### South Florida Ecosystem Restoration Program

# Cross-Cut Budget

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(a) Contacts List -South Florida Ecosystem Restoration Task Force Members and South Florida Ecosystem Restoration Working Group Members

### **Forward**

The FY 2004 Cross-Cut Budget document is comprised of four sections. Section 1.0 provides an introduction, an overview of the Federal and State Funding Requests and a summary cost table, which includes budget information for Federal and State agencies/entities.

Section 2.0 is the Federal Everglades Ecosystem Restoration Program information section of the Cross-Cut Budget and has three sub-sections: Section 2.1 is the Federal Comprehensive Everglades Restoration Plan (CERP) projects and funding, and Section 2.2 is the Federal Non-CERP Everglades Ecosystem Restoration Projects/Programs. Please note that base program and operational funding requests for some Federal agencies are not included in the figures provided within the FY 2004 Cross-Cut Budget.

Section 3.0 is the State of Florida Everglades Ecosystem Restoration Program information section of the Cross-Cut Budget. It also has 3 sub-sections: Section 3.1 is the State CERP projects and funding, and Section 3.2 is the State Non-CERP Everglades Ecosystem Restoration Projects/Programs. Since the publication date of each year's Cross-Cut Budget precedes the budget cycle for the SFWMD, the FY2003/04 totals shown represent estimates. When FY 2003/04 budget totals are available, they will be posted on the website link to the FY 2003 Cross-Cut Budget at www.sfrestore.org. The same information will also be included in the FY 2005 Cross-Cut Budget document.

Section 4.0 provides background information for reference on the South Florida Ecosystem Restoration Program and includes an excerpt from the latest document entitled "Coordinating Success: Strategy for Restoration of the South Florida Ecosystem (August, 2002)".

#### Section 1.0: Overview

#### **Section 1.1: Introduction**

The FY 2004 President's Budget and the FY 2003-04 State of Florida Budget both propose funding to continue investments in environmental and resource stewardship programs to ensure that our children and future generations experience the wonder and beauty of America's natural resources. The Budget requests also continue to build upon, and to improve collaborative federal and state efforts to restore the Everglades, which are recognized both domestically and internationally as like no other place on earth.

The restoration of America's Everglades is a national and State of Florida priority, as is reflected in the Congressional passage of the Water Resources Development Act of 2000 (WRDA 2000) which authorizes the Comprehensive Everglades Restoration Plan (CERP) (Section 601 of Public Law 106-541) and the Florida Legislature's passage of the 2000 Everglades Restoration and Investment Act. The CERP provides a roadmap for a 30+year implementation, of a suite of interrelated projects which are necessary to restore, preserve and protect the South Florida Ecosystem. The shared vision in implementing the equally cost-shared Plan is the restoration, preservation and protection of a healthy South Florida ecosystem that can support diverse and sustainable communities of plants, animals and people. Additionally CERP provides for the protection of water quality in and the reduction of the loss of fresh water from the Everglades, and meets other water-related needs of the region, including flood control and the enhancement of water supplies. The CERP will accomplish these goals and purposes by increasing the amounts of clean fresh water and distributing it at the right time and place in an effort to replicate more natural hydrologic patterns.

#### Section 1.2: FY 2004 Federal Funding Request Overview

Federal funding for Everglades Restoration of over \$256 million in FY 2004 is proposed for the U.S. Department of the Interior, and the U.S. Army Corps of Engineers. This funding provides an overall \$42 million increase as compared to FY 2003. Additional funding of over \$54 million, (an increase of \$5 million compared to FY 2003), in support of Everglades Restoration efforts has been requested for the U.S. Environmental Protection Agency, the U.S. Department of Commerce, and the U.S. Department of Agriculture. This funding will continue successful partnerships and will steer ongoing projects towards completion. The FY 2004 funding request includes the following:

- Comprehensive Everglades Restoration Plan (CERP) funding of \$39 million for the Army Corps of Engineers and \$9 million for the Department of the Interior.
- Funding of \$40 million for the Department of the Interior to acquire the Collier mineral rights underlying Big Cypress National Preserve
- An increase of \$33.9 million for the Army Corps to continue the C-111 Project which will restore more natural water flow to Taylor Slough and Florida Bay

The FY 2004 budget builds upon the earlier successes of this Administration – and the State of Florida – to lay an important legal foundation and begin implementation of a program to guide Everglades restoration through the next four decades and beyond.

To complement the signed (January 9, 2002) President-Governor Agreement which ensures that water produced by the Comprehensive Plan will be allocated appropriately under state law to restore the Everglades natural system, the Army Corps continues to work with Interior staff and other federal, state, tribal and non-governmental partners on the programmatic regulations. These regulations are expected to be issued in the late spring or early summer of 2003 and will require the concurrence of the Secretary of the Interior and the Governor of Florida. Although largely procedural, the programmatic regulations will define the relationships and the processes to be utilized among all the parties to ensure that the goals and objectives of the Comprehensive Everglades Restoration Plan are achieved.

Other Administration efforts in FY 2004 will focus on improving Everglades water quality by working with the State of Florida as it implements the adopted numeric water quality standard and compliance methodology; managing and protecting marine and coastal resources; acquiring additional lands/mineral rights in support of restoration, enhancing efforts to better coordinate science and research programs and above all, continuing the critically important role of the South Florida Ecosystem Restoration Task Force in collaboration, coordination, strategic planning, tracking of progress and the resolution of interagency and intergovernmental conflicts among all interested parties and stakeholders.

#### Section 1.3: FY 2003-04 State Funding Request Overview

Restoring and protecting the Everglades ecological system is and will remain a top environmental priority of the State of Florida, its resource agencies and South Florida regional and local governments. Florida and its citizens have repeatedly demonstrated a strong commitment to this goal, and in 2000, the Florida Legislature with the leadership and support of Governor Jeb Bush, took historic action by passing the Everglades Restoration and Investment Act, committing \$100 million per year for ten years, to help finance the implementation of the Comprehensive Everglades Restoration Plan.

In 2002, Governor Jeb Bush and the Florida Legislature passed into law the Everglades Bonding Act to provide a secure, long-term finance plan to ensure that the state's share of the plan costs would continue to be met through the year 2010.

The State of Florida continues to support the ongoing projects to be integrated with the Comprehensive Everglades Restoration Plan that are vital to the restoration of the South Florida ecosystem and has aggressively acted to complete the restoration projects embodied in the Florida Everglades Forever program. Four of the six Stormwater Treatment Areas (STAs) authorize by the state act are fully operational and are removing 65 percent of the phosphorous from the waters flowing into the four STAs; water that otherwise would flow into the protected areas of the Everglades.

In addition, state land acquisition and management agencies have continued to acquire land for ecosystem restoration, water resource and habitat protection, and recreation. Significant state and South Florida Water Management District purchases have been made in the Fisheating Creek, Southern Golden Gate Estates, Allapattah Ranch and East Coast Buffers, Cypress Creek projects. In addition, to protect the quality of water in the

Everglades ecosystem, Governor Jeb Bush and Department of Environmental Protection Secretary, David Struhs, recommended and the Environmental Regulation Commission has adopted a rule to establish 10 parts per billion as the numeric criterion for phosphorous in the Everglades Protection Area.

#### Section 1.4: Federal and State Funding Summary Tables:

The tables provided on the following pages contain a summary of the more detailed funding information provided in Sections 2.0 and 3.0 of this document. The tables include budget information provided by Federal and State agencies/entities for their Everglades Ecosystem Restoration CERP and Non-CERP projects, programs and restoration support activities.

The dollars specified in the summary funding tables are reflective of two different fiscal year periods. The dollars for all Federal agencies and the South Florida Water Management District reflect a fiscal year that begins on October 1 and ends on September 30 of each year. The dollars for State of Florida agencies reflect a fiscal year that starts on July 1 and ends on June 30 of each year. Pertinent footnotes are provided at the bottom of each summary table.

TABLE 1: FEDERAL FUNDING SUMMARY (ACTUAL \$)

TABLE I, PEDEI	1			. /
CERP PROJECTS	FY 2001	FY 2002	FY 2003	FY 2004
	Enacted	Enacted	Enacted	Request
USACE-CERP (Part of Central and	21,747,000	27,961,000	37, 062,000	39, 063,000
Southern Florida) (1)				
USDOI-NPS CERP	2,497,000	5,544,000	5,513,000	5,555,000
USDOI-FWS CERP	651,000	3,351,000	3,329,000	3,351,000
NON-CERP PROJECTS/PROGRAMS	5			
USACE-Central and Southern Florida				
(excluding CERP)	56,182,000	64,949,000	49,983,000	72,935,000
USACE -Critical Projects	20,485,000	19,876,000	19,526,000	14,835,000
USACE- Kissimmee River Restoration	19,961,000	25,846,000	23,727,000	17,706,000
USACE-Biscayne Bay	543,000	240,000	200,000	0
USDA - ARS	4,193,000	4,846,900	4,200,9002	4,200,900
USDA-NRCS	5,297,000	37,752,000	36,250,0002	41,250,000
US Department of Commerce-NOAA	4,264,000	4,065,000	4,065,000	4,065,000
USDOI-NPS Park Management	23,389,000	23,635,000	23,874,000	24,194,000
USDOI-South Florida Ecosystem				,_,
Restoration Task Force	1,316,000	1,325,000	1,320,000	1,332,000
USDOI-NPS Modified Water Deliveries	8,980,000	35,199,000 <sup>(3)</sup>	9,935,000	12,990,000
USDOI-NPS Land Acquisition	0,100,000	00,211,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,
(management)	2,075,000	2,800,000	2,782,000	2,300,000
USDOI-NPS Land Acquisition (Big	, ,	, ,	, ,	, ,
Cypress)	0	0	0	40,000,000
USDOI-NPS Land Acquisition Grants to				
Florida	11,974,000	15,000,000	14,924,000	0
USDOI-NPS Land Acquisition Grants to				
Florida Administration	0	0	497,000	0
USDOI-NPS Critical Ecosystem Studies				
Initiative	6,194,000	4,000,000	3,974,000	0
USDOI-FWS Ecological Services	2,554,000	2,554,000	2,537,000	2,554,000
USDOI-FWS Refuges and Wildlife	3,706,000	3,706,000	3,682,000	4,306,000
USDOI-FWS Law Enforcement	636,000	636,000	632,000	636,000
USDOI-FWS Fisheries	100,000	100,000	99,000	100,000
USDOI-FWS Land Acquisition	10,975,000	8,500,000	2,484,000	1,964,000
USDOI- USGS - Integrated Research,				
Planning and Interagency Coordination	8,553,000	8,636,000	8,580,000	12,636,000
USDOI-USGS DOI's Integrated				
Studies for Everglades				
Restoration (5)	0	0	0	[4,000,000]
USDOI-USGS Current Research				
Activities (4)	[8,553,000]	[8,636,000]	[8,580,000]	[8,636,000]
USDOI- BIA	396,000	396,000	393,000	396,000
US Environmental Protection Agency	4,582,000	5,338,300	4,510,500 <sup>2</sup>	4,678,200

Note: Base program and operational funding requests for the U.S. Environmental Protection Agency, U.S Department of Commerce, U.S. Department of Agriculture and the U.S. Army Corps of Engineers are not included in the information provided within the FY 2004 Cross-Cut Budget.

<u>Footnotes:</u>

<sup>&</sup>lt;sup>1</sup> USACE CERP activities are funded under the Central and Southern Florida Project (C&SF)

<sup>&</sup>lt;sup>2</sup> This figure reflects President's FY 2003 Budget request. Enacted figures were not available at the time of document publication.

<sup>&</sup>lt;sup>3</sup> Reflects \$19,199,000 for construction and \$16,000,000 for land acquisition

<sup>&</sup>lt;sup>4</sup> Bracketed dollars are already included in the totals for the USDOI-USGS Integrated Research, Planning and Interagency Coordination.

### TABLE 2 FEDERAL FUNDING SUMMARY (ACTUAL \$)

FEDERAL FUNDING TOTALS SUMMARY	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Enacted	FY2004 Request
CERP Subtotal (USACE and USDOI)	24,895,000	36,856,000	45,904,000	47,969,000*
Non-CERP Subtotal (USACE and				
USDOI)	178,019,000	217,398,000	169,149,000	208,884,000*
Non-CERP Subtotal (Other Federal	18,336,000	52,002,200	49,026,400	54,194,100
Agencies)				
Non-CERP Total (All Federal	196,355,000	269,400,200	218,175,400	263,078,100
Agencies)				
TOTAL CERP AND NON CERP				
(USACE AND USDOI)	202,914,000	254,254,000	215,053,000	256,853,000*
TOTAL CERP AND NON CERP (ALL FEDERAL AGENCIES)	221,250,000	306,256,200	264,079,400	311,047,100

<sup>\*</sup>Figures are as reported in the FY 2004 President's Budget.

TABLE 3 STATE OF FLORIDA FUNDING SUMMARY TABLE (ACTUAL \$)

CERP EVERGLADES ECOSYSTEM	FY 2000-01	FY 2001-02	FY 2002-03	FY 2003-04
RESTORATION PROJECTS	Enacted	Enacted	Requested	Requested
Department of Environmental Protection	89,619,051	90,380,949	150,279,126	105,586,702
Florida Fish and Wildlife Conservation	315,000	411,000	409,000	419,000
Commission				
South Florida Water Management District	32,773,071 (1)	91,708,816	133,284,645	119,700,000(2)
NON-CERP EVERGLADES ECOSYSTI	TION PROJEC	CTS		
Florida Department of Agriculture/	24,700,000	7,608,917	15,523,202	31,215,100
Consumer Services				
Department of Community Affairs	31,830,000	9,800,000	10,000,000	45,819,724
Florida Department of Environmental	135,422,927	72,654,344	109,393,692	92,364,834
Protection				
Florida Fish and Wildlife Conservation	17,271,000	19,681,000	21,306,000	25,729,000
Commission				
Florida Department of Transportation	16,104,000	4,931,000	10,528,832	2,090,000
South Florida Water Management District	268,873,786	395,314,127	372,701,387(3)	350,100,000(2)

#### Footnotes:

#### TABLE 4 STATE OF FLORIDA FUNDING SUMMARY TABLE (ACTUAL \$)

STATE OF FLORIDA FUNDING	FY 2000-01	FY 2001-02	FY 2002-03	FY 2003-04
TOTALS SUMMARY	Enacted	Enacted	Requested	Requested
CERP SUBTOTAL:	122,707,122	182,500,765	283,972,771	225,705,702
NON-CERP SUBTOTAL:	494,201,713	509,989,388	539,453,113	547,318,658
STATE OF FLORIDA FUNDING	616,908,835	692,490,153	823,425,884	773,024,360
TOTAL:				

<sup>&</sup>lt;sup>1</sup> Reflects SFWMD adopted budget appropriations less any State Department of Environmental Protection appropriations to the Save Our Everglades Trust Fund and Federal Department of Interior Funds.

<sup>&</sup>lt;sup>2</sup>Since the publication date of each year's Cross-Cut Budget precedes the budget cycle for the SFWMD, the FY2003/04 totals shown represent estimates. When FY 2003/04 budget totals are available, they will be posted on the website link to the FY 2004 Cross-Cut Budget at <a href="www.sfrestore.org">www.sfrestore.org</a>. The same information will also be included in the FY 2005 Cross-Cut Budget document.

<sup>&</sup>lt;sup>3</sup>Reflects SFWMD adopted budget appropriations less state funding received from the Lake Okeechobee Trust Fund.

# Section 2.0: Federal Everglades Ecosystem Restoration Program Funding and Project Information

### Section 2.1: Comprehensive Everglades Ecosystem Restoration Plan Projects (CERP) and Funding (USACE and DOI) (\$47,969,000)

This section of the FY 2004 Cross-Cut Budget includes descriptions for all federal agency projects and funding for CERP restoration projects as follows:

#### U.S. Army Corps of Engineers (Corps): (\$39,063,000)

This effort includes the Comprehensive Everglades Restoration Plan (CERP or Comp Plan) as recommended in the Central and Southern Florida Project Comprehensive Review Study (Restudy) submitted to Congress on July 1, 1999. The Comp Plan also includes the ongoing Southwest Florida, Comprehensive Water Quality, and Florida Bay/Florida Keys Feasibility studies.

The FY 2004 activities include continuation of program level activities focusing on the Restoration Coordination and Verification (RECOVER) program efforts, public outreach and involvement, and the environmental and economic equity program. RECOVER, whose role is to maintain a linkage between science and the Comp Plan, has been organized into 6 major teams and a Leadership Group that oversees all team activities and the RECOVER teams will focus on evaluating and assessing the performance of the Comp Plan, reviewing the effects that other restoration projects may have on the Plan, ensuring a system wide perspective is maintained throughout the restoration process, and assisting the numerous Project Delivery Teams that are developing the Project Implementation Reports for the various projects.

Remaining FY 2004 activities will focus on project development and planning. The major focus will be on preparation of Project Implementation Reports (PIR) for the 10 projects initially authorized by WRDA 2000 and other programmatic efforts. Preparation of Pilot Project Design Reports will continue for the 6 pilot projects. This includes the continued data collection and water quality sampling at the three Aquifer Storage and Recovery Sites. Work will also continue on 15 additional CERP PIR's addressing other components of the Comp Plan not previously authorized. Project Delivery Teams will be using the Initial CERP update to formalize the base conditions for each PIR and begin formulation of alternatives. One special PIR will be prepared to address the requirements of WRDA 2000 for the components contained in the Indian River Lagoon feasibility study, while the Southwest Florida, Comprehensive Water Quality, and Florida Bay/Florida Keys feasibility studies continue.

#### U.S. Department of the Interior: National Park Service (NPS) (\$5,555,000)

In 2004, NPS requests \$5,555,000 for CERP implementation. The NPS role in CERP in FY 2004 will center on implementation of projects that are essential to restoration of federal lands in south Florida. The planned CERP projects having significant effects on Big Cypress National Preserve, Biscayne National Park, and Everglades National Park include feasibility studies, pilot projects for seepage management and in-ground reservoirs, and restoration projects. The National Park Service will participate as a key agency in the development of the final designs. Additionally, the NPS will, in cooperation with other federal, state, and local partners, conduct

adaptive assessments to determine the effects of the implemented projects on NPS-managed lands and waters. Finally, the NPS will participate in the RECOVER (REstoration COordination and VERification) an inter-agency scientific group charged with system-wide assessments of planned and completed projects as well as with programmatic level activities, such as rulemaking, programmatic regulations, and interim goal development.

#### U.S. Department of the Interior: U.S. Fish and Wildlife Service (FWS) (\$3,351,000)

The 2004 request for CERP Implementation (\$3,351,000) will enable the FWS to fulfill its Trust Resource responsibilities under the Endangered Species Act, Fish and Wildlife Coordination Act, Migratory Bird Treaty Act, and other statutes as part of comprehensive Everglades restoration. The FWS will be an integral planning partner in designing, assessing and monitoring the separate CERP project components during its implementation. The FWS is also responsible for providing environmental expertise to the Corps of Engineers and the South Florida Water Management District to guide Everglades restoration.

In Fiscal Year 2004, the FWS will address new Corps of Engineers project starts and continue to be actively involved in threatened and endangered species consultation and recovery, conservation of Department of the Interior (DOI) trust lands, CERP project planning, preparation of Fish and Wildlife Coordination Act Reports, system-wide water quality improvement, land acquisition, migratory bird and fisheries conservation, and a myriad of multi-agency planning, science and outreach efforts. As a recognized leader in the science of ecosystem restoration and an integral planning partner in CERP, the FWS will ensure that ecosystem benefits are maximized consistent with long-term CERP project goals. These efforts will comprise the priority mission of the FWS over the next 30 years in south Florida. The role of the FWS in CERP implementation will support and advance the principal strategic goals and annual performance measures for the Everglades initiative.

#### **CERP FUNDING SUMMARY (ACTUAL \$)**

CERP PROJECTS	FY 2001	FY 2002	FY 2003	FY 2004
(USACE and DOI)	Enacted	Enacted	Enacted	Request
USACE-CERP (Part of Central and	21,747,000	27,961,000	37, 062,000	39, 063,000
Southern Florida) (1)				
USDOI-NPS CERP	2,497,000	5,544,000	5,513,000	5,555,000
USDOI-FWS CERP	651,000	3,351,000	3,329,000	3,351,000
TOTAL:	24,895,000	36,856,000	45,904,000	47,969,000

Note: Base program and operational funding requests for the U.S. Environmental Protection Agency, U.S Department of Commerce, U.S. Department of Agriculture and the U.S. Army Corps of Engineers are not included in the information provided within the FY 2004 Cross-Cut Budget.

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> USACE CERP activities are funded under the Central and Southern Florida Project (C&SF)

# Section 2.2: Non- CERP Everglades Ecosystem Restoration Projects/Programs (\$263,078,100)

This section of the Cross-Cut Budget includes descriptions for all Federal agency projects and funding for Non-CERP Everglades Ecosystem Restoration Projects/Programs as follows:

### U.S. Army Corps of Engineers (\$105,476,000)

#### Central and Southern Florida Project (\$72,935,000)

NOTE: The number shown above does not reflect costs for Upper St. Johns Project (not within the SFWMD boundaries/not part of the Cross-Cut) or \$39,063,000 for CERP projects, which are reported in Section 1.

#### • South Dade County, C-111 Project

This project consists of modifications to the C&SF Project to provide more natural hydrologic conditions in Taylor Slough and to minimize damaging flood releases to Barnes Sound/Manatee Bay, while maintaining flood protection for adjacent agricultural lands. The FY 2004 activities will include continued engineering and design of project features and contracts for the construction of canals, impoundments, and water control structures.

#### Manatee Pass Gates Project:

This project consists of alternative structural modifications to 23 existing water control structures and locks in the C&SF Project to reduce or eliminate manatee fatalities associated with their operation. The project is being implemented in two phases; the first phase report was approved in FY 96 and addresses the addition of pressure sensitive devices at water control structures. These devices will reverse the gate closure if a foreign object is detected. In the second project phase, acoustic sounding and sensing devices will be placed at lock gates. The FY 2004 activities will complete design for phase two and continue construction of phase one structures.

### • West Palm Beach Canal, Canal-51/Stormwater Treatment Area 1-East (C-51/STA 1E) Project

This project consists of design and construction of the C-51/STA 1E project to provide flood control for the western C-51 basin, provide water quality enhancement, and to restore a portion of the historic Everglades flows. It is being implemented in conjunction with SFWMD's Everglades Construction Project. The FY 2004 activities will complete STA-1E earthwork contracts and continue C-51 improvement contracts.

#### • Southwest Florida, Comprehensive Water Quality, and Florida Bay/Florida Keys Feasibility Studies

These studies, which are identified in the WRDA 2000 authorized CERP, are required to better address specific issues such as water quality. Studies were initiated in FY 2001 and will be continued in FY 2004.

#### Everglades and South Florida Ecosystem Restoration Critical Projects (\$14,835,000)

This project involves the implementation of "critical restoration projects" authorized in Section 528 of the Water Resources Development Act of 1996. The legislation authorizes the Corps, in consultation with the Task Force and the non-Federal sponsor, to implement projects that

produce independent, immediate and substantial restoration, preservation and protection benefits. The Florida Keys Carrying Capacity Study and East Coast Canal Structure, C-4 Project are both scheduled to be completed in FY 2003. FY 2004 activities will include initiating construction on one project, continuing construction on five projects and completing construction on one project.

#### *Kissimmee River Restoration (\$17,706,000)*

This project involves restoring the historic habitat in much of the Kissimmee River floodplain and restoring water-level fluctuations and seasonal discharges from Lakes Kissimmee, Cypress, and Hatchineha in the upper basin. Congress authorized the recommended plan in 1992 and design and construction is underway. The Project Modification Report recommending modifications to the upper basin was approved in FY 1996. The FY 2004 activities will include continuing engineering, design and monitoring; continuing construction on spillway additions; and, beginning construction on the Istokpoga canal enlargement and River Acres mitigation features.

#### U.S. Department of Agriculture - Agricultural Research Service (ARS) (\$4,200,900)

The ARS mission is to develop and transfer solutions to agriculture problems of high national priority; to provide information access and dissemination to ensure high-quality, safe food and other agricultural products; assess the nutritional needs of Americans; sustain a competitive agricultural economy; enhance the natural resource base and the environment; and provide economic opportunities for rural citizens, communities, and society. Related to the Everglades Ecosystem Restoration Program ARS conducts research on sustainable agriculture production systems for beef cattle grazing; horticulture, sugarcane, and other crops; biological control of aquatic weeds/ invasive species; improved water management; enhanced water quality protection, hydrologic and water quality modeling; advanced fertilizer and pesticide management practices; and atmospheric loadings from nutrients and pesticides. Individual projects are as follows:

#### • Beef Cattle Grazing Systems to Protect Water Resources (\$184,500)

A new research project has recently been initiated at the Beef Cattle Research Unit in Brooksville, FL, to develop better forages and grazing practices that will improve the profitability of beef cattle production as well as protect water quality for the subtropical areas of the United States. Changes in soil nutrients and water quality effects around and beneath the cattle congregation sites will be assessed.

### • Development of Improved Sugarcane Varieties and Their Use in Sustainable Agricultural Production Systems (\$834,200)

The primary mission of the Sugarcane Field Station in Canal Point, FL, is to develop high-yielding, disease-resistant sugarcane varieties. Research objectives of these projects are as follows: (1) quantify and genetically improve sugarcane's tolerance to wetter conditions, (2) determine seasonal flood-drain cycles that improve or maintain yields while controlling soil subsidence, (3) quantify and genetically improve sugarcane's ability to yield well with less phosphorus fertilizer or to yield well and take up more soil phosphorus, and (4) quantify the effects of raised water tables and intermittent flooding on the microbial activity that causes soil subsidence. The approach is to use laboratory, growth chamber, lysimeter, and field experiments to assess the potential for reducing organic matter oxidation for the soils

in the Everglades Agricultural Area. The lysimeter study showed that a 15-cm water table was sufficient to achieve an organic matter oxidation potential similar to flooded conditions.

### • Biological Control and Management of Aquatic Weeds/ Invasive Species in South Florida (\$1,923,200)

ARS has conducted research in the biological control of weeds in South Florida for more than 50 years. Since 1989, the ARS Invasive Plant Research Laboratory in Ft. Lauderdale, FL (and its satellite lab in Gainesville, FL) has spearheaded, in collaboration with the ARS Australian Biological Control of Weeds Laboratory, a biological control program directed against melaleuca. Research continues under current funding to develop management strategies and biological control agents that are efficient, economical, and environmentally sound. Current funding related to the Everglades restoration efforts totals \$1,676,800 and \$246,400 in Florida and Australia, respectively.

The research has been expanded to identify and collect natural enemies for control of Melaleuca quinquenervia and other invasive pest plants; evaluate biological control agents for control of melaleuca and other exotic plant species and obtain approvals of qualified natural enemies; and develop biological-based integrated pest (weed) management strategies that are efficient, economical, and environmentally sound. The release of approved biological control agents will be integrated with other methods of exotic plant species control (chemical, cultural, and physical), determination of optimum re-vegetation methods, and an evaluation of compliance with economic and environmental impact assessments on control measures. A new quarantine facility being constructed in Ft. Lauderdale will increase the capacity of Invasive Plant Research Lab to pursue biological control remedies for invasive plants in the Everglades National Park.

#### • Nutrient, Pesticide, and Water Management for Horticultural Crops (\$252,900)

The Horticultural and Breeding Research Unit at Ft. Pierce, FL, recently initiated a new project to improve water conservation and water quality associated with the irrigation of field and container–grown horticultural crops. Research objectives of the project are: (1) determine the fate and transport of nutrients and pesticides used and the potential for contamination of aquatic environments; (2) develop management practices that reduce losses of nutrients and pesticides into water resources; and (3) assess the potential of aquatic plants and algal species to purify horticultural runoff of excess nutrients and pesticides.

### • A Model for Predicting Sugarcane Yields, Soil Subsidence, and Nutrient Runoff (\$35,700)

The original project that dealt with crop stress and sugarcane production under high water table and climate change scenarios for different soil types has been completed. Results from the temperature-gradient greenhouse studies showed that sugarcane yields were slightly higher with the Water table maintained at a constant 8-inch depth compared to a fluctuating water table at about 20 inches. The objective of the remaining project of the Crop Genetics and Environmental Research Unit in Gainesville, FL, is to develop a sugarcane model to predict crop yields based on water deficits, different temperatures, photoperiods, soil properties, and other environmental conditions.

### • Hydrologic Evaluation and Water Quality Studies Affecting Dade County (\$613,200)

The long-term plan to restore the Everglades to a more natural condition may elevate the water table in parts of South Florida. This could result in flooding during the wet season and have an adverse effect on agricultural crop production. The main objectives of this project being conducted by the Subtropical Horticultural Research Unit are: (1) to develop and evaluate a comprehensive, agricultural decision-support computer model to improve water quality under high water table conditions, and (2) to develop guidelines and recommendations for agricultural management practices to improve water quality under high water table management conditions. The computer model and guidelines for agricultural practices is currently being developed for the C-111 basin.

### • Water Quality Impacts for Sweet Corn Production in Dade County, South Florida (\$158,200)

This research project was developed through the South Florida Water Management District; the University of Florida, Tropical Research and Education Center in Homestead, FL; and the Southeast Watershed Laboratory in Tifton, GA. The objectives of this research project are: (1) to evaluate the fate and transport of indicator nutrients and pesticides, i.e. compounds detected in surface water monitoring studies; (2) to evaluate the potential of summer cover crops in controlling pesticide and fertilizer contamination of surface and ground water; and (3) to evaluate contamination attenuation of nutrients and pesticides during transport processes in the upper Biscayne aquifer.

### • Atmospheric Processes of Agricultural Pollutants that Affect Air and Water in South Florida (\$199,000)

A new research project was initiated in FY 2002 to determine atmospheric loadings of nutrients and pesticides to sensitive ecosystems. This project is being lead by Environmental Quality Laboratory in Beltsville, MD, and the Southeast Watershed Laboratory in Tifton, GA, in cooperation with the University of Florida, South Florida Water management District, and national Park Service scientists. Air quality sampling sites have been established in Biscayne National Park near Homestead, FL, and West Palm Beach, FL. These measurements will compliment water quality research and toxicity testing by NOAA National Ocean Service scientists in the St. Lucie Estuary and Florida Bay.

### U.S. Department of Agriculture- Natural Resources Conservation Service (NRCS)(\$41,250,000)

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. This 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. Financial assistance is provided through a variety of USDA Farm Bill Programs.

NRCS operates Mobile Irrigation Laboratories in partnership with other governmental agencies to assist urban and agricultural land users in reducing irrigation water use and nutrient loading to receiving waters. Assistance is provided to livestock and dairy producers to apply Best Management Practices, including waste management systems, to reduce off farm nutrient discharges. A special effort in the EAA and C-139 basin is in place to assist the land user to meet requirements outlined in the 1994 Everglades Forever Act to reduce phosphorus loading into the Everglades Protection Area. Other areas of assistance are provided on private and tribal lands to restore wetlands, improve wildlife habitat and control invasive exotic plant species. (\$4,700,000)

#### Farm Security and Rural Investment Act of 2002

#### • Environmental Quality Incentives Program (EQIP) (\$15,000,000)

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.

#### • Wetlands Reserve Program (WRP) (\$20,000,000)

The WRP provides the opportunity to landowners to receive financial incentives to restore or enhance wetlands and improve wildlife habitat in exchange for retiring marginal land from agriculture production.

#### • Wildlife Habitat Incentives Program (WHIP) \$300,000)

WHIP encourages creation of high quality wildlife habitats that support wildlife populations on wetland, riparian, upland and aquatic habitat on agricultural lands.

#### • Farmland Protection Program (FPP) (\$250,000)

The FPP protects working agricultural land from conversion to non-agricultural uses through the purchase of conservation easements in partnership with local and state governments, Indian Tribes and non-governmental organizations.

### • Watershed Project (P.L. 566, Watershed Protection and Flood Prevention Program) (\$1,000,000)

The PL-566 Small Watershed Program will provide cost share incentives to implement conservation practices to improve surface water quality in the Lower Kissimmee River and Taylor Creek-Nubbin Slough Watersheds north of Lake Okeechobee targeting improved pastures in cow/calf operations, dairy outer pastures and other intensively used pastures.

### <u>U.S. Department of Commerce: National Oceanic and Atmospheric Administration (NOAA) (\$4,065,000)</u>

The FY 2004 budget for the National Oceanic and Atmospheric Administration (NOAA) includes \$4,065,000 to provide science and monitoring projects critical to implementing and assessing the Comprehensive Ecosystem Restoration Plan (CERP) and other portions of the South Florida ecosystem restoration effort. NOAA supports the only portion of the ecosystem restoration effort exclusively devoted to monitoring, restoring and managing the coastal portions of the South Florida Ecosystem. These projects will provide information critical to the design and implementation of inland restoration projects and to the evaluation of the downstream impacts of restoration activities on coastal resources. This information will allow project managers to efficiently monitor the results of restoration projects on downstream resources, and make adjustments if necessary through the adaptive management process.

As the CERP projects begin to implement major construction and re-routing of water flow through the South Florida Ecosystem, downstream coastal resources will be affected. NOAA's role is to provide research, monitoring, and management to support successful implementation of the CERP, including restoration of the affected coastal resources. Although many NOAA programs support an integrated effort among Federal, tribal, state and nongovernmental partners to halt the degradation of the South Florida Ecosystem, the following three NOAA projects directly support CERP implementation.

# • Integrated Ecosystem Health Monitoring/National Ocean Service (\$900,000) & Interdisciplinary Coastal Oceanographic Observations/ Oceanic and Atmospheric Research (\$665,000)

Almost all of the replumbing and inland restoration efforts will ultimately affect the flow of water, nutrients and other elements to coastal bays and estuaries. Monitoring the impacts of replumbing water flow from inland to coastal areas, as part of the restoration effort, is critical to determine the overall success of the effort. This funding supports a variety of monitoring activities in South Florida's coastal waters that are downstream of major restoration projects, such as the Florida Keys National Marine Sanctuary, Florida Bay and Biscayne Bay. The objectives are to: (1) establish baseline conditions, (2) monitor trends including the effects of restoration efforts and management decisions, and (3) evaluate long-term impacts associated with the inland changes in water flow and other human impacts.

NOAA's monitoring of circulation and salinity of key coastal indicators including sea grasses, microinvertebrates, and coral reefs, are important for tracking and changing the restoration effort as it proceeds. This data will ultimately be used to determine the best alternatives, progress, and effectiveness of efforts to redirect inland water flow and restore a healthy South Florida ecosystem.

Additional funding beyond this amount will be required to fulfill NOAA's responsibility to: (1) establish a long-term ecological monitoring program and database for the South Florida Restoration effort and the Florida Keys National Marine Sanctuary, and (2) provide a forum for integrating monitoring into the management of the inland and coastal marine ecosystem. The geographic scope includes all the marine waters of South Florida.

### • Restoration Science and Assessment/National Marine Fisheries Service (\$1,300,000)

The National Marine Fisheries Service will continue research that defines the impact of inland restoration efforts and changing freshwater inflow on Florida Bay habitats, nutrients flow, hydrodynamics, and ultimately on measurable ecosystem productivity, diversity, and health. This research is conducted, in part, through a strong partnership with local scientists. Funds are targeted to conduct an integrative spatial study of the pelagic and benthic communities in relation to habitat, particularly sea grass and salinity, and to build a relationship among abundance, biomass, and the management of freshwater inflow. Elements of the study will include modeling, geographic information systems (GIS), field sampling across the entire Bay, and laboratory studies. Spatial community modeling will be incorporated into a total ecosystem model of Florida Bay to help integrate the interagency program of studies in Florida Bay. This effort also includes expansion of tests of water quality entering Florida Bay using biological assays appropriate for South Florida.

#### • Restoration Science/National Ocean Service (\$1,200,000)

Funding will support scientific investigations in the South Florida coastal ecosystem to better understand and restore the coastal areas as part of the overall restoration effort. When coupled with monitoring efforts, these investigations allow managers to see and predict the interactions between restoration efforts and oceanographic, atmospheric, geologic, hydrologic, and fisheries processes. Much of this work is coordinated through researchers at NOAA's Atlantic Oceanographic and Meteorological Laboratory (AOML) and a variety of university partners.

#### <u>U.S. Department of the Interior - National Park Service (\$80,816,000)</u> *Park Management (\$24,194,000)*

#### • Big Cypress National Preserve (\$5,343,000)

Costs associated with current area management activities support mandated programs such as the protection, inventorying and monitoring of ten threatened and endangered species (Florida Panther, Cape Sable Sparrow, Florida Manatee, etc.) and a large hydrology program that includes restoration of sheet water flow to the Everglades National Park and the Ten Thousand Islands. Additional mandated programs include special uses such as oil exploration/production, 3,000 acres of cattle leases, the largest recreation hunting wildlife management area in south Florida, implementation of the largest recreational off-road vehicle program in the 48 states, and 11 Native American (Seminole and Miccosukee) villages on Preserve lands. The Preserve supports the largest prescribed fire program in the Service; visitor and resources protection of 728,000 acres of predominately backcountry areas; maintenance of 47 employee housing units, two major visitor support facilities, public utility systems, seven primitive campgrounds, and 66 miles of roads and management of 394 known archeological sites.

The current natural resources management program includes collection of baseline data in formats that are compatible with interagency regional hydrologic and community/species-based models, non-native plant control, threatened and endangered

species, mitigation of visitor impacts, and about five percent are management funds to support direct inventory/monitoring of resources and a geographic information system.

#### • *Biscayne National Park* (\$3,501,000)

Costs for area management activities involve operations associated with a marine park that is exposed to intense urban pressures. These include efforts to address impacts to park resources associated with urban sprawl from the metropolitan area of Miami, four solid waste landfills, and a nuclear power facility. All of these threats are located along the park's western boundary, and "upstream" with respect to surface- and ground-water flow into the park.

Other area management activities are associated with the protection of 173,000 acres of marine resources, which include the largest living coral reef system in the National Park Service, eight known terrestrial and 40 known submerged cultural sites, and approximately 20 historic structures and two national historic districts within a boundary that has unlimited access points. Costs also involve the maintenance of three developed islands and one mainland site that include six harbors/docking facilities, two campgrounds, six picnic areas, approximately ten miles of trail, six residences, an environmental education camp and a major visitor center.

Current natural resources management efforts are directed towards coral reef and seagrass protection, water quality monitoring, documentation and mitigation of impacts due to visitor and commercial uses, controlling exotic vegetation, and monitoring at least eight threatened and endangered species. Special efforts are applied to prevent and restore extensive damage to seagrass beds and coral reefs from boat groundings.

#### Dry Tortugas National Park (\$1,297,000)

Costs are for operations of the 65,000-acre marine and historical national park 70 miles west of Key West. The popularity of this park is putting stress on park facilities and is threatening park resources, visitor safety, and the quality of the visitor experience. This raises concerns over visitor impacts on the remote, wilderness qualities of the site. Current funding will continue a preservation and maintenance program for Fort Jefferson.

Efforts will continue this year to document and recommend management strategies for submerged cultural resources. These efforts are supported by park staff, with overall technical direction provided by the NPS Submerged Cultural Resources Unit.

#### • Everglades National Park (\$14,053,000)

Costs for area management reflect continuing demands on operations, natural resources management, planning, maintenance and ecosystem restoration. The park continues to attract significant national and international attention, as a symbol of the effort to save the Everglades, and of the balance being sought in striving to secure South Florida's future. With over 1.5 million acres of fragile wilderness immediately adjacent to some 6 million people, the park has special challenges. Over one and one-half million visitors come each year. The Park has extensive outreach programs to the local community and sustains a large backcountry/wilderness operation.

The park operates major visitor use areas at Flamingo, Shark Valley, Everglades City, and Chekika, and oversees 3 concessions operations. Aging infrastructure requires extensive short-term maintenance, as well as long-term upgrade. The park has 82 miles of surfaced roads, 160 miles of trails, three campgrounds, 48 backcountry campsites, and three fee collection stations. The park has an unprecedented three international treaty designations and is unique in the world. It is home to over 1,000 species of plants, 400 species of birds, and 2 rare orchids, and is a refuge for 14 threatened and endangered species.

Everglades National Park remains the most ecologically threatened park in the nation. Florida Bay is continuing to experience dramatic changes, including striking alterations between hypo- and hyper-salinity, increased turbidity, dramatic seagrass die-offs and persistent and increasing spreads of algae blooms. Exotic plants have and are continuing to replace native plant communities in Everglades National Park and adjacent natural areas.

Shark Slough and eastern Florida Bay have the most extensive network of monitoring networks (hydrological, meteorological, and biological), but even these sites must be tied into a broader program to provide the level of information needed for an understanding of the relation between biotic and abiotic factors in restoration. Current funds primarily cover megafauna and key restoration areas such as Shark Slough, the C-111 basin, and eastern Florida Bay.

#### South Florida Ecosystem Restoration Task Force (\$1,332,000)

This activity is to support operations of the South Florida Ecosystem Restoration Task Force, which is responsible for coordinating and integrating the activities of the participating Federal, State, Local, and Tribal agencies involved in the Everglades Ecosystem Restoration Program and is also responsible to report to Congress on restoration programs and funding requirements. The Water Resources Development Act of 1996 directs the Task Force and Working Group to implement procedures to facilitate public participation in the advisory process; to maintain records and make the proceedings of meetings available for public inspection; and to submit biennial reports to Congress, summarizing the activities of the Task Force, the policies, strategies, projects, and priorities developed or implemented, and the progress made toward the restoration. In subsequent Congressional guidance, the Task Force was directed to develop implement and maintain an outcome oriented strategic plan; an improved process for resolving conflicts/disputes; and a comprehensive strategy for Federal land acquisition projects.

In FY 2004, the Task Force office will continue its coordination role and related activities on behalf of the Task Force and Working Group initiatives, projects, priorities and programs. The Task Force will also continue this role in coordinating, tracking and monitoring all aspects of CERP implementation as well as the continued implementation of its updated Strategic Plan. This work will include the 2004 biannual update of the plan as required by the Congress, reporting progress and accomplishments on Goals 1, 2 and 3 of the strategic plan, developing and maintaining a tracking system for its land acquisition strategy, engaging as necessary in its dispute resolution process, preparing the FY2005 Cross-Cut Budget and the annual updating of the restoration project sheet information (Integrated Financial Plan) including status, schedule, scope and budget for each project.

#### Modified Water Deliveries Project (MWD) (\$12,990,000)

The 2004 request is \$12,990,000 for the MWD project through the NPS construction appropriation account to continue this important project. The MWD project is authorized by section 104 of the Everglades National Park Protection and Expansion Act of 1989.

This project involves construction of modifications to the Central and Southern Florida Project (C&SF) water management system and related operational changes to provide improved water deliveries to Everglades National Park. The project includes water control structures to restore more natural hydrologic conditions within Everglades National Park and a flood mitigation system. Planned features will be implemented by the Corps with the concurrence of the National Park Service and the non-Federal sponsor, the South Florida Water Management District (SFWMD). Consistent with the cost-sharing provisions of the Everglades National Park Protection and Expansion Act of 1989 (1989 Act), project construction will be Federally funded, and in accordance with the Corps's General Design Memorandum for Modified Water Deliveries to Everglades National Park, the Federal government will provide 75 percent of operating and maintenance costs, with the South Florida Water Management District assuming responsibility for the remaining 25 percent. Additional project coordination is provided by quarterly meetings of the NPS, the Corps, the Fish and Wildlife Service, and the SFWMD. The project consists of structural features with the intended purpose of restoring conveyance between water conservation areas north of Everglades National Park and the Shark River Slough within the park, as well as flood mitigation features for a residential area known as the 8.5 square mile area.

The completion of this project is required prior to the construction of certain components of the CERP.

#### Land Acquisition Management (\$2,300,000)

This funding will be used to administer the Federal land acquisition program in South Florida to enable completion of land acquisition and to meet the schedule established by the Department of the Interior.

#### Land Acquisition Big Cypress (\$40,000,000)

The Department of the Interior and the Collier Resources Company have reached an agreement in principle to acquire Collier's mineral rights underlying Big Cypress National Preserve. The Collier Family is the primary holder of the mineral rights under the National Preserve. The Colliers own all or a portion of the oil and gas rights within 79 percent of the sections within Collier County. The Colliers' ownership of these mineral rights predates the establishment of the National Preserve and their rights were expressly grandfathered by Congress when the National Preserve was established. It is estimated that there are approximately 40 million barrels of conventionally recoverable oil under Big Cypress.

The funds requested, \$40,000,000, will be used to cover a portion of the total cost to acquire the mineral rights owned by Collier Resources Company at Big Cypress National Preserve. The Collier Resources Company will receive a total of \$120,000,000

for the mineral rights. The Collier Family believes that the mineral rights are worth in excess of \$120,000,000. The agreement with the Department of the Interior allows the Colliers to seek a tax donation, subject to the approval of the IRS, based on the excess value of the oil and gas rights. Legislation is required to implement the agreement.

#### U.S. Department of the Interior: Fish and Wildlife Service (\$9,560,000)

#### Resource Management - Ecological Services (\$2,554,000)

These funds will allow the FWS to continue coordination and partnering with NPS, USGS, Tribal governments, state agencies and private organizations involved in the restoration of the South Florida Ecosystem. These funds for 2004 will also enable the FWS to continue implementing the Multi-Species Recovery Plan, which provides a blueprint for protecting, conserving, and managing the threatened and endangered fish and wildlife resources. The FWS is undertaking a comprehensive habitat based strategy for restoration and recovery of species.

The FWS will continue its activities consulting with the Corps, NPS and other Federal agencies relative to those agency activities that potentially affect Federally listed species. In 2004, the FWS will continue consultation with the Corps on the Central and South Florida Restudy, in addition to other ongoing or new Federal projects. Additionally, the FWS will evaluate the potential need to list additional species pursuant to the ESA, and develop cooperative agreements with landowners for the protection and conservation of listed species through Candidate Conservation Agreements, Safe Harbor Agreements, and Habitat Conservation Plans.

Also included in this program category, the South Florida Coastal Habitat Restoration Program actively forms partnerships with other Federal and State agencies, local governments, non-governmental entities, and private property owners to implement "on-the-ground" restoration projects as well as to conduct research, monitoring and public outreach activities. The Coastal Program complements the larger, more comprehensive South Florida Ecosystem Restoration Initiative by implementing immediate "on-the-ground" actions designed to protect, conserve, and restore coastal living resources. For the past several years, the importance of "on-the-ground" restorative actions has been reflected by the distribution of half of the Coastal Program's budget toward actual habitat restoration.

In Fiscal Year 2004, the FWS will address new Corps of Engineers project starts and continue to be actively involved in threatened and endangered species consultation and recovery, private land partnerships, environmental contaminant reviews, coastal restoration projects, preparation of Fish and Wildlife Coordination Act Reports, system-wide water quality improvement, and a myriad of multi-agency planning, science and outreach efforts. The FWS will ensure that ecosystem benefits are maximized consistent with Everglades Restoration goals. The role of the FWS will support and advance adaptive management and the principal goals of Everglades Restoration.

#### Resource Management- Refuges and Wildlife (\$4,306,000)

The U.S. Fish and Wildlife Service (FWS) administers 16 national wildlife refuge units in South Florida. The Service manages all actions under the Endangered Species Act,

provides comments on comprehensive wetland programs (including permitting), carries out authorities of the Fish and Wildlife Coordination Act, and enforces federal wildlife laws. As a member of the South Florida Ecosystem Restoration Task Force Working Group, the FWS will continue to undertake important on-ground restoration activities.

#### Resource Management - Law Enforcement (\$636,000)

Funding will be used to enhance law enforcement's ability to handle the quickly escalating regional workload. There has been a marked increase in the illegal trafficking of exotic protected species and the unlawful "taking" of endemic species protected by the ESA and MBTA throughout South Florida. Southwest Florida is one of the most ecologically sensitive and rapidly growing areas of the State, requiring the highest priority for establishing an increased law enforcement presence. Funding will allow the purchase of vehicles, boats, and marine equipment needed by law enforcement personnel to conduct investigations in remote areas. Additional personnel will be detailed to "task force" enforcement operations within the ecosystem as needed. Increased efforts to educate the public regarding the law and illegal activities will be emphasized.

#### Resource Management - Fisheries (\$100,000)

Efforts will be directed toward restoration of anadromous and coastal fish species in South Florida. Emphasis will be placed on ensuring that non-indigenous fish species are adequately evaluated for potential effects on restoration activities.

#### *Land Acquisition* (\$1,964,000)

The 2004 request for land acquisition is necessary to acquire lands in two National Wildlife Refuge units (National Key Deer and Key West) essential to endangered and threatened species conservation in South Florida. Lands acquired will complement CERP implementation and will further the overall goals of Everglades restoration. Keystone listed species benefiting from these land acquisition initiatives include: endangered Key deer, endangered sea turtle, West Indian manatee and others.

#### • *National Key Deer* (\$500,000)

Acquisitions are for the purpose of protecting and maintaining habitat extensively used by the endangered key deer. No Name Key and Big Pine Key are the two most extensively used keys in the range of the key deer. Other notable species are also found here including the white-crowned pigeon, the mangrove cuckoo, the osprey, the brown pelican, the West Indian manatee, and the American alligator.

The greatest threat to key deer habitat is habitat modification 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 key 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 would assure the continued existence of

habitat reserved for deer movement throughout the island. Safe crossings are in need of development at two locations on U.S. Highway 1 (Overseas Highway) where the highway bisects the corridors.

Negotiations have been successful and with the availability of funding, acquisition of approximately 250 acres (owned by 15 willing sellers) within the refuge boundary is possible. These additions have been prioritized based on how beneficial they would be to the refuge. We have been working with the County and State in acquiring these properties for Service management. Both fee and easement acquisitions are options. Management costs would be approximately \$10,000 annually.

#### Key West (\$1,464,000)

Ballast Key is approximately 1,500 feet in length with varying widths from 300 to 600 feet. There is a tidal marsh in the center of the island, a significant mangrove fringe and a sandy beach. The island is immediately adjacent to an important sea turtle nesting and piping plover habitat. The refuge protects habitat for a wide variety of birds including nesting and/or wintering populations of terns, frigates birds, white-crowned pigeons, ospreys, and great white herons. The sandy beaches are nesting areas for the endangered Atlantic green and loggerhead turtles and are the only breeding site in the U. S. for the endangered hawksbill turtle.

Acquisition of Ballast Key will complete this refuge. The landowner has indicated he is willing to sell. Appraisals are being completed and The Nature Conservancy will negotiate a purchase agreement. This would be a phased acquisition over two to three years, since total anticipated acquisition costs will be between \$3.5 and \$4 million. Fee purchase is the only option agreeable to the landowner. There is strong public support for acquisition of Ballast Key and completion of the Key West refuge.

Long-term management costs for this tract would be minimal, less than \$5,000 annually. The refuge is fully staffed and equipped to handle the management of this additional tract.

#### U.S. Department of the Interior: U.S. Geological Survey

### Everglades Restoration: Integration Research, Planning, and Interagency Coordination (\$12,636,000)

In FY2003 and 2004, the USGS will continue to provide the planning, research, and interagency coordination efforts needed for Everglades restoration, in accordance with the terms of the Memorandum of Understanding that clarifies DOI collaboration in this effort. An integrated program of \$12.6 million will assist the USGS to leverage resources, maximize the value of Federal research funds, and ensure that the best available research products and monitoring and assessment tools are developed to meet the needs of the National Park Service and the Fish and Wildlife Service. These land management bureaus are responsible for the stewardship of one-half of the remaining Everglades ecosystem and for providing technical expertise to the U.S. Army Corps of Engineers as it implements, with the State of Florida, one of the largest watershed restoration programs in the world.

In FY 2004, the President's budget proposes the transfer of \$4.0 million in Critical Ecosystem Studies Initiative (CESI) funds (included in the \$12.6 million) from the NPS to the USGS. This funding transfer assists in maintaining a coordinated science approach within the Everglades restoration effort, as USGS is the lead science bureau for the Department. In FY 2004, the USGS will use the CESI funds to continue high-priority work that includes long-term ecological monitoring, adaptive environmental assessment, and development of simulation-based decision support tools for the DOI resource management bureaus (NPS and FWS) in South Florida. These tools will be used in the CERP implementation. CESI funds will also continue to support the South Florida Ecosystem Restoration Task Force's planning and interagency coordination activities.

Overall, USGS research will continue to focus on long-term research efforts that provide the scientific framework for restoration goals. With its nationally available expertise in biology, geology, mapping and water resources, USGS conducts single discipline, multi-discipline, and interdisciplinary research relevant to restoration of the greater Everglades and adjacent coastal ecosystems of South Florida. Over the past several years, USGS program funding has supported ecosystem studies that include program planning, data collection, process studies, and development and implementation of modeling and decision support tools. The initial studies concentrated in areas of the greater Everglades and coastal systems that were expected to realize the earliest changes resulting from CERP implementation. Many of these projects are information towards development whole-system contributing of ecological/hydrological model of the Everglades Park, Shark River Slough and southwest Everglades coastal system. An important aspect of the work will be analyzing and integrating the scientific data to provide decision making information to DOI resource managers and those within DOI dealing with policy issues (specifically NPS and FWS). Specific products include surface and subsurface hydrologic models linking the output of the South Florida Water Management District's Surface Water Management Model product at Tamiami Trail to flows through Everglades Park to Florida Bay and the southwest Everglades coast. The USGS hydrologic model will not only address flows through the Everglades Park into Florida Bay, but the model will provide a mechanism that ultimately will include chemical and sediment transport.

New research recently initiated will link the higher quality resolution hydrological models to the Across Trophic Level System Simulation (ATLSS) predictive ecological models, a series of linked models that permit prediction of the effects of various restoration scenarios on biological resources of concern. ATLSS relies on high-resolution topography coupled with landscape and hydrological models, and links these to ecological models for producer and consumer organisms and populations of special emphasis. New USGS work will focus on developing in August 2003, a GIS-based and web-accessible data viewing system similar to the personal computer-based system – called the ATLSS Data Viewing System – currently in early release. These GIS-based data viewing systems and decision support systems will greatly enhance the ability of resource managers and policy makers in assessing and evaluating CERP projects, as they are being planned and implemented.

A high-resolution topographic survey at a 400-meter scale of the natural Everglades is nearly complete; all data are readily available via Internet access. Work over the next 2-3 years will complete the entire natural system including Loxahatchee National Wildlife Refuge. In

addition, site-specific topographic surveys will be conducted as needed for key habitats and for key species. Landscape and plant community maps are being developed and refined using innovative remote sensing and GIS techniques to map vegetation and link vegetation characteristics to related hydrologic variables. These mapping tools are essential for assessing landscape-related changes as the various CERP projects are implemented.

Published reports show that mercury contamination continues to remain a significant problem in the Everglades. USGS research indicates that mercury bioaccumulation is more closely linked to 'new' rather than 'old' mercury. Current studies indicate most CERP restoration activities, if properly implemented, will reduce the negative effects of mercury. New studies are more closely assessing the link between mercury and other contaminants to biogeochemical processes that are expected to be modified, and perhaps improved, through CERP projects.

Full utilization of the information from these studies depends on the extent to which the information can be made available to the managers and decision-makers in a timely manner. For this reason, future efforts will continue to enhance the South Florida Information Access (SOFIA) web site (<a href="http://sofia.usgs.gov/">http://sofia.usgs.gov/</a>) as the main Internet portal for accessing data, metadata, monitoring programs, fact sheets and reports on all USGS-generated greater Everglades information. SOFIA will be enhanced by being linked to a geographic database system to increase ease of use and access to information on a geographical and landscape basis. Future efforts will include ensuring information dissemination through such means as journal publications, data reports, reports to cooperators, presentations at scientific meetings, seminars and workshops and use of the Internet. In addition, SOFIA is continually updating the K-12 educational outreach component for access by students and teachers.

Additionally, the South Florida Ecosystem Restoration Task Force office will conduct planning and interagency coordination activities in FY 2004. These activities include the biennial updating, reporting, and implementation activities as required by the Congress regarding the Task Force's outcome-oriented Strategic Plan; interagency coordination program for the science review activities performed by the National Research Council's CROGEE (Committee on Restoration of the Greater Everglades Ecosystem); and coordination and implementation activities for the Task Force's Invasive Exotic Plant Control Strategy.

#### U.S. Department of the Interior-Bureau of Indian Affairs (BIA) - (\$396,000)

Funds are included for the continuing efforts to restore the South Florida Ecosystem in the Tribal Priority Allocations base funding for the Seminole and Miccosukee Tribes. This funding (\$198,000 each) enables the Tribes to complete the design and cost estimates of stormwater treatment areas on the Seminole and Big Cypress reservations, conduct research and studies on water quality and distribution systems, ecosystem development and management, and planning for compliance with the Endangered Species Act. The stormwater treatment areas will be treated to reduce the concentration of phosphorous and other nutrients in water essential to the protection and restoration of the Everglades ecosystem.

#### U.S. Environmental Protection Agency (USEPA) (\$4,678,200)

EPA funds are devoted to a number of key ecosystem restoration issues including, natural resources management, water quality and habitat protection, information management and assessment, science and research, and infrastructure investment. For example, EPA and the

Corps are implementing wetlands conservation, permitting, and mitigation strategies that include interagency mechanisms to coordinate the permitting planning and mitigation planning needed to implement the existing regulatory programs with the greatest efficiency in the face of intense development pressure.

In addition, resources support the National Coastal Assessment and Global Climate research on coral reefs, the Coral Research effort examining UV and Disease interactions, and the development of Models and Measurements for investigating atmospheric transport and photochemistry of Mercury (HG).

#### FEDERAL NON-CERP FUNDING SUMMARY (ACTUAL \$)

TEDERAL NON-CERI	TONDING	<u> </u>	(11C1 O11D ψ)		
NON-CERP PROJECTS/PROGRAMS	FY 2001	FY 2002	FY 2003	FY2004	
	Enacted	Enacted	Enacted	Request	
USACE-Central and Southern Florida				-	
(excluding CERP)	56,182,000	64,949,000	49,983,000	72,935,000	
USACE -Critical Projects	20,485,000	19,876,000	19,526,000	14,835,000	
USACE- Kissimmee River Restoration	19,961,000	25,846,000	23,727,000	17,706,000	
USACE-Biscayne Bay	543,000	240,000	200,000	0	
USDA - ARS	4,193,000	4,846,900	4,200,9002	4,200,900	
USDA-NRCS	5,297,000	37,752,000	36,250,000 <sup>2</sup>	41,250,000	
US Department of Commerce-NOAA	4,264,000	4,065,000	4,065,000	4,065,000(2)	
USDOI-NPS Park Management	23,389,000	23,635,000	23,874,000	24,194,000	
USDOI-South Florida Ecosystem					
Restoration Task Force	1,316,000	1,325,000	1,320,000	1,332,000	
USDOI-NPS Modified Water Deliveries	8,980,000	35,199,000 (3)	9,935,000	12,990,000	
USDOI-NPS Land Acquisition (Mgmt.)	2,075,000	2,800,000	2,782,000	2,300,000	
USDOI-NPS Land Acquisition (Big					
Cypress)	0	0	0	40,000,000	
USDOI-NPS Land Acquisition Grants to					
Florida	11,974,000	15,000,000	14,924,000	0	
USDOI-NPS Land Acquisition Grants to					
Florida Administration	0	0	497,000	0	
USDOI-NPS Critical Ecosystem Studies					
Initiative	6,194,000	4,000,000	3,974,000	0	
USDOI-FWS Ecological Services	2,554,000	2,554,000	2,537,000	2,554,000	
USDOI-FWS Refuges and Wildlife	3,706,000	3,706,000	3,682,000	4,306,000	
USDOI-FWS Law Enforcement	636,000	636,000	632,000	636,000	
USDOI-FWS Fisheries	100,000	100,000	99,000	100,000	
USDOI-FWS Land Acquisition	10,975,000	8,500,000	2,484,000	1,964,000	
USDOI- USGS – Integrated Research,					
Planning and Interagency Coordination	8,553,000	8,636,000	8,580,000	12,636,000	
USDOI-USGS DOI's Integrated Studies					
for Everglades Restoration	0	0	0	[4,000,000]	
USDOI-USGS Current Research	• · · · · · · · · · · ·				
Activities (4)	[8,553,000]	[8,636,000]	[8,580,000]	[8,636,000]	
USDOI- BIA	396,000	396,000	393,000	396,000	
US Environmental Protection Agency	4,582,000	5,338,300	4,510,5002	4,678,200	
Non-CERP Sub Total (USACE and					
USDOI)	178,019,000	217,398,000	169,149,000	208,884,000	
Non-CERP Sub Total (Other Federal	18,336,000	52,002,200	49,026,400	54,194,100	
Agencies)	406 677 063	060 100 05	240 ( = 7 400	0.00.000.100	
NON-CERP SUBTOTAL (All Federal	196,355,000	269,400,200	218,175,400	263,078,100	
Agencies):  Note: Base program and operational funding requests for the U.S. Environmental Protection Agency, U.S. Department of Commerce, U.S.					

Note: Base program and operational funding requests for the U.S. Environmental Protection Agency, U.S Department of Commerce, U.S. Department of Agriculture and the U.S. Army Corps of Engineers are not included in the information provided within the FY 2004 Cross-Cut Budget.

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> USACE CERP activities are funded under the Central and Southern Florida Project (C&SF)

<sup>&</sup>lt;sup>2</sup> This figure reflects President's FY 2003 Budget request. Enacted figures were not available at the time of document publication.

<sup>&</sup>lt;sup>3</sup> Reflects \$19,199,000 for construction and \$16,000,000 for land acquisition

<sup>&</sup>lt;sup>4</sup> Bracketed dollars are already included in the totals for the USDOI-USGS Integrated Research, Planning and Interagency Coordination.

# Section 3.0: State of Florida Everglades Ecosystem Restoration Program Funding and Project Information

# Section 3.1: Comprehensive Everglades Restoration Plan Projects and Funding (\$225,705,702)

This section of the Cross-Cut Budget includes descriptions for all State agency projects and funding for CERP Restoration Projects as follows:

#### Florida Department of Environmental Protection (FDEP) (\$105,586,702)

The implementation of the Comprehensive Everglades Restoration Plan (CERP) in partnership with the South Florida Water Management District, Tribes, and other State, Federal, local agencies and environmental groups is a high priority for the Department. The Department is represented on the South Florida Ecosystem Restoration Task Force and Working Group, Project Delivery, Design Coordination and RECOVER Teams associated with the implementation of CERP.

The State of Florida is a full partner in CERP implementation having adopted the Everglades Restoration Investment Act in 2000 providing \$100,000,000 per year for 10 years. The amount will be matched with local sponsor funds and credits for a total of \$200,000,000 per year for 10 years.

The Department administers the Save Our Everglades Trust Fund.

Total FY 2002-03 expenditures through January 31, 2003 are \$113,625,422.92 for CERP land acquisition.

The Department expects to spend an additional \$100,000,000 to acquire land needed for CERP implementation in FY 2003-04.

Projects funded in 2002-03 include the Water Preserve Area (Cell 11, WCA 3A/3B levee Seepage Management, Bird Drive Basin), and Indian River Lagoon South (C-23/24 North Reservoir and Allapattah Flats).

#### Southern Golden Gate Estates (SGGE)

In FY 2002-03 the state spent \$47,332,000 to acquire land in SGGE. The Department anticipates the expenditure of approximately \$3,000,000 in FY 2003-04 to complete the land acquisition totaling 55,247 acres.

*Henderson Creek/Belle Meade CERP Project* – The Department anticipates expenditures of \$131, 250 in the design phase.

The Department's Tallahassee Office of Ecosystem Projects (Office of the Secretary) And Special Projects Section (Division of Water Resource Management) estimates a cost of \$255,790 and \$326,787 respectively to oversee the CERP implementation in FY 2003-04. The Department's Southeast Florida District office in West Palm Beach and South Florida District in Ft. Myers estimates expenditures of approximately \$365,375 and \$39,500 respectively in support of CERP project implementation in FY 2003-04.

We will also have a request for \$1,500,000 for the CERP Comprehensive Water Quality Feasibility Study in FY 2003-04.

#### Florida Fish and Wildlife Conservation Commission (FWC) (\$419,000)

The FWC contributes to CERP projects by participating on interagency planning teams to ensure that CERP activities address the needs of fish and wildlife and associated habitat. The Office of Environmental Services coordinates FWC comments under the Fish and Wildlife Coordination Act and the National Environmental Policy Act.

The Office of Environmental Services, Division of Freshwater Fisheries, the Florida Marine Research Institute, and the Office of the Executive Director actively participate on RECOVER, various Project Delivery Teams, and other CERP related teams.

### South Florida Water Management District (SFWMD)(\$119,700,000) *Implementation of CERP*:

The South Florida Water Management District (SFWMD) is the local sponsor for 46 of the 55 CERP projects included in the Comprehensive Everglades Restoration Plan (CERP). Planning and design is currently underway on approximately 14 of these projects. The focus of the SFWMD's efforts during FY2003 and 2004 will be on planning and design efforts associated with completion of Project Implementation Reports for restoration projects and Pilot Project Design Reports for the six authorized pilot projects.

The SFWMD is also engaged in acquisition of lands needed for CERP projects. Current efforts are focused on acquisition of lands from willing sellers for the ten initially authorized projects and other projects identified for early implementation, and lands needed for projects located in areas with significant development pressure.

In addition to these project efforts, the SFWMD is partnering with the Corps on several programmatic efforts that are necessary for implementation of the CERP. These programmatic activities include implementation of public outreach and environmental and economic equity plans; development of a Master Recreation Plan for the CERP; implementation of the Restoration Coordination and Verification (RECOVER) including a system-wide monitoring plan and an adaptive assessment; and development of an interagency modeling center to support CERP projects.

CERP PROJECTS FUNDING SUMMARY (ACTUAL \$)

CERP PROJECTS	FY 2000-01	FY 2001-02	FY 2002-03	FY2003-04
	Enacted	Enacted	Requested	Requested
Department of	89,619,051	90,380,949	150,279,126	105,586,702
Environmental Protection				
Florida Fish and Wildlife	315,000	411,000	409,000	419,000
Conservation Commission				
South Florida Water	32,773,071	91,708,816(1)	133,284,645 <sup>(1)</sup>	119,700,000(2)
Management District				
TOTAL:	122,707,122	182,500,765	283,972,771	225,705,702

#### Footnotes:

# Section 3.2: Non-CERP Everglades Ecosystem Restoration Projects/Programs (\$547,318,658)

This section of the Cross-Cut Budget includes descriptions for all State agency projects and funding for Non-CERP Everglades Ecosystem Restoration Projects as follows:

### Florida Department of Agriculture and Consumer Services (FDACS) (\$31,215,000)

The Florida Department of Agriculture and Consumer Services, through its Office of Agriculture Water Policy, addresses water issues relating to agriculture and ecosystem restoration. The Department is responsible for agriculture nonpoint source water pollution and for implementing and addressing Total Maximum Daily Load in water bodies and segments statewide. Lake Okeechobee is the first recipient of a TMDL in Florida and the Department has implemented a program in the Lake's basin to deal with agriculture nonpoint sources. The Department also plays an important role in the management of public lands, through its Division of Forestry. The Division is the lead managing agency on Picayune State Forest (Southern Golden Gate Estates and Belle Meade) and is the State agency responsible for wildfire suppression, prevention and forest protection in South Florida.

Funding for the Department of Agriculture and Consumer Services has doubled for fiscal year 2003-04 because of the submission of a legislative request for an additional \$15,000,000 appropriation. If approved, the additional \$15,000,000 will be used to implement farm specific "Best Management Practices" primarily on dairies within the Okeechobee Watershed.

#### Department of Community Affairs (DCA) (\$45,819,724)

The Florida Communities Trust provides grants to local governments to acquire conservation, recreation and green space lands in the 16 counties within the boundaries of the South Florida Water Management District. The DCA also participates on the

The Reflects SFWMD adopted budget appropriations less any State Department of Environmental Protection appropriations to the Save Our Everglades Trust Fund and Federal Department of Interior Funds.

<sup>&</sup>lt;sup>2</sup>Since the publication date of each year's Cross-Cut Budget precedes the budget cycle for the SFWMD, the FY2003/04 totals shown represent estimates. When FY 2003/04 budget totals are available, they will be posted on the website link to the FY 2004 Cross-Cut Budget at www.sfrestore.org. The same information will also be included in the FY 2005 Cross-Cut Budget document.

South Florida Ecosystem Restoration Working Group and its committees, providing expertise on comprehensive land use planning, growth management, affordable housing, disaster relief and hazard mitigation.

#### Florida Department of Environmental Protection (FDEP) (\$92,364,834)

The Department's Non-CERP Everglades Ecosystem Restoration Project priorities include implementation of the Everglades Forever Act and the Lake Okeechobee Protection Program (in cooperation with the South Florida Water Management District), and land acquisition for conservation purposes.

Expenditures of \$326,787 are anticipated for FY 2003-04 for the Everglades Technical Review Section. For FY 2003-04 it is anticipated that expenditures of approximately \$10,000,000 for projects designed to achieve phosphorus load reductions in Lake Okeechobee as a part of the Lake Okeechobee Protection Program.

The Department will spend approximately \$70,000,000 during 2002-2003 and \$50,000,000 during 2003-04 to acquire Non-CERP conservation lands in South Florida.

The Department of Environmental Protection is Florida's principal environmental protection agency. The Department protects and monitors air and water quality, acquires and manages land important to ecosystem protection. It regulates air emissions, dredging and filling activities, mining and oil and gas production, development and exploration, prevents pollution and implements recycling programs, regulates solid and hazardous waste, operates and manages the State Park System; and protects and manages coastal marine and estuarine resources.

The Department supports water quality improvement programs for Section 303d, the Clean Water Act, listed water bodies, ecosystem restoration project management, regulatory, watershed planning and coordination activities, research and monitoring, aquatic plant control, and land acquisition and management. The Department's budget for FY 2003-04 has projected expenditures of approximately \$32,038,747 for these activities in South Florida:

- Aquatic and Upland Exotic/Invasive Plant Control (\$9,500,000)
- State Park Operations and Management (\$15,168,382)
- Office of Ecosystem Research (\$255,790)
- Mercury Research and Monitoring (\$1,087,516)
- Central Florida District Office (\$15,000)
- Coastal and Aquatic Managed Areas (\$5,229,059)
- Total Maximum Daily Load Program (\$783,000)

#### Florida Fish and Wildlife Conservation Commission (FWC) (\$25,729,000)

The FWC contributes to Federal and State restoration projects within the South Florida Ecosystem. In addition the FWC contributes to state land acquisition programs through its Inholdings and Additions program, targeting lands within or contiguous to areas currently managed by the FWC.

The Office of Environmental Services contributes to the Federal Non-CERP restoration projects by participating in multi-agency planning teams, and through land acquisition. The Division of Freshwater Fisheries has an on-going lake enhancement and restoration program. In FY 2002-2003 FWC spent funds on Lake enhancement projects for Lake Istokpoga, Kissimmee, Jackson, and Walk-in-Water. Planned restoration of Lake Tohopekaliga was postponed and is anticipated to be activated in FY 2003-2004. In addition to lake restoration, FWC programs support non-native fish research and management, aquatic plant management, panther restoration research, and alligator management throughout the Everglades Ecosystem.

The FWC conducts a number of programs aimed at habitat maintenance, species research, and GIS-based data analyses. The Division of Wildlife manages over 1 million acres of public lands throughout the area. The Division of Freshwater Fisheries supports ecosystem-wide studies of fish populations. The Marine Research Institute conducts a number of regionally-connected studies on a range of species. The Division of Law Enforcement ensures that laws protecting fish, wildlife, and their habitats are enforced in upland, freshwater, and marine areas of the Everglades Ecosystem. Multiple programs of the FWC support outreach and education programs, including the Everglades Youth Camp, Urban Fishing Programs, Wildlife Curriculum support, and general fish and wildlife outreach in the area.

#### Florida Department of Transportation (FDOT) - (\$2,090,000)

The Florida Department of Transportation (DOT) provides a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities. The Department assists local and regional government agencies with funding, planning, design, mapping, transportation research and technical assistance. DOT also plans and implements programs for energy efficient transit, public transit, transportation programs for the disadvantaged and handicapped and assists agencies in planning safe bicycle routes. The DOT is a leader among transportation agencies in the nation for protecting wildlife and redesigning roadways to restore natural water flow to over drained areas. DOT is also a leader in providing funding and technical assistance to plan and implement greenways and trails. Many of these bellwether programs have been implemented in South Florida, particularly the Big Cypress Swamp (Interstate 75/Alligator Alley), Tamiami Trail and U.S.1 to the Florida Keys.

The Department's expenditures for South Florida Ecosystem Restoration related programs in fiscal year 2003/2004 are:

- Everglades Awareness Radio Project Add software and hardware to existing FDOT radio towers located at Miles City, Naples, and Ft. Lauderdale. FDOT obtained federal broadcast licenses for two locations. This is a joint project by FDOT and FDEP to promote public awareness of Everglades restoration efforts and to provide emergency assistance to the traveling public. (\$200,000)
- Provide funding to FDEP to develop natural areas of the Everglades Trail as educational focal points (\$110,000)
- Mitigation (wetland enhancement, public access) (\$180,000)

- Removal of exotic vegetation (\$1,600,000)
- Watershed signage program Partnership effort with EPA to promote watershed awareness through signs and public education

#### South Florida Water Management District (SFWMD) (\$350,100,000)

The SFWMD is constructing and implementing the Everglades Construction Project (ECP) and, additionally, works closely with the Florida Department of Environmental Protection (FDEP) and other State, Federal, and tribal governments on other non-CERP programs to restore and protect the South Florida Ecosystem.

The SFWMD's priority Non-CERP Everglades Ecosystem Restoration and Protection Projects include:

- (1) Implementation of the ECP mandated by the Everglades Forever Act through land acquisition, construction of stormwater treatment areas (STAs), hydropattern restoration projects and implementation of the Everglades Program control of exotic plants, research and monitoring, and regulation;
- (2) Restoration of the Kissimmee River and floodplain (in cooperation with the Corps) through land acquisition, construction (backfilling 22 miles of canal and opening 9 miles of remnant river channel) and a comprehensive ecological evaluation program.
- (3) Implementation of the Lake Okeechobee Protection Program (in cooperation with FDACS, FDEP and the Corps) which is focused on restoration and protection of the lake by reducing nutrient loading and controlling the spread of nuisance and exotic plants; and restoring isolated wetlands.
- (4) Restoration of the southern Everglades and Florida Bay (in cooperation with the Corps and Everglades National Park (ENP) through the C-111 and Modified Water Deliveries Projects, land acquisition, and operational changes to restore natural water flows to ENP and Florida Bay;
- (5) Development and implementation of regional water supply plans;
- (6) Acquisition of lands needed for ongoing and future non-CERP restoration projects and for conservation and protection of critical habitat;
- (7) Implementation of seven Critical Restoration Projects in cooperation with the Corps; and
- (8) Restoration of coastal ecosystems through pollutant load reduction and habitat restoration.

The Florida Legislature also requires the SFWMD to manage water and related land resources; promote conservation, development and use of surface and groundwater for reasonable beneficial uses; manage dams, impoundments, and other "Works of the

District" to provide water storage; prevent flood and soil erosion damage; maintain navigable rivers and harbors; and promote outdoor recreation on publicly owned lands.

In addition to ecosystem restoration projects, the SFWMD expends a significant amount of staff time and contract dollars toward implementation of restoration program support activities such as land management, control of invasive exotic plants, research and monitoring, environmental resource permitting, and intergovernmental coordination.

### NON-CERP EVERGLADES ECOSYSTEM RESTORATION PROJECTS/PROGRAMS (ACTUAL \$)

NON-CERP EVERGLADES ECOSYSTEM RESTORATION PROJECTS/PROGRAMS						
Florida Department of Agriculture/	24,700,000	7,608,917	15,523,202	31,215,100		
Consumer Services						
Department of Community Affairs	31,830,000	9,800,000	10,000,000	45,819,724		
Florida Department of Environmental	135,422,927	72,654,344	109,393,692	92,364,834		
Protection						
Florida Fish and Wildlife Conservation	17,271,000	19,681,000	21,306,000	25,729,000		
Commission						
Florida Department of Transportation	16,104,000	4,931,000	10,528,832	2,090,000		
South Florida Water Management	268,873,786	395,314,127	372,701,387 <sup>(3)</sup>	350,100,000(2)		
District						
TOTAL:	494,201,713	509,989,388	539,453,113	547,318,658		

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> Reflects SFWMD adopted budget appropriations less state funding received from the Lake Okeechobee Trust Fund. <sup>2</sup> Since the publication date of each year's Cross-Cut Budget precedes the budget cycle for the SFWMD, the FY2003/04 totals shown represent estimates. When FY 2003/04 budget totals are available, they will be posted on the website link to the FY 2003 Cross-Cut Budget at www.sfrestore.org. The same information will also be included in the FY 2005 Cross-Cut Budget document.

## Section 4.0: Background Information for Reference on Everglades Ecosystem Restoration Strategic Plan

Introduction: The South Florida Ecosystem is an 18,000- square-mile region of subtropical uplands, wetlands, and coral reefs that extends from the Chain of Lakes south of Orlando through the reefs southwest of the Florida Keys. This Ecosystem not only supports the economy and the quality of life of the Floridians and the Native American Indians who live there, but also enriches the legacy of all Americans. It encompasses many nationally significant conservation areas, including Everglades and Biscayne National Parks, Big Cypress National Preserve, the Arthur R. Marshall Loxahatchee National Wildlife Refuge, and the Florida Keys National Marine Sanctuary. This Ecosystem is sustained by water, and it has been seriously degraded by disruptions to the natural hydrology. Engineered flood control and water distribution systems for agriculture and urban development have dewatered large areas and greatly altered the quantity, timing, and distribution of water flows in other locations. Agricultural runoff and urban stormwater have introduced phosphorus and other contaminants into the water systems, polluting lakes, rivers, and wetlands. Discharges of stormwater into estuaries and coastal waters have severely degraded aquatic habitats. Groundwater is threatened by saltwater intrusion and other pollutants. These impacts have stressed the natural system, as evidenced by:

- Fifty percent reduction in the original extent of the Everglades
- Ninety percent reduction in wading bird populations
- Sixty-nine species on the Federal endangered or threatened list
- Declines in commercial fisheries in Biscayne and Florida Bays
- Thirty- seven percent loss of living corals at forty sites in the Florida Keys National Marine Sanctuary from 1996-2000.

#### Who Is Involved

Six Federal departments (twelve agencies), seven Florida State agencies or commissions, two American Indian tribes, sixteen counties, scores of municipal governments, and interested groups and businesses from throughout South Florida are participating in the restoration effort. Four sovereign entities (Federal, State, and two tribes) are represented. The task force sought extensive involvement from local agencies, citizen groups, nonprofit organizations, and other interested parties as part of its assessment for this strategy. The task force was created in 1993 as a Federal interagency partnership, with informal participation by the State of Florida, the Seminole Tribe of Florida, and the Miccosukee Tribe of Indians of Florida. The Water Resources Development Act of 1996 authorized the operation of the task force and provided for specific membership and duties. Pursuant to its statutory duties, a Task Force working group of agency and tribal representatives (the working group) works to resolve conflicts among participants, coordinate research, assist participants, prepare an integrated financial plan, and report to Congress. The Task Force does not have any oversight or project authority, and participating agencies are responsible for meeting their own targeted accomplishments. The task force's role as a forum in which ideas are shared and consensus is sought enhances the productivity of each member government or agency effort.

#### Vision and Goals

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

#### Goal 1: Get the Water Right

Sub goal 1-A: Get the Hydrology Right Sub goal 1-B: Get the Water Quality Right

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

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

#### Goal 3: Foster compatibility of the built and natural systems

Sub goal 3-A: Use and manage land in a manner compatible with ecosystem restoration. Sub goal 3-B: Maintain or improve flood protection in a manner compatible with ecosystem restoration

Sub goal 3-C: Provide sufficient water resources for built and natural systems

The task force members believe that by accomplishing these objectives they will achieve the restoration of the ecosystem. The region's rich and varied habitats will become healthy feeding, nesting and breeding grounds for diverse and abundant fish and wildlife.

The appropriate agencies will track progress toward restoring the ecosystem through approximately 200 indicators of success. 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 important to ecosystem health. The Task Force agencies that are tracking indicators of success provide data to the task force, which synthesizes the information for its reports. The following measures are a representative subset of a broader list of indicators for tracking success.

- 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
- 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 needs met in all years up to and including those years with droughts with a one-in-ten-year return frequency
- At least 40,000 acres of total submerged vegetation, including benthic macro-algae, around the shoreline of Lake Okeechobee on an ongoing basis
- Approximately 900 acres of healthy oyster beds in the major St. Lucie Estuary
- A nesting population of roseate spoonbills of at least 1,000 pairs annually distributed throughout Florida Bay, and some level of nesting by spoonbills in the coastal zone of the southwestern gulf coast
- No further degradation of tree islands, and recovery of as much as possible of the number and acreage of islands present in WCA 2 and WCA 3 in 1940
- A 65-70 percent coverage of Florida Bay with high-quality seagrass beds.
- A long-term commercial harvest of pink shrimp on the Dry Tortugas fishing grounds that equals or exceeds the 600 pounds per vessel-day that occurred during the seasons 1961-62 to 1982-83; and an amount of large shrimp in the long term average catch exceeding 500 pounds per vessel.

#### Restoration Strategy

The role of the Task Force is not to manage the South Florida restoration, but to facilitate the coordination of the restoration, provide a forum for participation agencies to share information about their restoration projects, and report on their progress. Congress and other stakeholders are particularly interested in how each agency's efforts contribute to the larger framework of total ecosystem restoration. 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, the members are accountable individually to their appropriate authorities and to each other for the success of the restoration.

The Task Force and its members coordinate and track the restoration effort as follows:

#### Focus On Goals

The document entitled "Coordinating Success: Strategy for Restoration of the South Florida Ecosystem" establishes specific goals and measures that define the scope of the restoration initiative and answer these fundamental questions: What will the restoration partners accomplish? When will the restoration effort be done? What key indicators will signal progress and success?

#### Coordinate Projects

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

#### Track and Assess Progress

The Task Force will facilitate the implementation of the individual entities' adaptive assessment processes to track and assess progress. Adaptive assessment involves constantly monitoring project contributions and indicators of success to determine the actual versus expected results of various actions. This process acknowledges that not all the data needed to restore the South Florida Ecosystem are available now. As project managers track incremental progress in achieving objectives they may raise "red flags" alerting the task force members that a project (1) is not on schedule or (2) is not producing the projected outputs or anticipated results. The ability to anticipate problems early helps to minimize their effect on the total restoration effort. Management responses may involve revising the project design, evaluating changing resource needs, or working collaboratively on projects that fall behind. Projects that are not proving effective may be replaced with new projects. Because each Task Force member is responsible for its particular programs, projects, and funding, such decisions are made by the entities involved.

#### Facilitate the Resolution of Issues And Conflicts

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

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

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

**NOTE:** The information provided in Section 4.0 is an edited excerpt from the document entitled "Coordinating Success: Strategy for Restoration of the South Florida Ecosystem." This document was prepared by the South Florida Ecosystem Restoration Task Force and submitted to the Congress in August 2002.

### Acknowledgments

Governmental Agencies and Entities of the South Florida Ecosystem Restoration Task Force and Working Group who have provided budget information for inclusion in this edition of the Cross-Cut Budget are listed below:

#### Federal:

United States Department of Agriculture

United States Department of Army

United States Environmental Protection Agency

United States Department of Commerce

United States Department of the Interior

#### State:

Executive Office of the Governor of Florida

Florida Department of Agriculture and Consumer Services

Florida Department of Community Affairs

Florida Department of Environmental Protection

Florida Fish and Wildlife Conservation Commission

Florida Department of Transportation

South Florida Water Management District