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EST. 1565

Old City South Public Works & Resiliency Discussion

March 16, 2023

Reuben C. Franklin, Jr., P.E. Director, Public Works





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Discussion Topics

- **Maria Sanchez Flood Mitigation Project**
- **Army Corp Back Bay Study**
- **King St Agreement, Projects & Schedule**
- **Parking (Broudy Project Update and Circulator)**
- **Development (Corazón, San Sebastian, etc.)**
- **Resiliency**
- **St. George Paving (South St to St. Francis)**
- **Other**

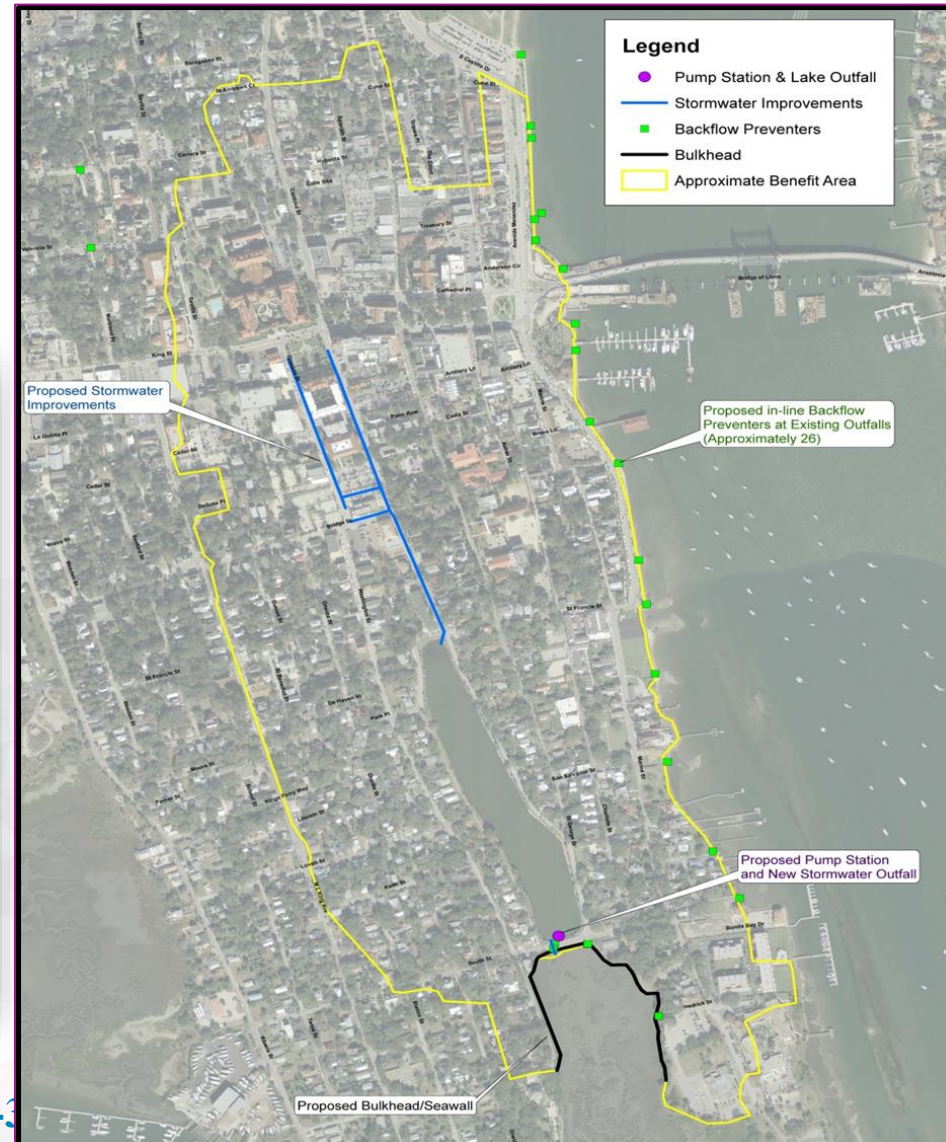


Lake Maria Sanchez Flood Mitigation and Drainage Improvement Project

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- ❖ Lake Maria Sanchez Flood Mitigation and Drainage Improvement Project is under design





Lake Maria Sanchez Flood Mitigation and Drainage Improvement Project

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❖ Flood Protection (Structures)

- ✓ Estimated 200 Acre Benefit Area
- ✓ 25-Year Storm Event + 2050 Sea Level Rise (6.4 Feet Storm Surge)
- ✓ Protect 186 Structures (Currently at Risk)



❖ Flood Protection (Roadways)

- ✓ 10-Year, 24-Hour Rainfall Event Level of Service (7.6 inches)
- ✓ Protected from Coastal Flooding
- ✓ Reduces both Depth and Duration of flooding





Lake Maria Sanchez Flood Mitigation and Drainage Improvement Project



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Lake Maria Sanchez Flood Mitigation and Drainage Improvement Project





Lake Maria Sanchez Flood Mitigation and Drainage Improvement Project

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❖ Proposed Flood Wall Rendering (subject to change based on final design)





Lake Maria Sanchez Flood Mitigation and Drainage Improvement Project

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❖ Proposed Pump Station Rendering





Lake Maria Sanchez Flood Mitigation and Drainage Improvement Project

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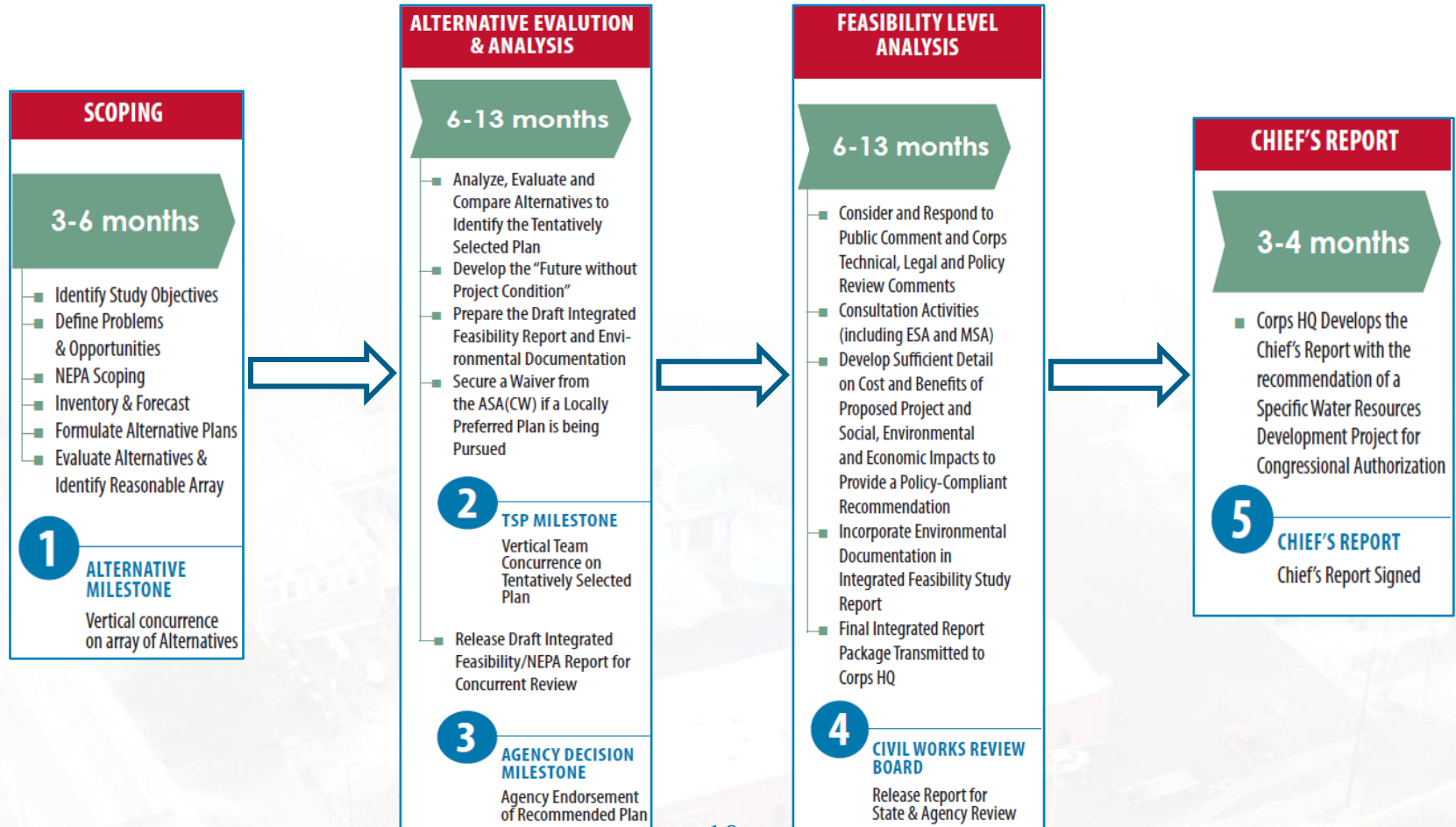
❖ Proposed South Street Facing East Rendering



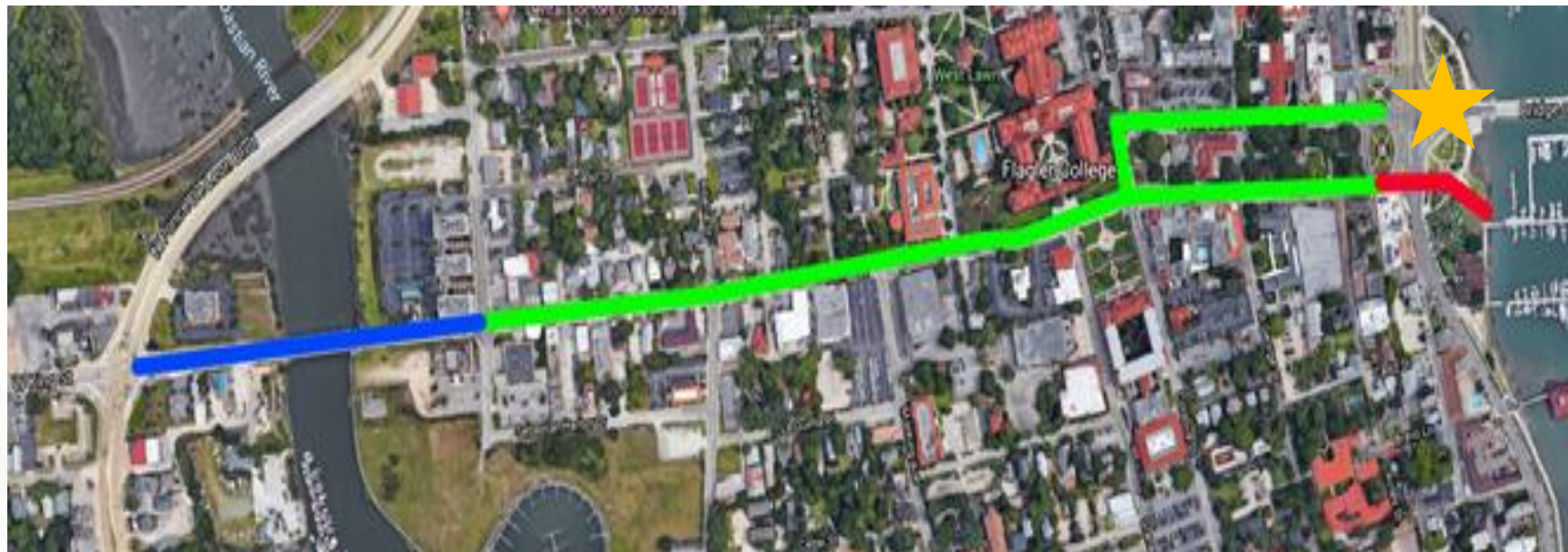


Army Corp Back Bay Study

SMART PLANNING STUDY PROCESS AND MAJOR MILESTONES



King St Agreement, Projects & Estimated Schedule



-  FDOT Drainage Construction April 2023-Nov 2023
-  FDOT Bridge Replacement Construction June 2024-Sept 2025
-  CITY Design March 2023 – June 2027
Construction January 2028 – December 2032
-  FDOT Intersection Improvements July 2027/July2028 (TBD)



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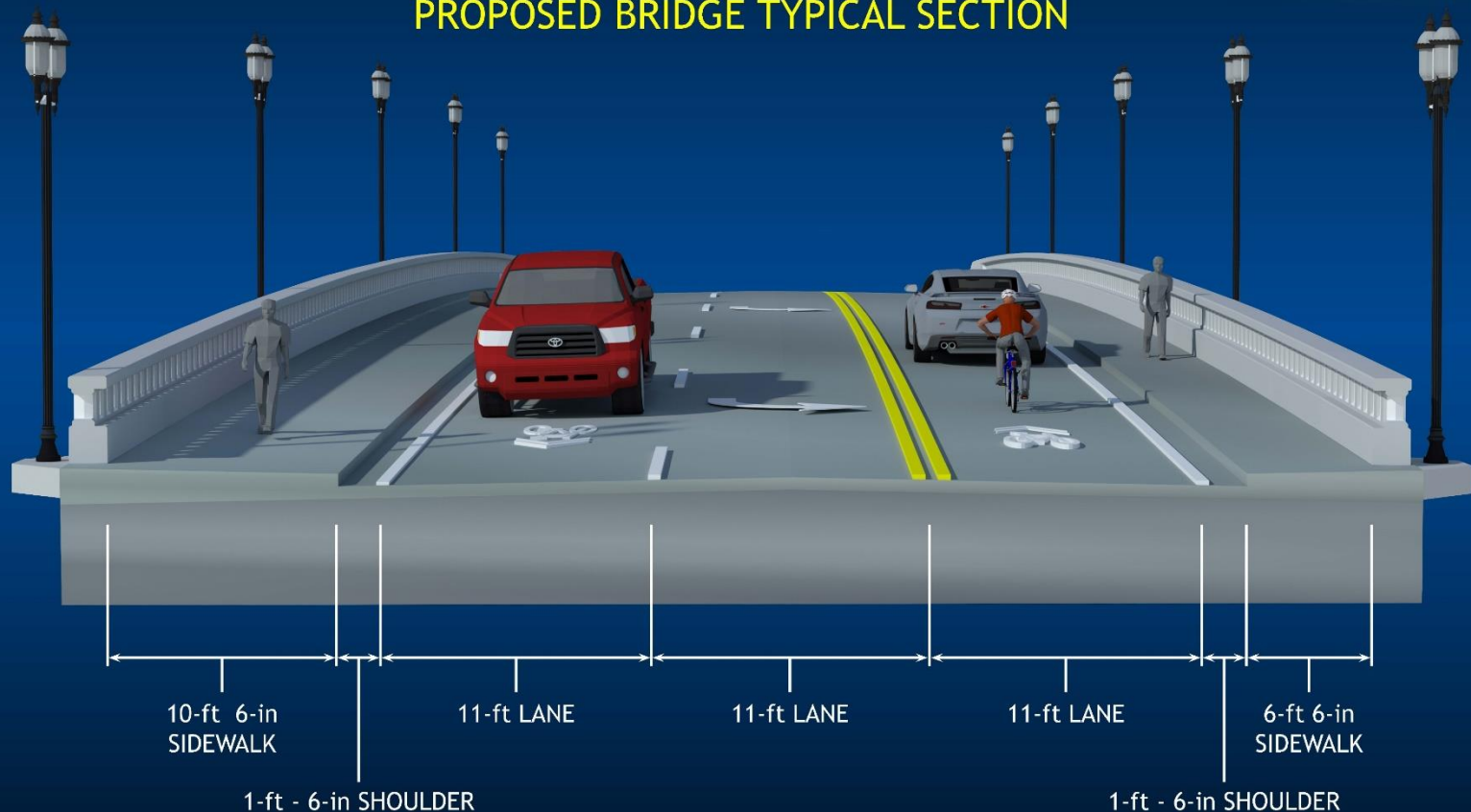
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King St Bridge Replacement

SR-5A (King Street) Bridge Replacement
over the San Sebastian River



PROPOSED BRIDGE TYPICAL SECTION





SR-5A (King Street) Bridge Replacement over the San Sebastian River

PROPOSED DETOUR





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A Recap of Hurricane Seasons



High Water Marks (HWM) at O'Steens Restaurant – Anastasia Blvd (Island)

Matthew (7.07 NAVD88)



Ian (6.5 NAVD88)



Nicole (6.53 NAVD88)

Irma (4.9 NAVD88)





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Why Do We Flood ?

Flooding is not new to the City

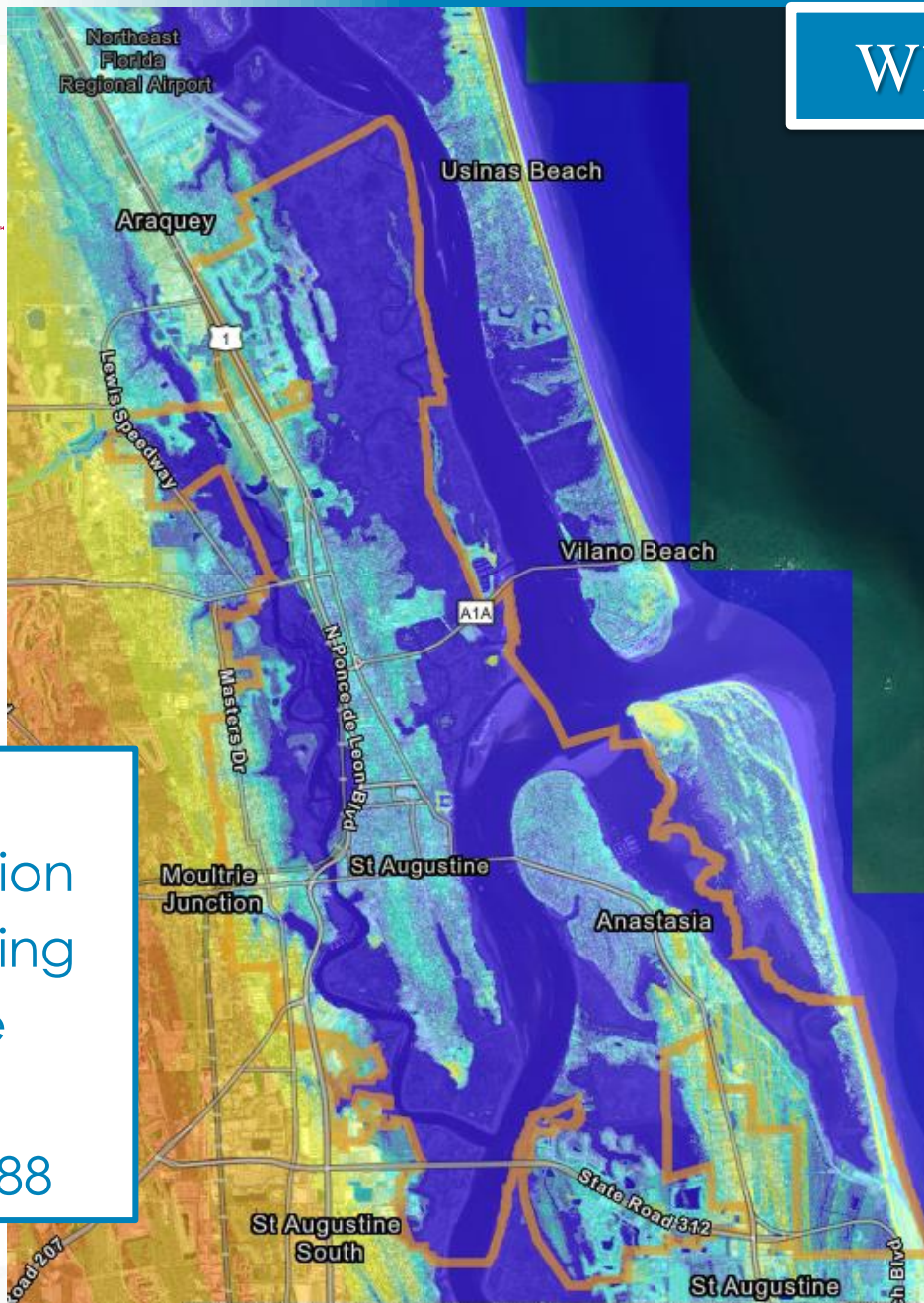


However, the frequency of “sunny day” flooding is on the rise



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❖ Digital
Elevation
Mapping
for the
City in
NAVD88



Why Do We Flood ?

Hurricane's Ian and
Nicole
(HWM ≈ 6.5 NAVD88)

- ☐ Wetlands
- ☐ Zip Codes
- ☐ Zoning Codes
- ☐ Elevation Certif
- ☐ Storm Surge De

☒ COSA_DEM





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www.citystaug.com/FMA
for more info

❖ Flood Mitigation Assistance (FMA) Program

- ✓ Cost share program with FEMA to elevate and/or reconstruct flood prone, at-risk structures
- ✓ FY21 – Application Cycle Completed (25 applications), but not selected
- ✓ FY 22 – Application Cycle:
 - Over 80 properties interested in the program, 62 properties had complete applications that met the program requirements
 - City submitted its applications to the State November 14th and is currently under State review, eligible applications will then be submitted to FEMA
 - Total funding request of \$12,353,474 submitted that would be cost shared with FEMA if selected
 - Late August – estimated timeframe to know if selected



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Project Map Key

1. Lake Maria Sanchez Flood Mitigation
2. South Whitney/West King Street Drainage
3. Inlet Drive Shoreline Stabilization
4. South Davis Shores Drainage
5. Court Theophelia Neighborhood Drainage
6. Avenida Menendez Seawall

City Wide Projects

- Tidal Backflow Prevention Program
- Groundwater Monitoring Network

City Planning Studies

- Back Bay Feasibility Study (Federal)
- Vulnerability Assessment Update (State)

City Programs

- Flood Mitigation Assistance (FMA) Program

City Ordinances

- Proposed Resilient Shorelines Ordinance

RESILIENCE STRATEGIES

PROJECTS

PLANNING/STUDIES

POLICY

PROGRAMS

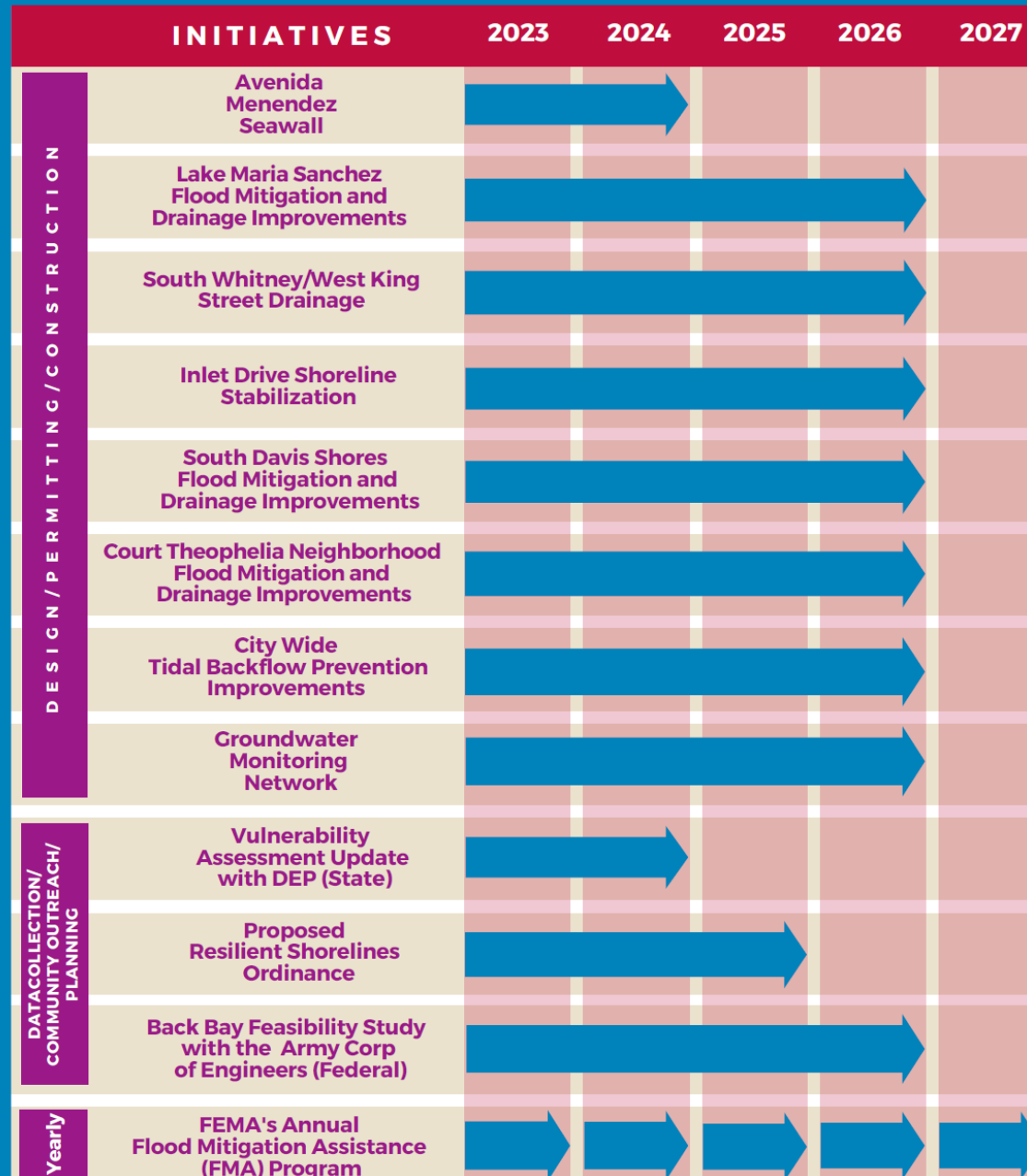


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RESILIENCE EFFORTS TIMELINE





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In Summary

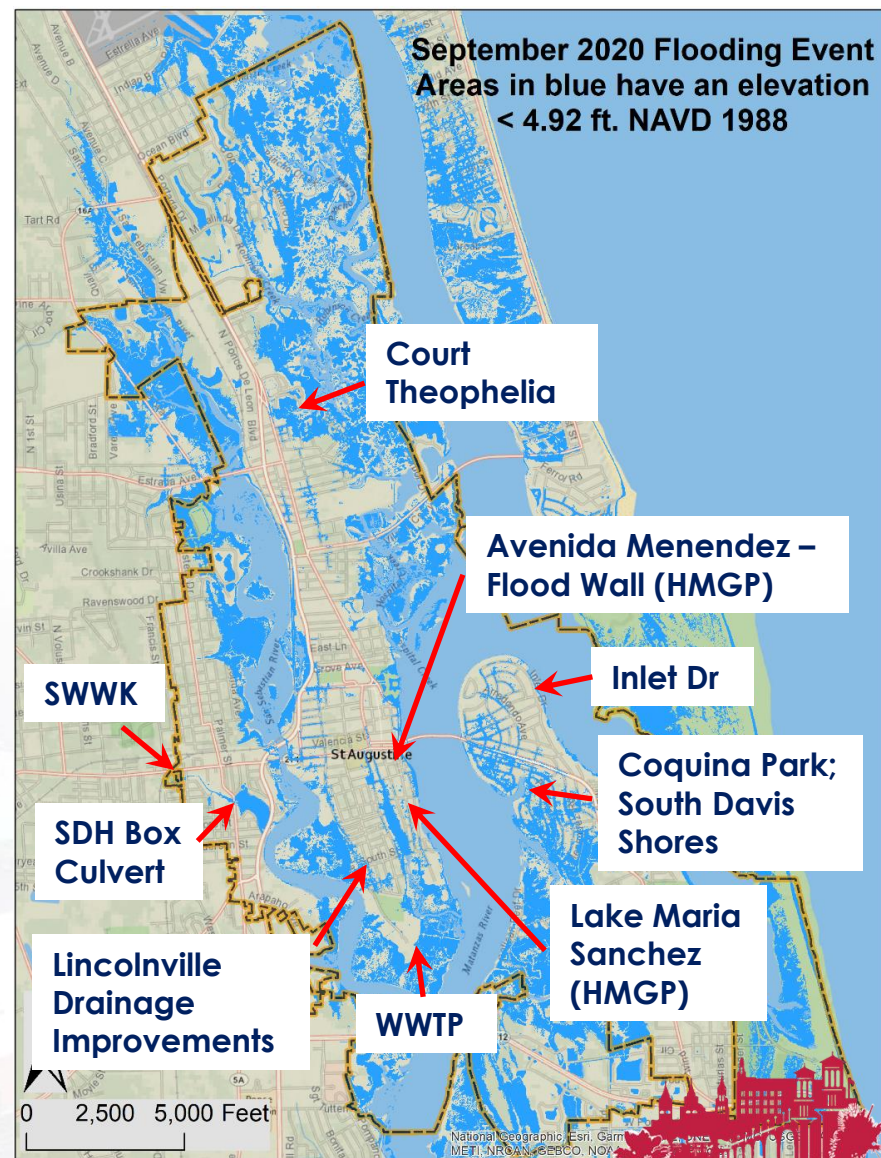
*Denotes Federally Funded Project (FEMA –PA, HMGP; HUD/DEO-CDBG-NR)

**Denotes State Funded Project (SJRWMD, FDEP)

❖ Current Flood Mitigation Investments ≈ \$69,741,833 (\$58,218,292, grant funded, 83%):

- ❑ Lake Maria Sanchez*, **
- ❑ FEMA 13 Lift Station Hardening and Flood Proofing*
- ❑ Wastewater Treatment Plant (WWTP) Flood Proofing
- ❑ South Whitney/West King (SWWK) Flood Mitigation*, **
- ❑ Avenida Menendez Flood Wall*
- ❑ City-wide tide check valves (43 installed, 20 future)**
- ❑ Coquina Park
- ❑ South Dixie Highway Culvert Replacement**
- ❑ Lincolnville Utility and Drainage Improvements*, **
- ❑ South Davis Shores Flood Mitigation and Drainage Improvements*, **
- ❑ Inlet Drive Shoreline Resiliency Improvements*, **
- ❑ Flood Mitigation and Drainage Improvements for the Court Theophelia Neighborhood*, **
- ❑ Updated Vulnerability Assessment (State)**
- ❑ USACE Back Bay Feasibility Study (Federal)**

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Questions and Answers