Resilient SRQ – Round 2 Grant Application
St. Armands Resiliency & Flood Mitigation Project *(Revised August 15, 2025)*

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1 | Applicant

Lead Applicant: Sarasota County
Co-Sponsors: City of Sarasota & Town of Longboat Key

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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

St. Armands Resiliency & Flood Mitigation Project
Service Area: St. Armands Circle, John Ringling Boulevard / SR 789, and the residential grid on St. Armands Key (≈ 160 acres).

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4 | Project Description & Need

St. Armands Key is a barrier-island commercial hub and the sole mainland connection for SR 789, an evacuation route carrying ≈ 32,000 vehicles AADT. More than 140 storefronts and restaurants support ≈ 1,100 service-sector jobs and generate ≈ $135 million in annual sales.

Increasing nuisance tides, a 3-ft Hurricane Debby surge, and 2024 “king tides” closed the Circle **6–8 times annually**, flooding ≈ 120 businesses and residences at ground-floor elevation. Hydrologic modeling shows existing pumps and outfalls provide **< 5-year storm** level of service (LOS); projected sea-level rise will reduce LOS to **< 2 years by 2035**.

Priority adaptation measures — pump-station retrofits with generators, tide-check valves, underground storage vaults, permeable pavement, bioswales, and deployable flood barriers — will restore **100-year (1 % ACE) LOS**, maintain SR 789 access during 3-ft surges, and significantly reduce stormwater nutrient export to Sarasota Bay.

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5 | Scope of Work & Cost (2025 Dollars)

Task / Component	Qty / Unit	Unit Cost	Sub-Total
Design, permitting, modeling & bid services (≈ 12 %)	1 LS	—	$ 2,800,000
Pump-station retrofits & backup generators	4 EA	$ 1.9 M	$ 7,600,000
Tide-check valves & outfall hardening	8 EA	$ 225 k	$ 1,800,000
Underground storage vaults (10 ft Ø × 300 ft)	3 EA	$ 1.85 M	$ 5,550,000
Permeable pavement & bioswales	65,000 SF	$ 35/SF	$ 2,275,000
Removable aluminum flood-barrier system	1,200 LF	$ 2,500/LF	$ 3,000,000
Construction contingency (10 %)	—	—	$ 2,000,000
Total Estimated Project Cost			**$ 25,025,000**

Unit prices benchmarked to 2025 FDOT District 1 bids and recent Gulf-coast barrier-island retrofit projects.

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6 | Funding Strategy

Source	Amount	% of Total	Notes
Local surtax & utility in-kind	$ 478,000	1.9 %	Survey, easements, staff project management (City match)
Resilient SRQ – Round 2 (CDBG-DR)	$ 24,547,000	98.1 %	Capital construction & compliance
Total Project Cost	**$ 25,025,000**	**100 %**	—

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7 | Expected Outcomes & Benefits

Metric	Pre-Project	Post-Project Target
Conveyance LOS	< 5-yr storm	100-yr storm
SR 789 / Circle closures per year	6–8	0
Ground-floor flooding (100-yr)	≈ 120 bldgs	0
Added stormwater storage	—	≈ 3.1 ac-ft
Annual TN removal	—	≈ 1,400 lb/yr
AADT protected on SR 789	32,000 veh/day	32,000 veh/day

Additional Benefits:

- **Economic continuity** – safeguards ≈ 140 businesses and ≈ $135 M annual retail/tourism revenue.
- **Emergency readiness** – deployable barriers and generator-backed pumps keep SR 789 open for evacuations.
- **Climate adaptation** – infrastructure designed for + 2 ft sea-level rise (2075 NOAA intermediate).

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8 | Cost Reasonableness & Validation

- Vault cost ($ 1.85 M) matches 2024 Pinellas Ave vault bid.
- Pump retrofit w/ generator ($ 1.9 M) mirrors City Lift Station #31 resiliency estimate.
- Flood-barrier price ($ 2,500/LF) aligns with 2023 Tampa Bayshore Blvd purchase.
- Soft-cost ratio (12 %) and contingency (10 %) match USACE coastal-infrastructure guidance.

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9 | Schedule (Key Milestones)

Milestone	Target Date
30 % design & environmental submittal	Summer 2026
Final design & permits	Late 2026
Advertise & award contract	Summer 2027
Phased construction start	Late 2027
Substantial completion	Summer 2028
Barrier deployment drill & close-out	April 2029

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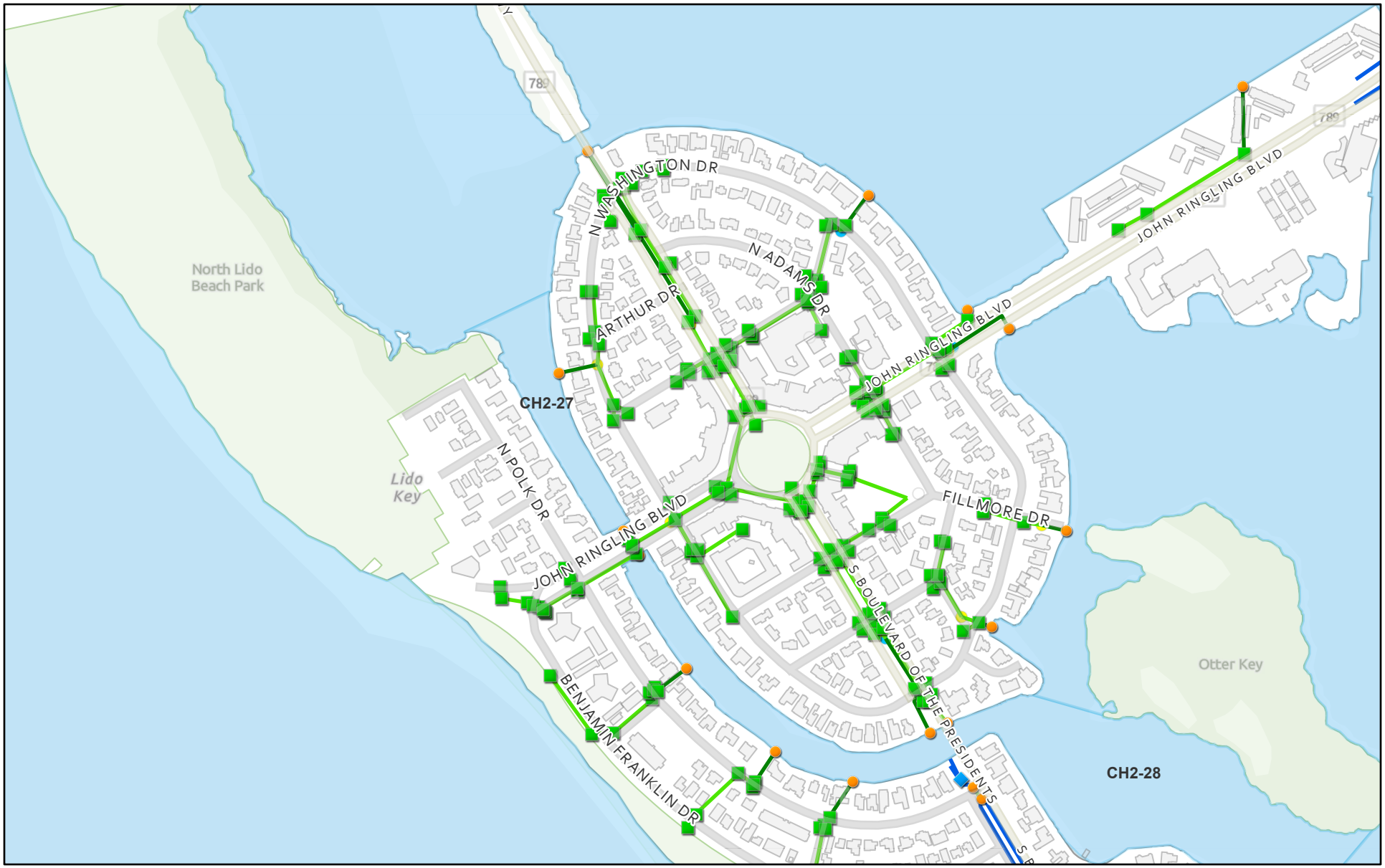
10 | Request

The **City of Sarasota**, **Town of Longboat Key**, and **Sarasota County** jointly request **$ 24,547,000** in Resilient SRQ – Round 2 (CDBG-DR) funding, matched by $ 478,000 in local in-kind services, to deliver the **$ 25.0 M St. Armands Resiliency & Flood Mitigation Project**. This investment will:

- Provide **100-year flood protection** for an island district hosting 32,000 vehicles daily and ≈ 140 businesses.
- Eliminate **structural flooding** and **roadway closures**.
- Remove ≈ **1,400 lb TN/year** before discharge to Sarasota Bay.
- Deliver **durable, scalable resilience** for residents, visitors, and critical evacuation operations on St. Armands Key.

Lido Key



WaterBody

Stormwater Drop Structure

Stormwater End Treatment

Stormwater Pipes

Collector

CrossDrain

Overflow

Stormwater Weir

Stormwater Network Structure

Baffle Box

Pump Station

Containment Point

Stormwater Open Channel

Swale

N

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

ArcGIS Web AppBuilder

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	Asset	Description	CAP ID	General Adaptation Measures
A	**John Ringling Boulevard – Lido Key – St. Armand's Circle**	**Culverts**	**T18**	1. Coordinate with county stormwater engineers to manage drainage 2. Design storm surge protection measures 3. Improve weirs/control structures 4. Upgrade pump system with salt resistant equipment and backup generators 5. Develop retention canal design with water quality treatments 6. Create water plazas along Blvd Presidents/Ringling promenades to capture flood water 7. Identify areas for bioswales and infiltration areas to hold stormwater 8. Install underground stormwater storage tanks to reduce flooding
B	**Island Drainage Outfalls**	**St. Armand's Drainage Outfall (Culverts)** **Located at SR 789 - St. Armand's**	**SW29**	1. Improve weirs/control structures 2. Install tide backflow devices to protect inland during extreme tide events 3. Develop funding mechanisms and replacement protocol for retrofits or redesign of assets

				4. Consider back-up generators, as well as renewable solar and wind energy (with battery storage) 5. Develop a retention canal design with pumps and WQ skimmer system 6. Increase canal capacity 7. Add open grid pavement and/or infiltration elements to absorb stormwater 8. Install water plazas/bioswales along promenades leading to infiltration areas/vaults in circle 9. Involves coordination with public works, businesses, parks, FDOT and County
C	**St. Armand's Pump Stations**	**Central Madison; Blvd of Presidents**	**SW47**	1. Add power source, backup generator or off grid power (e.g. solar, wind) for emergencies 2. Design pump capacity for peak discharge 3. Could require abandonment or retrofit of assets
		Jackson Drive; S Blvd of Presidents	**SW48**	4. Develop climate maintenance and operation protocol
		N Washington; N Blvd of Presidents	**SW49**	5. Install backwater devices - consider efficiency and resistance to salt and oysters (O&M)
		John Ringling Blvd; Washington	**SW50**	6. Involves coordination with public works, merchants, parks sectors, and Sarasota County
		E Madison Dr; N Washington	**SW51**	7. Replace with corrosion resistant equipment

D	**St. Armand's Canals**	**Tidal Water Feature**	**WF6**	1. Develop a retention canal design with upgraded pump system 2. Add more pump systems (corrosion resistant) with elevated generators (and backup generators) 3. Install retention swales, infiltration areas, or vaults along promenades leading to circle 4. Design water plazas along promenades to manage flood waters during high tides 5. Elevate land above 2050 projections creating multi-purpose pedestrian zones for flood protection
E	**Lift Station #31**	**Cleveland**	**WW15**	1. Continue to fund the City's I&I program to fix leaky pipes and improve the capacity of the WWTP 2. Develop engineering controls/guidelines to protect equipment (saltwater protection) 3. Reinforce protection for generators (protective structures) 4. Relocate generators and potentially affected equipment/components to higher ground (second floor) 5. Invest in backup generators to provide more resources during wide-spread power outages 6. Consider trailer mounted generators for areas prone to storm surge to avoid damage 7. Protect generators from cool water hits hot generators – damage 8. Develop engineering controls / guidelines to protect water quality

				9. Add redundancy by adding generators for emergency conditions to prevent sewage overflow to bay 10. Add redundant pipes for flow during surge or extreme precipitation to capture additional volume
F	**St. Armand's Circle Park**		**P45**	Consider opportunities for green design to reduce flooding and UHI such as vaults, bioswales and water plazas

TOWN OF
LONGBOAT KEY

Incorporated November 14, 1955

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(941) 316-1999
www.longboatkey.org

August 18, 2025

Ben Quartermaine
Stormwater Director
Sarasota County
1660 Ringling Boulevard
Sarasota, FL 34236

RE: Letter of Support and Co-Sponsorship – St. Armands Resiliency & Flood Mitigation Project – Sarasota County Resilient SRQ

Dear Mr. Quartermaine:

On behalf of the Town of Longboat Key, I am pleased to express our full support for the St. Armands Resiliency & Flood Mitigation Project, proposed jointly by Sarasota County and the City of Sarasota for funding through the Resilient SRQ Round 2 (CDBG-DR) program.

This project will deliver critical regional benefits by protecting State Road 789 (John Ringling Boulevard) – the primary mainland connection for Longboat Key, Lido Key, and St. Armands Key, and a designated hurricane evacuation route carrying approximately 32,000 vehicles per day. Planned improvements including pump-station retrofits with generators, tide-check valves, underground storage vaults, permeable pavement, bioswales, and deployable flood barriers will restore a 100-year storm level of service, eliminate chronic flooding, and reduce nutrient discharges to Sarasota Bay.

Recognizing our shared reliance on SR 789 for public safety, economic vitality, and emergency preparedness, the Town of Longboat Key is honored to join Sarasota County and the City of Sarasota as a co-sponsor of this application. The anticipated outcomes of protecting more than 140 businesses, safeguarding roughly $135 million in annual retail and tourism revenue, and ensuring uninterrupted evacuation access during storm events will strengthen the resilience of the entire region.

We appreciate your leadership in advancing this essential initiative and look forward to continued collaboration as the project moves forward.

Sincerely,

Howard Tipton
Town Manager
Town of Longboat Key
501 Bay Isles Road
Longboat Key, FL 34228
Phone: (941) 316-1999
Email: htipton@longboatkey.org

CC: Nik Patel, City Engineer, City of Sarasota

Dave Bullock, Interim City Manager, City of Sarasota

Pat Robinson, Deputy City Manager, City of Sarasota

Sarasota County

HUD Block-Grant Planning App

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 2

LMI % 15.6

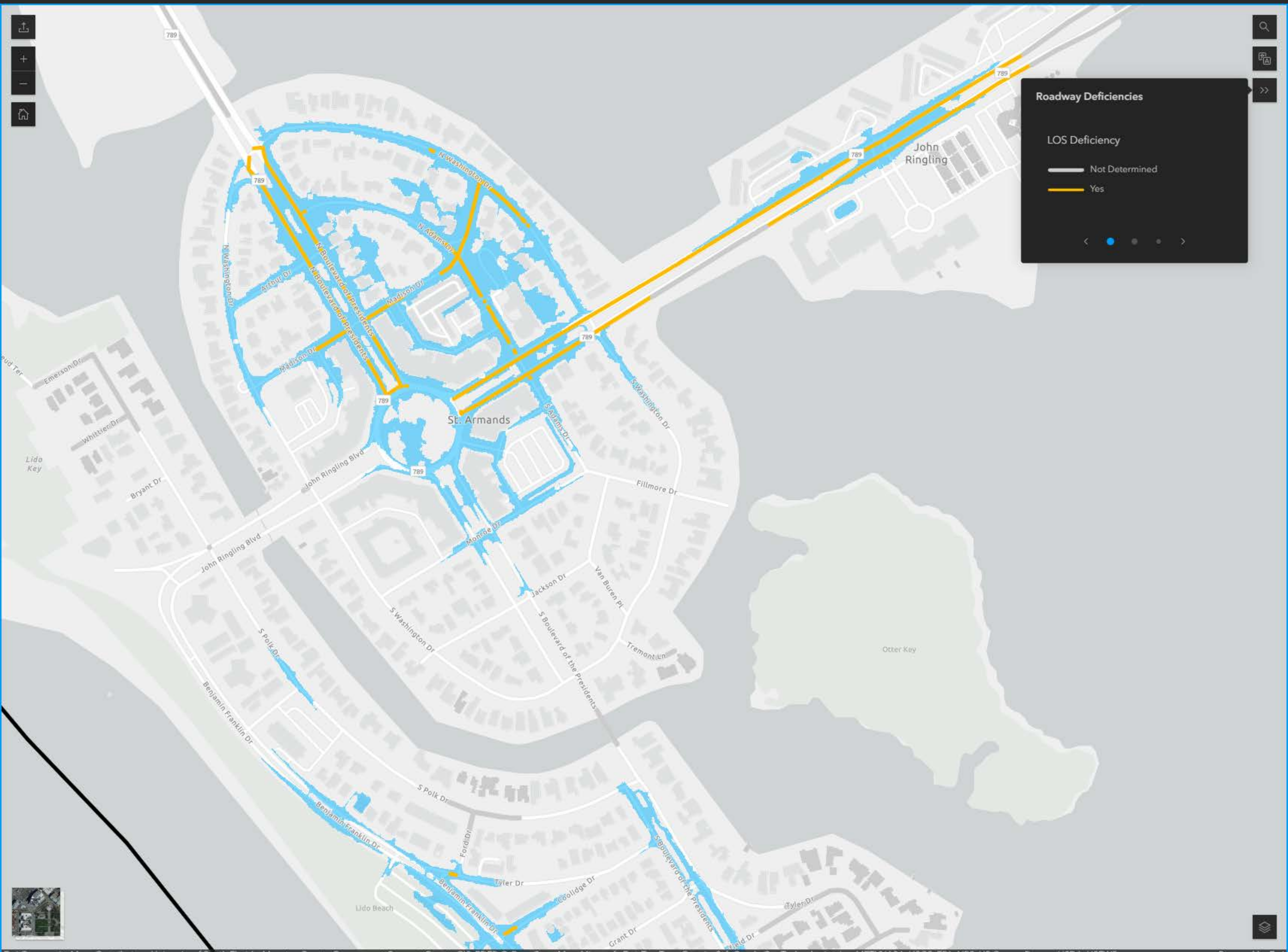
2015 Census Block Group 3

LMI % 21.58

Layers

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

CCNA Stormwater Map



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