

## Osceola County Local Mitigation Strategy Project Submission Form

<b>Project Name:</b> S-57 Structure Enhancement & C-30 Canal Conveyance Improvement				<b>Submission Date:</b> 12/12/24	
<b>Primary Agency:</b> <b>SFWMD</b>	<b>Partner Agencies:</b> <b>N/A</b>	<b>Jurisdictions Benefited:</b> <b>Osceola County</b>	<b>Address:</b>	<b>GPS:</b> -81.174, 28.339	
			<b>Flood Zone: AE</b>		

<b>Primary Contact:</b>	<b>Secondary Contact:</b>	<b>Estimated Project Cost:</b>	<b>Project Timeframe:</b>
<b>Name:</b> David Colangelo	<b>Name:</b> Carolina Maran	<b>\$39,783,671</b>	3-5 years
		<b>Estimated Annual Maintenance Cost:</b>	
		<b>\$20,000.00</b>	
<b>Agency:</b> SFWMD	<b>Agency:</b> SFWMD	<b>Benefit Cost Analysis:</b> Project submissions must include a benefit cost analysis. Projects with a BCA less than 1 will not be considered. <a href="https://www.fema.gov/fact-sheet/fema-bca-toolkit-60-installation-instructions">https://www.fema.gov/fact-sheet/fema-bca-toolkit-60-installation-instructions</a>	
<b>Email:</b> dcolange@sfwmd.gov	<b>Email:</b> cmaran@sfwmd.gov		
<b>Phone:</b> 561-352-8927	<b>Phone:</b> 561-682-6868		
		<b>BCA:</b>	4.5

### List Potential Funding Sources

<b>Primary Funding Source(s):</b>	District Revenue (or State Funds TBD)	
<b>Local Cost-Share(s) (Match) and Maintenance:</b>	25% of project cost	

**Primary Community Benefit:**

Protection of Public Health and Safety

**Primary LMS Category:**

Stormwater/Drainage Mitigation/Road Elevation

**\*Primary LMS Goal:**

To minimize threats of disasters to the health, safety and welfare of the community's residents and visitors

**\*Primary Community Lifeline:**

Safety and Security

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Additional Project Information:	
<b>Population Benefited:</b> Project affects between 1,000 and 50,000 people	<b>CRS Elements Addressed:</b> Activity 530 - Protecting flood-prone buildings in place
<b>Project Lifespan:</b> 40 or more years	<b>Mitigates Repetitive Loss:</b> Yes <input checked="" type="radio"/> No <input type="radio"/> Attach relevant documentation if applicable
<b>Project Status:</b> Conceptual	<b>Benefits Critical Facilities:</b> Yes <input checked="" type="radio"/> No <input type="radio"/> <b>Benefits Critical infrastructure:</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
<b>Social Vulnerability Index:</b> Project submissions will be scored using the social vulnerability index provided with the FEMA national risk index: <a href="https://hazards.fema.gov/nri/map">https://hazards.fema.gov/nri/map</a>	<b>Consistency with Additional Long Range Plans:</b> Examples: Comprehensive plans, floodplain management plan, etcetera  2025 Upper Kissimmee Basin Flood Protection Level of Serv
SVI: 84.3 (5.1)	<input type="checkbox"/>

Primary Hazards Addressed:	
Tropical Cyclone <input checked="" type="checkbox"/>	Cyber Attack <input type="checkbox"/>
Flooding <input checked="" type="checkbox"/>	Terrorism <input type="checkbox"/>
Tornado <input type="checkbox"/>	Nuclear Facility Incident <input type="checkbox"/>
Wildfire <input type="checkbox"/>	Civil Unrest <input type="checkbox"/>
Severe Thunderstorm <input checked="" type="checkbox"/>	Mass Migration <input type="checkbox"/>
Pandemic <input type="checkbox"/>	Transportation Incident <input type="checkbox"/>
Agriculture/Livestock Disease <input type="checkbox"/>	Hazardous Material Release <input type="checkbox"/>
Geomagnetic Storm Sinkhole <input type="checkbox"/>	
Climate Change <input checked="" type="checkbox"/>	
<input type="checkbox"/>	

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## Project Description:

The S-57 structure is a double-barreled corrugated metal pipe culvert located on the C-30 Canal, about 6,200 feet downstream from Lake Myrtle in Osceola County, Florida. It connects Lakes Myrtle and Mary Jane, with the primary purpose of regulating water levels in the C-30 Canal and Lakes Myrtle, Preston, and Joel. The structure features two sluice gates, each measuring 4.82 feet wide by 4.78 feet high, which control water flow from the upstream side. These gates can be operated remotely from the South Florida Water Management District (SFWMD) Operations Control Center or controlled locally. The structure is maintained by the St. Cloud Field Station. Access is via Nova Road, along an access road on the west side of the C-32 and C-30 canals.

The design discharge for the S-57 culvert is 170 cubic feet per second (cfs), representing 30% of the Standard Project Flood (SPF). Larger conveyance capacity is recommended to provide flood control during peak events, reducing the risk of upstream flooding and ensuring operational effectiveness. This will be accomplished by enlarging the existing culvert or adding additional barrels. In addition, deployment of new temporary pumps to augment operations, facilitated by the construction of permanent pump pads at the structure will allow for quick deployment during and after extreme events. Finally, widening, deepening and/or elevation of C-30 canal banks will be necessary to accommodate the additional conveyance capacity in the system.

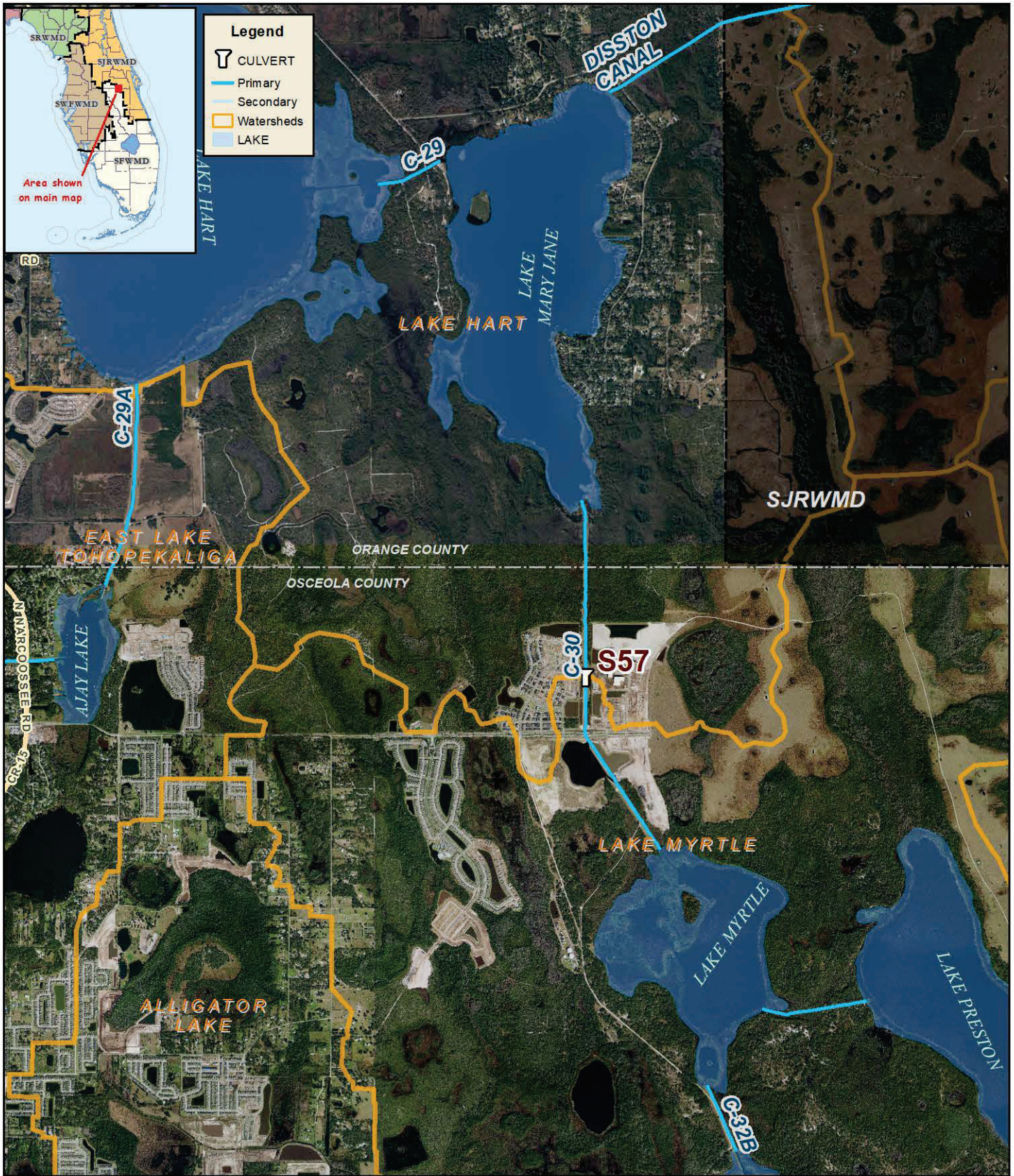
The proposed project aims to enhance flood protection for approximately 72.4 square miles, consisting of land in the Lake Management Areas (LMAs) Myrtle and Hart. Within the Urban Area, an estimated 41,306 people residing in the area stand to benefit from this enhancement. The strategic implementation of the proposed flood control infrastructure within these watersheds is a crucial enhancement to build resilience against extreme events, tropical storms and other associated flood risks, including future urban development, water and climate conditions. These upgrades mitigate flooding risks for business, agricultural and residential areas upstream of structure S-57. Enhanced gates and associated pumps increase operational flexibility and enhanced water controls, countering hydraulic challenges and protecting residents, business and farmland from inundation. Enhanced conveyance capacity safeguards communities and ecosystems.

### Potential Disruption to Local Community:

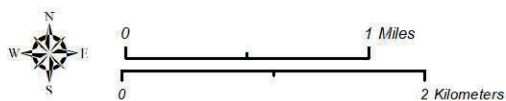
None

### Potential Regulatory Compliance Issues:

None



**Primary Water Control Features with Culvert S57**



**IMPORTANT DISCLAIMER:**

This map is a conceptual or planning tool only. The South Florida Water Management District does not guarantee or make any representation regarding the information contained herein. It is not self-executing or binding, and does not affect the interests of any persons or properties, including any present or future right or use of real property.

Feb. 2025

