Resilient SRQ – Round 2 Grant Application

Hudson Bayou Dredging & Resiliency Project (*Revised August 13, 2025)*

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1 | Applicant
Sarasota County & City of Sarasota

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2 | Primary Contact
Nikesh Patel - Director of Public Works
Email: Nikesh.Patel@sarasotafl.gov • Phone:(941) 263-6132

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3 | Project Title & Location
Hudson Bayou Dredging & Stormwater Mitigation Project
Location: Entire tidal reach of Hudson Bayou, from Sarasota Bay to the headwaters at Bahia Vista Street (≈ 2.9 miles).

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4 | Project Description & Need
The **Hudson Bayou Dredging & Resiliency Project** is a critical flood mitigation and water quality initiative that restores the function of one of Sarasota's oldest urban waterways. Sediment accumulation, bank erosion, and undersized outfalls have reduced channel capacity and led to routine flooding of streets and homes during moderate storms.

2024 bathymetric and hydraulic studies identified over **80,500 cubic yards (CY)** of sediment that must be removed to achieve the **100-year (1% annual-chance) Level-of-Service (LOS)** standard adopted by the City and County for primary drainage basins. The project also addresses chronic bank erosion and delivers nature-based stabilization using native vegetation.

Without intervention, neighborhoods surrounding Orange Avenue, Alta Vista Elementary, and Osprey Avenue will continue to face public safety hazards, infrastructure damage, and declining water quality.

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5 | Scope of Work & Cost (2025 Dollars)

Task	Quantity / Unit	Unit Cost	Sub-Total
Bathymetric survey, design & permitting	1 LS	—	$ 1,200,000
Hydraulic dredging & in-bay dewatering	≈ 80,500 CY	$ 140/CY	$ 11,270,000
Upland disposal / beneficial reuse (≈ 8 mi haul to County spoil site)	≈ 80,500 CY	$ 20/CY	$ 1,600,000
Bank stabilization & native vegetation	1 LS	—	$ 600,000
Sediment testing, environmental compliance, post-construction monitoring & contingency (~6%)	1 LS	—	$ 330,000
Total Estimated Project Cost			**$ 15,000,000**

Costs include contractor mobilization, dewatering, and a 15% construction-phase contingency.

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6 | Funding Strategy

Source	Amount	% of Total	Notes
City of Sarasota & Surtax Funds (Local)	$ 1,300,000	8.7%	Covers design, permitting, and provides CDBG-DR leverage
Resilient SRQ – Round 2 (CDBG-DR)	$ 13,700,000	91.3%	Funds dredging, disposal, stabilization, and monitoring
Total Project Cost	**$ 15,000,000**	100%	Fully funded upon SRQ award approval

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7 | Expected Outcomes & Benefits

Performance Metric	Pre-Project	Post-Project (Target)
Conveyance Level-of-Service (LOS)	< 2-year storm	**100-year storm**
Structures impacted by flooding (100-yr event)	≈ 150 homes	**0 homes flooded**
Critical road closures per major storm	3–6 hours	**0 hours**
Annual sediment/nutrient removal	—	**≈ 36 tons TSS & 4.8 tons TN**

Additional Benefits

- **Public safety:** Eliminates flash flooding along key evacuation routes including Osprey Ave and Bahia Vista Street.
- **Economic protection:** Safeguards ~$290 million in property value and supports access to Southside Village commercial district.
- **Water quality improvement:** Reduces nutrient loads entering Sarasota Bay.
- **Habitat & erosion control:** Stabilized banks with native vegetation improve ecological function and reduce future shoaling.
- **Climate resilience:** Channel capacity accommodates 1.3 feet of sea-level rise through 2075, consistent with City adaptation models.

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8 | Cost Reasonableness & Market Validation

- **Dredging ($140/CY):** Within 2025 average bid range for hydraulic dredging with upland disposal in Florida ($120–$180/CY).
- **Disposal ($20/CY):** Includes haul distance and tipping; confirmed through comparative analysis of Manatee and Sarasota County projects.
- **Soft costs (≈10%):** Align with USACE standards for complex environmental infrastructure efforts.
- **Validation:** Scope and unit pricing confirmed by Taylor Engineering (25% Basis-of-Estimate, July 2025) and benchmarked to FDOT 2025 Construction Cost Handbook.

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9 | Project Schedule (Key Milestones)

Milestone	Target Date
Final design & permit submittal	Summer 2026
USACE & FDEP approvals	Late 2026
Advertise & award construction contract	Summer 2026
Mobilization & dredging start	Late 2027
Substantial completion	Summer 2028
Post-construction monitoring & close-out	Late 2028

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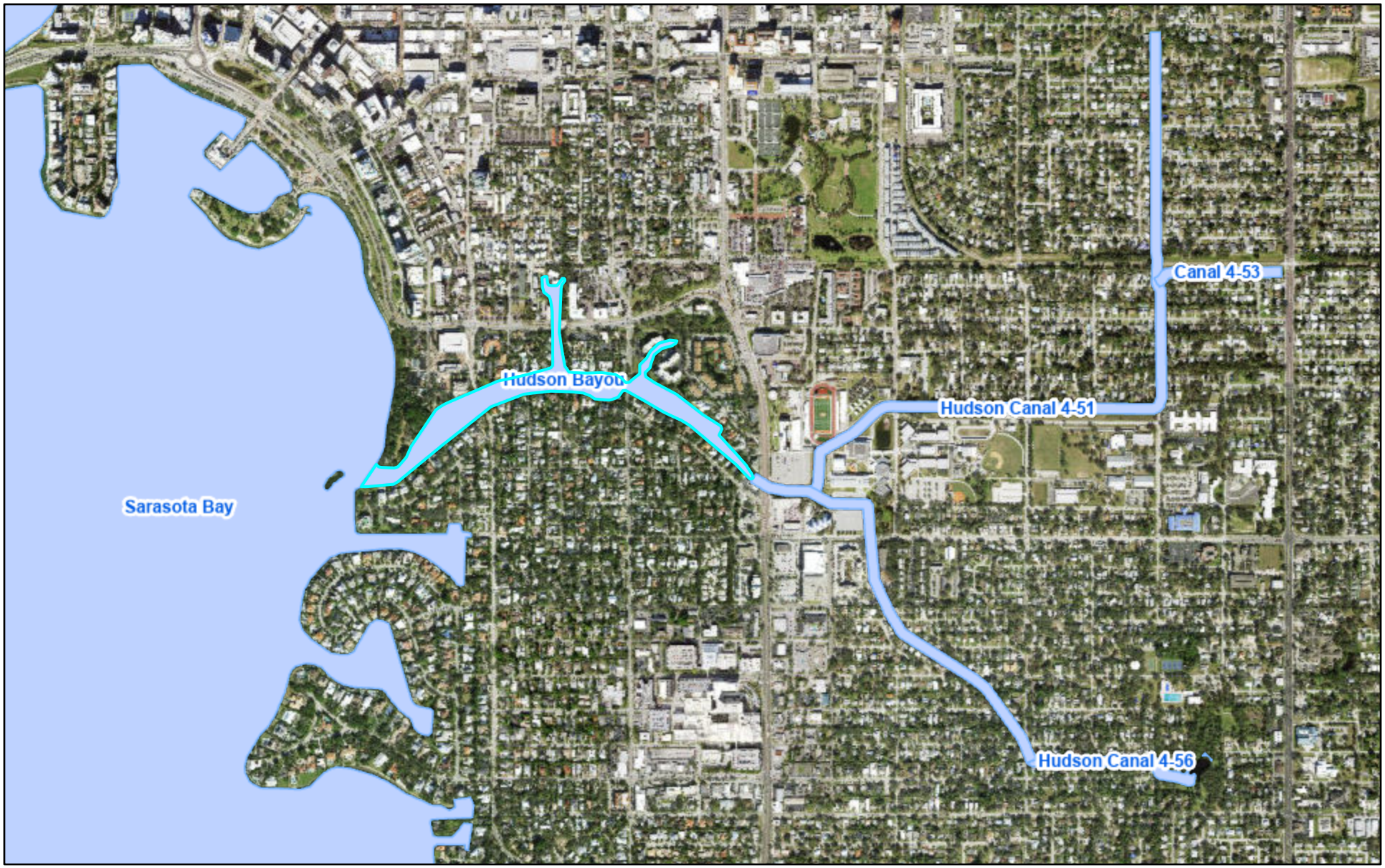
10 | Project Request

The City of Sarasota and Sarasota County respectfully request **$ 13,700,000** in **Resilient SRQ – Round 2 (CDBG-DR)** funding, to be paired with **$ 1,300,000** in local surtax contributions, fully funding the **$ 15,000,000 Hudson Bayou Dredging & Resiliency Project**. This project will deliver **100-year flood protection**, improve water quality, restore ecological function, and provide durable resilience for core Sarasota neighborhoods disproportionately affected by repetitive storm events and rising seas.

Hudson Bayou



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N

0 0.13 0.25 0.5 mi

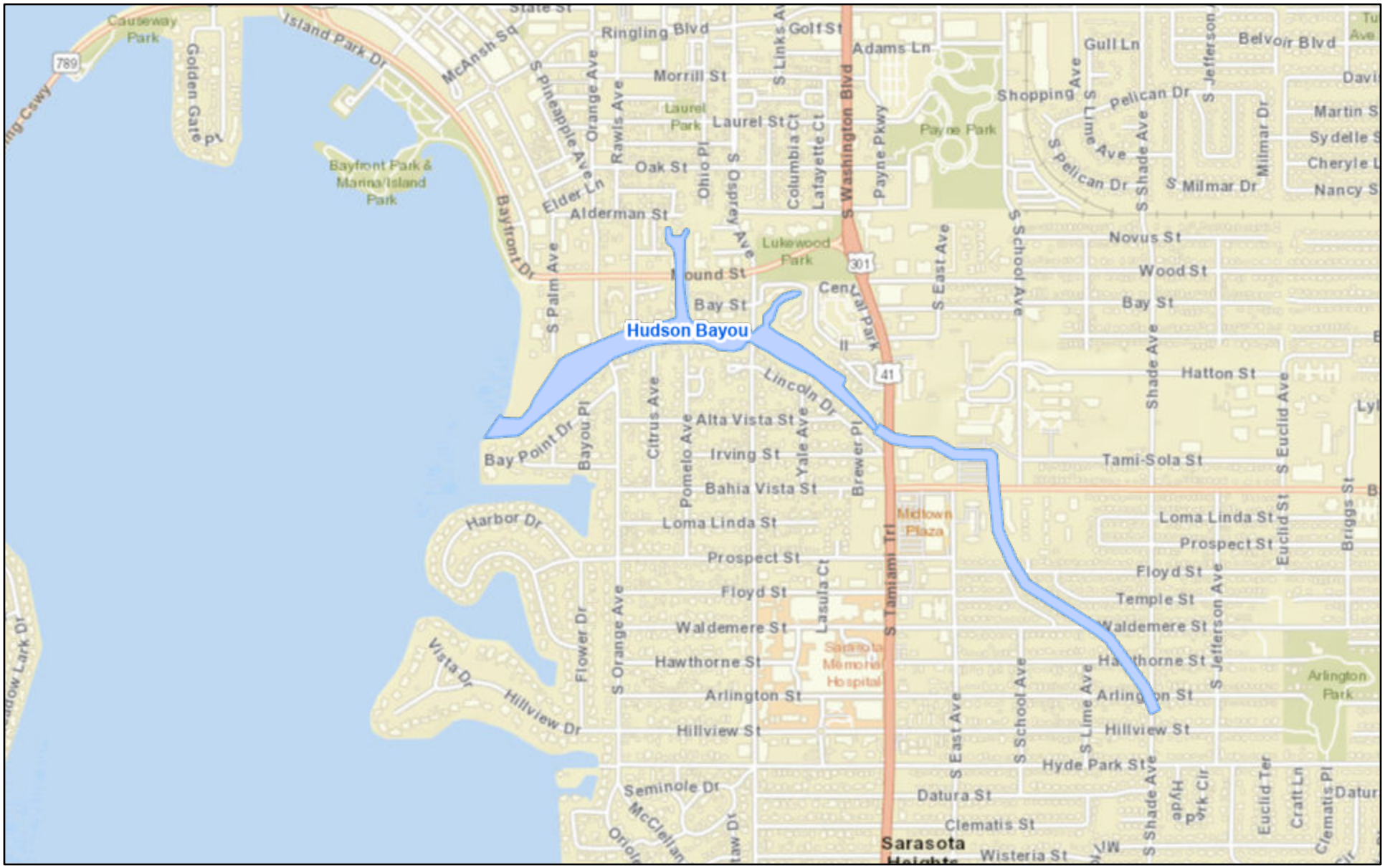
0 0.2 0.4 0.8 km

State of Florida, Maxar

The Water Institute @ USF

State of Florida, Maxar | Florida DEP Watershed Assessment Section | FDEP | environment, TMDL Total Maximum Daily Load Impairment, Environmental Monitoring and Modeling |

Hudson Bayou



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University of South Florida, County of Manatee, Sarasota County GIS, Esri, HERE, Garmin, INCREMENT P, NGA, USGS

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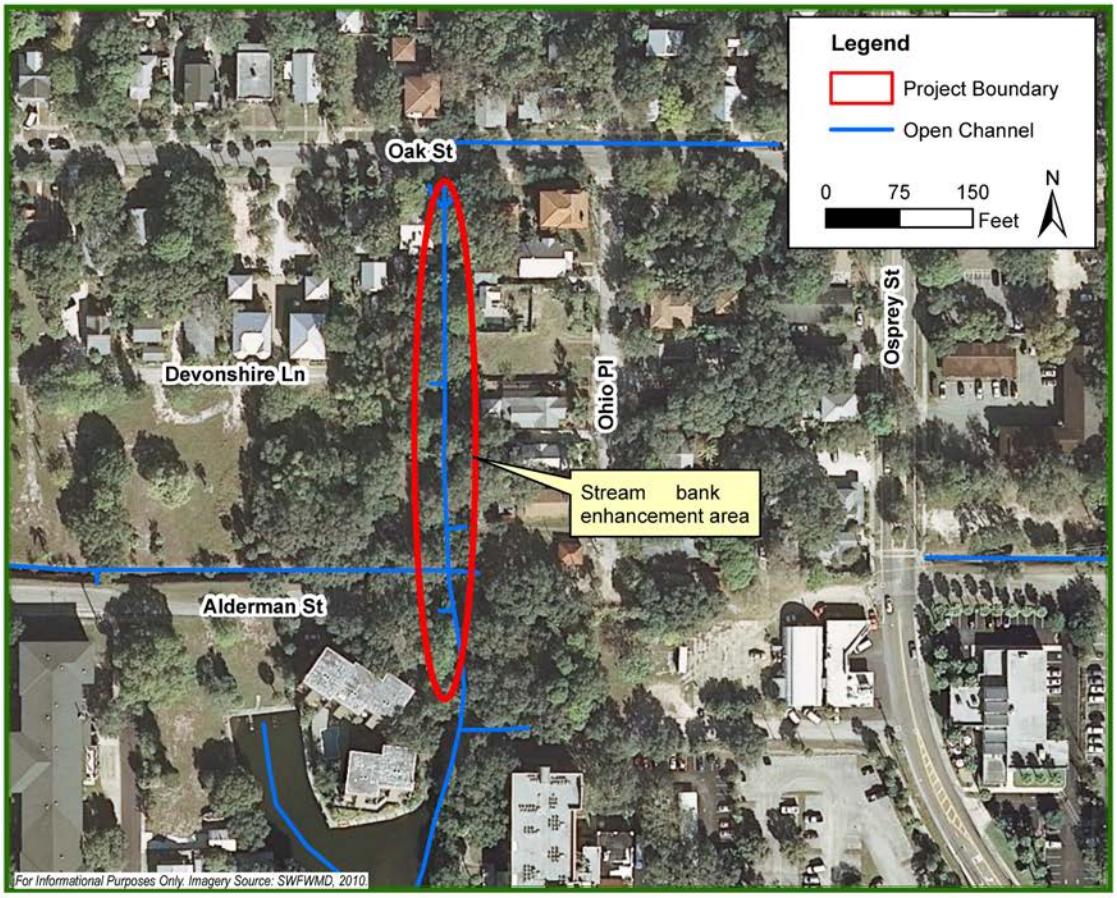
Sarasota County

Sarasota Bay Water Quality Management Plan

NS6 - Hudson Bayou Oak Street Canal

Jones Edmunds

Janicki Environmental, Inc.



Site Evaluation

This site is a channelized tributary of Hudson Bayou that flows south within a narrow 12- to 15-foot-wide drainage easement between residential properties. Almost the entire reach of this channelized tributary is armored or has vertical or near vertical side slopes and much of the bank is dominated by dense exotic vegetation. This system receives untreated stormwater that discharges directly to the creek via pipes or ditches.

Proposed Project Elements

- Remove and treat exotic vegetation
- Stabilize banks with native vegetation
- Install logs/large branches in channel

Benefits

The banks will be enhanced by removing exotic invasive vegetation and planting desirable native species from the toe to top of slope. Enhancement of the side slope will be challenging in several locations due to the vertical bank and the potential for bank failure if large exotic invasive trees and shrubs are removed. Installing several logs and thick-diameter branches in two or three locations of this stream reach will trap sediments and provide benthic habitat.

Pollutant Removal Estimate (Avg)

- TSS (lb/yr): 1,148
- TP (lb/yr): 2
- TN (lb/yr): 9
- UMAM Credits (Forested Wetlands): 0.02

Opinion of Probable Cost *(Conceptual Level Estimate)*

- $33,094

Sarasota Bay Water Quality Management Plan

Conceptual Level Cost Estimate

NS6 - Hudson Bayou Oak Street Canal

OWNER:	ESTIMATED BY:
Sarasota County	**MOB**
CLIENT:	CHECKED BY:
Sarasota County	**BJB**
PROJECT TITLE:	APPROVED BY:
Hudson Bayou Oak Street Canal	**CAM**
JONES EDMUNDS PROJECT NUMBER:	DATE:
19006-034-01	**4/19/2012**
ESTIMATE TYPE (ROM, BUDGET, DEFINITIVE):	CONSTRUCTION OR PROJECT ESTIMATE:
ROM	**Construction Cost Estimate**

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
Mobilization (10%)	LS	1	$ 1,425.00	$ 1,425
Floating Turbidity Barrier	LF	500	$ 12.00	$ 6,000
Installation of Wood Debris	LS	1	$ 2,500.00	$ 2,500
Plant Material and Install for Banks	LS	1	$ 5,750.00	$ 5,750
Contingency (25%)	LS	1	$ 3,918.75	$ 3,919
			SUBTOTAL	$ 19,594
Survey	LS	1	$ 3,000.00	$ 3,000
Design and Permitting	LS	1	$ 7,500.00	$ 7,500
Maintenance of Exotic Species (Biannual for 2 years, then annually for 2 years)	YR	6	$ 500.00	$ 3,000
			SUBTOTAL	$ 13,500
			OPINION OF PROBABLE COST (ROUNDED)	**$ 33,094**

Note: Unit prices are based on FDOT area and statewide prices, and recent bids received by Jones Edmunds.

PHASE IV INFRASTRUCTURE SURTAX EXTENSION
FY25-FY39
CITY OF SARASOTA PROJECT DETAIL

Project Name: Restoration Hudson Bayou North Branch
Department: Sustainability
Category: Environment
Location: Hudson Bayou North Branch
Contact Name: Douglas Jeffcoat **Contact Phone:** 941-263-6101

Total Project Amount ($M): $1.300
Total Surtax Amount ($M): $1.000
Citizen Recommended? Yes
Staff Recommended? --
Email: douglas.jeffcoat@sarasotafl.gov

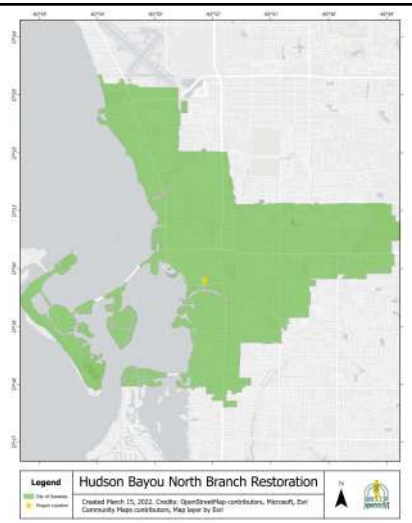
Description	Project Implementation Schedule
Bank erosion is threatening the stability of adjacent properties and often makes the kayak launch unusable. This initiative crosses city, county and state jurisdictions and requires coordinated focus to complete. The public benefit is improved stormwater management minimizing harmful nutrients in our bay and estuaries.	FY25-FY29

Rationale

Mitigation of property damage and provide water quality improvements.

Operating Impact

The completion of this project is not anticipated to increase the City's annual operating cost.



Estimated Total Costs ($M)

Funding by Source	FY25 - FY29	FY30 - FY34	FY35 - FY39	TOTAL
Surtax	$1.000	$0.000	$0.000	**$1.000**
Other	$0.300	$0.000	$0.000	**$0.300**
Total Project Cost	**$1.300**	**$0.000**	**$0.000**	**$1.300**

HUD Block-Grant Planning App

Sarasota County

Enter a Census Tract number into the search. From the Search Results drop panel, selet the Tract and Block number combination as input to the Income Summary tool. The tool will then summarize the LOM Income percentages for the selected and adjacent blocks.

0 Feet

2020 Census Block Group 7

LMI %
41.71

2015 Census Block Group 7

LMI %
39.18

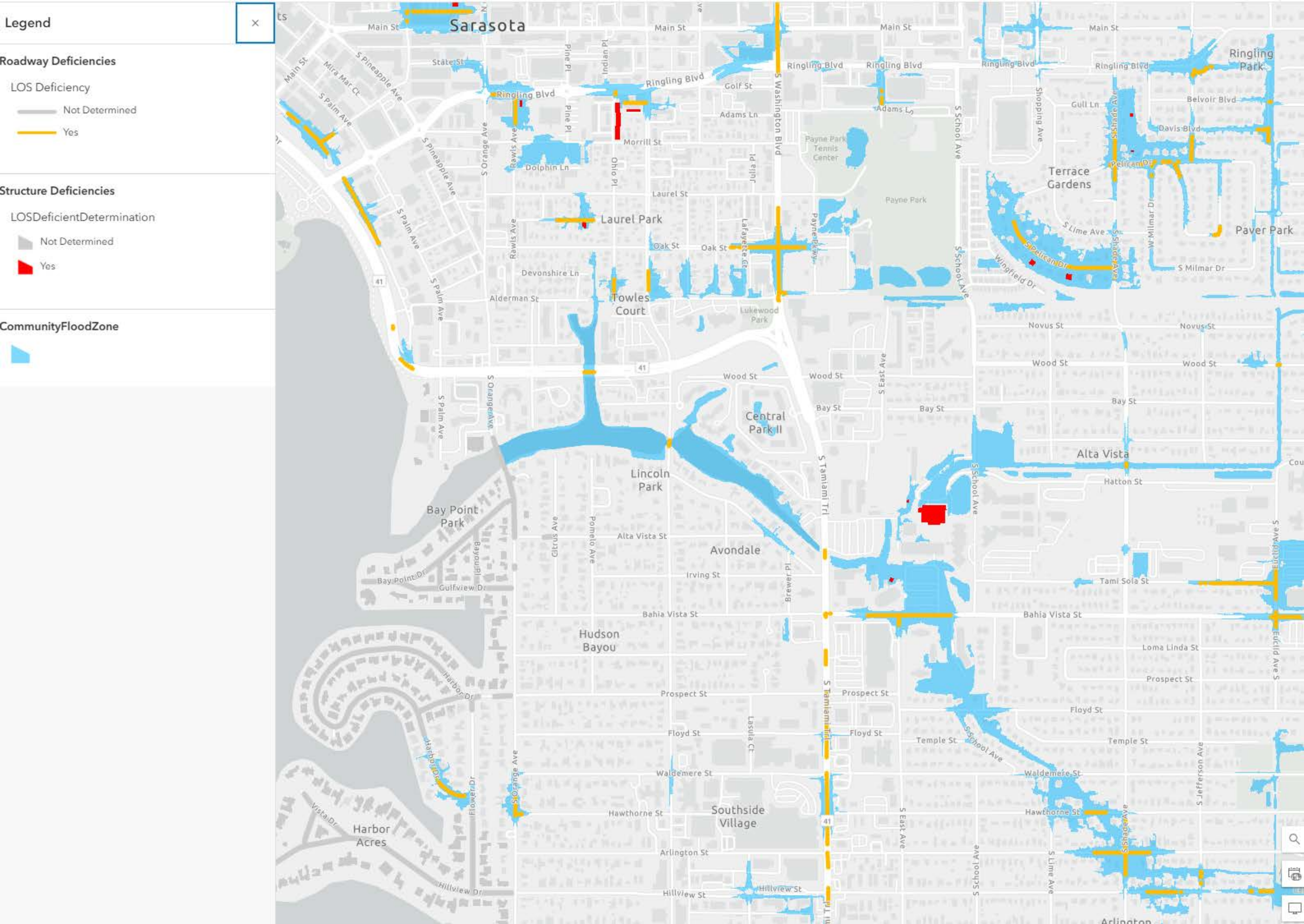
Layers

- County Infrastructure Layers
- Census Block Group Layers
- ACS Variable Layers
- County Boundary Layers

Search by Tract Number or Address

5 Points
Merchants
Main St
Ringling Blvd
Ringling Park
Bayfront Dr
000401-1
40.7%
Terrace Gardens
000102-3
47.8%
PAYNE PARK
Laurel Park
Paver Park
000104-1
32.5%
ISLAND PARK
000104-2
11.5%
Towles Court
S School Ave
Wood St
Mound St
Central Park
Central Park II
000502-1
Alta Vista
33.2%
Lincoln Park
000501-1
40.3%
Bay Point Park
Avondale
ALTA VISTA ELEMENTARY SCHOOL
Bahia Vista St
Hudson Bayou
S Tamiami Trl
000501-2
34.8%
000502-3
54.5%
000502-2
60.9%
Southside Village
Harbor Acres
ARLINGTON PARK AND AQUATIC CENTER
Arlington Park
McClellan Park
000602-1
32.4%

1,000 ft


Legend
Roadway Deficiencies
LOS Deficiency
Not Determined
Yes
Structure Deficiencies
LOSDeficientDetermination
Not Determined
Yes
CommunityFloodZone
Sarasota
Ringling Park
Terrace Gardens
Paver Park
Laurel Park
Towles Court
Central Park II
Lincoln Park
Bay Point Park
Avondale
Alta Vista
Hudson Bayou
Southside Village
Harbor Acres
Payne Park
Payne Park Tennis Center
Lukewood Park
Main St
Ringling Blvd
Golf St
Adams Ln
Morrill St
Laurel St
Oak St
Devonshire Ln
Alderman St
Wood St
Bay St
Alta Vista St
Irving St
Bahia Vista St
Prospect St
Floyd St
Waldemere St
Hawthorne St
Arlington St
Hillview St
Temple St
Novus St
Loma Linda St
Tami Sola St
Hatton St
Belvoir Blvd
Davis Blvd
Pelican Dr
Gull Ln
Lime Ave
Wingfield Dr
S Milmar Dr
W Milmar Dr
Dolphin Ln
Bay Point Dr
Gulfview Dr
Harbor Dr
Flower Dr
Vista Dr
Hillview Dr
S Washington Blvd
S School Ave
S Tamiami Trl
S East Ave
S Orange Ave
S Palm Ave
S Pineapple Ave
Rawls Ave
Pine Pl
Indian Pl
Ohio Pl
Juliet Pl
Lafayette Cir
Payne Pkwy
Shopping Ave
S Shade Ave
Citrus Ave
Pomelo Ave
Brewer Pl
Lasula Ct
S Jefferson Ave
Euclid Ave S
Mira Mar Ct
Bayou Pl
41