

**FISCAL YEAR 2021
CROSS-CUT BUDGET
REQUEST**

TASK FORCE WORKING DOCUMENT

SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Table of Contents

1.0	OVERVIEW	3
1.1	Introduction	5
1.2	Federal and State of Florida Funding Summary Tables	7
2.0	FEDERAL EVERGLADES ECOSYSTEM RESTORATION PROJECTS AND FUNDING REQUESTS	11
2.1	Federal Comprehensive Everglades Restoration Plan (CERP) Projects and Funding Requests	13
2.2	Non-CERP Everglades Ecosystem Restoration Projects and Funding Requests	18
3.0	STATE OF FLORIDA EVERGLADES ECOSYSTEM RESTORATION PROJECTS AND FUNDING REQUESTS	31
3.1	State of Florida Comprehensive Everglades Restoration Plan (CERP) Projects and Funding Requests	31
3.2	Non-CERP Everglades Ecosystem Restoration Projects and Funding Requests	36
4.0	AGENCY CONTACTS	43

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Section 1.0

Overview

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Section 1.0: Overview

Section 1.1: Introduction

This document provides coordinated budget requests for the Everglades ecosystem restoration efforts in south Florida with information provided by both federal and state agencies represented on the South Florida Ecosystem Restoration Task Force. The information in this report is compiled and prepared by the U.S. Department of the Interior's Office of Everglades Restoration Initiatives (OERI) on an annual basis and includes a summary accounting of all funding requests in the Fiscal Year (FY) 2021 Budget for represented federal and state agency members. This document is available online at: www.evergladesrestoration.gov.

This document consists of three sections. This overview (Section 1.0) includes summary tables for the federal and state funding requests. The tables in this edition provide enacted and requested funding for FY 2014 through FY 2021. Historical enacted funding dating back to FY 2002 is available online at: www.evergladesrestoration.gov.

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

Section 3.0 provides detailed information concerning the State of Florida's Everglades ecosystem restoration projects and funding requests. Section 3.1 addresses CERP projects and funding requests, and Section 3.2 addresses non-CERP projects and funding requests. The FY 2020/21 totals shown represent estimates for the South Florida Water Management District (SFWMD).

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 coordinated budget requests provided by federal agencies and Table 2 includes coordinated budget requests provided by the State of Florida agencies.

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

THIS PAGE WAS LEFT BLANK INTENTIONALLY

TABLE 1: FEDERAL FUNDING (ACTUAL \$)

EVERGLADES ECOSYSTEM RESTORATION PROJECTS	FY 2014 Enacted	FY 2015 Enacted	FY 2016 Enacted	FY 2017 Enacted	FY 2018 Enacted	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Requested
COMPREHENSIVE EVERGLADES RESTORATION PROGRAM (CERP)								
USACE - CERP (Part of Central and Southern Florida) ^{1,3,4}	35,217,178	61,001,000	71,924,612	78,435,000	92,053,578	97,253,000	233,800,000	244,900,000
USACE - CERP O&M ^{1,6}	425,000	1,538,000	1,826,635	0	2,920,000	0	4,971,000	4,789,000
USDOJ - NPS CERP ²	5,130,000	5,162,000	5,216,000	5,236,000	5,236,000	5,236,000	5,359,000	5,054,000
USDOJ - FWS CERP	3,246,000	2,746,000	2,718,000	2,718,000	2,718,000	2,718,000	2,718,000	2,718,000
NON-COMPREHENSIVE EVERGLADES RESTORATION PROGRAM (CERP)								
USACE - Central and Southern Florida (excluding CERP) ¹	8,800,000	7,550,000	23,071,529	11,787,000	3,573,152	2,840,000	200,000	2,100,000
USACE - Non-CERP O&M ^{5,6}	6,844,555	4,039,000	6,741,392	5,703,010	2,996,000	6,537,000	8,850,000	5,263,000
USACE - Critical Projects	0	0	0	0	0	522,160	0	0
USACE - Kissimmee River Restoration	0	0	31,411,789	36,065,000	9,800,000	3,950,000	1,000,000	3,000,000
USDA - ARS	2,989,000	2,989,000	2,989,000	2,989,000	2,989,000	2,989,000	2,989,000	2,735,000
USDA - NRCS	15,463,985	29,785,906	21,857,180	45,017,889	13,613,458	30,000,000	22,000,000	29,000,000
US Department of Commerce - NOAA	307,242	357,242	1,190,593	1,155,000	1,155,000	1,081,500	1,031,460	946,460
USDOJ - NPS Park Management	29,314,000	29,624,000	30,055,000	30,181,000	30,605,000	30,420,000	31,058,000	29,359,000
USDOJ - OERI and the South Florida Ecosystem Restoration Task Force	1,311,000	1,316,000	1,325,000	1,330,000	1,330,000	1,330,000	1,363,000	1,271,000
USDOJ - NPS Everglades Research (Critical Ecosystem Studies Initiative)	3,845,000	3,855,000	3,870,000	3,876,000	3,876,000	3,876,000	3,970,000	3,691,000
USDOJ - NPS Tamiami Trail Bridging	7,500,000	0	0	0	0	0	0	0
USDOJ - NPS Land Acquisition (management)	665,000	668,000	636,000	636,000	660,000	830,000	900,000	740,000
USDOJ - FWS Ecological Services	2,718,000	2,700,000	3,246,000	3,246,000	3,246,000	3,246,000	3,246,000	3,246,000
USDOJ - FWS Refuges and Wildlife	4,016,000	4,271,000	4,771,000	4,771,000	4,771,000	4,771,000	4,771,000	4,771,000
USDOJ - FWS Migratory Birds	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000
USDOJ - FWS Law Enforcement	608,000	568,000	568,000	568,000	568,000	568,000	568,000	568,000
USDOJ - FWS Fisheries	92,000	92,000	92,000	92,000	143,000	143,000	143,000	143,000
USDOJ - FWS Land Acquisition	5,000,000	3,000,000	4,591,000	2,500,000	2,500,000	2,000,000	3,700,000	0
USDOJ - USGS - Integrated Research, Planning and Interagency Coord.	6,525,000	7,313,000	7,928,000	7,727,000	8,327,000	8,327,000	8,192,000	1,521,000
USDOJ - BIA	390,000	390,000	743,000	580,000	390,000	380,000	380,000	380,000
USEPA	1,356,000	1,418,000	1,069,000	1,490,000	1,400,000	2,900,000	4,700,000	0

TABLE 2: FEDERAL FUNDING (ACTUAL \$)

EVERGLADES ECOSYSTEM RESTORATION PROJECTS	FY 2014 Enacted	FY 2015 Enacted	FY 2016 Enacted	FY 2017 Enacted	FY 2018 Enacted	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Requested
CERP Total (USACE and USDOJ)	44,018,178	70,447,000	81,685,247	86,389,000	102,927,578	105,207,000	246,848,000	257,461,000
Non-CERP Subtotal (USACE and USDOJ)	77,720,555	65,478,000	119,141,710	109,164,010	73,269,152	69,832,160	68,433,000	56,118,000
Non-CERP Subtotal (Other Federal Agencies)	20,116,227	34,280,148	27,105,773	50,651,889	27,659,000	36,970,500	30,720,460	32,681,460
Non-CERP Total (All Federal Agencies)	97,836,782	99,758,148	146,247,483	159,815,899	100,928,152	106,802,660	99,153,460	88,799,460
TOTAL CERP AND NON-CERP (USACE AND USDOJ)	121,738,733	135,925,000	200,826,957	195,553,010	176,196,730	175,039,160	315,281,000	313,579,000
TOTAL CERP AND NON-CERP (ALL FEDERAL AGENCIES)	141,854,960	170,205,148	227,932,730	246,204,899	203,855,730	212,009,660	346,001,460	346,260,460

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 part of the Central and Southern Florida Project (C&SF) but are presented separately from other C&SF activities.

² NPS CERP funding includes GSA space rental costs in the following amounts: FY 2014 - \$410,000; FY 2015 - \$410,000; FY 2016 - \$410,000; FY 2017 - \$410,000.

³ USACE FY 2014 enacted reflects reduction for the C&SF Upper St Johns River Project.

⁴ USACE FY 2015 requested reflects reduction for the C&SF Upper St Johns River Project.

⁵ FY 2016 Enacted O&M data includes \$6,950,000 that will be executed in FY2017 but was provided in FY2016.

⁶ FY 2017 Enacted O&M data includes \$2,832,000 that will be executed in FY2018 but was provided in FY2017.

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

EVERGLADES ECOSYSTEM RESTORATION PROJECTS	FY 2013-14 Enacted	FY 2014-15 Enacted	FY 2015-16 Enacted	FY 2016-17 Enacted	FY 2017-18 Enacted	FY 2018-19 Enacted	FY 2019-20 Enacted	FY 2020-21 Requested
COMPREHENSIVE EVERGLADES RESTORATION PROGRAM (CERP)								
Florida Department of Environmental Protection	73,164,611	61,336,618	49,371,486	163,461,458	173,783,678	176,041,563	322,702,810	233,900,000
Florida Fish and Wildlife Conservation Commission	2,001,704	1,732,157	2,151,735	3,004,775	4,616,862	4,954,181	4,143,809	3,873,679
South Florida Water Management District	56,117,416 ¹	52,836,197 ¹	54,436,380 ¹	35,914,180 ¹	30,212,186 ¹	26,637,998 ¹	46,096,597 ¹	26,517,598 ²
NON- COMPREHENSIVE EVERGLADES RESTORATION PROGRAM (CERP)								
Florida Department of Agriculture/Consumer Services	3,000,000 ³	3,000,000 ³	4,332,449 ³	4,332,449 ³	4,332,449 ³	4,332,449 ³	21,220,449 ³	21,220,449 ³
Florida Department of Environmental Protection	63,080,365	82,993,974	37,923,719	168,264,771	131,836,360	121,866,650	120,267,355 ⁵	84,711,405 ⁶
Florida Fish and Wildlife Conservation Commission	40,209,004	48,216,417	50,832,728	52,538,808	53,607,006	55,600,328	54,537,988	55,069,881
Florida Department of Transportation	19,963,236	17,656,798	11,951,883	8,969,139	44,518,584	17,369,656	5,386,700	11,284,846
South Florida Water Management District	415,873,861 ¹	418,794,193 ¹	448,384,250 ¹	395,390,671 ¹	374,751,716 ¹	370,673,830 ¹	400,839,404 ¹	409,354,036 ⁴
CERP SUBTOTAL:	131,283,731	115,904,972	105,959,601	202,380,413	208,612,726	207,633,742	372,943,216	264,291,277
NON-CERP SUBTOTAL:	542,126,466	570,661,382	553,428,029	629,495,838	609,046,080	569,842,913	602,251,896	581,640,617
STATE OF FLORIDA FUNDING TOTAL:	673,410,197	686,566,354	659,387,630	831,876,251	817,658,806	777,476,655	975,195,112	845,931,894

Footnotes:

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

² Reflects SFWMD adopted budget appropriations less any River of Grass project funds which are accounted for in the Non-CERP Everglades Ecosystem Restoration Projects category.

³ The number reflected does not include Forestry's contributions for FY 2014/15, FY 2015/16, FY 2016/17, FY 2017/18, FY 2018/19, FY 2019/20 and FY20/21.

⁴ SFWMD FY 2020/21 Preliminary Budget less state and federal funds

⁵ Total does not include FDEP FY 2019/20 grants funding of \$50,600,000 for grant funds for water quality improvements, some of which may go towards projects within the Everglades ecosystem

⁶ Total does not include Governor's budget recommendations of \$50,600,000 for FDEP FY 2020/21 grant funds for water quality improvements, some of which may go towards projects within the Everglades ecosystem.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Section 2.0

Federal Everglades Ecosystem Restoration Projects and Funding Requests

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Section 2.1: Federal Comprehensive Everglades Restoration Plan (CERP) Projects and Funding Requests (\$257,461,000)

U.S. Army Corps of Engineers (USACE) Construction (\$244,900,000)

Congress authorized the CERP in the Water Resources Development Act (WRDA) of 2000. The objective of the program is to restore, protect, and preserve water resources in central and southern Florida, including the Everglades. 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. The PIRs 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. Congress authorized three projects in WRDA 2007: the Indian River Lagoon South, the Picayune Strand Restoration, and the Site 1 Impoundment projects. An additional project, the Melaleuca Eradication Facility, was authorized for construction in accordance with the programmatic authority provision of WRDA 2000. The WRDA 2014 authorized four additional CERP projects: the Caloosahatchee River (C-43) West Basin Storage Reservoir, the C-111 Spreader Canal Western Project, the Broward County Water Preserve Areas, and the Biscayne Bay Coastal Wetland Phase 1 Projects. The WRDA 2016 authorized the Central Everglades Planning Project (CEPP) and reauthorized the Picayune Strand Restoration Project. The WRDA 2018 authorized the CERP Central and Southern Florida Everglades Agricultural Area (EAA) Reservoir Project, subject to conditions.

From a project perspective, the major focus of the USACE FY 2021 activities includes continuing construction management on the Indian River Lagoon South project features at C-44 and oversight of South Florida Water Management District (SFWMD) construction of the pump station; oversight of the C-43 Caloosahatchee West Basin Storage Reservoir construction being performed by the SFWMD; continuing construction and construction management of the Biscayne Bay Coastal Wetlands L-31 East Flow-way features; construction and construction management of CEPP South features, continued design of the CEPP South components and EAA project features; construction and construction management of the Picayune Strand southwest protection features and road removal east and west of Miller Boulevard; continued design of Broward County Water Preserve Areas features; and continuation of project adaptive assessment and monitoring activities used to monitor the effects of projects as they are implemented, as well as the CERP Design program level activities.

From a program perspective, FY 2021 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 as contained in the Integrated Delivery Schedule.

U.S. Department of the Interior (DOI) - National Park Service (NPS)
(\$5,054,000)

The CERP is a multidecadal framework to restore, protect, and preserve the water and natural resources of central and southern Florida. Projects affecting NPS lands and waters occur in phases through the end of CERP implementation (beyond 2030). The NPS works with the U.S. Fish and Wildlife Service (FWS) and the U.S. Geological Survey (USGS), in collaboration with the State of Florida and the USACE, to support CERP projects through the development of restoration performance measures, quantitative evaluations of the environmental benefits of proposed actions, and assessments of how completed projects are benefiting NPS resources.

Several long-term non-CERP Foundation Projects were completed in 2018 and 2019 and are now operational. The NPS and USACE were the lead federal agencies on the Modified Water Deliveries (Mod Waters) and C-111 South Dade (C-111SD) project implementation. The NPS and Florida Department of Transportation (FDOT) were the leads on the Tamiami Trail Next Steps (TTNS) bridging and roadway reconstruction project. All of these projects focus on restoring more natural water flows, removing barriers to reconnect the Water Conservation Areas (WCAs) and Everglades National Park (ENP), and improving habitats in the Northeast Shark River Slough and Taylor Slough regions within ENP. In FY 2020, the NPS completed the planning and preliminary design, and developed the request for proposals (RFP) to initiate construction for the Tamiami Trail Next Steps Phase 2 project. The NPS also actively participated in several ongoing CERP projects, including the initial components of the CEPP South, modeling studies to assess seepage management needs along the ENP eastern boundary (L-31N and C-111 Canals), the Western Everglades Restoration Project (WERP), and the startup of the Biscayne Bay Southeastern Everglades Restoration (BBSEER) project. CERP funding also supports NPS engagement on water management operational studies, such as the Combined Operational Plan (COP) and the Lake Okeechobee System Operating Manual (LOSOM), where our teams actively assess the effects of the planned operational changes on NPS/DOI resources. Continued NPS participation in these projects helps to ensure incremental progress toward our goal of conserving our lands and waters for the enjoyment of future generations.

In addition to these project-level interagency assessments, the NPS has a key role in programmatic-level restoration science activities, such as the RECOVER Monitoring and Assessment Plan (MAP) led by the USACE and SFWMD. The MAP develops monitoring and research studies to determine the landscape-scale ecological effects of CERP projects, that the interagency RECOVER team uses to track overall restoration success. The NPS is on the leadership team for RECOVER, which is the scientific group responsible for providing restoration science input to the CERP project teams, and the NPS also serves as a co-chair on the Southern Coastal System team. In addition, the NPS also currently serves as the Chair of the Science Coordination Team (SCG), in support of the South Florida Ecosystem Restoration Task Force, and as DOI's liaison to the National Academies: Committee on Independent Scientific Review of Everglades Restoration Progress (CISRERP).

The NPS also participates for the DOI in the formal requirements on programmatic activities as specified in WRDA 2000. These include any updates to the CERP Programmatic Regulations that specify how CERP projects will be built, operated, and evaluated; achievement of Interim Goals and Interim Targets (IGIT) used to forecast restoration progress and provide benchmarks for the

Five-Year Reports to Congress; and the identification of the appropriate quantity, timing, and distribution of water that will be produced – and reserved under federal and state law – for the natural and built system.

The Foundation and CERP project activities for FY 2020 include the following:

- For federal projects, the CERP authorization directs the NPS to formally participate in CERP planning and assessment efforts, ensuring appropriate benefits to NPS natural and cultural resources and visitor opportunities. NPS staff participate in CERP system-wide monitoring, applying hydrological and ecological performance measures, developing interim goals, and producing programmatic guidance to evaluate restoration performance. For State of Florida projects, the NPS participates in the establishment of water reservations, minimum flows and levels, water supply plans, and standards for water quality (nutrients and contaminants).
- For the Mod Waters and C-111SD Foundation Projects, the NPS will continue to track the results of the ongoing incremental field tests and development of the COP that is expected to be approved in October 2020. The COP will utilize the new project infrastructure and a new Tamiami Trail Flow Formula (TTFF) to restore more natural water flows and improve natural resource conditions in ENP and adjacent areas. NPS staff also manage the ecological monitoring program and a new COP Adaptive Management Plan, to assess the effects of the constructed Mod Waters and C-111SD projects, and continue to optimize the benefits for NPS/DOI lands and resources.
- For the Tamiami Trail Next Steps project, the NPS will analyze the water flow and marsh connectivity benefits of the 1-mile and 2.3-miles of eastern bridging completed in 2013 and 2019, respectively. The TTNS Phase 2 project received \$103.5 million in joint state/federal funding in 2019. The NPS led the preliminary design and produced the RFP in March 2020, and is currently completing the required permitting process. In July 2020 the FDOT will award the contract, and the design build project will begin construction in October 2020. The four-year project will reconstruct the remaining 6.7 miles of unbridged roadway, upgrade seven sets of existing culverts, and construct six small bridges, with an expected completion date of November 2024.
- A new non CERP project began in 2019, to develop a revised LOSOM and associated National Environmental Policy Act (NEPA) document that coincides with the completion of the Herbert Hoover Dike rehabilitation project. Lake Okeechobee is a natural lake, but also the largest water storage feature in South Florida. The Lake is the central component connecting the Kissimmee River, Caloosahatchee and Saint Lucie estuaries, and the central/southern Everglades. The CERP envisions reducing harmful Lake Okeechobee wet-season regulatory releases into the northern estuaries by redirecting this water southward as beneficial dry-season flows to the Everglades. The LOSOM is a key step for regional water supply, improving the health of the Lake and northern estuaries, and achieving Everglades restoration success, including NPS/DOI resource protection.
- The LOSOM project will involve NPS participation in public workshops and interagency technical meetings and helping to prepare the NEPA document. The outcome will be a series of incremental Lake Okeechobee regulation schedules that can be implemented as increments when new infrastructure projects are completed over the next 10 to 15 years (Kissimmee River Restoration, Herbert Hoover Dike Rehabilitation, C-43/C-43 Reservoirs, Tamiami Trail Next Steps bridging and roadway improvements, and the Central Everglades/EAA Reservoir projects).

- The NPS CERP program will also advance monitoring and assessment projects oriented toward threatened and endangered species on NPS lands, providing technical input to the USFWS as well as state/federal implementing agency planning that supports restoration-oriented water operations.
- The NPS CERP program team will continue to provide technical analyses and support to water operations and restoration activities that affect Biscayne National Park and will track progress toward completion of components of the Biscayne Bay Coastal Wetlands project, BBSEER project, as well as planned Florida Power and Light Turkey Point nuclear plant expansion and transmission corridors.
- The NPS CERP program team will continue to evaluate performance measures and restoration alternatives for the Lake Okeechobee Watershed Restoration and WERP. These ongoing CERP planning projects are expected to be authorized in WRDA 2022 or later.
- The NPS CERP program team will track the effects of current and proposed operations on Everglades water quality and work with the USACE and the State of Florida to design water operations to minimize the risk of water quality exceedances. The team will work with the State (SFWMD/Florida Department of Environmental Protection [FDEP]), USACE, USFWS, U.S. Environmental Protection Agency (USEPA), and U.S. Department of Justice (DOJ) to track the 1992 Consent Decree compliance standards that protect ENP and the Arthur R. Marshall Loxahatchee National Wildlife Refuge (Loxahatchee NWR).
- The CERP program team will continue to track and provide technical analysis and briefings on the detailed design and implementation of the State of Florida's Restoration Strategies project and its progress toward achieving the Water Quality Based Effluent Limit (WQBEL) for phosphorus entering the Everglades.

U.S. Department of the Interior (DOI) – U.S. Fish and Wildlife Service (FWS)
(\$2,718,000)

The FY 2021 request for CERP implementation will support approximately 14 full-time Ecological Services employees that actively serve on planning teams for all CERP and non-CERP restoration projects being conducted by the USACE. 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 (MBTA), and other statutes as well as the CERP Programmatic Regulations as part of the restoration effort. The FWS is an integral planning partner in formulating alternatives; designing, assessing, and monitoring; and adaptively managing the project components of CERP during its implementation. The FWS is responsible for providing environmental expertise to the USACE and the SFWMD. The FWS is also involved in guiding Everglades restoration at a system-wide scale through the following activities: system status reports, participation in RECOVER activities, and the LOSOM.

In FY 2021, the FWS will continue to participate in the development and execution of major restoration projects throughout the Everglades. These activities will include assistance in restoration plan formulation and ecological benefit analysis, ESA Section 7 consultation, recovery plan implementation, monitoring and adaptive management, 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 myriad multi-agency planning, science, and outreach efforts. As a recognized leader in the science of ecosystem restoration, the FWS provides biological and ecological expertise and is an integral planning and implementation partner in the 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.

For more information, please visit:

<http://www.fws.gov/verobeach/EvergladesRestoration.html>.

The U.S. Fish and Wildlife Service National Wildlife Refuge System (NWRS) is a premier system of federal lands set aside primarily for the purpose of conserving fish, wildlife, and plants. There are seventeen refuges within the CERP, Florida Bay, and Lake Okeechobee water management footprint. The Loxahatchee NWR is the northern extent of the Everglades and provides flows south into the Greater Everglades. Thus, NWRS is actively engaged in CERP planning and implementation through project delivery teams (PDTs) and sub-teams, such as the ecology, water quality, engineering, modeling, and plan formulation sub-teams. The NWRS is working cooperatively with multiple agencies with recommendations on water management and water quality improvements to the Everglades and estuary ecosystems.

In 1988, the United States sued the State of Florida for failing to preserve the Loxahatchee NWR and ENP for future generations due to water pollution. A 1992 consent decree established phosphorus limits and water quality compliance requirements for the refuge and the park. The NWRS works very closely with the State of Florida in water quality modeling, stormwater treatment area (STA) designs and operations, and compliance monitoring of water nutrients. The Area II refuge supervisor is a consent decree FWS principal and the Area II refuge ecologist is a member of the Technical Oversight Committee and Everglades Program Team.

For more information, please visit: <https://www.fws.gov/refuges/>

Section 2.2: Federal Non-CERP Everglades Ecosystem Restoration Projects and Funding Requests (\$88,799,460)

U.S. Army Corps of Engineers (\$10,363,000)

U.S. Army Corps of Engineers Construction (\$5,100,000)

Kissimmee River Restoration (\$3,000,000): 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 2021 activities include project oversight of ongoing construction, work in-kind and lands, easements, rights-of-way, relocation, and disposal area reviews for crediting, and post construction ecological monitoring.

South Dade County, C-111 Project (\$2,100,000): This project consists of modifications to the Central & Southern Florida (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 2021 activities include physical closeout and lands, easements, rights-of-way, relocation, and disposal area reviews for crediting, as well as initiation of design to replace two pump stations.

U.S. Army Corps of Engineers Non-CERP Operations & Maintenance (\$5,263,000)

The FY 2021 Operations and Maintenance (O&M) activities includes critical routine operations and maintenance activities associated with mitigation requirements specified in the USFWS Biological Opinion on the Everglades Restoration Transition Plan to protect threatened and endangered species (funds specific C-111 SD and Modified Water Deliveries activities); and cost shared O&M responsibilities of CERP and non-CERP features.

U.S. Department of Agriculture (USDA) - Agricultural Research Service (ARS) (\$2,735,000)

The USDA-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. Two major areas of research support South Florida Ecosystem restoration and agriculture: biological control of invasive species and improved crop production systems.

Development and Evaluation of Biological Control Agents for Invasive Species Threatening the Everglades and other Natural and Managed Systems (\$2,372,100)

The ARS Invasive Plant Research Laboratory (IPRL) in Fort Lauderdale, Florida, and its satellite lab in Gainesville, Florida, conduct research to: (1) identify and collect natural enemies for control of melaleuca, Brazilian peppertree, Old World climbing fern, downy rose myrtle, Chinese tallow, air potato, water hyacinth, water lettuce, and other invasive pest plants; (2) evaluate biological control agents for release against invasive weed and insect species in a risk analysis context; (3) obtain approval for release of host specific natural enemies; (4) mass-rear and distribute approved

agents on natural area weeds; (5) evaluate individual and community level impacts of established agents on weed targets; (6) quantify the effects of biological control agents on food webs; and (7) develop biological based integrated weed management strategies that are efficient, economical, and environmentally sound. Many of the biological control agents that are developed by the IPRL were discovered by scientists at the ARS Australian Biological Control Laboratory in Brisbane or the Foundation for the Study of Invasive Species near Buenos Aires. Landscape level weed suppression programs that maximize biological control agents are designed in close cooperation with client groups like the SFWMD, the Florida Fish and Wildlife Conservation Commission (FWC), the USACE, the NPS, the FWS, the Nature Conservancy, and many others. The FY 2021 President's Budget has a proposed termination for melaleuca research in the amount of \$262,000.

Soil Conservation for Sustainable Sugarcane Production (\$362,900)

The Sugarcane Field Station in Canal Point, Florida, develops high-yielding, disease-resistant sugarcane cultivars for both organic (muck) and sand soils. Development of new, improved sugarcane cultivars impacts the cultural practices used in commercial sugarcane production. In particular, harvest residue and application of chemicals during production affect critical components of sustainable production such as soil dynamics. The biggest challenge for sugarcane growers in Florida is orange rust disease, which causes considerable yield losses and increases production costs with multiple fungicide applications. The development of new cultivars with resistance to economically limiting diseases is a high priority because of the impact of brown and orange rust diseases. Promising molecular markers for resistance to orange rust have been identified in sugarcane germplasm and these markers are being validated for their use in marker-assisted breeding for the incorporation of disease resistance into new cultivars.

For more information, please visit:

<https://www.ars.usda.gov/southeast-area/canal-point-fl/sugarcane-field-station/>.

U.S. Department of Agriculture (USDA)- Natural Resources Conservation Service (NRCS) (\$29,000,000*)

The NRCS provides technical assistance on a voluntary basis to private landowners and operators, 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 South Florida Ecosystem. Financial assistance is provided through a variety of USDA Farm Bill Programs.

The NRCS provides assistance to livestock and dairy producers to apply Best Management Practices (BMP), 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.

Farm Bill of 2018

Environmental Quality Incentives Program (EQIP)

The EQIP 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 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.

Agricultural Conservation Easement Program (ACEP)

The ACEP provides financial and technical assistance to help conserve agricultural lands and wetlands and their related benefits. Under the Agricultural Land Easements component, NRCS helps Indian tribes, state and local governments, and non-governmental organizations protect working agricultural lands and limit non-agricultural uses of the land. Under the Wetlands Reserve Easements component, NRCS helps to restore, protect, and enhance enrolled wetlands.

**FY 2019 program funding is pending national approval of annual allocations to States.*

U.S. Department of Commerce - National Oceanic and Atmospheric Administration (NOAA) (\$946,460)

[NOAA](#) provides science, monitoring, and modeling projects critical to implementing and assessing the CERP and other parts of the South Florida Ecosystem restoration effort. NOAA projects provide pre-implementation and early implementation information critical in evaluating the downstream impacts of restoration activities on coastal resources. This information allows project managers to make adjustments through the adaptive management process. NOAA scientists and resource managers, including those from the [Florida Keys National Marine Sanctuary Program \(FKNMS\)](#), participate in various management and science coordination activities related to South Florida Ecosystem restoration. While many NOAA programs support restoration efforts, the following NOAA projects directly support CERP implementation.

Atlantic Oceanographic & Meteorological Laboratory (AOML)

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 changes in surface water flows to coastal systems is critical in determining the overall success of restoration activities. Since the early 1990s scientists from [AOML](#) (South Florida Program) have been conducting interdisciplinary observations of south Florida coastal waters. In 2020, NOAA funded large-scale shipboard surveys conducted from the R/V Walton Smith. Large-scale surveys are planned for 2021 and will cover the waters of the FKNMS. Data collected will continue to improve the predictive capabilities and enhance the understanding of the south Florida coastal ecosystem and its connectivity to the Everglades, allowing NOAA to contribute to adaptive management of CERP and fulfill its responsibility to CERP.

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

NOAA's [Southeast Fisheries Science Center \(SEFSC\)](#), in collaboration with other agencies and entities, conducts monitoring and assessment projects to support CERP. In FY 2020, NOAA's NMFS continued scientific activities to determine the impact of upstream restoration efforts and changing freshwater inflow on south Florida coastal systems. This research, which will continue in FY 2021, examines the impacts of changing freshwater runoff patterns on inshore and coastal ecosystems. These activities are conducted in Biscayne Bay and Florida Bay in collaboration with the NOAA AOML and with academic institutions and other agency partners working under the CERP Monitoring and Assessment Plan (MAP) of RECOVER.

Biscayne Bay NOAA Habitat Focus Area (HFA) / National Marine Fisheries Service

The [Biscayne Bay HFA](#) is one of NOAA's first 10 HFAs in its Habitat Blueprint Initiative, which provides a forward looking framework for coordination within NOAA and with partner organizations to address growing challenges of coastal and marine habitat loss and degradation. In FY 2020, the SEFSC continued with collaborators at AOML and elsewhere to address major goals of the Biscayne Bay HFA, including reduction of incidences of habitat-degrading algal blooms. Two papers with HFA scientists and local and regional partners were published in FY 2020 to improve understanding of factors affecting algal blooms in the bay and guide their prevention. Prompted by AOML's initial work, a recently launched watershed study for the Coral Gables Waterway will determine nutrient sources and input locations in detail. The watershed study is viewed as a pilot study to develop and display results of an approach for later application to other canals and associated watersheds discharging to the Bay. Additional SEFSC emphasis in FY 2020 was on documenting smalltooth sawfish presence in the Biscayne Bay HFA and conducting demonstration projects on living shoreline development and invasive exotic species removal on SEFSC Virginia Key property. The SEFSC and the University of Miami have collaborated to establish and maintain a 40-unit FACT (Florida Atlantic Coast Telemetry) acoustic array in the Biscayne Bay HFA to determine presence, habitat, and movement patterns of smalltooth sawfish and other acoustically tagged species. This work provides new information that may influence future management of this endangered species, as well as its potential status as an indicator of CERP success. Besides providing demonstration projects, the HFA's invasive exotic removal on SEFSC property has made it a good neighbor to the Virginia Key community removing Exotic Brazilian pepper trees (*Schinus terebinthifolius*) that were providing seed-bearing berries carried by birds to other Virginia Key areas. In FY 2021, through the Biscayne Bay HFA and existing programs, NOAA will continue to work within CERP and with other partners to protect and enhance Biscayne Bay's ecosystem health and promote healthy populations of protected and fishery species.

U.S. Department of the Interior (DOI) - National Park Service (NPS)
(\$35,061,000)

Park Management (\$29,359,000)

Big Cypress National Preserve

FY 2021 funding will support area management activities promoting public use and resource protection through the implementation and interpretation of an extensive backcountry off-road vehicle (ORV) trail system. The NPS will continue to support mandated programs, such as the protection, inventory, and monitoring of 10 threatened and endangered species (including the Florida panther, Cape Sable seaside sparrow, and Florida manatee) and a large hydrology program that includes restoration of sheet flow to ENP and the Ten Thousand Islands. Additional mandated programs include special uses, such as oil exploration and production, the largest recreational hunting wildlife management area in south Florida, implementation of the largest recreational ORV program in the lower 48 States, and 22 American Indian (Seminole, Miccosukee, and independent) sites 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 26 employee housing units, two major visitor support facilities, public utility systems, five primitive campgrounds, three developed campgrounds, and 66 miles of roads; and management of approximately 460 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 and monitoring of resources and a geographic information system.

For more information, please visit <http://www.nps.gov/bicy/index.htm>.

Biscayne National Park

Fiscal Year 2021 funding will support the park's area management activities, including promoting public use and mitigation of public use; interpretation and education programs; protection of resources; and efforts to address impacts and threats associated with urban sprawl, increased urban freshwater use, four solid waste landfills, and a nuclear power facility. All of these threats exist along the park's western boundary and are "upstream" with respect to surface- and groundwater flow into the park.

Park employees perform other area management activities associated with the protection of the park's natural, cultural, and historic resources, as well as maintenance of park facilities. Park staff protect 173,000 acres of resources that include Biscayne Bay, the largest living coral reef system in the NPS, eight known terrestrial cultural sites, 67 known submerged cultural sites, approximately 20 historic structures, and two national historic districts within a boundary that has unlimited access points. Park staff maintain three developed islands and two mainland sites that include six harbors/docking facilities, two campgrounds, six picnic areas, approximately 10 miles of trails, six residences, an environmental education camp, and a major visitor center.

The park's natural resources management will continue to protect Biscayne Bay estuarine resources, coral reefs, seagrass beds, and hard bottom communities; monitor water quality; document and mitigate impacts due to visitor and commercial uses; control exotic vegetation; and monitor 17 federally listed threatened and endangered species. Staff make special efforts to prevent extensive damage to seagrass beds and coral reefs from boat groundings and to restore those areas. Park staff also make extensive efforts to work with local, state, and federal government agencies on development and impact issues.

For more information, please visit <http://www.nps.gov/bisc/index.htm>.

Dry Tortugas National Park

Funding in FY 2021 will support operations of this 65,000-acre marine and historical park located 70 miles west of Key West. Current funding will continue to support natural and cultural resource management, including a preservation and maintenance program for Fort Jefferson. The NPS will continue 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. Natural resource activities include continuation of park-funded science and monitoring to analyze the efficacy of the Dry Tortugas Research Natural Area, natural resource damage assessment and restoration, and monitoring of sea turtles. Natural resource activities are performed by Dry Tortugas National Park natural resources staff, with technical and additional staff support provided by ENP (South Florida Natural Resources Center).

For more information, please visit <http://www.nps.gov/drto/index.htm>.

Everglades National Park

Funding for ENP in FY 2021 will support area management activities, including operations, natural and cultural resource 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 more than 1.5 million acres of fragile resources, in excess of seven million people living within 100 miles of the park boundary (as of the 2010 census), and more than one million visitors each year, ENP has special challenges. The park engages in outreach programs to the local community and has traditionally sustained a large backcountry/wilderness operation.

The park operates major visitor use areas at Flamingo, Shark Valley, and Everglades City and oversees multiple 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, two campgrounds, 48 backcountry campsites, and two fee-collection stations.

ENP remains one of the most ecologically complex parks in the nation and is unique in that it has an unprecedented four international treaty designations. It is home to approximately 750 native plant species, 61 of which are considered critically imperiled in south Florida, and hosts 39 species of orchids, of which 12 species are critically imperiled. More than 360 species of birds have been found in the park. Florida Bay, making up about 40 percent of the ENP area, is continuing to experience dramatic changes, including alterations between hypo- and 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 the park and adjacent natural

areas. Exotic animals, particularly reptiles, have become a major natural resource management issue for the park.

For more information, please visit <http://www.nps.gov/ever/index.htm>.

Office of Everglades Restoration Initiatives (OERI) and the South Florida Ecosystem Restoration Task Force (\$1,271,000)

Funding in FY 2021 will sustain the continued operations and activities of the Department of the Interior's OERI. Since 1995, the OERI has provided senior executive level leadership in support of the congressionally mandated responsibilities of the Department and the Secretary in the restoration of America's Everglades. OERI will provide support necessary to fulfill the Secretary's role and responsibilities as chair of the intergovernmental Task Force. The OERI, under the leadership of the office of the Assistant Secretary for Fish, Wildlife and Parks, will also continue in its role as the south Florida liaison for the Office of the Secretary in coordinating all departmental and bureau-level Everglades restoration activities, projects and programs.

In FY 2021, the OERI leadership and staff will continue to support and work directly with the federal, state, local government, and tribal representatives on the Task Force. OERI will also administer, manage, and support the priorities, activities, meetings, and the required reporting responsibilities of the Task Force, its Working Group, the Science Coordination Group, and any designated advisory bodies. Congressionally mandated reporting documents produced by OERI in FY 2021 will include the South Florida Ecosystem Restoration Strategy and 2018-2020 Biennial Report, the 2020 Integrated Financial Plan, and the FY 2021 Cross Cut Budget. OERI will also collaborate with the USACE in preparation of the 2020 Five Year CERP Report to Congress. In addition to the required Everglades restoration support activities, the Task Force has assigned OERI to support and lead its efforts to: update their Invasive Exotic Species Strategic Action Framework, update the 2015 Invasive Exotics Crosscut Budget document; update and assess the System-wide Ecological Indicators which is an integral component of the Task Force's Biennial Report; and to analyze and develop alternative funding scenarios for the USACE's Integrated Delivery Schedule. In FY 2021, the OERI will also continue maintaining, redesigning and improving the content of the evergladesrestoration.gov website. This website was established and designed as an innovative and comprehensive resource and is recognized by all as the "go-to" resource for any current and historical information on the activities, projects and programs associated with the restoration of America's Everglades.

As a consequence of the Covid 19 crisis of 2020, in FY 2021 OERI will continue its efforts with the implementation and application of social distancing practices by using available web technologies such as Microsoft Teams, Go to Meeting, Zoom Webinars and any other similar newly developed services when conducting its restoration programs and business meetings.

Everglades Research – Critical Ecosystem Studies Initiative (CESI) (\$3,691,000)

Since its inception in 1997, the 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. CESI supports ecological and environmental monitoring and research, restoration project assessment, hydrologic and ecological model development, and information synthesis, enabling the provision of scientific information and insight needed to promote Everglades restoration and management success.

The CESI planned activities for FY 2020 will address major restoration and management issues and support multiple restoration projects:

Restoration Project Planning, Assessment, and Decision Support

- Implementation of applied science and monitoring to fill gaps in the Mod Waters monitoring program through cooperative agreements that track the effects of the operation of the Mod Waters and C-111SD projects on ENP resources.
- Continuing support of hydrologic and ecological modeling and synthesis of ecological knowledge that improves forecasting capability and informs restoration project planning, design, and water operations planning; this includes support of Mod Waters, TTNS, and CEPP.
- Continuing development and management of biological and hydrologic databases that organize and protect information, along with development of decision-support tools that enable rapid support for resource managers, decision makers, and the public about trends in ENP resources as they relate to resource management changes, restoration progress, and climatic events and variations; these databases contain more than 80 years of continuous measurements on some subjects.
- Continuing support of the Task Force, OERI and DOI's oversight of the Everglades Restoration Initiative.
- Continuing support to OERI for the Department's cost share resp for the Committee on Independent Scientific Review of Everglades Restoration (CISRERP).

Invasive Exotic Species Management

- Increasing support of applied science on the effects of exotic invasive species on the natural resources of ENP, Big Cypress National Preserve and Biscayne National Park and the development of methods of detection, suppression, and control of invasive species, especially invasive reptiles and plants; projects informing potential management of Burmese pythons and Argentine black and white tegus are ongoing.
- Assessment of fire management options to better control invasive exotic plants while protecting soils and native plants; ongoing analysis of the combined influence of freshwater flow restoration and fire management on coastal wetlands soils is particularly important to minimize saltwater intrusion impacts.

Florida Bay and Coastal Resource Management and Restoration

- Supporting marine and estuarine applied science and enhanced monitoring of the physical and ecological indicators of the health of Florida Bay, including monitoring and research of the 2015–2016 Florida Bay seagrass die-off and recovery and the cause and effects of associated algal blooms that persist in the bay.
- Assessment of how freshwater flow restoration affects salinity and other environmental factors and can benefit seagrass habitat and recreational fishing.
- Research and modeling on the effects of sea level rise on coastal resources and how Everglades restoration can best mitigate those effects.

Threatened and endangered species, biodiversity, and wildlife

- Continuing support of monitoring and research on the endangered Cape Sable seaside sparrow (CSSS) to enhance the ability to manage this species during the next decade, as water inflows to ENP are redistributed.

- Continuing critical long-term hydrologic and biological monitoring projects that support assessments of the effect of restoration projects on Everglades species, habitats, and communities, including monitoring of fish and macro-invertebrates, plant communities, wading birds, water fowl, and alligators and crocodiles.
- Research on how complementary combinations of water management and fire management can best protect and restore Everglades biodiversity, including the improvement of habitat for endangered butterflies and CSSS populations.

For more information, please visit <https://www.nps.gov/ever/learn/scienceresearch.htm>.

Land Acquisition Management (\$740,000)

Funding in FY 2021 will 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) (\$8,820,000)

Resource Management

Ecological Services (\$3,246,000)

These funds will allow the FWS to continue coordination, technical assistance, and partnering efforts with the NPS, the USGS, tribal governments, state agencies, and private organizations involved in the restoration of the South Florida Ecosystem. The funds for FY 2021 will also enable the FWS to continue implementing the Multi-Species Recovery Plan, which provides a blueprint for protecting, conserving, and managing threatened and endangered fish and wildlife resources. The FWS is undertaking comprehensive habitat-based strategies for restoration and recovery of species. Examples include the establishment of panther conservation banks and multi-species management plans.

The FWS will continue consulting with and providing technical assistance to the USACE, the 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's 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 planning and building of several CERP components require careful review of applications by the local sponsor, mainly the SFWMD, through the USACE's regulatory process. In FY 2021, the FWS will continue consultation with the USACE 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, nongovernmental 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 2021, the FWS will address new USACE 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 myriad 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 be to support and advance adaptive management and the principal goals of Everglades restoration.

Refuges and Wildlife (\$4,771,000)

The NWRS has embarked on strategically and collaboratively addressing the mounting challenges faced with conserving America's wild plants, fish, animals and their habitats in our rapidly changing world. These efforts are finding new ways to conserve America's wildlife and wildlife places. Management focuses on scientific excellence at a landscape scale for the benefit of a diverse public while nurturing the next generation of conservation leaders. The mission of the NWRS is to administer a national network of lands and waters for the conservation, management, and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats for the benefit of present and future generations of Americans.

The NWRS administers 17 refuges in central and south Florida. Resource management funds will foster the restoration and management of lands and protection of fish and wildlife including migratory birds and threatened and endangered species. These funds will support operations and management of refuges to address ecosystem restoration efforts, and impacts and threats associated with urban development, increased freshwater demands, sea level rise, and a warming climate. The following are supported refuges:

Everglades Headwaters, Lake Wales Ridge, Pelican Island, Archie Carr, Arthur R. Marshall Loxahatchee, Nathaniel P. Reed Hobe Sound, J.N. Ding Darling complex, (including the Caloosahatchee, Island Bay, Matlacha Pass, and Pine Island refuges), Florida Panther, Ten Thousand Islands, and refuges in Florida Bay and the Florida Keys, including Crocodile Lake, National Key Deer, Great White Heron, and Key West refuges.

Migratory Birds (\$92,000)

While coordinating with the Service's South Florida Ecological Services Field Office and the Loxahatchee NWR, the Division of Migratory Birds works cooperatively with the Florida Fish and Wildlife Conservation Commission 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 swamp hen. Effective implementation of the CERP with the cited partners, the USACE, 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.

Law Enforcement (\$568,000)

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 the 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.

Fisheries (\$143,000)

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 (\$1,521,000)

Greater Everglades Restoration – Integrating Research, Planning, and Interagency Coordination

South Florida is particularly vulnerable to the introduction and spread of invasive plants and animals and is home to a wide variety of non-native species, such as melaleuca trees, Old World climbing ferns, the Burmese python, and most recently, the Argentine black and white tegu. In FY 2021, the USGS will continue to support high-priority research needs identified by the Task Force through its Invasive Exotic Species Strategic Action Framework and requested by DOI and other partners.

For more information, please see <https://www.evergladesrestoration.gov/content/ies/>.

This Task Force-led process occurred over 1.5 years, with participation from federal, state, and local governments; tribes; NGOs; academia; and private citizens. Analysis identified early detection and rapid response (EDRR) as the best way to stop invasive species early in their invasion process. It also identified the need for a risk assessment framework to help natural resource managers decide how to allocate limited resources in the face of new invasive threats. An initial framework was developed by the USGS and is now being used by partner agencies. The Task Force, via the South Florida Ecosystem Restoration Working Group, will convene additional workshops in FY 2021 to update the list of high-priority research needs, and the USGS will focus research intended to address those priorities. Research will focus on aspects of EDRR, such as using environmental DNA (eDNA) to determine the northern extent of the Burmese python expansion; examining the biology, distribution, and impacts of tegus and pythons; using population models and decision-support tools to develop better monitoring and management efforts; and developing a synthesis document summarizing all research on Burmese pythons.

Greater Everglades Restoration Alternatives

The USGS will maintain existing models such as the field scale physical model of sheet flow, the relationships between restoring hydropattern (i.e., the time series of water levels) and water quality, and the existing global-scale climate models that were downscaled for use on the Everglades system. The USGS will start to develop single-species models to predict the possible impacts of different Everglades restoration alternatives.

Groundwater Monitoring in the Everglades

The USGS provides science to support management and restoration of America's Everglades in collaboration with federal and state partners, including the USACE and the State of Florida water management districts. The Groundwater and Streamflow Information Program/Water Observing System Program provides cooperative matching funds for groundwater monitoring in the Everglades, which supports monitoring of water levels in approximately 290 groundwater wells; cooperative matching funds for surface-water monitoring in the Everglades, which supports water-level only or water-level and streamflow monitoring at 63 streamgages; and Federal Priority Streamgage funds to support water-level and streamflow monitoring at one streamgage in the Everglades.

Federal Everglades Ecosystem Restoration Projects

The Southeast Climate Adaptation Science Center will provide ad hoc technical assistance on climate science and data needs to support the Everglades area.

U.S. Department of the Interior - Bureau of Indian Affairs (BIA) (\$380,000)

In FY 2021, \$380,000 will be used for continuing efforts to restore the South Florida Ecosystem for the Seminole Tribe of Florida and the Miccosukee Tribe of Indians of Florida. That funding (\$190,000 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 Endangered Species Act in stormwater areas on the Seminole and Big Cypress reservations.

U.S. Environmental Protection Agency (EPA) (\$0)

The EPA priorities for restoring and protecting the South Florida Ecosystem in FY 2021 include continuing to work with the USACE and the State of Florida to implement the CERP via the EPA authorities under the Clean Water Act and the National Environmental Policy Act through the following activities:

- provide support for Everglades Water Quality Restoration Strategies;
- serve as co-chair, with the Florida Department of Environmental Protection, for the FKNMS Water Quality Protection Program (WQPP) to adopt enforceable pollution control measures and BMPs to reduce or eliminate point and nonpoint source pollution impacting the FKNMS; and
- provide one EPA staff member co-located with the USACE to promote early engagement efforts and face-to-face opportunities for the CERP and other south Florida activities.

In addition, the EPA anticipates carrying out the following activities during FY 2021 pending the availability of South Florida Geographic Initiative (SFGI) funding:

- provide technical and funding support for the implementation of the Florida Keys Reasonable Assurance Document;

- implement the comprehensive long-term monitoring program (water quality, coral reef, and seagrass), special studies, data management, and public education components of the FKNMS WQPP as required by the National Marine Sanctuaries Program Act of 1990;
- aid in the protection of southeast Florida coral reef ecosystems by the reduction of land-based sources of pollution on a watershed scale including the control of discharges from point sources; and
- provide funding opportunities for various water quality and ecosystem monitoring efforts throughout south Florida.

During FYs 2018, 2019, and 2020, the Agency's final enacted budget levels are reflected in Table 1. Additionally, the final EPA SFGI budget values enacted for FY 2019 (\$2.9 million) and FY 2020 (\$4.7 million) have significantly increased, compared to previous years 2014-2018 (~\$1 million-\$1.5 million).

Furthermore, several special projects were funded with the final enacted FY 2019 budget increase including: approximately \$430,000 to monitor coral health in south Florida; \$475,000 to enhance water quality and seagrass monitoring in the Caloosahatchee Estuary, especially with respect to assessing the impact of releases from Lake Okeechobee and harmful algal blooms; and \$584,000 to enhance water quality and seagrass monitoring in Biscayne Bay, especially with respect to assessing the impact of Everglades Restoration projects and harmful algal blooms.

For FY 2020, EPA anticipates providing funding in the following focused subject areas: South Florida coral health monitoring, water quality and seagrass monitoring in the Caloosahatchee Estuary and Indian River Lagoon, especially with respect to assessing the impact of Lake Okeechobee releases and harmful algal blooms; and water quality and seagrass monitoring in Florida Bay and Biscayne Bay, especially with respect to assessing the impact of Everglades Restoration projects and harmful algal blooms and the FKNMS WQPP.

The proposed EPA FY 2021 President's budget returns the responsibility for funding local environmental programs to state and local entities.

For more information, please visit:

http://ocean.floridamarine.org/fknms_wqpp/home.htm

<https://www.epa.gov/everglades>

Section 3.0

State of Florida Everglades Ecosystem Restoration Projects and Funding Requests

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Section 3.1: State of Florida Comprehensive Everglades Restoration Plan (CERP) Projects and Funding Requests (\$264,291,277)

Florida Department of Environmental Protection (FDEP) (\$233,900,000)

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

The FDEP administers the Save Our Everglades Trust Fund (SOETF), which is used to pay for a portion of the State's share of CERP (<https://floridadep.gov/eco-pro>). Additional Everglades restoration funding from the Land Acquisition Trust Fund (LATF) is used to fund CERP, the Northern Everglades and Estuaries Protection Program (NEEPP), and the Restoration Strategies Regional Water Quality Plan (Restoration Strategies), which will be discussed further in section 3.2. The Florida Legacy bill was signed into law during the 2016 legislative session and provides continual funding beginning in FY 2017/18 with a minimum of \$200 million for Everglades project implementation with a preference given to projects that reduce harmful discharges from Lake Okeechobee to the St. Lucie or Caloosahatchee estuaries.

The Governor's Recommended FY 2020/21 CERP funding includes a total of \$233,900,000. These funds will be distributed through the FDEP to the SFWMD for the planning, design, engineering, and construction of various CERP projects including the C-43 West Basin Reservoir, Biscayne Bay Coastal Wetlands, CEPP, CERP Planning and \$64,000,000 in funding provided for the EAA reservoir and associated projects, in accordance with Senate Bill 10.

The FDEP CERP-related project expenditures during the past fiscal year, as of April 01, 2020, totaled \$102,792,901. These expenditures included the following activities:

Office of Water Policy and Ecosystems Restoration: The Office of Water Policy and Ecosystems Projects (OWPEP) oversees implementation of CERP projects. Tasks include policy, regulatory, planning, program coordination, technical and engineering support, and coordination with other FDEP staff regarding issues related to CERP and non-CERP projects. Projects funded through the SOETF and LATF during FY 2019/20 include the EAA Reservoir, C-43 West Basin Storage Reservoir project, C-44 Reservoir and STA project, Lake Okeechobee Watershed Project, Loxahatchee River Watershed Restoration, WERP, Biscayne Bay Coastal Wetlands, Picayune Strand Restoration project, C-111 Spreader Canal, CEPP South, CERP Planning, and CERP Water Quality Studies.

Waste Management in Tallahassee: Tasks include technical support and review of potential impacts from residual agrochemicals on lands acquired for restoration projects and CERP Water Quality Studies.

Florida Fish and Wildlife Conservation Commission (FWC) (\$3,873,679)

The FWC contributes to CERP projects by providing technical assistance to the sponsoring agencies, ensuring that CERP activities address the needs of fish and wildlife and their associated habitats. The Office of Conservation Planning Services facilitates official consultations for CERP projects through various processes including inter-agency planning teams, the Coastal Zone Management Act, the Fish and Wildlife Coordination Act, and the NEPA.

FWC's Office of Strategic Initiatives (OSI) identifies and coordinates programs with boundary-spanning implications that benefit wildlife and their habitats. FWC maintains an agency organized inter-divisional team to prioritize and coordinate the agency's contributions to all South Florida Ecosystem restoration activities including CERP. The agency created an Everglades Coordinator position in 2016, housed within the OSI, to work internally across FWC divisions and regions and externally with partnering agencies. The Everglades Coordinator position and inter-divisional support team ensure that FWC is strategically positioned to support restoration of the South Florida Ecosystem.

South Florida Water Management District (\$26,517,598)

The SFWMD is the local sponsor for the majority of the 68 projects included in the CERP. Planning, design, and construction are currently underway on some of these projects. While some projects are in the planning and design phase, others such as the Indian River Lagoon South C-44 Reservoir and STA Project, C-43 Reservoir Project, Picayune Strand Restoration Project, and CEPP are currently under construction.

The [Indian River Lagoon South](#) restoration project will reduce harmful freshwater inflows and generate habitat and water quality improvements in the St. Lucie Estuary and the Indian River Lagoon. The SFWMD has completed construction of the C-44 Communication Tower, the S-404 System Discharge structure and the S-401 Pump Station. The 6,300-acre C-44 STA is currently under construction and expected to be completed in 2020. The C-44 Reservoir, which will store up to 550,600 acre-feet of water, is under construction by the USACE and expected to be completed in 2021.

The [Picayune Strand Restoration](#) project will restore natural sheetflow to enhance wetlands in the 55,000-acre Picayune Strand and provide more natural freshwater inflow to the Ten Thousand Islands National Wildlife Refuge. The SFWMD initiated construction of the Manatee Mitigation Feature of the Picayune Strand Restoration Project in late Spring 2015 and construction is now complete. The operational testing and monitoring period for the Merritt, Faka Union, and Miller pump stations are complete and have been transferred to the SFWMD for long term operations and maintenance. The design of the southwestern protection feature is in progress and the acquisition of remaining project lands in the Belle Meade area is underway with the majority of parcels now in SFWMD ownership.

The [C-43 West Basin Reservoir Project](#) will capture and store approximately 170,000 acre-feet of Lake Okeechobee regulatory releases improving salinity balance for the Caloosahatchee Estuary by controlling peak flows during the wet season and providing essential flows during the dry season. Preloading, demolition work, and construction of the irrigation pump station (195 cfs) is complete. The intake pump station (1500 cfs) and embankment construction is underway and scheduled for completion in September 2023.

The [CEPP](#) includes a suite of storage, treatment, conveyance and seepage management measures that will provide the necessary components to deliver additional fresh water from Lake Okeechobee south to WCA 3, ENP, and Florida Bay. The project was first authorized by Congress in 2016 and amended in 2018. The CEPP South components currently moving forward are the removal of approximately 5 miles of Old Tamiami Trail and increasing the conveyance capacity at the S-333 structure. These project features are anticipated to be completed by 2021 and will facilitate additional deliveries of water from WCA 3A directly to ENP and aid in alleviating the high-water conditions being experienced in WCA 3A.

Congress approved the [CEPP Post Authorization Change Report](#) as part of WRDA 2018. The project will provide additional canal conveyance, 240,000 acre-feet of storage, and 6,500 acres of treatment south of Lake Okeechobee, and in conjunction with other project components, will reduce the volume of damaging discharges from Lake Okeechobee to the northern estuaries and provide increased conveyance south to the Everglades. In 2019, the SFWMD began design of the canal conveyance improvements and stormwater treatment area and the USACE began design of the reservoir.

The SFWMD and USACE completed the [Integrated Delivery Schedule](#) (IDS) in 2015 and updated it again in 2018 based on funding availability from the implementing agencies. The 2019 IDS was completed in December 2019. In accordance with this publicly supported project delivery schedule, the agencies initiated the [Lake Okeechobee Watershed Restoration Project](#), the WERP, and the [Loxahatchee River Watershed Restoration Project](#) in 2016. The Final Integrated PIR and Environmental Impact Statement for the Loxahatchee River Watershed Restoration Project was published in the Federal Register in February 2020.

In addition to the projects listed above, the SFWMD partners with the USACE on several other projects. The Melaleuca Mass Rearing Annex project to raise biological control agents to aid in the eradication of exotic plant species in the Everglades was the first CERP project transferred into the operations and maintenance phase under the 50/50 cost share agreement between the USACE and the SFWMD. The [C-111 West Spreader Canal](#), [Biscayne Bay Coastal Wetlands](#), and [Broward County Water Preserve Areas](#) are in different stages of design and construction.

Status of these projects can be found in the Everglades Restoration Progress document at <https://www.sfwmd.gov/our-work/everglades>.

Section 3.2: State of Florida Non-CERP Everglades Ecosystem Restoration Projects and Funding Requests (\$581,640,617)

Florida Department of Agriculture and Consumer Services (FDACS) (\$21,220,449)

Under the Florida Watershed Restoration Act (section 403.067, F.S.), the FDEP is charged with identifying impaired surface waters and establishing total maximum daily loads (TMDLs) for pollutants entering the impaired waters. Once a TMDL is adopted, the FDEP develops and adopts a basin management action plan (BMAP) for the applicable watershed. In South Florida, BMAPs have been developed for the Lake Okeechobee, St. Lucie and Caloosahatchee basins. The BMAPs outline the load allocations for different source inputs and specific activities that stakeholders must undertake to reduce pollutants to meet the applicable TMDL. In watersheds with adopted BMAPs, nonpoint source agricultural landowners are required to either enroll in and implement the FDACS BMPs or conduct water quality monitoring prescribed by the FDEP or a water management district. The FDACS has adopted by rule BMPs for cow/calf, citrus, vegetable and agronomic crops, nurseries, equine, sod, dairy, poultry, specialty fruit and nut, forestry and silviculture operations. The FDACS Office of Agricultural Water Policy also works with agricultural landowners outside of BMAPs to implement water quality and water conservation BMPs to further water resource protection and ecosystem restoration. The FDACS provides technical and financial assistance to producers for the implementation of prioritized BMPs, as well as other innovative practices and projects. Some examples of other practices and projects include advanced precision agricultural practices, structures for onsite water management, wetland restoration, floating aquatic vegetative tilling, and hybrid wetlands treatment technology. BMPs are just one strategy used to achieve pollutant reductions within BMAPs. Other strategies and projects must also be implemented.

The FDACS also plays an important role in the management of public lands through the Florida Forest Service, which 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.

Florida Department of Environmental Protection (FDEP) (\$84,711,405)

The FDEP's non-CERP South Florida Ecosystem restoration priorities include implementation of the Everglades Forever Act, Restoration Strategies, and the NEEPP. (<https://floridadep.gov/eco-pro>). The Governor's Recommended FY 2020-2021 budget includes funding for the following programs: \$32,668,382 for Restoration Strategies and \$47,043,022 for the implementation of NEEPP and water storage projects that provide relief from discharges to the St. Lucie and Caloosahatchee rivers and estuaries. The budget also includes \$5 million distributed through the FDEP to the SFWMD for Dispersed Water Management, a shallow water storage program initiated by the state that retains water on public and private lands providing local basin runoff relief.

The Governor's Recommended Budget also includes \$10 million for the purpose of supporting the evaluation and implementation of innovative technologies and short-term solutions to combat or clean up harmful algal blooms and nutrient enrichment of Florida's fresh waterbodies, including lakes, rivers, estuaries, and canals.

Additional funding not included in the above total, but part of the Governor's Recommended Budget, includes \$40,600,000 million for grant funds for water quality improvements, some of which may go towards projects within the Everglades system.

In addition, the FDEP implements water quality improvement programs for the Clean Water Act Section 303d-listed water bodies; ecosystem restoration project management; watershed planning and coordination activities; BMAPs; and research and monitoring. The FDEP Office of Resilience and Coastal Protection manages more than 4 million acres of submerged lands and coastal uplands in Florida. With support from the NOAA, this office manages 41 aquatic preserves, three National Estuarine Research reserves, the FKNMS, and the Coral Reef Conservation Program.

For more information, please visit: <https://floridadep.gov/rcp>
<https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps>

The FDEP's related project expenditures during the past fiscal year, totaled \$44,824,879.96, as of April 01, 2020. These expenditures included the following activities:

- Office of Water Policy and Ecosystems Restoration

The Office of Water Policy and Ecosystems Projects also oversees implementation of non-CERP projects. Tasks include policy, regulatory, planning, program coordination, technical and engineering support, and coordination with other FDEP staff regarding issues related to non-CERP projects. Non-CERP projects funded through the SOETF and LATF during FY 2019/20 include Restoration Strategies, Lakeside Ranch STA, C-111 South Dade land acquisition, and Dispersed Water Management projects.

- Division of Environmental Assessment and Restoration

Tasks include TMDL and BMAP development, water quality sampling and technical support, the South Florida Canal Study, mercury research and monitoring, aquatic ecology and quality assurance assistance and reviews, and water quality-related issues associated with the Everglades.

Florida Fish and Wildlife Conservation Commission (FWC) (\$55,069,881)

The FWC stewards 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 (Division of

Freshwater Fisheries Management, Division of Habitat and Species Conservation, Division of Hunting and Game Management, and Division of Marine Fisheries Management), while the Division of Law Enforcement ensures that conservation laws protecting fish, wildlife, and their habitats are enforced. The Fish and Wildlife Research Institute administers the research and monitoring programs that support the FWC's mission and integrates its research activities with management efforts of other divisions and partnering programs. The Fish and Wildlife Research Institute (FWRI) plays a key role supporting the CERP's based RECOVER program through dedicated seagrass monitoring, oyster monitoring, fisheries independent monitoring, and RECOVER team support. FWC programs also support imperiled species management, freshwater and marine fisheries management; non-native species research, management, and removal; aquatic and terrestrial invasive plant management, and the recovery of endangered species such as the Florida panther, Everglade Snail Kite, Red-cockaded Woodpecker, marine mammals, and stony corals.

The FWC is either sole manager or a partnering manager on over three million acres of public lands throughout the South Florida Ecosystem. Additionally, FWC contributes to state land acquisition programs targeting lands within or contiguous to areas currently managed by the agency. Further, FWC administers an on-going lake enhancement and restoration program to maintain quality habitat for wetland-dependent fish and wildlife.

Partnerships and Outreach: Partnerships with other governmental agencies (local, state, and federal), NGOs, and individuals help achieve conservation goals for wildlife. Working with partners, the FWC provides both technical assistance and grant support to build public-private conservation partnerships with Florida landowners wishing to sustain fish and wildlife habitat on their properties. FWC partnerships also support the agency's broad outreach goals that encourage the responsible use of natural resources, education, and conservation.

The FWC's planned funding for South Florida Ecosystem restoration during FY 2019/20 includes:

- Division of Habitat and Species Conservation (\$31,960,701)
- Law Enforcement (\$25,927,597)
- Division of Freshwater Fisheries (\$476,000)
- Fish and Wildlife Research Institute (\$579,262)

Florida Department of Transportation (FDOT) (\$11,284,846)

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. Notable expenditures in this fiscal year's plan:

- FDOT District Four plans to construct wildlife crossings for the SR 710 and the SR 7 Extension projects.
- FDOT District Four is researching the potential to create a conservation bank for the Caracara.
- FDOT District Six plans to continue removal of exotic vegetation for several project in the district.

The FDOT's planned funding for South Florida Ecosystem restoration during FY 2020/21 is \$11,284,846 and includes:

- Exotic and endangered/threatened species survey (\$376,890)
- Research to determine the effectiveness of wildlife crossings (\$1,519,440)
- Mitigation maintenance and monitoring (\$388,250)
- Removal of exotic vegetation (\$1,861,678)
- Wildlife and wetland mitigation (\$5,946,088)
- Seagrass and mangrove mitigation (\$1,175,000)
- Everglades Restoration (\$17,500)

South Florida Water Management District (SFWMD) (\$409,354,036)

The SFWMD is implementing the Long-Term Plan by including the structural and vegetation enhancements to the existing STAs, implementing BMPs, and working to ensure integration with CERP projects. In Water Year 2019 (May 1, 2018 - April 30, 2019), the STAs treated approximately 1.4 million acre-feet of water and recorded good annual performance, retaining 81% of phosphorus from water flowing through the treatment cells and treating water to a flow-weighted mean concentration of 23 parts per billion of phosphorus. During the water year, the STAs removed more than 179 metric tons of phosphorus.

For more information, please visit: <http://www.sfwmd.gov/sta>.

BMPs in the EAA resulted in a 56% reduction in phosphorus, exceeding the 25% statutory requirement. For the tenth consecutive year, BMPs in the C-139 Basin complied with the requirement of maintaining historic phosphorus loads. Additionally, the SFWMD works closely with the FDEP and other local, state, federal, and tribal governments on other non-CERP programs to restore and protect the South Florida Ecosystem.

For more information, please visit: <https://www.sfwmd.gov/bmps>.

During the 2013 legislative session, the Everglades Forever Act (EFA) was modified to incorporate the Restoration Strategies Regional Water Quality Plan, dated April 27, 2012, into the Long-Term Plan. Since the EFA and National Pollutant Discharge Elimination System permits and consent orders were issued in September 2012, six Restoration Strategies projects have been completed, seven others are ongoing, and 51 of 74 consent order milestones have been achieved, 49 of them ahead of their deadlines. In 2018, the SFWMD updated the *Science Plan for the Everglades Stormwater Treatment Areas* to identify studies that investigate the critical factors that

collectively influence ultralow treatment performance and phosphorus reduction in the STAs. Six studies have been completed and eight are under way.

For more information, please visit: <http://www.sfwmd.gov/restorationstrategies>.

As part of an ongoing effort to maximize water storage in the greater Everglades system, the SFWMD continues to partner with agencies and private landowners to bolster the DWM Program. Detaining or treating water on public and private lands is one tool to help reduce the amount of water flowing into Lake Okeechobee and/or discharged to the Caloosahatchee and St. Lucie estuaries during times of excess water conditions throughout south Florida. This year, the SFWMD has led efforts to plan, implement, or operate one Florida Ranchlands Environmental Services Project, eight first solicitation Northern Everglades Payment for Environmental Services projects, seven second solicitation projects on ranchlands, two water farming projects, six large public/private projects under the NEEPP, and nine projects on District lands. Since its inception in 2005, the DWM Program's estimated average annual retention volume has grown to more than 114,403 acre-feet per year in operation and maintenance with an additional estimated average annual retention volume of over 380,650 acre-feet per year in the planning, design/permitting, or construction phase.

For more information, please visit: <http://www.sfwmd.gov/storage>.

Restoration of the Northern and Southern Everglades is integral to the core mission of the SFWMD and several initiatives and construction projects are now underway to revitalize and protect the South Florida Ecosystem. The SFWMD's priority non-CERP South Florida Ecosystem restoration and protection projects for FY 2020/21 include:

- Restoring the Kissimmee River and floodplain (in cooperation with the USACE) through construction, backfilling 22 miles of canal, reshaping 9 miles of remnant river channel, rehydrating 25,000 acres of river floodplain, and a comprehensive ecological evaluation program.
For more information, please visit: <http://www.sfwmd.gov/kissimmee>.
- Implementing the C-111 South Dade Project to improve hydrologic conditions in Taylor Slough, its headwaters, the Rocky Glades, and the eastern panhandle of ENP and to increase freshwater flows to northeast Florida Bay.
- The construction of a bridge to raise a 6.5-mile section of Tamiami Trail in western Miami-Dade County, the second phase of the Tamiami Trail Project, which will allow more water to flow out of WCA 3A south into ENP. Design is anticipated to be completed in December 2020 and construction is expected to be completed by December 2022.
- Updating the Lake Okeechobee Watershed Protection Plan (LOWPP) by March 1, 2020, in accordance with F.S. 373.4595(3)(a), to ensure that it is consistent with the Lake Okeechobee Basin Management Action Plan adopted pursuant to s. 403.067.
- Continuing implementation of the NEEPP and associated protection plans for the three northern watersheds (Lake Okeechobee, St. Lucie, and Caloosahatchee).
For more information, please visit: <http://www.sfwmd.gov/northerneverglades>.

- Continuing implementation of provisions in the Everglades Forever Act and Long-Term Plan including STA operation and optimization, regulation, managing invasive exotic and nuisance vegetation on SFWMD lands, and implementing cost-effective solutions to improve water quality treatment, reduce nutrient loads, and achieve water quality standards.
For more information, please visit: <http://www.sfwmd.gov/sta>.
- Updating and implementing regional water supply plans.
For more information, please visit: <http://www.sfwmd.gov/watersupply>.
- Operating and maintaining one of the largest [flood control systems](#) in the world that includes over 650 water control structures, 621 project culverts, 77 pump stations, approximately 2,100 miles of canals, and 2,000 miles of levees/berms.

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; 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 and animals, environmental resource permitting, and intergovernmental coordination.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Section 4.0

Agency Contacts

The following individuals are designated as points of contacts concerning their agency information as provided in the Cross-Cut Budget 2020 Working Document.

Federal Agencies:

<i>Marsha Bansee Lee</i> Department of the Interior, Office of Everglades Restoration Initiatives	954/377-5916	marsha_bansee@evergladesrestoration.gov
<i>Kevin Burger</i> Department of the Interior, Office of Everglades Restoration Initiatives	954/377-5968	Kevin_Burger@ios.doi.gov
<i>Nancy Diersing</i> U.S. Department of Commerce - NOAA	305/852-7717	Nancy.Diersing@noaa.gov
<i>Cecelia Ann Harper</i> U.S. Environmental Protection Agency	470/249-3125	Harper.Cecelia@epa.gov
<i>Michael Magley</i> U.S. Army Corps of Engineers	404/562-5206	Michael.E.Magley@usace.army.mil
<i>Steve Farrell</i> U.S. Department of the Interior	202/208-6690	Steven_Farrell@ios.doi.gov
<i>Jeff Schmidt</i> U.S. Department of Agriculture - NRCS	561/792-2811	Jeff.Schmidt@fl.usda.gov
<i>Christina Woods</i> U.S. Department of Agriculture - ARS	301/504-4482	christina.woods@ars.usda.gov

State of Florida Agencies:

<i>James Erskine</i> Florida Fish and Wildlife Conservation Commission	561/625-5122	James.Erskine@MyFWC.com
<i>Deinna Nicholson</i> Florida Department of Environmental Protection	850/245-2230	Deinna.Nicholson@FloridaDEP.gov
<i>Nafeeza Hooseinny</i> South Florida Water Management District	561/682-2209	nhoosein@sfwmd.gov
<i>Jason Watts</i> Florida Department of Transportation	850/414-4316	jason.watts@dot.state.fl.us
<i>Rebecca Elliott</i> Florida Department of Agriculture and Consumer Services	561/682-6040	relliott@sfwmd.gov