

MacArthur Blvd Dune Restoration

Category Concurrency
Project Number 7509
Location Hutchinson Island
District 1

Project Limits MacArthur Blvd Dune from R-26 to R-34

Related Projects None
Lead Dept/Division Public Works/Coastal Management
Year Project Initiated 2023

Project Life Cycle 5 Years

Resilience Requirements ☒ 2040 Vulnerability ☐ 2070 Vulnerability ☐ 2100 Vulnerability



DESCRIPTION

The MacArthur Blvd dune restoration project plans to reconstruct a beachfront dune along MacArthur Boulevard beach beginning at Florida Department of Environmental Protection (FDEP) Monument R-25 and extending south to R-34.

BACKGROUND

MacArthur Dune was damaged during the 2004 Hurricanes Frances and Jeanne. Immediately following those storms a FEMA project was completed along the dune to restore the dune. In September 2022 Hurricane Ian passed over the State of Florida and in November 2022 Hurricane Nicole made landfall in Fort Pierce and caused significant erosion to the Martin County shoreline. The MacArthur Blvd dune requires extensive restoration work. Staff will obtain all necessary permits and easements to construct this project. FDEP funds have been allocated during the December 2022 special legislative session for a portion of this project. Construction is proposed for FY26 and funds will be needed to cover the difference left from the FDEP grant. It is anticipated that a Municipal Service Benefit Unit (MSBU) shall be administered to the dune front property owners for proportionate funding of the project.

PROJECT ORIGINATION

Infrastructure Needs

JUSTIFICATION

Policy 8.2E.10 of the Comprehensive Growth Management Plan has Coastal Infrastructure Requirements "to maintain established levels of service and phased and maintained infrastructure to assure that adequate public facilities and services are available to existing and projected residents and visitors to the coastal high-hazard area." This work involves mitigation practices to protect MacArthur Blvd infrastructure from high-tide events, storm surges, and related impacts of sea-level rise.

Expenditures	Total	To Date		Funded					Unfunded
				FY25	FY26	FY27	FY28	FY29	FY30-FY34
Design	200,000			100,000					100,000
Monitoring	1,600,000				200,000	200,000	200,000	200,000	800,000
CEI	150,000				150,000				
Construction	2,250,000				2,250,000				
Expenditure Total	4,200,000	-		100,000	2,600,000	200,000	200,000	200,000	900,000
Revenues	Total	To Date	Carryover						FY30-FY34
				FY25	FY26	FY27	FY28	FY29	
Ad Valorem	391,700		391,700						
Beach Property MSBU	1,000,000				1,000,000				
Grant(s)	1,388,300		538,300		670,000	60,000	60,000	60,000	
Revenue Total	2,780,000	-	930,000	-	1,670,000	60,000	60,000	60,000	-
Total Unfunded									1,420,000

OPERATING BUDGET IMPACT

Staff time to administer the program.