

CITY OF BOCA RATON CAPITAL IMPROVEMENT PLAN

Boca Raton Inlet and Jetties

PROJECT #: 1440019

PRIORITY: 31

LOCATION

Boca Raton Inlet

DEPARTMENT

Municipal Services

DESCRIPTION

The City has continuously performed the dredging since 1972 with no significant periods of downtime, with the exception for a brief period in 2002.

Over the past few years, it has been observed that the North Jetty Rocks have experienced settlement since the 2008 Jetty Rehabilitation. Because of this settlement, the North Jetty could potentially become a navigational hazard, especially during spring high tide events when portions of the jetty become submerged. The maintenance repairs to the north jetty will re-establish the design elevation of the north jetty.

FY 2021/22

FDEP permitting (2nd Discharge)

FDEP permitting (Sediment Budget Update)

USACE permitting (sand bypassing)

Permit required physical monitoring

FY 2022/23

Permit required physical monitoring

Construction of the second discharge south of the Boca Raton Inlet \$800,000

FY 2023/24

Permit required physical monitoring

FY 2024/25

Permit required physical monitoring

FY 2025/26

Permit required physical monitoring

FY 2026/27

Permit required physical monitoring

JUSTIFICATION

This project is the maintenance dredging of Boca Raton Inlet and placement of bypassed sand to the south side of the inlet. The excavated sand is discharged on the beach landward of the MHW line, within 500 feet south of the south jetty.

To conduct these continuous operations, the City is required to maintain both Florida Department of Environmental Protection and USACE permits. Additionally, as part of the permit requirements, the City is required to conduct annual monitoring and reporting of the bypassing efforts.

The jetty is a quarried rock structure on a rock-filled geogrid marine mattress foundation. The jetty includes a shore-attached section and detached section. The shore-attached section extends approximately 50 feet seaward of the MHW. The detached section provides a 75-foot gap from the shore-attached section and the structure is approximately 100-feet long. The open gap serves as a weir section in effort to maintain the southerly net littoral drift.

IMPACT

N/A

PROJECT COST AND FUNDING

**CITY OF BOCA RATON
CAPITAL IMPROVEMENT PLAN**

	2022	2023	2024	2025	2026	2027	TOTAL
CONSTRUCTION	\$0	\$800,000	\$0	\$0	\$0	\$0	\$800,000
DESIGN & PERMITTING	\$374,000	\$0	\$80,000	\$0	\$0	\$0	\$454,000
MONITORING	\$27,000	\$28,100	\$29,200	\$30,400	\$31,600	\$32,900	\$179,200
PROJECT COSTS	\$401,000	\$828,100	\$109,200	\$30,400	\$31,600	\$32,900	\$1,433,200
ACCTNUM	2022	2023	2024	2025	2026	2027	TOTAL
354-4471-537.63-59	\$0	\$800,000	\$0	\$0	\$0	\$0	\$800,000
354-4471-537.63-59	\$374,000	\$0	\$80,000	\$0	\$0	\$0	\$454,000
354-4471-537.63-59	\$27,000	\$28,100	\$29,200	\$30,400	\$31,600	\$32,900	\$179,200
PROJECT COSTS	\$401,000	\$828,100	\$109,200	\$30,400	\$31,600	\$32,900	\$1,433,200
BPD	\$100,200	\$207,025	\$27,300	\$7,600	\$7,900	\$8,225	\$358,250
BRF	\$100,300	\$207,025	\$27,300	\$7,600	\$7,900	\$8,225	\$358,350
DEP	\$200,500	\$414,050	\$54,600	\$15,200	\$15,800	\$16,450	\$716,600
PROJECT FUNDING	\$401,000	\$828,100	\$109,200	\$30,400	\$31,600	\$32,900	\$1,433,200