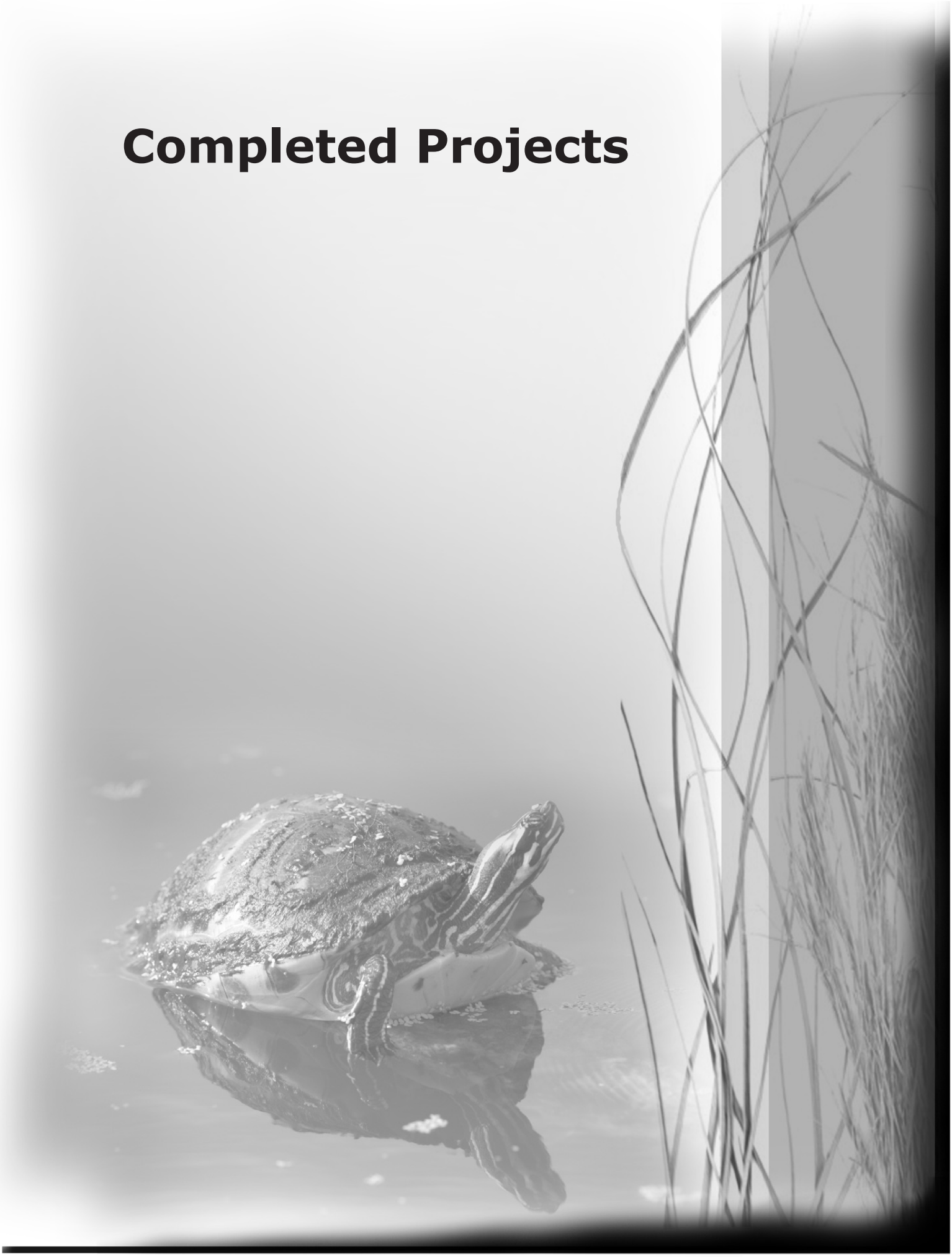
Completed Projects



Program Name: Land Acquisition
Project name: Cayo Costa
Project ID: 2110
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: CARL Program

Strategic Plan Goal(s) Addressed: 2.A.1

Measurable Output(s): 1,954 Acres acquired

Project Synopsis: The project area, involving 1,954 acres, includes Cayo Costa and North Captiva, both part of a small chain of barrier islands that provide protection for Charlotte Harbor, one of Florida's most productive estuaries. The natural communities within the project are in excellent condition and have high species diversity; some may be unique to these islands. This project contains several archaeological and historical sites. Cayo Costa Island is subdivided into small lots and is threatened by rapid residential development. This project is completed.

Cost:
Total: Project size 1,954. All acres acquired at a cost of $28,337,346
Project Development:
Land Acquisition:
Implementation:
Operations and maintenance:

Project Schedule:
Start Date: 1980
Finish Date: 2004

Detailed Project Budget Information (1000s)

	Thru 2004	**2005**	**2006**	**2007**	**2008**	**Balance to complete**	**Total**
Federal							
State	$28,337						28,337
Tribal							
Local							
Other							
Total	**$28,337**						**28,337**

Hyperlink: http://www.dep.state.fl.us/stland/oes/carlmain.htm
Contact: FDEP

Program Name: Restoration Program: Habitat and Species and Water Quality
Project Name: Corkscrew Regional Mitigation Bank Land Acquisition
Project ID: 2113
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: Primary: 2.A.1

Measurable Output(s): Target 633 Acres

Project Synopsis: The Corkscrew Regional Mitigation Bank is located in southern Lee County, along Corkscrew Road (SR 850). It is adjacent to Lee County's Stairstep Mitigation Areas, which has been established to offset impacts associated with the Southwest Florida Regional Airport. The total project acreage is 633 acres.

This project has been completed.

Cost:

Total:	$2,600,000
Project Development:	N/A
Land Acquisition:	$1,159,040
Implementation:	N/A
Operations and Maintenance:	N/A

Project Schedule:
Start Date: 1995
Finish Date: 1999

Detailed Project Budget Information

	Through 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to Complete**	**Total**
Federal								
State	2,600,000							2,600,000
Tribal								
Local								
Other								
Total	**2,600,000**							**2,600,000**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: Dupuis Reserve Land Acquisition
Project ID: 2116
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: Primary: 2.A.1

Measurable Output(s): Target 21,875 Acres

Project Synopsis: The Dupuis Reserve encompasses 21, 875 acres in northwestern Palm Beach and southwestern Martin Counties. The property is interspersed with numerous ponds, wet prairies, cypress domes, pine flatwoods, and remnant Everglades marsh. Dupuis is actively managed by the District and the Florida Fish and Wildlife Conservation Commission. Numerous public use opportunities are available, including hiking, horseback riding, hunting, fishing, and bicycling. Total project acreage is 21,875 acres. **This project has been completed.**

Cost:

Total:	$23,016,601
Project Development:	N/A
Land Acquisition:	$23,016,601
Implementation:	N/A
Operations and Maintenance:	N/A

Project Schedule:
Start Date: 1985
Finish Date: 1986

Detailed Project Budget Information ($1000)

	Through 1999	2000	2001	2002	2003	2004	Balance to Complete	Total
Federal								
State	23,016.601							23,016.601
Tribal								
Local								
Other								
Total	**23,016.601**							**23,016.601**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: Lake Walk-in-Water Land Acquisition
Project ID: 2130
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: Primary: 2.A.1

Measurable Output(s): Target 4,009 Acres

Project Synopsis: The Lake Walk-in-Water project covers land between the northeast shore of lake Weohyakapka (Walk-in-Water) and SR60. The retirement communities of Nalcrest and Fedhaven border the property to the west and the community of Indian Lake Estates lies to the south. The project has extensive frontage along SR60 and Lake Water-in-Water and contains a large expanse of dry prairie, interspersed with small, isolated depression marshes a very large basin marsh along the highway, and large pine stands that have grown back since being logged in the 1920s. In 1999, the District and Polk County partnered to make the initial 4,000 acre purchase. The project is historically significant Town of Sumica. Polk County actively manages the property with financial assistance from the District. The total project acreage is 4,009 acres and all have been acquired.

Cost:

Total:	SFWMD does not make cost projections on SOR projects
Project Development:	N/A
Land Acquisition:	SFWMD does not make cost projections on SOR projects
Implementation:	N/A
Operations and Maintenance:	N/A

Project Schedule:

Start Date: 1995
Finish Date: 1998

Detailed Project Budget Information (1000s)

	Through 1999	2000	2001	2002	2003	2004	Balance to Complete	Total
Federal								
State	$1,975							$1,975
Tribal								
Local	$1,975							$1,975
Other								
Total	**$3,950**							**3,950**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: Loxahatchee River Land Acquisition
Project ID: 2131
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: Restore, Preserve and Protect the Natural Habitat and Species

Measurable Output(s): Target 1,936 Acres

Project Synopsis: This 1,936-acre project connects to the southern end of Jonathan Dickinson State Park, and contains lands in Palm Beach and Martin Counties. The project includes the historic floodplain of the Northwest Fork of the Loxahatchee River, a National Wild and Scenic River.

The purpose of this project is to protect the outstanding natural and cultural values of Florida's first federally designated Wild and Scenic River. Public ownership of this property will prevent direct disruption of surface and groundwater flows to the northwest Fork, and increase minimum flows to the Loxahatchee River, which will affect downstream movement of the saltwater wedge during dry conditions. A total of 1,914 acres are in public ownership; the District has acquired 1,547 acres and Palm Beach County owns 367 acres within the project area.

This Project has been completed.

Cost:

Total:	$13,074,703
Project Development:	N/A
Land Acquisition:	$13,074,703
Implementation:	N/A
Operations and Maintenance:	N/A

Project Schedule:
Start Date: 1984
Finish Date: 2001

Detailed Project Budget Information ($1000)

	Through 1999	2000	2001	2002	2003	2004	Balance to Complete	Total
Federal								
State	$11,927.120							$11,927.120
Tribal								
Local	$1,147.583							$1,147.583
Other								
Total	**$13,074.703**							**$13,074.703**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: Nicodemus Slough Land Acquisition
Project ID: 2137
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: Primary: 2.A.1

Measurable Output(s): Target 2,231 Acres

Project Synopsis: Nicodemus Slough consists of wet prairie, broadleaf marsh, and prairie hammock south of the Herbert Hoover Dike (LD-3) and west of State Road 78. Until recently, the construction of the Herbert Hoover Dike, coupled with the maintenance of lower stages in Lake Okeechobee, resulted in a shortened hydroperiod and general lowering of water levels in Nicodemus Slough. This in turn altered vegetative patterns on the property and allowed the spread of transition and upland species. This project consists of 2,231 acres and has been completed.

Cost:

Total:	$1,894,501
Project Development:	N/A
Land Acquisition:	$1,894,501
Implementation:	N/A
Operations and Maintenance:	N/A

Project Schedule:
Start Date: 1981
Finish Date: 1988

Detailed Project Budget Information (1000s)

	Through 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to Complete**	**Total**
Federal								
State	$1,894.5							$1,894.5
Tribal								
Local								
Other								
Total	**$1,894.5**							**$1,894.5**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: South Fork St. Lucie River Land Acquisition
Project ID: 2153
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: Restore, Preserve and Protect the Natural Habitat and Species

Measurable Output(s): Target 184 Acres

Project Synopsis: This project includes 184 acres on the western shore of the upper South Fork St. Lucie River. The property begins approximately 0.75 miles south of State Road 76 and extends approximately 1.25 miles southward.

The purpose of this project is to protect the integrity of the river corridor. River water quality is best maintained when river corridor lands remain in their natural state and are restored and managed to enhance the natural community quality. Prescribed fire has successfully been used as the main restoration tool to improve the condition of degraded communities on this property. Responsibility for management of land is divided between the Department of Environmental Protection and Martin County.

This Project has been completed.

Cost:

Total:	$2,480,000
Project Development:	N/A
Land Acquisition:	$2,480,000
Implementation:	N/A
Operations and Maintenance:	N/A

Project Schedule:

Start Date:	1995
Finish Date:	1996

Detailed Project Budget Information (1000s)

	Through 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total***
Federal								
State	$2,480						0	$2,480
Tribal								
Local								
Other								
Total	**$2,480**						**0**	**$2,480**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: Tibet-Butler Preserve Land Acquisition
Project ID: 2157
Lead Agency: South Florida Water Management District
Authority: Save Our Rivers (SOR)

Strategic Plan Goal(s) Addressed: Restore, Preserve and Protect the Natural habitat and Species

Measurable Output(s): Acres Acquired

Project Synopsis: The Preserve covers 439 acres along the southwest shore of Lake Tibet-Butler in Orange County. The vegetative communities include bay swamp, pine flatwoods, cypress swamp, and smaller areas of xeric oak and freshwater marsh. The Tibet-Butler Preserve site includes approximately 4,000 feet of shoreline on Lake Tibet. Orange County Parks and Recreation Department manages Tibet-Butler Preserve as an environmental education facility.

This project has been completed.

Cost:

Total:	$3,601,900
Project Development:	N/A
Land Acquisition:	$3,601,900
Implementation:	N/A
Operations and Maintenance:	N/A

Project Schedule:
Start Date: 1988
Finish Date: 1999

Detailed Project Budget Information (1000s)

	Through 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to Complete**	**Total**
Federal								
State	$3,601.9							$3,601.9
Tribal								
Local								
Other								
Total	**$3,601.9**							**$3,601.9**

Hyperlink: www.sfwmd.gov under the heading "Major Projects"
Contact: Wanda Caffie-Simpson, (561) 682-6445

Program Name: Restoration Program: Habitat and Species
Project Name: Yamato Scrub
Project ID: 2161
Lead Agency: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Authority: Florida Forever

Strategic Plan Goal(s) Addressed: Primary: 2.A.1 Secondary:

Measurable Output(s): Target 207 Acres

Project Synopsis: Predominantly natural communities here are sand pine scrub and scrubby flatwoods. The species richness of the scrub is considered higher than that of any other scrub on the southeast coast. A bargain shared project.

Cost:
Total: Project size 207 acres all acquired
Project Development
Land Acquisition: 207 acres acquired at a cost of $25,932,850
Implementation
Operations and maintenance

Project Schedule:
Start Date: 1992
Finish Date: 1996

Detailed Project Budget Information (1000)

	Thru 1999	**2000**	**2001**	**2002**	**2003**	**2004**	**Balance to complete**	**Total**
Federal								
State	17,500							17,500
Tribal								
Local	8,432.8							8,432.8
Other								
Total	**25,932.8**							**25,932.8**

Hyperlink: http://www.dep.state.fl.us/lands/acquisition/FloridaForever.htm
Contact: FDEP

Program Name: Infrastructure
Project Name: C&SF: Indian River Lagoon Feasibility Study
Project ID: 1428
Lead Agency: USACE / SFWMD
Authority: WRDA 1996

Strategic Plan Goal(s) Addressed: Primary: Other

Measurable Output(s): Reports

Project Synopsis: The purpose of the study is to investigate making structural and operational modifications to the C&SF Project to improve the quality of the environment, improve protection of the aquifer, improve the integrity, capability, and conservation of urban and agricultural water supplies and other water related purposes. The product of this study is a regional plan for addressing the water resource problems and opportunities of the St. Lucie River and Estuary and Indian River Lagoon watersheds in Martin and St. Lucie Counties.

Note: The Indian River Lagoon South Feasibility Study was completed October 2002 and a project implementation report was completed in march 2004.

Cost:

Total:	$6,150,000
Project Development:	$6,150,000
Land Acquisition:	
Implementation:	
Operations and maintenance:	

Project Schedule:

Start Date: 1996
Finish Date: 2002

	1999	2000	2001	2002
Planning & Design				
Real Estate				
Construction				

Detailed Project Budget Information ($1000)

	Thru 2002	Total
USACE	$3,075	$3,075
SFWMD	$3,075	$3,075
Total	**$6,150**	**$6,150**

Hyperlink: http://www.evergladesplan.org/pm/studies/irl_south.cfm
Contact: USACE

Coordinating Success and Tracking Success

For further information on this document please contact:
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For more information on the
South Florida Ecosystem Restoration Program
or to view this document on-line, please visit
http://www.sfrestore.org

Coordinating and Tracking Success