# Beach Management Funding Assistance Program Fixed Capital Outlay Local Government Funding Request Fiscal Year 2019-2020

Division of Water Resource Management
Florida Department of Environmental Protection
February 2019





2018 Sand Key Segment – Pinellas County Shore Protection Project

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#### Introduction

Florida is dependent on its 825 miles of sandy beaches fronting the Atlantic Ocean, Gulf of Mexico and Straits of Florida for storm protection. Healthy beaches protect public infrastructure and private upland development, provide critical habitat for many endangered and threatened species, and secure recreational and economic interest along the state's sandy shoreline. According to the Florida Office of Economic and Demographic Research (2015), "...the state's investment in the Beach Management Program generated a positive return on investment of 5.4... estimated using tax revenues resulting from visitor spending... A return of greater than 1 means that the tax revenue generated by tourists to the state of Florida more than covers the state's expenditure on beaches..."

The Florida Department of Environmental Protection (DEP) is charged, in Chapter 161, Florida Statutes (F.S.), with developing and implementing a comprehensive, long-range statewide beach management plan. DEP has developed, in coordination with local sponsors and the U.S. Army Corps of Engineers (USACE), a Strategic Beach Management Plan (Strategic Plan), Long Range Budget Plan and annual inventory of beach erosion control project activities proposed for the coming fiscal year. The Strategic Plan adopts strategies for erosion control activities along critically eroded beaches and inlets. Projects must have a clearly identifiable beach management benefit consistent with the Strategic Plan to be eligible for state funding assistance.

Florida's beach management program provides funding for a variety of local government-sponsored erosion control activities (e.g., feasibility and design studies, construction of erosion control structures and engineered sand placement, and post-construction monitoring to document project performance and potential impacts). Restoration involves the initial placement of sand to rebuild a beach that has been severely eroded. Beach nourishment, or periodic maintenance, places sand on previously restored beaches at specific intervals based on project performance in order to maintain original design intent for storm protection, recreational beach area and habitat enhancement. Inlet management and inlet sand bypassing are also critical to account for the disruption of sand transport along the shoreline caused by dredging of inlets.

DEP currently designates 420.9 miles of sandy shoreline as critically eroded. Since 1998, the Florida Legislature has dedicated over \$832 million of the Ecosystem Management and Restoration Trust Fund, Land Acquisition Trust Fund and General Revenue for beach management. Of this, nearly \$109 million was appropriated specifically for hurricane recovery projects. State funds are cost-shared with local

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governments on local and federally authorized projects, with each level of government contributing about one-third of the cost of the entire program. This funding has resulted in the restoration and subsequent maintenance of more than 229.7 miles, or 55 percent, of the state's critically eroded beaches.

The funding requests for Fiscal Year 2019-2020 consist of 48 different projects, which total nearly \$75.5 million. The prioritized list of beach erosion control projects is organized in two sections: (1) Beach Restoration and Nourishment Projects (Beach Projects); and (2) Inlet Sand Bypassing/Inlet Management Plan Implementation Projects (Inlet Projects). Each section contains a list of eligible projects ranked in priority order, based on the authority in Sections 161.101 and 161.143, F.S., and the procedures outlined in Chapter 62B-36, Florida Administrative Code (F.A.C.), as amended in 2013. Post-construction monitoring, required by state and federal permits, is presented on each list as a consolidated category, pursuant to Section 62B-36.003(11), F.A.C. Projects have been evaluated by DEP based on consistency with the Strategic Plan, permitting status, readiness to proceed with the proposed funding phase and appropriateness of the amount of funding requested.

This document is organized with an overview of the beach projects, followed by a summary funding table with beach projects listed in priority order and a summary table for post-construction monitoring of beach projects. Next, the document provides an overview of the inlet projects, followed by a summary funding table with inlet projects listed in priority order and a summary table for post-construction monitoring of inlet projects. Lastly, project descriptions of individual beach and inlet projects are provided in the order they appeared in the funding tables. This funding request does not include funding needs associated with damage from Hurricane Michael. Supplemental information will be provided to address these impacts.

### Beach Restoration and Nourishment Projects

DEP has developed a multi-year repair and maintenance strategy to implement the state's responsibilities for a comprehensive, long-range, statewide program of beach erosion control, including beach restoration, nourishment and storm protection. The principles of this strategy are to:

- Maximize the infusion of beach-quality sand into the coastal system;
- Implement projects that contribute most significantly to addressing the state's beach erosion problems;
- Extend the life of beach restoration projects and reduce the frequency of nourishment;
- Encourage regional approaches to ensure the geographic coordination and sequencing of projects; and
- Reduce equipment mobilization and demobilization costs.

The funding requests for Beach Projects for Fiscal Year 2019-2020 total nearly \$68.6 million. Projects are presented in the following order:

- Beach Restoration and Nourishment Projects: a total of 27 projects requesting funds for feasibility studies, design and permitting, construction and first year post-construction monitoring (11 of these projects are also listed on the post-construction monitoring list below).
- Post-Construction Monitoring: a combined list of 21 projects requesting funds for state and federal permit-required monitoring.
- Regional Monitoring: one project is listed for statewide regional monitoring.

Projects have been evaluated by DEP and ranked in priority order in accordance with Rule 62B-36, F.A.C. The descriptions of the proposed projects are based primarily on information provided by local governments. Funding eligibility and state cost share percentages are calculated individually for each project based on public access, as defined by program rule.

### Beach Restoration and Nourishment Projects

Rank	Project	Local Sponsor	Project Phase	Federal	State	Local	Total	Cumulative State Total
	Post-Construction Monitoring (1)	Various	Monitoring	\$277,985	\$1,432,855	\$2,310,260	\$4,021,100	\$1,432,855
1	Lido Key Beach Nourishment (2)(3)	City of Sarasota	Construction	\$13,466,529	\$1,747,604	\$1,747,604	\$16,961,737	\$3,180,459
2	South Amelia Island Beach Nourishment	Nassau County/ SAISSA	Construction	\$3,096,212	\$7,586,779	\$10,032,309	\$20,715,300	\$10,767,238
3	Charlotte County Beach Nourishment	Charlotte County	Construction	\$2,226,529	\$12,655,117	\$22,615,554	\$37,497,200	\$23,422,355
4	Fort Pierce Shore Protection Project (2)(3)	St. Lucie County	Feasibility, Design, Construction	\$8,864,000	\$1,685,000	\$1,685,000	\$12,234,000	\$25,107,355
5	Gasparilla Island- Lee County Shore Protection Project	Lee County	Construction	\$7,248,640	\$6,214,345	\$978,015	\$14,441,000	\$31,321,700
6	Anna Maria Island Shore Protection Project (Federal)	Manatee County	Design, Construction	\$7,865,800	\$3,355,250	\$3,355,250	\$14,576,300	\$34,676,950
7	Bathtub Beach/Sailfish Point Beach Nourishment	Martin County	Construction	\$1,444,460	\$773,721	\$1,317,983	\$3,536,164	\$35,450,671
8	Collier County Beach Nourishment (3)	Collier County	Design, Construction	\$0	\$2,406,446	\$3,271,813	\$5,678,259	\$37,857,117
9	Anna Maria Island Beach Nourishment (Non-federal) (3)	Manatee County	Design, Construction	\$2,637,750	\$3,706,475	\$3,706,475	\$10,050,700	\$41,563,592
10	Delray Beach Segment- Palm Beach County Shore Protection Project	City of Delray Beach	Design	\$70,413	\$27,293	\$27,294	\$125,000	\$41,590,885
11	South St. Lucie County Beach Nourishment (3)	St. Lucie County	Design, Construction	\$6,651,000	\$5,399,719	\$7,016,281	\$19,067,000	\$46,990,604
12	Ocean Ridge Segment- Palm Beach County Shore Protection Project	Palm Beach County	Design	\$48,700	\$25,650	\$25,650	\$100,000	\$47,016,254
13	Longboat Key Beach Nourishment	Town of Longboat Key	Construction	\$0	\$2,675,460	\$9,524,540	\$12,200,000	\$49,691,714

<sup>(1)</sup> Biological and physical monitoring required by state and federal permits after the first year of monitoring has been consolidated on the Post–Construction Monitoring List. A total of 21 previously constructed projects require monitoring activities for Fiscal Year 2019-2020. A complete monitoring project listing can be found on Page 7. First year monitoring has been included with construction funds.

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<sup>(2)</sup> Funding request is for reimbursement of a shortfall balance for projects that received a previous appropriation but had a remaining eligible state share balance.

<sup>(3)</sup> Project also appears on the Hurricane Irma Supplemental Funding list.

### Beach Restoration and Nourishment Projects (continued)

Rank	Project	Local Sponsor	Project Phase	Federal	State	Local	Total	Cumulative State Total
14	South Marco Island Beach Nourishment (3)	Collier County	Design, Construction	\$0	\$403,271	\$1,253,552	\$1,656,823	\$50,094,985
15	North Boca Raton Segment- Palm Beach County Shore Protection Project	City of Boca Raton	Design	\$345,200	\$127,400	\$127,400	\$600,000	\$50,222,385
16	South Ponte Vedra/Vilano Beach Restoration	St. Johns County	Design, Construction	\$8,471,820	\$5,407,738	\$22,964,442	\$36,844,000	\$55,630,123
17	Captiva Island Beach Nourishment	Captiva Erosion Prevention District	Design	\$0	\$70,786	\$320,948	\$391,734	\$55,700,909
18	Jupiter Island Beach Nourishment (3)	Town of Jupiter Island	Construction	\$10,119,216	\$1,729,105	\$7,582,179	\$19,430,500	\$57,430,014
19	Deerfield Beach Feasibility Study	City of Deerfield Beach	Feasibility	\$0	\$100,000	\$100,000	\$200,000	\$57,530,014
20	Mid-Town Beach Nourishment	Town of Palm Beach	Design, Construction	\$0	\$754,381	\$1,087,819	\$1,842,200	\$58,284,395
21	Vero Beach Restoration (3)	Indian River County	Feasibility, Design, Construction	\$704,178	\$1,934,152	\$2,201,670	\$4,840,000	\$60,218,547
22	Key Biscayne Beach Nourishment (3)	Village of Key Biscayne	Design, Construction	\$1,430,702	\$1,024,023	\$1,215,257	\$3,669,982	\$61,242,570
23	South Jupiter Beach Feasibility Study	Palm Beach County	Feasibility, Design	\$0	\$133,292	\$133,293	\$266,585	\$61,375,862
24	Coral Cove Park Dune Nourishment (3)	Palm Beach County	Construction	\$0	\$510,000	\$510,000	\$1,020,000	\$61,885,862
25	Ponte Vedra Beach Feasibility Study	St. Johns County	Feasibility	\$0	\$600,000	\$600,000	\$1,200,000	\$62,485,862
26	Southern Palm Beach Island Restoration	Palm Beach County	Feasibility, Design, Construction	\$0	\$5,301,000	\$5,949,000	\$11,250,000	\$67,786,862

<sup>(1)</sup> Biological and physical monitoring required by state and federal permits after the first year of monitoring has been consolidated on the Post–Construction Monitoring List. A total of 21 previously constructed projects require monitoring activities for Fiscal Year 2019-2020. A complete monitoring project listing can be found on Page 7. First year monitoring has been included with construction funds.

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<sup>(2)</sup> Funding request is for reimbursement of a shortfall balance for projects that received a previous appropriation but had a remaining eligible state share balance.

<sup>(3)</sup> Project also appears on the Hurricane Irma Supplemental Funding list.

### Beach Restoration and Nourishment Projects (continued)

Rank	Project	Local Sponsor	Project Phase	Federal	State	Local	Total	Cumulative State Total
27	Singer Island Dune Nourishment (3)	Palm Beach County	Construction	\$0	\$537,900	\$962,100	\$1,500,000	\$68,324,762
28	Regional Monitoring	DEP	Monitoring	\$0	\$250,000	\$0	\$250,000	\$68,574,762
	TOTAL			\$74,969,134	\$68,574,762	\$112,621,688	\$256,165,584	

<sup>(1)</sup> Biological and physical monitoring required by state and federal permits after the first year of monitoring has been consolidated on the Post–Construction Monitoring List. A total of 21 previously constructed projects require monitoring activities for Fiscal Year 2019-2020. A complete monitoring project listing can be found on Page 7. First year monitoring has been included with construction funds.

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<sup>(2)</sup> Funding request is for reimbursement of a shortfall balance for projects that received a previous appropriation but had a remaining eligible state share balance.

<sup>(3)</sup> Project also appears on the Hurricane Irma Supplemental Funding list.

### Beach Restoration and Nourishment Post-Construction Monitoring

### **Project Description**

This category serves to provide funding for monitoring activities associated with previously constructed projects. Eligible program activities include physical and biological monitoring required by permit.

#### **Funds Requested**

Funds will be used to support the following projects identified in priority order for Year 2 monitoring and beyond. First year monitoring required by permit is included in the construction funds on the Beach Projects list.

Project	Federal	State	Local	Total
South Amelia Island Beach Nourishment	\$0	\$56,538	\$74,762	\$131,300
Charlotte County Beach Nourishment	\$0	\$60,278	\$107,722	\$168,000
Fort Pierce Shore Protection Project	\$0	\$18,500	\$18,500	\$37,000
St. Johns County Shore Protection Project	\$0	\$65,340	\$84,660	\$150,000
Anna Maria Island Shore Protection Project (Federal)	\$59,100	\$67,650	\$67,650	\$194,400
St. Joseph Peninsula Beach Restoration	\$0	\$190,000	\$310,000	\$500,000
Collier County Beach Nourishment	\$0	\$245,804	\$334,196	\$580,000
South St. Lucie County Beach Nourishment	\$0	\$17,396	\$22,604	\$40,000
South Marco Island Beach Nourishment	\$0	\$48,948	\$152,153	\$201,101
North Boca Raton Segment- Palm Beach County Shore Protection Project	\$0	\$52,500	\$52,500	\$105,000
Pensacola Beach Nourishment	\$0	\$24,500	\$24,500	\$49,000
Panama City Beaches- Bay County Shore Protection Project	\$0	\$94,050	\$155,950	\$250,000
Jupiter Island Beach Nourishment	\$0	\$65,654	\$287,896	\$353,550
Juno Beach Nourishment (1)	\$0	\$55,000	\$55,000	\$110,000
Broward County Shore Protection Project- Segment II	\$218,885	\$72,630	\$105,734	\$397,249
South Siesta Key Beach Nourishment	\$0	\$82,620	\$117,380	\$200,000
Mid-Town Beach Nourishment	\$0	\$34,398	\$49,602	\$84,000
Central Boca Raton Beach Nourishment	\$0	\$26,450	\$36,050	\$62,500
Phipps Ocean Park Beach Nourishment	\$0	\$28,470	\$44,530	\$73,000
South Boca Raton Beach Nourishment	\$0	\$83,097	\$131,903	\$215,000
Singer Island Dune Nourishment	\$0	\$43,032	\$76,968	\$120,000
TOTAL	\$277,985	\$1,432,855	\$2,310,260	\$4,021,100

<sup>(1)</sup> Funding request is for reimbursement of a shortfall balance for projects that received a previous appropriation but had a remaining eligible state share balance.

### Inlet Sand Bypassing/Inlet Management Plan Implementation Projects

Navigational inlets are not only critical components of the state's commercial and recreational infrastructure, but they contribute significantly to beach erosion by interrupting or altering the natural drift of sand. For this reason, the Legislature directed DEP to commit its comprehensive beach management efforts to addressing beach erosion caused by inlets. Funding for the inlet projects will be used to implement the actions recommended in the specific Inlet Management Plans (IMP) or the statewide Strategic Plan. IMPs adopted by DEP are incorporated into the Strategic Plan by reference along with other inlet management strategies. Feasibility studies conducted by local governments, federal and state studies and reports, and the study reports authorizing federal shore protection projects are also incorporated by reference. Inlet management projects include, but are not limited to, inlet sand bypassing, modifications to channel dredging, jetty redesign, jetty repair, disposal of dredge material, and the development, revision, adoption or implementation of an IMP.

The Legislature amended Section 161.142, F.S., and created Section 161.143, F.S., in 2008 to strengthen DEP's commitment to managing sediment around inlets. These sections direct DEP to develop and maintain sediment budgets for each inlet and ensure beach quality sand is placed on adjacent eroding beaches. It further establishes funding priorities and ranking criteria for inlet projects and requires DEP to provide an annual inlet project list to the Legislature for funding consideration. Rule 62B-36, F.A.C., was amended in 2013 to incorporate new ranking criteria specific to inlet projects. These new criteria were used in ranking projects for Fiscal Year 2019-2020. Post-construction monitoring is consolidated into a single category, pursuant to Rule 62B-36.003, F.A.C.

The funding requirements provided in Section 161.143, F.S., also include provisions that:

- At least 10 percent of the total amount appropriated by the Legislature will be used for the three highest-ranked inlet projects;
- At least 50 percent of the funds appropriated for the feasibility and design category will be made available for inlet management projects which involve the study, design or development of an inlet management project; and
- Inlet projects may receive 75 percent state cost share for the proposed activity.

For Fiscal Year 2019-2020, the funding requests for Inlet Sand Bypassing/Inlet Management Plan Implementation Projects (Inlet Projects) total nearly \$6.9 million. The funding priorities established by

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DEP must be consistent with the requirements and legislative declaration in Sections 161.101(14), 161.142, 161.143, and 161.161(1)(b), F.S. Projects are presented in the following order:

- Inlet Management Implementation/Inlet Sand Bypassing Projects a total of nine projects requesting funds for feasibility studies, design and permitting activities, construction and first year post-construction monitoring (five of these projects are also listed on the post-construction monitoring list).
- Post-Construction Monitoring a combined list of six projects requesting funds for state and federal permit–required monitoring.

### Inlet Sand Bypassing/Inlet Management Plan Implementation Projects

Rank	Project Name	Local Sponsor	Project Phase	Federal	State	Local	Total	Cumulative State Total
	Post Construction Monitoring (1)	Various	Monitoring	\$0	\$509,625	\$169,875	\$679,500	\$509,625
1	Lake Worth IMP Implementation	Town of Palm Beach	Construction	\$0	\$450,000	\$150,000	\$600,000	\$959,625
2	St. Lucie IMP Implementation (2)	Martin County	Design, Construction	\$0	\$1,153,514	\$384,505	\$1,538,019	\$2,113,139
3	Port Canaveral IMP Implementation	Canaveral Port Authority	Design	\$0	\$48,000	\$16,000	\$64,000	\$2,161,139
4	South Lake Worth IMP Implementation	Palm Beach County	Design, Construction	\$0	\$144,000	\$48,000	\$192,000	\$2,305,139
5	Sebastian Inlet IMP Implementation	Sebastian Inlet District	Construction	\$0	\$2,980,521	\$993,507	\$3,974,028	\$5,285,660
6	Wiggins Pass IMP Implementation (2)	Collier County	Construction	\$0	\$1,195,606	\$398,535	\$1,594,141	\$6,481,266
7	Boca Raton IMP Implementation	City of Boca Raton	Design, Construction	\$0	\$170,625	\$56,875	\$227,500	\$6,651,891
8	Estero Barriers Regional Inlet Management Study	Lee County	Feasibility	\$0	\$24,303	\$8,101	\$32,404	\$6,676,194
9	Matanzas Inlet Sediment Budget Analysis	DEP	Feasibility	\$0	\$200,000	\$0	\$200,000	\$6,876,194
	TOTAL			\$0	\$6,876,194	\$2,225,398	\$9,101,592	

<sup>(1)</sup> Biological and physical monitoring required by state and federal permits has been consolidated on the Post–Construction Monitoring list. A total of six previously constructed projects require monitoring activities for Fiscal Year 2019-2020. A complete monitoring project listing can be found on Page 11.

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<sup>(2)</sup> Funding request is for reimbursement of a shortfall balance for projects that received a previous appropriation but had a remaining eligible state share balance.

### **Inlet Management Post-Construction Monitoring**

### **Project Description**

This category serves to provide funding for monitoring activities associated with previously constructed projects. Eligible program activities include physical and biological monitoring required by permit.

### **Funds Requested**

Funds will be used to support the following projects identified in priority order.

Project	Federal	State	Local	Total
Lake Worth IMP Implementation	\$0	\$212,250	\$70,750	\$283,000
Port Canaveral IMP Implementation	\$0	\$37,500	\$12,500	\$50,000
South Lake Worth IMP Implementation	\$0	\$90,000	\$30,000	\$120,000
Fort Pierce IMP Implementation	\$0	\$38,250	\$12,750	\$51,000
Wiggins Pass IMP Implementation	\$0	\$114,750	\$38,250	\$153,000
<b>Boca Raton IMP Implementation</b>	\$0	\$16,875	\$5,625	\$22,500
TOTAL	<b>\$0</b>	\$509,625	\$169,875	\$679,500

**NAME OF PROJECT:** Lido Key Beach Nourishment

**LOCAL SPONSOR:** City of Sarasota

**LOCAL CONTACT:** Alexandrea Davis Shaw **PHONE:** 941-365-2200 ext. 4181

#### PROJECT DESCRIPTION:

The Lido Key Beach Nourishment project consists of the nourishment of approximately 2.2 miles of shoreline between DEP Monuments R31 – R44 in Sarasota County. Restoration of the northern 1.2 miles was conducted in 1998. The remainder of the project area was restored in 2000-01. The first nourishment was conducted in 2003. Hurricane recovery nourishment of the project was completed in 2009 with funding from the Federal Emergency Management Agency (FEMA). Subsequent hurricane recovery nourishment to repair damage sustained during Tropical Storm Debby was completed in 2015. Funds are being requested for a FEMA storm repair project in Fiscal Year 2018-19 in addition to a federal nourishment scheduled for Fiscal Year 2019-2020. Staff has determined that 100 percent of the project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Construction (includes reimbursement and first year monitoring).

Federal	'ederal State Local		Total
\$13,466,529	\$1,747,604	\$1,747,604	\$16,961,737

**NAME OF PROJECT:** South Amelia Island Beach Nourishment

**LOCAL SPONSOR:** Nassau County

**LOCAL CONTACT:** Michael S. Mullin **PHONE:** 904-530-6010

### **PROJECT DESCRIPTION:**

The South Amelia Island Beach Nourishment project consists of the nourishment and maintenance of 3.6 miles of shoreline between DEP Monuments R60 – R80 located at South Amelia Island in Nassau County. Restoration of the shoreline occurred in 1994 using offshore sand sources, with nourishments occurring in 2002 and 2011. Dredging of the Atlantic Intracoastal Waterway through Nassau Sound with dredge material placement partially nourished the southern end of the project in 1997, 2001, 2006 and 2013. Stabilization of the southern end of the project necessitated construction of a terminal rock groin and offshore breakwater in 2004. Project monitoring between 2005 and 2017 has indicated that the structures have performed as designed and that no adverse impacts have occurred to resources within Nassau Sound. The last hydrographic survey of Nassau Sound occurred in the summer of 2016. Funds are being requested for construction of the third nourishment of the project. Staff has determined that 86.06 percent is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Construction (includes first year monitoring).

Federal	State	Local	Total	
\$3,096,212	\$7,586,779	\$10,032,309	\$20,715,300	

**NAME OF PROJECT:** Charlotte County Beach Nourishment

**LOCAL SPONSOR:** Charlotte County

**LOCAL CONTACT:** Matthew Logan **PHONE:** 941-575-3610

#### PROJECT DESCRIPTION:

The Charlotte County Beach Nourishment project consists of the nourishment of 2.3 miles of shoreline between DEP Monuments R28 – R40.5 in Charlotte County, restoration of 3.9 miles of shoreline between R1 – R21.2 in Charlotte County, and restoration of 1.6 miles of shoreline between R175 – R183.7 in Sarasota County. Restoration of the southern segment in Charlotte County was completed in 2003. The first nourishment was completed in 2006. Nourishment was completed in 2011 using FEMA funds received to repair damage sustained during Tropical Storm Fay. A terminal groin stabilization of the south end of Manasota Key/Stump Pass Beach State Park is complete. Funds are being requested for restoration of the 3.9-mile northern segment and the 1.6-mile Sarasota County segment planned for Fiscal Year 2019-2020. Staff has determined that 71.76 percent of the joint project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Construction (includes first year monitoring).

Federal	State Local		Total	
\$2,226,529	\$12,655,117	\$22,615,554	\$37,497,200	

**NAME OF PROJECT:** Fort Pierce Shore Protection Project

**LOCAL SPONSOR:** St. Lucie County

**LOCAL CONTACT:** Joshua Revord **PHONE:** 772-462-1269

### **PROJECT DESCRIPTION:**

The Fort Pierce Shore Protection Project includes 2.3 miles of critically eroded Atlantic shoreline between DEP Monuments R34 – R46 in St. Lucie County. Initial restoration of the project area began in 1971 with the construction of a 1.3-mile segment (R34 – R41) immediately south of the Fort Pierce Inlet. Subsequent nourishment events were completed in 1981 and 1999. Since 1999, 13 nourishments have been completed. The next nourishment is scheduled for fall 2019/spring 2020. Staff has determined that 100 percent of the project is eligible for state cost sharing.

### **FUNDS WILL BE USED FOR:**

Design, construction (includes first year monitoring) and federal feasibility study (reimbursement).

Federal	State Local		Total	
\$8,864,000	\$1,685,000	\$1,685,000	\$12,234,000	

**NAME OF PROJECT:** Gasparilla Island - Lee County Shore Protection Project

**LOCAL SPONSOR:** Lee County

**LOCAL CONTACT:** Steve Boutelle **PHONE:** 239-533-8128

### **PROJECT DESCRIPTION:**

The Gasparilla Island segment of the Lee County Shore Protection Project consists of the nourishment of 3.1 miles of shoreline between DEP Monuments R10 – R26A in Lee County. Restoration was completed in 2007. Federal nourishment was completed in 2013 to repair damages sustained during Tropical Storm Debby. Funds are being requested for tasks associated with a federal nourishment in addition to 100 percent state funding for Gasparilla Island State Park, which is scheduled for completion in 2019. Staff has determined that 84.42 percent of the project is eligible for state cost sharing.

### **FUNDS WILL BE USED FOR:**

Construction (includes reimbursement and first year monitoring).

Federal	State	Local	Total
\$7,248,640	\$6,214,345	\$978,015	\$14,441,000

**NAME OF PROJECT:** Anna Maria Island Shore Protection Project (Federal)

**LOCAL SPONSOR:** Manatee County

**LOCAL CONTACT:** Charles Hunsicker **PHONE:** 941-745-3727

### **PROJECT DESCRIPTION:**

The Anna Maria Island Shore Protection Project consists of approximately 4.5 miles of shoreline between DEP Monuments R12 – R36 in Manatee County. The project, also known as the Central Beach project, was restored in 1993. Nourishment was completed in 2002. In 2005, a portion of the island received federal storm funding for a hurricane recovery nourishment. Federal nourishment was completed in 2014 to repair damages sustained during Tropical Storm Debby. Funds are being requested for nourishment in Fiscal Year 2019-2020. Staff has determined that 100 percent of the project is eligible for state cost sharing.

### **FUNDS WILL BE USED FOR:**

Design and construction (includes first year monitoring).

Federal	State	Local	Total
\$7,865,800	\$3,355,250	\$3,355,250	\$14,576,300

**NAME OF PROJECT:** Bathtub Beach/Sailfish Point Beach Nourishment

**LOCAL SPONSOR:** Martin County

**LOCAL CONTACT:** Kathy Fitzpatrick, P.E. **PHONE:** 772-288-5429

#### PROJECT DESCRIPTION:

The Bathtub Beach/Sailfish Point Beach Nourishment project includes 0.67 miles of critically eroded shoreline between DEP Monuments R34.3 – R38 in Martin County. The Bathtub Beach segment of the project was restored in 2012. The Sailfish Point segment of the project was designated as critically eroded in 2015. A 2016 construction project included nourishment of Bathtub Beach and restoration of Sailfish Point. Funds are being requested for reimbursement of storm repair projects constructed in 2017 and 2018. Staff has determined that 73.98 percent of the project is eligible for state cost sharing.

### **FUNDS WILL BE USED FOR:**

Construction (reimbursement).

Federal	State	Local	Total
\$1,444,460	\$773,721	\$1,317,983	\$3,536,164

**NAME OF PROJECT:** Collier County Beach Nourishment

**LOCAL SPONSOR:** Collier County

**LOCAL CONTACT:** Gary McAlpin **PHONE:** 239-252-5342

### **PROJECT DESCRIPTION:**

The Collier County Beach Nourishment project consists of three segments along 7.7 miles of shoreline in Collier County. The segments consist of the following components: Vanderbilt Beach, approximately 1.5 miles between DEP Monuments R22 – R31; Park Shore, approximately 2.5 miles between DEP Monuments R42 – R54.4; and Naples, approximately 3.7 miles between DEP Monuments R58 – R79. Restoration was completed in 1996. Nourishments were completed in 2006 and 2014, with the latter receiving FEMA funds for Tropical Storm Fay (2008) and Tropical Storm Debby (2012) storm losses. In late 2016, nourishment was completed to repair hotspots in Park Shore and Vanderbilt Beach. The Fiscal Year 2019-2020 project will be limited to the following sections: Vanderbilt Beach (R22 – R30), Park Shore (R42 – R54) and Naples (R58 – R79) to repair damages sustained during Hurricane Irma. Staff has determined eligibility for state cost sharing to be 84.94 percent for Vanderbilt Beach, 68.70 percent for Park Shore and 95.02 percent for Naples.

#### **FUNDS WILL BE USED FOR:**

Design and construction (includes first year monitoring).

Federal	State	Local	Total
\$0	\$2,406,446	\$3,271,813	\$5,678,259

**NAME OF PROJECT:** Anna Maria Island Beach Nourishment (Non-federal)

**LOCAL SPONSOR:** Manatee County

**LOCAL CONTACT:** Charles Hunsicker **PHONE:** 941-745-3727

### **PROJECT DESCRIPTION:**

The Anna Maria Island Beach Nourishment project consists of nourishment of approximately 1.0 mile of shoreline between DEP Monuments R36 – R41.3 in Manatee County. Restoration of the Coquina Beach segment (R36 – R41.3) and City of Anna Maria segment (R7 – R10) was completed in 2011. Nourishment of the Coquina Segment (R36 – R41.3) was completed in 2014 and reconstruction of the Cortez Groins was completed in 2016. Manatee County is planning a storm repair project for Hurricanes Hermine/Irma in Fiscal Year 2018-19 and nourishment in combination with the federal Central Beach project in Fiscal Year 2019-2020. Staff has determined that 100 percent of the project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Design and construction (includes reimbursement and first year monitoring).

Federal	State	Local	Total
\$2,637,750	\$3,706,475	\$3,706,475	\$10,050,700

**NAME OF PROJECT:** Delray Beach Segment – Palm Beach County Shore Protection Project

**LOCAL SPONSOR:** City of Delray Beach

**LOCAL CONTACT:** Cynthia Fuentes **PHONE:** 561-243-7196

### **PROJECT DESCRIPTION:**

The Delray Beach segment of the Palm Beach County Shore Protection Project includes 2.7 miles of shoreline between DEP Monuments R175+300 – R188A in Palm Beach County. The federal project was initially constructed in 1973, with nourishments in 1978, 1984, 1992, 2002, 2005 and 2013. A federal storm repair project was constructed in 2014 to address damage from Hurricane Sandy. Proposed activities include design and pre-construction tasks for the next nourishment project. Staff has determined that 100 percent of the project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Design.

Federal	State	Local	Total
\$70,413	\$27,293	\$27,294	\$125,000

**NAME OF PROJECT:** South St. Lucie County Beach Nourishment

**LOCAL SPONSOR:** St. Lucie County

**LOCAL CONTACT:** Joshua Revord **PHONE:** 772-462-1269

### **PROJECT DESCRIPTION:**

The South St. Lucie County Beach Nourishment project includes 3.4 miles of critically eroded shoreline between DEP Monuments R98 – R115 in St. Lucie County. The project was restored in 2013. A nearshore limestone boulder mitigation reef was constructed in 2015. The South St. Lucie Storm Risk Management federal feasibility study was recently completed and received a signed Chief's Report on December 15, 2017. The project is pending congressional authorization. Subsequently, Hurricane Irma impacted St. Lucie County in September 2017. In response to this event, Congress passed the Bipartisan Budget Act of 2018 which included funding to support a federal nourishment of the South St. Lucie Beach project. Staff has determined that 86.98 percent of the project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Design and construction (includes first year monitoring).

Federal	State	Local	Total
\$6,651,000	\$5,399,719	\$7,016,281	\$19,067,000

NAME OF PROJECT: Ocean Ridge Segment – Palm Beach County Shore Protection Project

**LOCAL SPONSOR:** Palm Beach County

**LOCAL CONTACT:** Michael Stahl **PHONE:** 561-233-2433

#### **PROJECT DESCRIPTION:**

The Ocean Ridge segment of the Palm Beach County Shore Protection Project extends along 1.4 miles of shoreline between DEP Monuments R152 – R159 in Palm Beach County. The initial restoration of the federally authorized project was completed in 1998 and included the construction of eight T-head groins and 2 acres of mitigation reef. Additional hardbottom impacts were mitigated in 2010 with the construction of 2.25 acres of artificial reef. The first nourishment was completed in 2005 with sand placement along 1.1 miles south of the groin field. Bypass material from the South Lake Worth Inlet sand transfer plant, as well as maintenance disposal material from South Lake Worth Inlet sand trap, are placed in the project area. A federal storm repair project was completed in 2014 to replace losses sustained during Hurricane Sandy. Post-construction monitoring following the 2014 nourishment is ongoing. A third nourishment is scheduled for Fiscal Year 2019-2020 to restore the design template following erosion sustained from Hurricane Irma. Staff has determined that 100 percent of the project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Design.

Federal	State	Local	Total
\$48,700	\$25,650	\$25,650	\$100,000

**NAME OF PROJECT:** Longboat Key Beach Nourishment

**LOCAL SPONSOR:** Town of Longboat Key

**LOCAL CONTACT:** Isaac Brownman **PHONE:** 941-361-6411

#### PROJECT DESCRIPTION:

The Longboat Key Beach Nourishment (North End Structural Stabilization) project consists of 0.8 mile of shoreline between DEP Monuments R44 – R47.5 in Manatee County. The North End received emergency sand placement in 2011, followed by flood shoal sand trap material placement in 2014 and the construction of two permeable groins in 2015. Nourishment of the entire island was completed in segments in 2016, including dredge material placement in the North End from Longboat Pass. Construction of additional stabilizing groins is planned for Fiscal Year 2019-2020. Staff has determined that 43.86 percent of the project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Construction (North End Structural Stabilization Project).

Federal	State	Local	Total
\$0	\$2,675,460	\$9,524,540	\$12,200,000

**NAME OF PROJECT:** South Marco Island Beach Nourishment

**LOCAL SPONSOR:** Collier County

**LOCAL CONTACT:** Gary McAlpin **PHONE:** 239-252-5342

### **PROJECT DESCRIPTION:**

The South Marco Island Beach Nourishment project consists of 1.1 miles of shoreline between DEP Monuments R143 – G4 in Collier County. The project was restored in 1997, with nourishment following in 2007. Nourishment was completed again in 2013, including a storm recovery component partially funded by FEMA to address damage sustained during Tropical Storm Fay. The structural repair of five existing erosion control structures was completed in coordination with the 2013 nourishment project. Nourishment was completed again in 2016, including a storm recovery component partially funded by FEMA to address damage sustained during Tropical Storm Debby. The Fiscal Year 2019-2020 project will be constructed in response to Hurricane Irma storm damage. Staff has determined that 48.68 percent of the joint project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Design and construction (includes first year monitoring).

Federal	State	Local	Total
\$0	\$403,271	\$1,253,552	\$1,656,823

**NAME OF PROJECT:** North Boca Raton Segment – Palm Beach County Shore Protection

**Project** 

**LOCAL SPONSOR:** City of Boca Raton

**LOCAL CONTACT:** Jennifer Bistyga **PHONE:** 561-416-3397

### PROJECT DESCRIPTION:

The North Boca Raton segment of the Palm Beach County Shore Protection Project includes 1.5 miles of shoreline between DEP Monuments R205 – R212 in Palm Beach County. Restoration was completed in 1988, with nourishments in 1998 and 2010. The federal Hurricane Sandy storm repair project was completed in 2014. The project is currently in the post-construction monitoring phase for the 2014 nourishment and design phase for the next nourishment, planned for Fiscal Year 2024-25. Staff has determined that 100 percent of the project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Design.

Federal	State	Local	Total
\$345,200	\$127,400	\$127,400	\$600,000

**NAME OF PROJECT:** South Ponte Vedra/Vilano Beach Restoration

**LOCAL SPONSOR:** St. Johns County

**LOCAL CONTACT:** Damon Douglas **PHONE:** 904-209-0255

### **PROJECT DESCRIPTION:**

The South Ponte Vedra/Vilano Beach Restoration project consists of 2.9 miles of shoreline between DEP Monuments R102.5 – R117.5 in St. Johns County. A federal coastal storm risk feasibility study of the project area was completed in February 2016 by USACE. Following the completion of the federal feasibility study, USACE moved forward with design and permitting of the project, with an anticipated construction start date during Fiscal Year 2019-2020. Staff has estimated that 38.12 percent of the project is eligible for state cost sharing.

### **FUNDS WILL BE USED FOR:**

Design and construction.

Federal	State	Local	Total
\$8,471,820	\$5,407,738	\$22,964,442	\$36,844,000

**NAME OF PROJECT:** Captiva Island Beach Nourishment

**LOCAL SPONSOR:** Captiva Erosion Prevention District (CEPD)

**LOCAL CONTACT:** Carolyn Weaver **PHONE:** 239-472-2472

### **PROJECT DESCRIPTION:**

The Captiva Island Beach Nourishment project consists of 5.0 miles of shoreline between DEP Monuments R83 – R109 in Lee County. Restoration was completed in 1981 as a part of the federal Lee County Shore Protection Project, with nourishment following in 1989. Subsequent nourishments were completed in 1996, 2006 and 2014, in conjunction with a project on Sanibel Island, as a non-federal option. A sand search is proposed to begin the next design phase for a future nourishment event. Staff has determined that 36.14 percent of the project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Design (includes reimbursement).

Federal	State	Local	Total
\$0	\$70,786	\$320,948	\$391,734

**NAME OF PROJECT:** Jupiter Island Beach Nourishment

**LOCAL SPONSOR:** Town of Jupiter Island

**LOCAL CONTACT:** John Duchock, P.E. **PHONE:** 772-545-0100

### **PROJECT DESCRIPTION:**

The Jupiter Island Beach Nourishment project includes approximately 6.47 miles of shoreline between DEP Monuments R73 – R111 in Martin County. Restoration was completed in 1973-1974. Nourishments are constructed on a three- to four-year cycle. Construction of the next nourishment commenced in January 2019. Staff has determined that 37.15 percent of the project is eligible for state cost sharing.

### **FUNDS WILL BE USED FOR:**

Construction (includes first year monitoring).

Federal	State	Local	Total
\$10,119,216	\$1,729,105	\$7,582,179	\$19,430,500

**NAME OF PROJECT:** Deerfield Beach Feasibility Study

**LOCAL SPONSOR:** City of Deerfield Beach

**LOCAL CONTACT:** Patrick Bardes **PHONE:** 954-480-1426

### **PROJECT DESCRIPTION:**

The Deerfield Beach project is located between DEP Monuments R6 - R7 in Broward County. Restoration was completed in 1998, and subsequent nourishments in 2009, 2011 and 2015, were conducted in conjunction with the Hillsboro Beach Nourishment project. A feasibility study will be conducted to evaluate a separate nourishment project for the segment of Deerfield Beach currently designated as critically eroded (R6 - R6.6) and whether the critically eroded designation should be expanded further north. Feasibility phase analysis provides up to 50 percent cost sharing for approved work.

### **FUNDS WILL BE USED FOR:**

Feasibility study.

Federal	State	Local	Total
\$0	\$100,000	\$100,000	\$200,000

**NAME OF PROJECT:** Mid-Town Beach Nourishment

**LOCAL SPONSOR:** Town of Palm Beach

**LOCAL CONTACT:** Robert Weber **PHONE:** 561-838-5440

#### PROJECT DESCRIPTION:

The Mid-Town Beach Nourishment project includes 2.8 miles of shoreline between DEP Monuments R89 – R102 in Palm Beach County. Restoration was completed in 1995 from R95 – R100 and included construction of 11 groins which were completed in 1996. In 2003, nourishment was completed in an extended shoreline length between R90.4 – R101.4. The project was nourished using FEMA funds in 2006 in response to the 2004-05 hurricane seasons, and again in Fiscal Year 2010-11 to repair dune damage sustained during Tropical Storm Fay. The project was included in the 2013 Palm Beach Island Beach Management Agreement Pilot Project. The next nourishment was completed in April 2015, extending the project tapers on both ends and reducing the overall project volume density. Post-construction monitoring following the 2015 nourishment is ongoing. Construction of an additional groin at R99 was completed in 2018. The next nourishment is scheduled for Fiscal Year 2020-2021. Staff has previously determined that 81.90 percent of the project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Design and construction (reimbursement of groin).

Federal	State	Local	Total
\$0	\$754,381	\$1,087,819	\$1,842,200

**NAME OF PROJECT:** Vero Beach Restoration

**LOCAL SPONSOR:** Indian River County

**LOCAL CONTACT:** Kendra Cope **PHONE:** 772-226-1569

### **PROJECT DESCRIPTION:**

The Vero Beach Restoration project (Sector 5) consists of a restoration of 3.1 miles of critically eroded shoreline between DEP Monuments R70 – R86 in Indian River County. The County conducted a feasibility study in 2017, which was amended in 2018. The County is currently designing a restoration project and a Joint Coastal Permit application was submitted to DEP in April 2018. An intent to issue the permit has been released. Restoration is scheduled for Fiscal Year 2019-2020. Staff has determined that 93.3 percent of the project is eligible for state cost sharing.

### **FUNDS WILL BE USED FOR:**

Feasibility (reimbursement), design (reimbursement) and construction (includes first year monitoring).

Federal	State	Local	Total
\$704,178	\$1,934,152	\$2,201,670	\$4,840,000

**NAME OF PROJECT:** Key Biscayne Beach Nourishment

**LOCAL SPONSOR:** Village of Key Biscayne

**LOCAL CONTACT:** Andrea Agha **PHONE:** 305-365-5514

#### PROJECT DESCRIPTION:

The Key Biscayne Beach Nourishment project is a 1.3-mile project between DEP Monuments R101 – R108 in Miami-Dade County. The project was restored as a federally authorized restoration in 1987. The project was subsequently followed by three non-federal nourishments in 2002, 2008 and 2012. The most recent nourishment was completed in 2017 to address erosion caused by Hurricane Matthew. The next nourishment is proposed for Fiscal Year 2019-2020 to address erosion caused by Hurricane Irma. Staff has determined that 91.46 percent of the project is eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Design (2017 reimbursement and upcoming nourishment), construction (2017 reimbursement and upcoming nourishment) and first year post-construction monitoring (2017 reimbursement and upcoming nourishment).

Federal	State	Local	Total
\$1,430,702	\$1,024,023	\$1,215,257	\$3,669,982

**NAME OF PROJECT:** South Jupiter Beach Feasibility Study

**LOCAL SPONSOR:** Palm Beach County

**LOCAL CONTACT:** Michael Stahl **PHONE:** 561-233-2433

### **PROJECT DESCRIPTION:**

The South Jupiter Beach Feasibility Study will evaluate alternatives for beach restoration along 1.45 miles of critically eroded shoreline between DEP Monuments R19 – R26 in Palm Beach County. In 2016, a dune restoration was conducted to provide storm protection to State Road A1A/Ocean Boulevard. Palm Beach County is looking to incorporate the Jupiter/Carlin, South Jupiter and Juno Beach projects into a single fill event to reduce project construction costs and increase project performance of all three segments. Staff has determined that the project segment is 100 percent eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Feasibility study (reimbursement) and design.

Federal	State	Local	Total
\$0	\$133,292	\$133,293	\$266,585

**NAME OF PROJECT:** Coral Cove Park Dune Nourishment

**LOCAL SPONSOR:** Palm Beach County

**LOCAL CONTACT:** Michael Stahl **PHONE:** 561-233-2433

#### PROJECT DESCRIPTION:

The Coral Cove Park Dune Nourishment project is located between DEP Monuments R1.1 – R7.6 in Palm Beach County. A dune restoration project was completed within the boundaries of the park in 1989. A dune nourishment was completed in 1993 using sand from an upland sand source. A dune repair project was completed in Fiscal Year 2012-13 to address storm impacts from Hurricane Sandy with a subsequent nourishment completed in Fiscal Year 2013-14. The next dune maintenance project is scheduled for Fiscal Year 2019-2020. Staff has determined the project is 100 percent eligible for state cost sharing.

### **FUNDS WILL BE USED FOR:**

Construction (2019 dune maintenance).

Federal	State	Local	Total
\$0	\$510,000	\$510,000	\$1,020,000

**NAME OF PROJECT:** Ponte Vedra Beach Feasibility Study

**LOCAL SPONSOR:** St. Johns County

**LOCAL CONTACT:** Damon Douglas **PHONE:** 904-209-0255

### **PROJECT DESCRIPTION:**

The Ponte Vedra Beach Feasibility Study consists of a beach management study from DEP Monuments R1 – R46 in St. Johns County. The feasibility study will include a shoreline assessment, environmental characterization of the beach and an offshore reconnaissance-level borrow area investigation. The study will provide a project alternatives analysis including cost effectiveness determination. Staff has determined that the project is 100 percent eligible for state cost sharing in areas designated critically eroded by DEP, or for the entire length of the project in a federally funded study.

#### **FUNDS WILL BE USED FOR:**

Feasibility study.

Federal	State	Local	Total
\$0	\$600,000	\$600,000	\$1,200,000

**NAME OF PROJECT:** Southern Palm Beach Island Beach Restoration

**LOCAL SPONSOR:** Palm Beach County

**LOCAL CONTACT:** Michael Stahl **PHONE:** 561-233-2433

### **PROJECT DESCRIPTION:**

The Southern Palm Beach Island Beach Restoration project consists of feasibility analysis and design of a beach restoration project along 0.7 mile of critically eroded beach between DEP Monuments R134 – R137 in Palm Beach County. Dune maintenance projects were conducted in 2007 and 2009. Several alternatives have been explored including beach restoration and the use of breakwaters. A federal Environmental Impact Statement (EIS) was published in June 2016 and the project is currently under review for a state permit. The feasibility study is eligible for 50 percent cost sharing for approved work. Staff has determined that 94 percent of project is eligible for state cost sharing of subsequent phases.

#### **FUNDS WILL BE USED FOR:**

Feasibility (EIS), design (permitting) and construction (includes first year monitoring).

Federal	State	Local	Total
\$0	\$5,301,000	\$5,949,000	\$11,250,000

**NAME OF PROJECT:** Singer Island Dune Nourishment

**LOCAL SPONSOR:** Palm Beach County

**LOCAL CONTACT:** Michael Stahl **PHONE:** 561-233-2433

### **PROJECT DESCRIPTION:**

The Singer Island Dune Nourishment project consists of nourishment and maintenance of 1.3 miles of dunes on Singer Island between DEP Monuments R60.5 – R67 in Palm Beach County. The County has conducted four dune nourishments since 2012. Dune nourishment events are planned to continue on a biennial basis through 2026. The most recent project was completed in 2017. A dune nourishment is proposed for Fiscal Year 2019-2020. Staff has determined the project is 71.72 percent eligible for state cost sharing.

#### **FUNDS WILL BE USED FOR:**

Construction (dune nourishment).

Federal	State	Local	Total
\$0	\$537,900	\$962,100	\$1,500,000

**NAME OF PROJECT:** Regional Monitoring

**LOCAL SPONSOR:** Florida Department of Environmental Protection

**LOCAL CONTACT:** Robert Brantly **PHONE:** 850-245-7577

#### PROJECT DESCRIPTION:

The Regional Data Collection and Processing Program is designed to address statewide coastal erosion and shoreline change analysis. The minimum data collection efforts necessary to accomplish the program goals include a combination of in-house and contracted work efforts that provide for complete statewide coverage of the program jurisdictional areas on an eight-year cycle. The data collection cycle includes the acquisition and development of:

- Aerial photography;
- Aerial oblique photography for reconnaissance and emergency response;
- Conventional topographic and bathymetric surveys;
- Laser remote sensing technologies including topographic and bathymetric data (LIDAR);
- Computer-based stereo photo modeling; and
- Regional Offshore Sand Source Inventory.

These data are used to support all aspects of the statewide beach management and coastal permitting programs, including the planning and design of beach restoration and nourishment, post-hurricane response and recovery activities, and development of the critically eroded beaches inventory. The collection and analysis of the data is coordinated with other statewide initiatives including the annual aerial digital photo acquisition initiative, USACE Regional Sediment Management efforts and local government project sponsors to increase cost efficiency and avoid duplication of efforts.

#### **FUNDS WILL BE USED FOR:**

Monitoring.

Federal	State	Local	Total
\$0	\$250,000	\$0	\$250,000

**NAME OF PROJECT:** Lake Worth IMP Implementation

**LOCAL SPONSOR:** Town of Palm Beach

**LOCAL CONTACT:** Robert Weber **PHONE:** 561-838-5440

#### PROJECT DESCRIPTION:

Lake Worth Inlet (also known as Palm Beach Inlet) is a federally authorized and maintained inlet located between DEP Monuments R75 – R76 in Palm Beach County. A fixed sand transfer plant (STP) was constructed on the northern jetty in 1958. The Lake Worth IMP was adopted in 1996. A subsequent sediment budget study was completed in 2000, recommending an annual bypassing objective of 202,000 cubic yards. The STP was reconstructed in 2010, replacing the diesel-powered pump with an electric pump. Federal maintenance dredging occurs every year to maintain required navigational clearances with placement of beach-compatible material on downdrift beaches when possible. Funds are being requested for the proposed bypassing of inlet-dredged sand to the dunes between R78 – R82.2 (Reach 2) in Fiscal Year 2019-2020.

#### **FUNDS WILL BE USED FOR:**

Construction.

Federal	State	Local	Total
\$0	\$450,000	\$150,000	\$600,000

**NAME OF PROJECT:** St. Lucie IMP Implementation

**LOCAL SPONSOR:** Martin County

**LOCAL CONTACT:** Kathy Fitzpatrick, P.E. **PHONE:** 772-288-5429

#### PROJECT DESCRIPTION:

St. Lucie Inlet is a federally authorized inlet located between DEP Monuments R44 – R45 in Martin County. Federally authorized improvements began in 1974 with the construction of the first extension of the northern jetty, a small southern jetty and a detached breakwater. Construction of a sediment impoundment basin was completed in 2002. Extensive monitoring and modeling efforts were undertaken after the construction of the sediment impoundment basin to more fully understand the impact and functioning of the basin. A revised IMP, based largely on the monitoring and modeling efforts, was adopted in 2016. Funds are being requested for reimbursement of the construction shortfall for bypassing that occurred in Fiscal Year 2018-19, physical and biological monitoring, and design for hydraulic bypassing into St. Lucie Inlet Preserve State Park.

#### **FUNDS WILL BE USED FOR:**

Design and construction (includes reimbursement and first year monitoring).

Federal	State	Local	Total
\$0	\$1,153,514	\$384,505	\$1,538,019

**NAME OF PROJECT:** Port Canaveral IMP Implementation

**LOCAL SPONSOR:** Canaveral Port Authority

**LOCAL CONTACT:** Robert Musser **PHONE:** 321-783-7831 ext. 256

### **PROJECT DESCRIPTION:**

The Port Canaveral Inlet is a federally authorized and maintained inlet located between DEP Monuments V167 – R1 in Brevard County. Since 1995, USACE and the Canaveral Port Authority have completed structural improvements to the north and south jetties as well as four federally funded sand bypassing events. The fifth sand bypassing event commenced in December 2018 and is in progress. An update to the inlet sediment budget was completed in 2013 and the IMP was subsequently updated in 2014. Design funds are requested for a new inlet sediment budget study.

#### **FUNDS WILL BE USED FOR:**

Design.

Federal	State	Local	Total
\$0	\$48,000	\$16,000	\$64,000

**NAME OF PROJECT:** South Lake Worth IMP Implementation

**LOCAL SPONSOR:** Palm Beach County

**LOCAL CONTACT:** Michael Stahl **PHONE:** 561-233-2433

### **PROJECT DESCRIPTION:**

South Lake Worth Inlet (also known as Boynton Inlet) is located between DEP Monuments R151 – R152 in Palm Beach County. The South Lake Worth IMP was adopted in 1999, establishing an annual bypassing objective of 88,000 cubic yards with 60,000 cubic yards to be bypassed by the sand transfer plant (STP). In 2002, the inlet sand trap was expanded. In 2011, the STP was reconstructed, including conversion to electric power and increasing the size of the discharge pipe. The seagrass mitigation site was completed in 2014 prior to the sand trap expansion and completion of the maintenance dredging event in 2015. A new sediment budget study is proposed for Fiscal Year 2019-2020 and will be provided as a component of an update to the IMP. The construction of a new discharge pipe under State Road A1A has been proposed to improve the effectiveness of future maintenance dredging of the sand trap and subsequent placement onto the beach.

#### **FUNDS WILL BE USED FOR:**

Design (sediment budget) and construction (second discharge pipeline).

Federal	State	Local	Total
\$0	\$144,000	\$48,000	\$192,000

**NAME OF PROJECT:** Sebastian Inlet IMP Implementation

**LOCAL SPONSOR:** Sebastian Inlet District

**LOCAL CONTACT:** James Gray **PHONE:** 321-724-5175

#### PROJECT DESCRIPTION:

Sebastian Inlet is located between DEP Monuments R219 in Brevard County and R1 in Indian River County. The inlet channel, sand trap and associated structures are maintained by the Sebastian Inlet District. Maintenance dredging of the channel and sand trap occur periodically, with placement of suitable material on the downdrift beaches located south of the inlet. Proposed activities over the next 20 years involve major dredging events of the sand trap and channel resulting in the placement of approximately 150,000 cubic yards on the beach every four years. During each major dredging event, at least 30,000 cubic yards will be placed in an approved disposal area to create a stockpile of beach quality sand. This material will be truck hauled to the beach in response to storm events during interval dredging years. Additional activities will include physical and biological monitoring of the project area with particular emphasis on hardbottom monitoring.

#### **FUNDS WILL BE USED FOR:**

Construction (includes first year monitoring).

Federal	State	Local	Total
\$0	\$2,980,521	\$993,507	\$3,974,028

**NAME OF PROJECT:** Wiggins Pass IMP Implementation

**LOCAL SPONSOR:** Collier County

**LOCAL CONTACT:** Gary McAlpin **PHONE:** 239-252-5342

#### PROJECT DESCRIPTION:

Wiggins Pass is located between DEP Monuments R16 – R17 in Collier County. The initial phase of the latest Inlet Management Study was implemented in 2013 by dredging approximately 107,000 cubic yards for maintenance dredging and initial realignment of the channel. In 2015, an interim maintenance dredging project was completed to clear the shoal across the main inlet entrance channel. DEP adopted the IMP in 2018, with strategies being implemented with the recently completed 2018 maintenance dredging event. Dredging of Wiggins Pass will be concurrent with the dredging of Doctors Pass as a means for cost sharing of common costs.

#### **FUNDS WILL BE USED FOR:**

Construction (includes reimbursement and first year monitoring).

Federal	State	Local	Total
\$0	\$1,195,606	\$398,535	\$1,594,141

**NAME OF PROJECT:** Boca Raton IMP Implementation

**LOCAL SPONSOR:** City of Boca Raton

**LOCAL CONTACT:** Jennifer Bistyga **PHONE:** 561-416-3397

### **PROJECT DESCRIPTION:**

Boca Raton Inlet is located at DEP Monument R223 in Palm Beach County. The Boca Raton IMP was adopted in 1997. The plan established a bypassing objective of 71,300 cubic yards annually. In 2004, the bypassing objective was revised and increased to 83,000 cubic yards. The weir on the northern jetty was extended 50 feet seaward to allow for the creation of a wider beach in conjunction with nourishment north of the inlet in 2004. In 2008, the wooden crib structure of the northern jetty was rehabilitated with quarried rock. Bypassing activities occur annually using a city-owned dredge that bypasses sand to a fixed outfall located on the beach south of the inlet.

#### **FUNDS WILL BE USED FOR:**

Design and construction (bypassing).

Federal	State	Local	Total
\$0	\$170,625	\$56,875	\$227,500

**NAME OF PROJECT:** Estero Barriers Regional Inlet Management Study

**LOCAL SPONSOR:** Lee County

**LOCAL CONTACT:** Steve Boutelle **PHONE:** 239-533-8128

### **PROJECT DESCRIPTION:**

The primary focus of this regional inlet management study will be to develop sediment budgets for three inlets located between DEP Monuments R209 – R227 in Lee County: Big Carlos Pass, New Pass and Big Hickory Pass. The study will also evaluate potential strategies for inlet sediment management which will result in balancing the sediment budget between the inlets and adjacent beaches.

### **FUNDS WILL BE USED FOR:**

Feasibility (Inlet Management Study).

Federal	State	Local	Total
\$0	\$24,303	\$8,101	\$32,404

**NAME OF PROJECT:** Matanzas Inlet Sediment Budget Analysis

**LOCAL SPONSOR:** Florida Department of Environmental Protection

**LOCAL CONTACT:** Robert Brantly **PHONE:** 850-245-7577

### **PROJECT DESCRIPTION:**

DEP, with the assistance of university-based resources, shall conduct inlet management studies consistent with Sections 161.142 and 161.143(4), F.S., to determine, calculate, refine and achieve general consensus regarding net annual sediment transport volumes to be used for the purpose of planning and prioritizing inlet management projects. The inlet of interest is Matanzas Inlet in St. Johns County, where erosion threatens upland residential development and State Road A1A, as well as the Summer Haven River Restoration project that was recently completed with funding appropriated by the Legislature. In addition, DEP, with the assistance of contractual resources, shall develop and maintain an inventory of sediment budgets and a current estimate of beach quality sand that is placed on adjacent eroding beaches for all inlets in the State of Florida in accordance with the legislative mandate in Sections 161.142(2) and 161.143(4), F.S.

#### **FUNDS WILL BE USED FOR:**

Feasibility study.

Federal	State	Local	Total
\$0	\$200,000	\$0	\$200,000