Cross-Cut Budget Task Force Working Document

Fiscal Year 2009

South Florida Ecosystem Restoration Program

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Section 1.0

Overview

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Section 1.0: Introduction

Section 1.1: Overview

The information in this document is reported annually by the members of the South Florida Ecosystem Restoration Task Force and Working Group and is compiled by the Office of the Executive Director. It consists of three sections. Section 1.0 provides an overview and includes summary tables for the federal and state budget requests.

Section 2.0 provides detailed information concerning the Federal Everglades Ecosystem restoration projects and funding. Section 2.1 addresses the Comprehensive Everglades Restoration Plan (CERP) projects and funding, and Section 2.2 addresses non-CERP projects and funding. The base program and operational funding requests for some federal agencies are not included in the document.

Section 3.0 provides the detailed information concerning State Everglades Ecosystem restoration projects and funding. Section 3.1 addresses CERP projects and funding, and Section 3.2 addresses non-CERP projects and funding. The Fiscal Year (FY) 2008-09 totals shown represent estimates for the South Florida Water Management District (SFWMD). When finalized the FY 2008-09 actual budget totals for SFWMD will be posted on the website www.sfrestore.org.

Section 1.2: Federal and State of Florida Funding Summary Tables

The following tables provide a summary of the detailed funding information found in Sections 2.0 and 3.0 of this document. Table 1 includes budget information provided by federal members and Table 2 includes budget information provided by the State of Florida members.

The funding for the federal agencies and SFWMD reflects a fiscal year that begins on October 1 and ends on September 30 of each year. The funding for other state agencies reflects a fiscal year that starts on July 1 and ends on June 30 of each year.

TABLE 1: FEDERAL FUNDING SUMMARY (ACTUAL \$)

EVERGLADES ECOSYSTEM	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
RESTORATION PROJECTS	Enacted	Enacted	Enacted	Enacted	Enacted	Enacted	Enacted	Enacted	Requested
COMPREHENSIVE EVERGLADES RESTORATION PROGRAM (CERP)									•
USACE- CERP (Part of Central and									
Southern Florida) ¹	21,747,000	27,961,000	37, 062,000	39, 063,000	64, 446,000	62,610,0002	64, 000,000	64,000,000	92,363,000
USDOI - NPS CERP	2,497,000	5,544,000	5,513,000	5,463,000	5,213,000	5,174,000	5,212,000	5,211,000	5,253,00010
USDOI - FWS CERP	651,000	3,351,000	3,329,000	3,309,000	3,304,000	3,269,000	3,269,000	3,250,000	3,250,000
NON- COMPREHENSIVE EVERGLAD	ES RESTORA	TION PROGRA	AM (CERP)						
USACE - Central and Southern Florida									
(excluding CERP) 3, 4	56,182,000	64,949,000	49,983,000	64,906,000	8,029,000	9,126,000	6,447,000	14,505,000	7,825,000
USACE - Critical Projects ^{3, 4}	20,485,000	19,876,000	19,526,000	14,760,000	25,813,000	11,880,000	8,289,000	8,156,000	3,797,000
USACE-Kissimmee River Restoration ^{3,4}	19,961,000	25,846,000	23,727,000	17,616,000	17,871,000	13,042,000	50,264,000	30,968,000	31,015,000
USACE - Biscayne Bay ³	543,000	240,000	200,000	0	74,000	0	0	0	0
USACE- Modified Water Deliveries ⁴						34,650,000	35,000,000	9,840,000	50,000,000
USDA - ARS	4,193,000	4,846,900	5,216,800	5,415,100	6,101,000	4,908,600	4,941,000	4,754,500	3,928,900
USDA- NRCS	5,297,000	37,752,000	21,376,000	23,580,000	62,539,337 5	61,505,271 5	5,143,335	13,240,17511	41,779,000
US Department of Commerce - NOAA	4,264,000	4,065,000	4,065,000	4,359,000	4,389,000	3,000,000	3,000,000	3,000,000	TBD ⁹
USDOI - NPS Park Management									
3	23,389,000	23,635,000	23,874,000	23,991,000	25,266,000	25,832,000	26,377,000	28,991,000	30,210,000
USDOI - South Florida Ecosystem	1.016.000	1 225 000	1 220 000	1 200 000	1 200 000	1.006.000	1 207 000	1 202 000	1 202 000
Restoration Task Force	1,316,000	1,325,000	1,320,000	1,308,000	1,290,000	1,286,000	1,307,000	1,303,000	1,303,000
USDOI - NPS Critical Ecosystem Studies Initiative	6,194,000	4,000,000	3,974,000	3,937,000	3,882,000	3,840,000	3,864,000	3,849,000	3,849,000
USDOI - NPS Modified Water	0,21 2,000	_,,,,	2,77 2,000	2,721,722	2,002,000	2,0 20,000	2,002,000	0,025,000	2,022,000
Deliveries	8,980,000	35,199,000 6	9,935,000	12,830,000	7,965,000	24,962,000 7	13,330,000	14,299,000	10,000,000
USDOI - NPS Land Acquisition		, ,	, ,	, ,	, ,	, ,	, ,		, ,
(management)	2,075,000	2,800,000	2,782,000	1,800,000	1,500,000	690,000	500,000	750,000	800,000
USDOI - NPS Land Acquisition Grants									
to Florida	11,974,000	15,000,000	15,421,000	(5,000,000) 8	0	0	0	0	0
USDOI - FWS Ecological Services	2,554,000	2,554,000	2,537,000	2,523,000	2,518,000	2,516,000	2,521,000	2,482,000	2,443,000
USDOI - FWS Refuges and Wildlife	3,706,000	3,706,000	3,682,000	9,784,000	4,787,000	4,086,000	4,086,000	4,315,000	4,315,000
USDOI - FWS Migratory Birds						101,000	101,000	99,000	99,000

NON-CERP	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
PROJECTS/PROGRAMS	Enacted	Requested							
USDOI - FWS Law Enforcement	636,000	636,000	632,000	628,000	627,000	619,000	619,000	609,000	609,000
USDOI - FWS Fisheries	100,000	100,000	99,000	98,000	99,000	95,000	95,000	94,000	94,000
USDOI - FWS Land Acquisition	10,975,000	8,500,000	2,484,000	0	740,000	0	0	1,028,000	0
USDOI - USGS - Integrated									
Research, Planning and Interagency									
Coordination	8,553,000	8,636,000	7,847,000	7,847,000	7,738,000	7,771,000	7,042,062	6,800,000	6,800,000
USDOI - BIA	396,000	396,000	393,000	539,000	536,000	382,000	382,000	390,000	390,000
US EPA	4,582,000	4,666,800	3,352,100	3,139,600	2,882,300	3,439,400	3,683,000	2,009,000	2,161,000
CERP Total (USACE and									
USDOI)	24,895,000	36,856,000	45,904,000	47,835,000	72,963,000	71,053,000	72,481,000	72,461,000	100,866,000
Non-CERP Subtotal (USACE									
and USDOI)	178,019,000	217,398,000	168,416,000	157,028,000	108,735,000	140,878,000	160,224,062	128,478,000	153,549,000
Non-CERP Subtotal (Other									
Federal Agencies)	18,336,000	51,330,700	34,009,900	36,493,700	75,911,637	72,853,271	16,767,335	23,003,675	50,868,900
Non-CERP Total (All Federal									
Agencies)	196,355,000	268,728,700	202,425,900	193,521,700	184,646,637	213,731,271	176,991,397	151,481,675	204,417,900
TOTAL CERP AND NON-CERP									
(USACE AND USDOI)	202,914,000	254,254,000	214,320,000	204,863,000	181,698,000	211,931,000	232,705,062	200,939,000	254,415,000
TOTAL CERP AND NON-CERP									
(ALL FEDERAL AGENCIES)	221,250,000	305,584,700	248,329,900	241,356,700	257,609,637	284,784,271	249,472,397	223,942,675	305,283,900

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 this Cross-Cut Budget Working Document.

Footnotes:

¹ USACE CERP activities are funded under the Central and Southern Florida Project (C&SF).

² USACE FY 2006 Enacted reflects reductions for rescission and congressionally directed funding for the C&SF Upper St. Johns River project.

³ Enacted numbers for USACE reflect reductions for any rescissions, but do not account for reductions due to savings and slippage.

⁴ Beginning with the FY 2006 Budget Request these projects are now included as part of one Corps of Engineers line item referred to as the "South Florida Everglades Ecosystem Restoration" Program.

⁵ Enacted numbers for FY 2005 and FY 2006 reflect additional Emergency Watershed Protection Program funding due to hurricanes.

⁶ Reflects \$19,199,000 for construction and \$16,000,000 for land acquisition.

⁷ Includes the transfer of \$17 million in unobligated balances from the NPS Federal Land Acquisition Account to NPS Construction to further the Modified Water Deliveries project.

⁸ Reflects the transfer of \$5,000,000 in prior year balances from the USDOI – NPS Land Acquisition Account to the USDOI-FWS Resource Management Account.

⁹ 2009 numbers for NOAA are still pending.

¹⁰ NPS CERP funding includes GSA space rental costs in the following amounts: FY 2004 - \$741,000; FY 2005 - \$556,000; FY 2006 - \$554,000; FY 2007 - \$554,000; FY 2008 - \$554,000; FY 2009 - \$554,000.

TABLE 2: STATE OF FLORIDA FUNDING SUMMARY TABLE (ACTUAL \$)

EVERGLADES ECOSYSTEM	FY 2000-01	FY 2001-02	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07	2007-08	2008-09
RESTORATION PROJECTS	Enacted	Enacted	Enacted	Enacted	Enacted	Enacted	Enacted	Enacted	Request
COMPREHENSIVE EVERGLADES RESTORATION PROGRAM (CERP)									
Florida Department of	89,619,051	90,380,949	150,279,126	105,586,702	128,972,634	128,637,628	136,615,473	102,093,964	57,205,964
Environmental Protection									
Florida Fish and Wildlife	315,000	411,000	409,000	419,000	336,359	336,359	0	0	4,465,301
Conservation Commission									
South Florida Water Management	32,773,071 1	91,708,816 1	133,284,645 1	107,887,4691	101,119,569 ¹	253,715,473 ¹	507,980,226 ¹	411,690,864 ¹	448,500,0002
District									
NON- COMPREHENSIVE EVERGLA	ADES RESTORA	TION PROGRA	AM (CERP)						
Florida Department of									
Agriculture/Consumer Services	24,700,000	7,608,917	15,523,202	16,215,100	8,531,378	5,132,269	6,928,051 ³	6,000,0003	10,000,0003
Florida Department of Community									
Affairs	31,830,000	15,314,720	51,580,680	29,781,074	31,349,633	23,340,316	24,252,571	24,499,2704	TBA ⁵
Florida Department of									
Environmental Protection	135,422,927	72,654,344	109,393,692	92,364,834	102,222,540	176,467,770	408,365,782	203,236,072	78,118,780
Florida Fish and Wildlife									
Conservation Commission	17,271,000	19,681,000	21,306,000	25,729,000	27,466,653	27,579,153	27,579,153	28,682,319	4,714,329
Florida Department of									
Transportation	16,104,000	4,931,000	10,528,832	1,940,300	7,905,314	5,400,000	14,375,043	9,453,057	6,931,285
South Florida Water Management									
District	268,873,786 1	395,314,127 1	372,701,387 1	381,868,047 1	299,820,508 1	316,312,557 1	478,050,397 1	420,993,9751	367,000,0002
CERP SUBTOTAL:	122,707,122	182,500,765	283,972,771	213,893,171	230,428,562	382,689,460	644,595,699	513,784,828	510,171,265
NON-CERP SUBTOTAL:	494,201,713	515,504,108	581,033,793	547,898,355	477,296,026	554,232,065	959,550,997	692,864,693	466,764,394
STATE OF FLORIDA FUNDING									
TOTAL:	616,908,835	698,004,873	865,006,564	761,791,526	707,724,588	936,921,525	1,604,146,696	1,206,649,521	976,935,659

Footnotes:

1 Reflects SFWMD adopted budget appropriations less any state and federal funds.

2 Since the publication date of each year's Cross-Cut Budget cycle for the SFWMD and FDEP, the FY 2008-09 totals shown represents estimates. When FY 2008-09 budget totals are available, they will be posted on the website link to the Cross-Cut Budget 2009.

The same information will also be included in the FY 2009 Cross-Cut Budget document.

³The number reflected does not include Forestry's contribution for FY 2006-07, FY 2007-08 and 2008-09.

⁴These numbers are through April 2007.

⁵ These figures are the Florida Communities Trust grants that are awarded to local governments in the South Florida Ecosystem. They can only be identified and calculated after the June 30 close of each Fiscal Year. Since this is a statewide competitive grant program, an estimate of these figures prior to June 30 is not possible.

Section 2.0

Federal Everglades Ecosystem Restoration Projects and Funding

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Section 2.1: Federal Comprehensive Everglades Restoration Plan (CERP) Projects and Funding (\$100,866,000)

U.S. Army Corps of Engineers (Corps) (\$92,363,000)

Congress authorized the CERP in the Water Resources Development Act (WRDA) of 2000. The objective of the program is to restore, protect, and preserve the South Florida Ecosystem, while providing for other water related needs of the region. The CERP includes numerous projects that work together to achieve the plan's restoration goals. WRDA 2000 requires the completion of Project Implementation Reports (PIRs) for these projects. The PIRs provide further information on plan formulation and evaluation, engineering and design, estimated benefits and costs, and environmental effects of planned restoration activities. They serve to bridge the gap between the conceptual level of detail contained in the CERP and the detailed design plans and specifications required to proceed with construction.

From a project perspective, the major focus of the Corps' FY 2009 activities includes the initiation of construction on the Picayune Strand Project, continuation of detailed design on completed PIRs; continuation of detailed design on pilot projects, including the installation and testing of Aquifer Storage and Recovery Pilot Projects and preparation of Pilot Project Design Reports that contain the technical analyses needed to implement the pilot projects; completion of four PIRs, continuation of other ongoing PIRs and feasibility studies; and continuation of project adaptive assessment and monitoring activities used to monitor the effects of projects as they are implemented.

From a program perspective, FY 2009 CERP activities include continuation of Restoration Coordination and Verification (RECOVER), an inter-agency scientific group charged with system-wide assessments of planned and completed projects as well as with programmatic level activities. RECOVER's science-based activities include evaluation and assessment on the performance of the CERP, review of the effects that other restoration projects may have on CERP, and provision of a system-wide perspective throughout the restoration process. Other program level activities include continued reassessment of project sequencing to optimize delivery of benefits, public outreach and involvement, and environmental and economic equity program efforts.

Finally, in recognition of the State of Florida's commitment to advance design and construction work on certain CERP components, the Corps will continue to work with the State to ensure that work performed meets federal design and construction standards and is consistent with planned federal activities.

<u>U.S. Department of the Interior (DOI) - National Park Service (NPS)</u> (\$5,253,000)

CERP projects will have significant effects on Big Cypress National Preserve (BCNP), Biscayne National Park (BNP), and Everglades National Park (ENP). The NPS continues to concentrate on projects that are essential to the restoration of federal lands in south Florida. The NPS actively participates in the Project Development Teams for such projects including seepage

management in the L-30/L-31N Canals, early features in the Water Conservation Area (WCA) 3 Decompartmentalization and Sheetflow Enhancement, the C-111 North Spreader, and the Biscayne Bay Coastal Wetlands. The NPS also supports work on important foundation projects that are critical precursors to CERP.

To support these project-level activities, the NPS, in cooperation with other federal, state, and local partners is implementing a Monitoring and Assessment Plan for CERP, which will provide the information to determine the ecological effects and overall restoration success of CERP projects. Additionally the NPS will continue to participate in RECOVER.

Finally the NPS will continue to participate in DOI's formal requirements on programmatic activities including: guidance memoranda to formalize how CERP projects will be built, operated, and evaluated; interim goals that will be used to track restoration progress and provide five-year status reports to Congress; and the identification of the appropriate quantity, timing, and distribution of water that will be produced, and pursuant to federal and state law, dedicated and managed for the natural system.

<u>U.S. Department of the Interior: U.S. Fish and Wildlife Service (FWS)</u> (\$3,250,000)

The FY 2009 request for CERP Implementation will support approximately 30 full-time employees that actively serve on planning teams for all CERP and non-CERP restoration projects initiated by the Corps. This will enable the FWS to fulfill its Trust Resource responsibilities under the Endangered Species Act (ESA), Fish and Wildlife Coordination Act, Migratory Bird Treaty Act, and other statutes as part of the restoration effort. The FWS is an integral planning partner in formulating alternatives, 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 SFWMD to guide Everglades restoration at a system-wide scale.

In FY 2009, the FWS will participate in the development and execution of the following projects: WCA-3 Decompartmentalization and Sheetflow Enhancement, the Combined Structural and Operational Plan, Everglades Agricultural Area Reservoir (EAA), Lake Okeechobee Watershed, C-43 Reservoir, Indian River Lagoon, Water Preserve Areas, Picayune Strand Restoration Project, North Palm Beach County – Part 1, Everglades National Park Seepage Management, and other major restoration projects. These activities will include assistance in plan formulation and ecological benefit analysis, ESA Section 7 consultation, recovery plan implementation, restoration and management activities on DOI 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, the FWS participates as the biological and ecological experts and is an integral planning partner in CERP to ensure that ecosystem benefits are maximized consistent with long-term CERP project goals. The FWS will design features and project components that maximize natural resource benefits through active participation throughout the restoration planning process.

Section 2.2: Federal Non-CERP Everglades Ecosystem Restoration Projects and Funding (\$204,417,900)

U.S. Army Corps of Engineers (\$92,637,000)

Central and Southern Florida Project (C&SF) (\$7,825,000)

NOTE: The \$7,825,000 indicated above does not reflect \$92,363,000 in funding requested for CERP projects, which is reported in Section 2.1.

• 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 2009 activities include the continuation of design and construction of the S-331 command building, continued construction of the Southern Detention Area, continued engineering and design of remaining detention areas and culverts, canal backfilling, water quality monitoring, levee vegetative removal, and formulation of the Combined Structural and Operating Plan.

• 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 lock operation. FY 2009 activities include completion of construction and installation of detection devices to prevent entrapment of this endangered species.

• 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. FY 2009 activities include continued monitoring on the field test of the Periphyton Storm Water Treatment Area (PSTA) within the STA-1E and completing final design of L-40 canal improvements. Results of the field test, which have been delayed due to the continuing drought conditions in south Florida, are expected to clarify the benefits of full implementation of PSTA technology at STA-1E in future years.

Everglades and South Florida Ecosystem Restoration Critical Projects (\$3,797,000)

This program involves the implementation of "critical restoration projects" authorized in Section 528 of WRDA 1996, as modified by WRDA 2007, Section 6006. FY 2009 activities include completion of construction on the Seminole Big Cypress project.

Kissimmee River Restoration (\$31,015,000)

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. The FY 2009 activities include continuing construction on the second Reach 4 backfill contract, completion of construction on Istokpoga and S-68 modifications, and continuation of plans and specifications on remaining components.

Modified Water Deliveries (MWD) to Everglades National Park (\$50,000,000)

The MWD involves construction of modifications to the C&SF Project water management system and related operational changes to provide improved water deliveries to ENP. The project consists of structural features with the intended purpose of restoring conveyance between WCAs north of ENP and the Shark River Slough within the Park. It will also provide flood mitigation to the 8.5 Square Mile Area, a residential area adjacent to the Park expansion boundary in the East Everglades. The FY 2009 activities include continuation of work on the Tamiami Trail (Eastern Segment) to improve historic flow of Shark River Slough to ENP project and continued design of the conveyance and seepage features.

U.S. Department of Agriculture - Agricultural Research Service (ARS) (\$3,928,900)

ARS conducts an integrated research program that addresses the needs of agriculture and complements the CERP. The goal of the research is to develop and transfer improved scientific technologies and enhanced management strategies that control invasive exotic species and assure the continued economic integrity of agriculture. Four major areas of research support south Florida restoration and agriculture: hydrology and water quality, improved crop/animal production systems, biological control of invasive species, and decision support systems/model development. Individual projects supporting these priority areas are as follows:

Hydrology and Water Quality

• Integrated Horticultural Production Systems for Water Quality Protection and Water Conservation (\$809,300)

The Horticultural and Breeding Research Unit at Fort Pierce, Florida, conducts research to develop management practices and production systems that promote water conservation and protect water quality while sustaining or improving crop quality, production, and profitability. Research objectives of the project are to: 1) gain fundamental knowledge of the plant-substrate-water-nutrient system to identify factors that control effects of chemical stressors and develop irrigation strategies for the efficient and effective application of poor-quality water to ornamental crops; and 2) understand the impact of nutrients and pesticides on aquatic biota that inhabit onsite retention ponds. The expected impact of the research will be information that will be used in the development of Best Management Practices that will allow growers to maximize profits and minimize the impact of production on water resources, and to better define water fate and transport on nursery operations. Successfully accomplishing these goals will preserve or improve Florida's economy and the quality of life for the state's citizens.

Improved Crop/Animal Production Systems

• Soil Conservation For Sustainable Sugarcane Production (\$381,800)

The Sugarcane Field Station in Canal Point, Florida, develops high-yielding, disease-resistant sugarcane cultivars. A new project focuses on: determining soil carbon dynamics under a range of water-table depths and agronomic practices; determining the potential for sugarcane to increase soil organic matter; and developing methods to monitor soil organic matter oxidation potential for different water-table depths. Major accomplishments include demonstrating that raising water to six inches below the soil

surface and flooding up to three inches above the soil surface reduces microbial activity and soil loss; consequently, farmers may not have to flood soils to prevent soil loss and reduce soluble phosphorus runoff to the Everglades.

Biological Control of Invasive Species

Development and Evaluation of Biological Control agents for Invasive Species Threatening the Everglades and other Natural and Managed Systems (\$2,737,800) The ARS Invasive Plant Research Laboratory in Fort Lauderdale, Florida, and its satellite lab in Gainesville, Florida, conduct research to identify and collect natural enemies for control of melaleuca and other invasive pest plants; evaluate biological control agents for release against invasive weeds and insects species in a risk analysis context; obtain approval for release of host specific natural enemies; and develop biological based integrated weed management strategies that are efficient, economical, environmentally sound. The integration of biological control with other management tactics has been included in a comprehensive management plan, call TAME Melaleuca (crafted by scientists and natural resources managers from ARS, NPS, SFWMD, the Corps, the Florida Department of Environmental Protection, and many south Florida county governments), for managing invasive species problems. Research will continue to develop management strategies and biological control agents that are sustainable, efficient, economical, and environmentally sound. Current funding related to Everglades restoration totals \$2,469,100 in Florida and \$268,700 in Australia and Southeast Asia.

<u>U.S. Department of Agriculture (USDA) - Natural Resources Conservation</u> <u>Service (NRCS) (\$ 41,779,000)</u>

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

Food, Conservation and Energy Act of 2008

Environmental Quality Incentives Program (EQIP (\$5,085,000)

The Environmental Quality Incentives Program provides financial and technical assistance to farmers and ranchers who face threats to soil, water, air, and related natural resources on their land. Through EQIP, the Natural Resources Conservation Service (NRCS) develops contracts with agricultural producers to implement conservation practices to address environmental natural resource problems. Payments are made to producers once conservation practices are completed according to NRCS requirements on agricultural lands that will improve or maintain the health of natural resources in the area including water quality.

Wetlands Reserve Program (WRP) (\$35,000,000)

The Wetlands Reserve Program (WRP) is a voluntary program that provides technical and financial assistance to private landowners and Tribes to restore, protect, and enhance wetlands in exchange for retiring eligible land from agriculture.

Wildlife Habitat Incentives Program (WHIP) (\$294,000)

The Wildlife Habitat Incentive Program (WHIP) is a voluntary program for developing or improving high quality habitat that supports fish and wildlife populations of National, State, Tribal, and local significance. Through WHIP, the USDA's Natural Resources Conservation Service (NRCS) provides technical and financial assistance to private and Tribal landowners for the development of upland, wetland, aquatic, and other types of wildlife habitat.

Grassland Reserve Program (GRP) (\$1,400,000)

The Grassland Reserve Program (GRP) is a voluntary program for landowners and operators to protect grazing uses and related conservation values by conserving grassland, including rangeland, pastureland, shrubland, and certain other lands. The program emphasizes support for working grazing operations; enhancement of plant and animal biodiversity; and protection of grassland and land containing shrubs and forbs under threat of conversion. Eligible land includes privately owned or Tribal grasslands; land that contains forbs (including improved rangeland and pastureland or shrubland) for which grazing is the predominant use; or land that is located in an area that historically has been dominated by grassland, forbs, or shrubland that has the potential to serve as wildlife habitat of significant ecological value.

<u>U.S. Department of Commerce - National Oceanic and Atmospheric Administration (NOAA) (\$TBD)</u>

NOAA provides science, monitoring, and modeling projects critical to implementing and assessing the 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.

While 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 NOAA projects directly support CERP implementation.

South Florida Ecosystem Modeling/National Ocean Service (NOS)

NOS and partners have funded several years of research to gain a sufficient understanding of processes in and around Florida Bay and the Florida Keys National Marine Sanctuary (FKNMS) so that a predictive capability could be established to assess the impacts of alternative management strategies for the restoration of the Everglades on these water bodies. In FY 2008 NOS will fund competitive proposals to utilize and build upon this research to support development of quantitative, coupled, management-relevant ecosystem models that will provide specific outcomes (e.g. water quality measures, seagrass distribution, etc.) for water diversion scenarios. This work will be conducted with complementary efforts being overseen by other federal and state agencies.

Interdisciplinary Coastal Oceanographic Observations / Oceanic and Atmospheric Research

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. Understanding the impacts of replumbing water flow from inland areas to coastal systems, as part of the restoration effort, is critical to determine overall success. FY 2008 funding will support a suite of research and monitoring activities in south Florida coastal waters downstream of major restoration projects, such as the FKNMS, Florida Bay, and Biscayne Bay.

Restoration Science and Assessment/National Marine Fisheries Service (NMFS)

NMFS will continue research in FY 2008 that defines the impact of inland restoration efforts and changing freshwater inflow on Florida Bay and other South Florida natural systems. These funds will be used to assess the impacts of changing freshwater runoff patterns on inshore and coastal habitats and associated fishery resources. Projects to be supported in FY 2008 include continued work on impacts of freshwater on pink shrimp recruitment in Florida Bay, factors affecting the distribution of snapper/grouper larvae in various Florida Bay habitats, and factors impacting the distribution and health of coral species in coastal waters adjacent to Florida Bay (including elkhorn and staghorn corals species proposed for protection under the ESA). Ongoing visual assessments of reef fish along the Florida Keys reef tract (including reefs of the FKNMS) will also be continued.

Additionally, NOAA will participate in various management activities, including the South Florida Ecosystem Restoration Task Force, the Working Group, and the Science Coordination Group; the Water Resources Advisory Commission of the SFWMD; and the Program Management Committee (PMC) for the Florida Bay and Adjacent Marine Systems Science Program.

U.S. Department of the Interior (DOI) - National Park Service (\$46,716,000) Park Management (\$30,210,000)

• Big Cypress National Preserve (\$6,579,000)

NPS will continue to support mandated programs such as the protection, inventory, 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 flow to ENP and Ten Thousand Islands. Additional mandated programs include special uses such as oil exploration/production, 3,000 acres of cattle leases, the largest recreational 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 also supports the largest prescribed fire program in the NPS; 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 natural resources management program will continue to collect baseline data in formats that are compatible with interagency regional hydrologic and community/species-based models, control non-native plants, protect threatened and endangered species, mitigate visitor impacts, and manage funds to support direct inventory/monitoring of resources and a geographic information system (GIS).

• Biscayne National Park (BNP) (\$4,340,000)

FY 2009 funding will support BNP area management activities promoting public use, mitigation, and efforts to address impacts associated with urban sprawl, four solid waste landfills, and a nuclear power facility. All of these threats are located along the park's western boundary and are "upstream" with respect to surface- and ground-water flow into the park.

The BNP performs other area management activities associated with the protection of the park's natural, cultural, and historic resources as well as maintenance of park facilities. The BNP protects 173,000 acres of marine resources that include the largest living coral reef system in the NPS, 8 known terrestrial cultural sites, 40 known submerged cultural sites, and approximately 20 historic structures and two national historic districts within a boundary that has unlimited access points. The BNP maintains three developed islands and one mainland site that include six harbors/docking facilities, two campgrounds, six picnic areas, approximately ten miles of trails, six residences, an environmental education camp, and a major visitor center.

Current natural resources management will continue to protect coral reefs and seagrass beds, monitor water quality, document and mitigate impacts due to visitor and commercial uses, control exotic vegetation, and monitor 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 (\$1,784,000)

Funding in FY 2009 will support operations of this 65,000-acre marine and historical national park located 70 miles west of Key West. 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 (\$17,507,000)

Funding for ENP in FY 2009 will support area management activities including 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 restore 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 approximately 6 million people, and over 1.5 million visitors each year, ENP has special challenges. The park has extensive outreach programs to the local community and sustains a large backcountry/wilderness operation.

The ENP operates major visitor use areas at Flamingo, Shark Valley, Everglades City, and Chekika, and oversees three concessions operations. Infrastructure requires extensive short-term maintenance, as well as long-term upgrades. The park has 82 miles of surfaced roads, 160 miles of trails, 3 campgrounds, 48 backcountry campsites, and 3 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.

The ENP remains one of the most ecologically complex parks in the nation. Florida Bay is continuing to experience dramatic changes, including striking alterations between hypoand hyper-salinity, increased turbidity, seagrass die-offs, and persistent and increasing spreads of algae blooms. Exotic plants have and are continuing to replace native plant communities in ENP and adjacent natural areas.

South Florida Ecosystem Restoration Task Force (Task Force) (\$1,303,000)

Funding in FY 2009 will support the operations of the Task Force and the Office of the Executive Director, 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 for reporting to Congress on restoration programs and funding requirements. WRDA 1996 directs the Task Force 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 also 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 2009, OED will continue its coordination role and related reporting activities in support of the Task Force, Working Group, and Science Coordination Group initiatives, projects, priorities, and programs. This will include the coordinating, tracking, and monitoring of all aspects of CERP implementation; producing the biennial update of the strategic plan as required by the Congress; reporting progress and accomplishments on Goals 1, 2, and 3 of the strategic plan; maintaining a tracking system for annual updates of the land acquisition strategy; engaging, as necessary, in the established dispute resolution process; implementing activities associated with the Task Force plan to coordinate science; and the annual updating of the Cross Cut Budget and the restoration project sheet information (Integrated Financial Plan) that includes a synopsis, start and end date, and cost estimate for each project.

Everglades Research (\$3,849,000)

Since its inception in 1997, the Critical Ecosystem Studies Initiative (CESI) has been the primary investment by DOI to provide scientific information to advise restoration decision-making and to guide its own land management responsibilities for South Florida Ecosystem restoration.

The CESI planned activities for FY 2009 include:

- Continuing development of decision support tools that support Everglades restoration including restoration success indicators (with a focus on CERP Interim Goals), GIS tools for evaluating land management policies, and biological/physical database development and dissemination.
- Initiation of climate change modeling studies that link sea level rise and climate predictions with expected hydrological and ecological responses to ongoing restoration actions.
- Conducting studies on the rates and patterns of sheetflow and projected changes in ridge and slough topography and vegetation patterns; including developing models that link marsh sheetflow, sediment transport, and landscape-scale vegetation patterns.
- Continuing work on refining restoration targets for Biscayne and Florida Bay; including new process and modeling studies of the relationship between freshwater inflows, salinity gradients, and productivity in the estuaries of the southern Everglades.
- Continuing critical long-term monitoring projects that support restoration assessments, such as the comprehensive fish and macro-invertebrate monitoring program, marsh water level/water quality/flow monitoring, monitoring of threatened and endangered species, and sampling vegetation communities that will most likely be impacted by implementation of the Modified Water Deliveries, C-111, and CERP projects.
- Continuing short-term hydrological and ecological monitoring projects at the DOI units in southwest Florida to define baseline conditions and indicators, and to measure the success of future restoration actions.
- Completing the Southern Everglades Incremental Adaptive Restoration plan and begin implementation of field monitoring projects that answer key scientific uncertainties in the restoration projects for the Shark Slough and Taylor Slough basins of ENP.

Modified Water Deliveries Project (MWD) (\$10,000,000)

The MWD project is authorized by Section 104 of the ENP Protection and Expansion Act of 1989. This project involves construction of modifications to the C&SF Project water management system and related operational changes to provide improved water deliveries to ENP. The NPS

requests a total of \$10.0 million for the MWD project for FY 2009. As indicated on page 10, the FY 2009 budget request for the Corps includes \$50.0 million for this project.

The MWD project is authorized by Section 104 of the ENP Protection and Expansion Act of 1989. This project involves construction of modifications to the C&SF Project water management system and related operational changes to provide improved water deliveries to ENP. The NPS requests a total of \$10.0 million for the MWD project for FY 2009. As indicated on page 10, the FY 2009 budget request for the Corps includes \$50.0 million for this project.

The current status and plans for FY 2009 are described below:

- The purpose of the 8.5 Square Mile Area component is to provide flood mitigation to an agricultural and urban area adjacent to ENP due to the higher water levels in the area resulting from the construction of the MWD's restoration features. The component features include a perimeter levee, an internal canal and levee system, a pump station and storm water treatment area, and the acquisition of lands adjacent to the ENP boundary and west of the perimeter levee. Construction was completed in FY 08. In FY 2009, the focus will be on revising the operational plan and turnover of this component to the SFWMD.
- The purpose of the Tamiami Trail Modifications (TTM) component is to modify the existing highway in a manner consistent with the increased water flows and levels resulting from the conveyance components of the project. In addition, these modifications must be designed to be consistent with Florida Department of Transportation road safety requirements. The Army Corps of Engineers has completed a Limited Reevaluation Report and is currently preparing to initiate construction of the selected alternative; the construction of a one mile long bridge and modifications to the remaining roadway section to allow raising the water level in the L-29 canal.
- The purpose of the Conveyance and Seepage Control (CSC) component is to convey water through reservoirs upstream of ENP into the Shark Slough drainage basin of ENP more consistent with historic hydrologic conditions. In addition, these project features will also return project-induced increased seepage from the project area to ENP in order to maintain flood protection to adjacent areas. Some of the features of this project component have been completed: the S-356 pump station, back-filling of the lower four miles of the L-67 extension canal, and construction of the S-355 structures in the L-29 levee. Revisions to the TTM component require complimentary design refinements to the C&SC components. In FY 2009 activities will focus on preparation of an Engineering Design Report and revised NEPA evaluation documents.
- The purpose of Project Implementation Support is to provide funding for needed ENP and USACE personnel, conduct environmental monitoring, develop improved operational plans, and complete the needed modifications to the Osceola Camp flood mitigation features. FY 2009 activities will include the continuation of personnel support and environmental monitoring and initiation of design for the Osceola Camp modifications.

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

Land Acquisition Management (\$800,000)

Funding in FY 2009 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 DOI.

U.S. Department of the Interior: Fish and Wildlife Service (FWS) (\$7,560,000)

Resource Management - Ecological Services (\$2,443,000)

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 FY 2009 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. The FWS continues its historically active role in reviewing applications for impacts on wetlands under the USACE Regulatory Program. In addition to the analysis of direct, indirect, and cumulative impacts, the FWS ensures that private development proposals are compatible with the CERP. The acceleration of planning and building several CERP components requires careful review of applications by the local sponsor (mainly the SFWMD) through the Corps' regulatory process. In FY 2009, the FWS will continue consultation with the Corps on the CERP, as well as other ongoing or new federal projects. Further, 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 FY 2009, the FWS will address new Corps 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 (\$4,315,000)

The FWS administers 16 national wildlife refuge units in south Florida. The Service manages all actions under the ESA, 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 Working Group, the FWS will continue to undertake important on-ground restoration activities.

Resource Management - Migratory Birds (\$99,000)

While coordinating with the Service's South Florida Ecological Services Field Office and the Arthur R. Marshall Loxahatchee National Wildlife Refuge, the Division of Migratory Birds works cooperatively with the Florida Fish and Wildlife Conservation Commission (FWC) and the SFWMD to provide technical expertise relative to MBTA implications on the various CERP projects, especially for Avian Protection Plans and management of invasive exotics species such as the purple swamphen. Effective implementation of CERP with the above partners, the Corps, and the NPS, and others is critical to restoring water quantity, quality, timing, and distribution for the benefit of people, migratory birds, and other wildlife and their habitats.

Resource Management - Law Enforcement (\$609,000)

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 Migratory Bird Treaty Act (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 (\$94,000)

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.

U.S. Department of the Interior - U.S. Geological Survey (USGS)

Everglades Restoration - Integrating Research, Planning, and Interagency Coordination (\$6,800,000)

Funding in FY 2009 will support the USGS, through its Priority Ecosystems Science activities, in continuing to provide planning, research, and interagency coordination efforts needed for Everglades restoration in accordance with the terms of the Memorandum of Understanding between the USGS, FWS, and NPS. This coordinated science effort allows the DOI bureaus 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 priority needs in the Everglades. In FY 2005 the USGS, in partnership with the FWS and NPS, updated the Department's Everglades science plan to better identify emerging science needs.

The revised science plan was then used as the basis for the selection of new studies which were initiated in FY 2006, 2007 and 2008. The DOI Everglades science plan serves as the template upon which to define and prioritize studies to address critical decision-related information needs. The DOI Greater Everglades Science Team used the science plan coupled with near-term plans for CERP, mod-waters and other restoration activities as well as other emerging issues (e.g., sea level rise and climate change) to generate a priority list of research, monitoring and modeling studies needed to address immediate and near-term decision-related information needs. USGS, in partnership with FWS, NPS and other restoration partners, is continuing to prioritize its research to support and conduct timely and relevant decision-critical science.

USGS activities provide a fundamental understanding of ecosystem process, structure, and function. A significant part of USGS activities is to integrate the ecosystem science through continued development of decision support tools. This is accomplished through continued development and improvement of integrative models, including hydrologic models, ecological models, chemical models, and geographic and landscape models. These ecosystem models are being integrated into decision support tools to aid in restoration-related planning decisions by the FWS, NPS, USACE, Florida Department of Environmental Protection (FDEP), EPA, and the SFWMD to predict the consequences of varied management alternatives, set ecological goals by providing yardsticks to measure the success of the restoration, and manage the natural resources of the system. In support of the revised science plan and the updated list of critical/priority research, monitoring and modeling needs, the USGS will continue high-priority work that includes long-term hydrologic monitoring, coastal salinity monitoring, continued development and enhancement of ecological models including models for adaptive assessment, and development of simulation-based decision support tools. These tools will continue to be used in planning and implementing CERP, MWD and other Everglades restoration projects. A continuing challenge is to make all ecological models an integral part of the decision support tools available to restoration practitioners. USGS has initiated work with the Interagency Modeling Center (IMC) to incorporate the USGS process-based hydrologic models into the IMC's modeling 'tool box'. This process will not only put ecological models into the IMC 'tool box', but will provide a mechanism for improving the models by providing feedback between model application, model research and development, and model improvement via integration with monitoring.

In addition, since paleoecological data also include a record of sea-level fluctuations, USGS will be reevaluating sea-level rise data within the context of projected future freshwater flows and accelerated sea-level rise. This information will help us better refine the target(s) for freshwater flows to coastal systems, and better understand the dynamics of the interaction of restoration with coastal change. Also, a USGS preliminary study on the paleoecology of freshwater marshes, specifically marl prairie marshes, is providing the FWS with information useful in their reevaluation of the current distribution of species within the context of both the historical and the projected 'future' Everglades having more water than today's current Everglades.

U.S. Department of the Interior - Bureau of Indian Affairs - (\$390,000)

In FY 2009, funds will be used for continuing efforts to restore the South Florida Ecosystem for the Seminole and Miccosukee Tribes. This funding (\$195,000 each) is included within each Tribe's base funding and is provided to support research, studies, and planning on water

quality and distribution systems, ecosystem development and management, and planning for compliance with the ESA in storm water areas on the Seminole and Big Cypress reservations.

U.S. Environmental Protection Agency (EPA) (\$2,161,000)

EPA priorities for restoring and protecting the South Florida Ecosystem in FY 2009 include continuing to work with the State of Florida and federal agencies to implement appropriate phosphorus control programs that will attain water quality standards within the Everglades Ecosystem; supporting development of Total Maximum Daily Loads for the Lake Okeechobee watershed; assisting the State of Florida and the SFWMD in evaluating the appropriateness of Aquifer Storage and Recovery technology as a key element of the restoration strategy for south Florida; updating and implementing the South Florida Wetlands Conservation Strategy to include protecting and restoring critical wetland habitats in the face of tremendous growth and development pressures; continuing to implement the comprehensive monitoring program (water quality, coral reef, and seagrass), special studies, data management, and public education components of the Florida Keys National Marine Sanctuary Water Quality Protection Program as required by the National Marine Sanctuaries Program Amendments Act of 1992; and protecting coral reef ecosystems of southeast Florida by reducing land-based sources of pollution on a watershed scale, including controlling discharges from point sources.

Section 3.0

State of Florida Everglades Ecosystem Restoration Projects and Funding

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Section 3.1: State of Florida Comprehensive Everglades Restoration Plan (CERP) Projects and Funding (\$510,171,265)

Florida Department of Environmental Protection (FDEP) (\$57,205,964)

The implementation of the CERP, in partnership with the SFWMD, tribes, other state, federal, and local agencies and environmental groups, is a high priority for the FDEP.

The FDEP administers the Save Our Everglades Trust Fund. The State has bonding authority, if needed, to fund Florida's commitment to Everglades restoration.

Restoring America's Everglades, \$50 million - The Florida Legislature appropriated \$50 million to continue the state-federal partnership, established in 2000, to restore America's Everglades and return a natural flow of water across the 2.4 million-acre marsh and implement the Northern Everglades and Estuaries Program. A separate \$5 million appropriation was made for the CERP C-111 Spreader Canal project. To date, the state's commitment toward the \$10.9 billion Comprehensive Everglades Restoration Plan tops \$2 billion. The funding plan ensures that the projects needed for the restoration of the Everglades can continue to restore a more natural water flow and improve water quality.

The FDEP's Tallahassee Office of Ecosystem Projects (Office of the Secretary) and the Water Quality Standards and Special Projects Program (Division of Water Resource Management) estimates costs of \$326,678 and \$1,182,286 respectively to oversee the Everglades Forever Act (EFA) and CERP implementation in FY 2007/2008. The FDEP's Southeast Florida District office in West Palm Beach and South Florida District in Fort Myers estimate expenditures of approximately \$510,000 and \$106,000 respectively in support of CERP projects and other South Florida related restoration activities including a grant of \$81,000 to the Collier County Soil and Water District to fund a feasibility study for Horse Pen Strand Conservation Area in Northern Golden Gate Estates in FY 2007/2008. The project will determine the feasibility to reconnect and rehydrate wetlands to decrease flooding, restore wetlands and provide water quality improvements and divert flows to the historic receiving waters.

Florida Fish and Wildlife Conservation Commission (FWC) (\$4,465,301)

The FWC contributes to CERP projects by providing technical assistance to the sponsoring agencies in order to ensure that CERP activities address the needs of fish and wildlife and their associated habitats. In FY 2007/2008, the agency organized an inter-divisional team to prioritize and coordinate the agency's contributions to all inter-agency ecosystem restoration activities in south Florida including the CERP. The Office of Policy and Stakeholder Coordination facilitates official consultations for the CERP through various processes including inter-agency planning teams, the Coastal Zone Management Program, the Fish and Wildlife Coordination Act, and the National Environmental Policy Act.

South Florida Water Management District (SFWMD) (\$448,500,000)

The SFWMD is the local sponsor for the majority of the over 50 projects included in the CERP. Planning and design is currently underway on many of these projects. The focus of the SFWMD's efforts during FY 2008/09 will be on continued work in partnership with the Corps on planning and design efforts associated with completion of PIRs and detailed design for several accelerated projects. The SFWMD will also continue construction on several accelerated projects during this period.

The SFWMD is also engaged in acquisition of lands needed for CERP and other Everglades restoration projects. Current efforts are focused on acquisition of lands needed for the construction of the accelerated Everglades restoration projects (700 acres), the Herbert Hoover Dike Rehabilitation Project, as well as lands identified within the next five year implementation schedule for the CERP and the Northern Everglades.

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 RECOVER, including a system-wide monitoring plan, an adaptive assessment program, and the use of Incremental Adaptive Restoration; and continued operation of the interagency modeling center to support CERP projects.

Section 3.2: State of Florida Non-CERP Everglades Ecosystem Restoration Projects and Funding (\$466,764,394)

Florida Department of Agriculture and Consumer Services (FDACS) (\$10,000,000)

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

Department of Community Affairs (DCA) (\$ To Be Determined*)

DCA's Florida Communities Trust offers competitive grants to local governments to acquire conservation, recreation, and green space lands throughout Florida and including the 16 counties within the boundaries of the SFWMD. From July 2007 through March 2008, projects in Collier, St. Lucie, Polk, and Broward Counties were awarded grants. Grants are also pending in St. Lucie, Broward, and Palm Beach Counties. Furthermore, DCA participates on the Working Group and its committees, providing expertise on comprehensive land use planning, growth

management, affordable housing, disaster relief, and hazard mitigation.

*These figures are the Florida Communities Trust grants that are awarded to local governments in the South Florida Ecosystem. They can only be identified and calculated after the June 30 close of each Fiscal Year. Since this is a statewide competitive grant program, an estimate of these figures prior to June 30 is not possible.

Florida Department of Environmental Protection (FDEP) (\$78,118,780)

The FDEP's non-CERP South Florida Ecosystem restoration priorities include implementation of the EFA, the Lake Okeechobee Protection Program, the Lake Okeechobee and Estuary Recovery (LOER) Program (in cooperation with the SFWMD), land acquisition for conservation purposes, and funds to support the Indian River Lagoon Initiative and Issue Team and St. Lucie River Issues Team.

The Lake Okeechobee Protection Plan is a comprehensive plan to accelerate the restoration and recovery of Lake Okeechobee which started in 2000 and was expanded by the Florida Legislature in FY 2007/08 to include the protection and restoration of the Northern Everglades including the Lake Okeechobee watershed and the Caloosahatchee and St. Lucie estuaries. The Florida Legislature appropriated \$94 million in FY 2007/08 to:

- Implement projects identified in Phase I of the Lake Okeechobee Protection Plan identified in section 373.4595 (3)(b), F.S.; the development of the Phase II Technical Plan identified on section 373.4595 (3)(b), F.S.; and the acquisition of lands needed for restoration (\$49 million).
- Implement project components which benefit the hydrology, water quality, and aquatic habitats of the Caloosahatchee and St. Lucie watersheds, including project components in the Lake Okeechobee watershed, for the planning, design and engineering of a stormwater treatment areas in association with the C-43 reservoir, including work necessary to complete the Phase II Project Implementation Report; and for the acquisition of lands needed for restoration (\$30 million).
- Implement pilot projects that are cost-effective biologically based, hybrid wetland/chemical and other innovative nutrient control technologies pursuant to section 373.4595 (3) (b), F.S. (\$5 million).
- Implement projects within the Caloosahatchee River watershed identified for the purposes of improving the hydrology, water quality, and aquatic habitats (\$5 million).
- Implement projects within the St. Lucie River watershed identified for the purposes of improving the hydrology, water quality, and aquatic habitats (\$5 million).

Saving Lake Okeechobee - Recognizing the importance of the heart of America's Everglades, the Florida Legislature continues the commitment to Lake Okeechobee by recommending funding for the implementation of projects identified in phase I of the Lake Okeechobee Protection Plan and projects identified in the Northern Everglades and Estuaries Program. Funds for these projects will come from the \$50 million appropriated for overall Everglades restoration. These efforts will enhance the ecological health of the lake, rivers and downstream coastal estuaries.

The Florida Legislature also approved the following water projects:

Miami River Dredging project - \$10 million

Indian River Lagoon Initiative - \$3.6 million

Indian River Lagoon Issues Team - \$1.4 million

Loxahatchee River Preservation Initiative - \$1.3 million

Palm Beach County Central Everglades Water Quality Improvement - \$250,000

Palm Beach County Chain of Lakes Restoration - \$200,000

Palm Beach County Lake Worth Lagoon Restoration - \$500,000

St. Lucie River Issues Team - \$1.3 million

Western Everglades Restoration: Evaluation of Restoration Effects Upon Selected Fauna - \$200,000

Launched in 1999, Florida Forever is the largest conservation program of its kind in the world. The ten-year, \$3 billion program permanently protects environmentally sensitive land, vital waterways, and important cultural and historical landmarks. The Florida Legislature's FY 2008/2009 budget appropriated \$300 million to continue the acquisition of lands vital to the preservation and conservation of Florida's natural resources. The Department receives \$120 million of the appropriation.

The FDEP also anticipates the funding of \$18,436,725 in FY 2008-2009 to acquire non-CERP conservation lands in South Florida.

In addition, the FDEP supports: water quality improvement programs for Section 303d, Clean Water Act, listed water bodies; ecosystem restoration project management; regulatory, watershed planning, and coordination activities; research and monitoring; and aquatic plant control. The FDEP's budget for FY 2008/2009 has projected funding of approximately \$40,932,055 for the following activities in South Florida:

- Aquatic and upland exotic/invasive plant control (\$20,000,000)
- State park operations and management (\$15,985,564)
- Mercury research and monitoring (\$1,200,000)
- Coastal and aquatic managed areas (\$2,746,491)
- TMDL Program (\$1,000,000)

Florida Fish and Wildlife Conservation Commission (FWC) (\$4,714,329)

The FWC embodies the state's executive responsibility for managing Florida's freshwater, marine, and terrestrial fish and wildlife. In order to meet its mission, the agency contributes to South Florida Ecosystem restoration and conservation both operationally and through partnerships.

Operations: Four of the agency's divisions manage fish and wildlife resources (Divisions of Freshwater Fisheries Management, Habitat and Species Conservation, Hunting and Game Management, and Marine Fisheries Management), while the Division of Law Enforcement ensures that laws protecting fish, wildlife, and their habitats are enforced. The Fish and Wildlife Research Institute administers the research and monitoring programs that support the agency's mission. A significant contribution in this regard are the GIS-based species habitat models that

are used to identify those lands that need to be conserved in support of imperiled species management plans. FWC programs support non-native species research and management, aquatic plant management, panther restoration research, and alligator management throughout the Everglades Ecosystem.

The agency is either sole manager or a partnering manager on over one million acres of public lands throughout the region. Further, 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. Lastly, the agency administers an on-going lake enhancement and restoration program and in FY 2007/08, FWC conducted restoration activities in Lakes Okeechobee, Tohopekaliga, and Trafford.

Partnerships and Outreach: The FWC took lead responsibility for developing the state's Comprehensive Wildlife Conservation Strategy in 2005. The strategy, which relies heavily on partnering to achieve its objectives, identifies eighteen priority habitats for conservation, and many of these areas occur in south Florida. In FY 2007/08, the agency began working on the strategy's land conservation element. Known as the Conservation Blueprint, this effort has been dove-tailed into the Century Commission's Critical Lands and Waters Identification Plan. In addition, multiple programs of the FWC support outreach and education in the region, including the Everglades Youth Camp, Urban Fishing Programs, Wildlife Curriculum support, and general fish and wildlife outreach. Also in FY 2007/08, the agency began developing a strategy and work plan for providing technical assistance to local governments during growth management planning activities. Finally, the agency partners with the FWS, NRCS and the FDACS to provide both technical assistance and grant support to those private landowners wishing to sustain fish and wildlife habitat on their properties.

The FWC's planned funding for South Florida Ecosystem restoration during FY 2008/09 is \$9,179,963 and includes:

- Land management on public conservation areas (\$6,697,951)
- Law Enforcement (\$2,476,679)
- Intergovernmental coordination and partner development (\$To be determined)

Florida Department of Transportation (FDOT) (\$6,931,285)

The FDOT is a leader among transportation agencies in the nation for protecting wildlife and redesigning roadways to restore natural water flow to over-drained areas. The FDOT is also a leader in providing funding and technical assistance to plan and implement greenways and trails. Many of these 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 FDOT also funds wildlife and habitat mitigation efforts ranging from seagrass restoration in the Indian River Lagoon, sea turtle lighting along the southeast coast, to the purchase of panther habitat in southwest Florida.

The FDOT's planned funding for South Florida Ecosystem restoration during FY 2008/09 is \$6,931,285 and includes:

- Exotic and endangered/threatened plant survey (\$5,785)
- Research to determine the effectiveness of wildlife crossings (\$10,000)

- Mitigation maintenance and monitoring (\$163,000)
- Removal of exotic vegetation (\$2,507,500)
- Design of wildlife and wetland mitigation (\$45,000)
- Construction of wildlife and wetland mitigation (\$2,250,000)
- Panther mitigation (\$1,500,000)
- Water Quality Study (\$450,000)

South Florida Water Management District (\$367,000,000)

The SFWMD is implementing the Long-Term Plan for Achieving Water Quality Goals in the Everglades Protection Area (Long-Term Plan) including the structural and vegetation enhancements to the Everglades Construction Project (ECP) as required by the 2003 amendments to the EFA. Critical initiatives underway include design, construction and start-up operations of over 18,000 acres of additional stormwater treatment areas for removing phosphorus from inflows to the Everglades. Additionally, the SFWMD works closely with the FDEP and other state, federal, and tribal governments on other non-CERP programs to restore and protect the South Florida Ecosystem.

Underscoring the State's commitment to greater Everglades ecosystem restoration, the Florida Legislature in 2007 expanded the Lake Okeechobee Protection Act to include protection and restoration of the interconnected Kissimmee, Lake Okeechobee, Caloosahatchee, and St. Lucie watersheds. This interagency initiative is focusing on the water storage and water treatment needed to help improve and restore the Northern Everglades and coastal estuaries. As part of the Northern Everglades Initiative, the SFWMD and the State will expand water storage areas, construct treatment marshes, and expedite environmental management initiatives to enhance the ecological health of the lake and downstream coastal estuaries. While Northern Everglades projects have been conceptually identified, detailed design will continue to be the main focus of efforts during FY 2008/09.

The SFWMD's priority non-CERP South Florida Ecosystem restoration and protection projects for FY 2008/09 include:

- Study, design, and construction of a nitrogen-removing constructed wetland in the Caloosahatchee River watershed.
- Implementation of provisions in the EFA: water quality restoration in the Everglades Protection Area through implementation of the ECP and the Long-Term Plan; and implementation of the Everglades Program for control of exotic plants, research and monitoring, and regulation.
- Restoration of the Kissimmee River and floodplain (in cooperation with the Corps) through land acquisition (completed in FY 2006), construction (backfilling 22 miles of canal and opening 9 miles of remnant river channel), and a comprehensive ecological evaluation program.
- 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, controlling the spread of nuisance and exotic plants, restoring isolated wetlands, and addressing extreme high and low water levels.

- Restoration of the southern Everglades and Florida Bay, in cooperation with the Corps and ENP, through the C-111 South Dade and MWD to ENP projects, land acquisition, and operational changes to restore natural water flows to ENP and Florida Bay.
- Updates and implementation of regional water supply plans.
- Acquisition, management, and mitigation of lands needed for ongoing and future non-CERP restoration projects and for conservation and protection of critical habitat.
- Implementation of Critical Restoration Projects in cooperation with the Corps.
- Restoration of coastal ecosystems through pollutant load reduction and habitat restoration and identification of storage needs to meet salinity targets.
- Restoration of wetlands and associated upland buffer habitat in the Kissimmee Chain of Lakes, Indian River Lagoon, and Loxahatchee River basins (in cooperation with the USDA - NRCS).
- Operation and maintenance of the flood control system that includes over 500 primary water control structures, 50 pump stations, approximately 1,970 miles of canals and levees, and 2,000 secondary structures which control inflows from secondary sources into the SFWMD's primary system.

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.

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Section 4.0 Agency Contacts

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