



Can Small Cities be the Underdog for Stormwater Management?

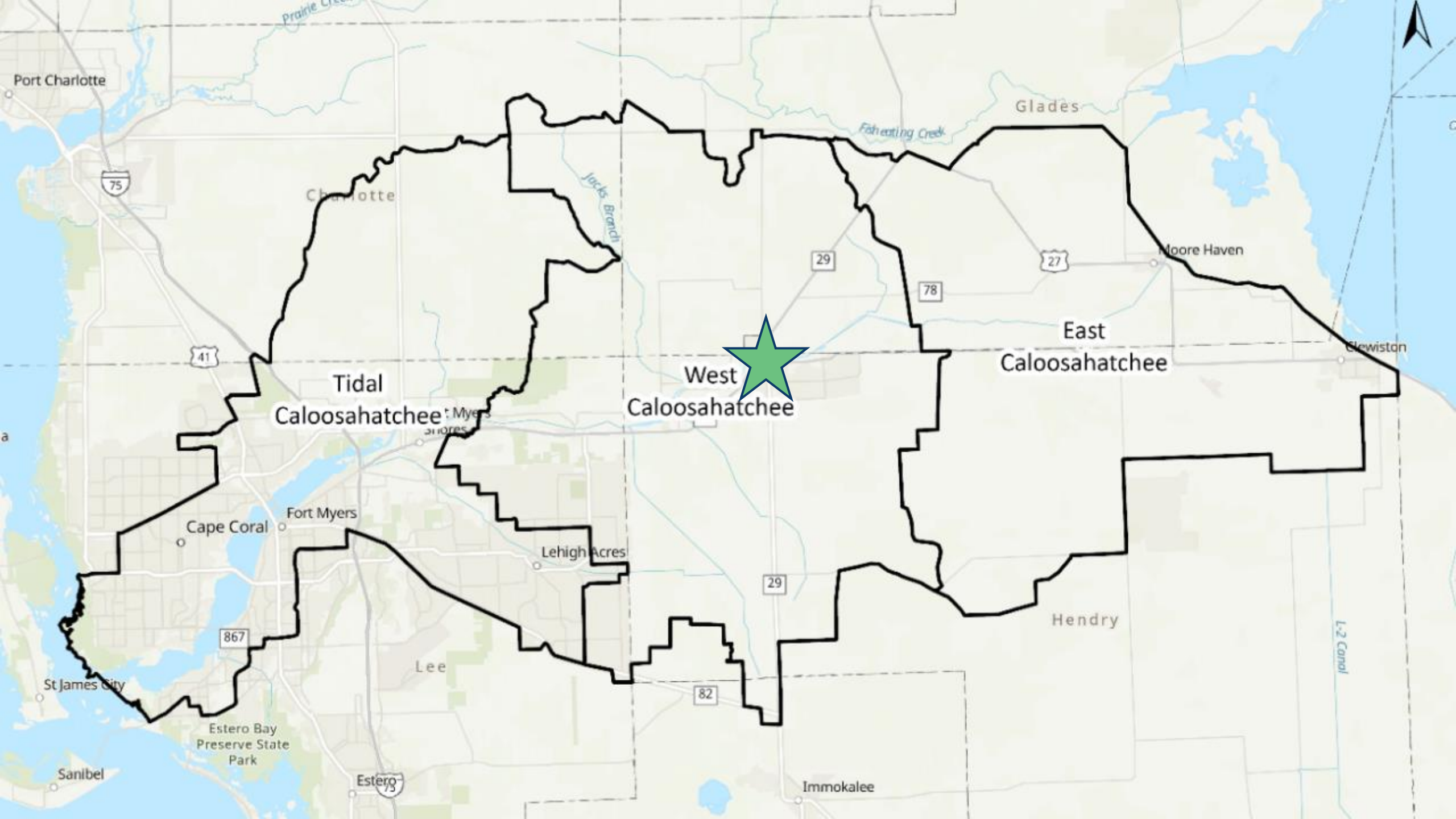
Amanda C. Boone, PE

**Florida Stormwater Association
Summer Conference 2024**

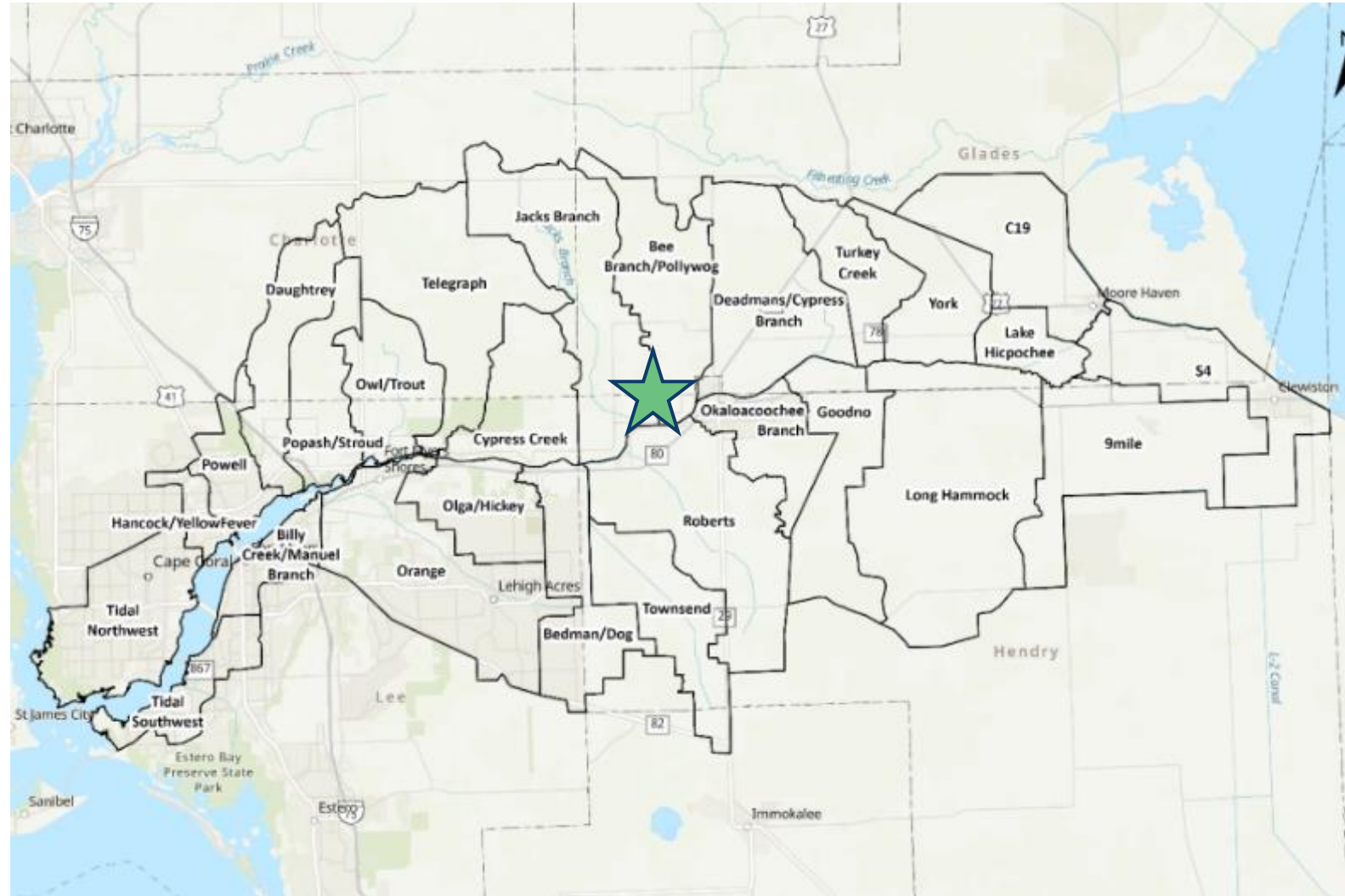
City of LaBelle

The City Under the Oaks





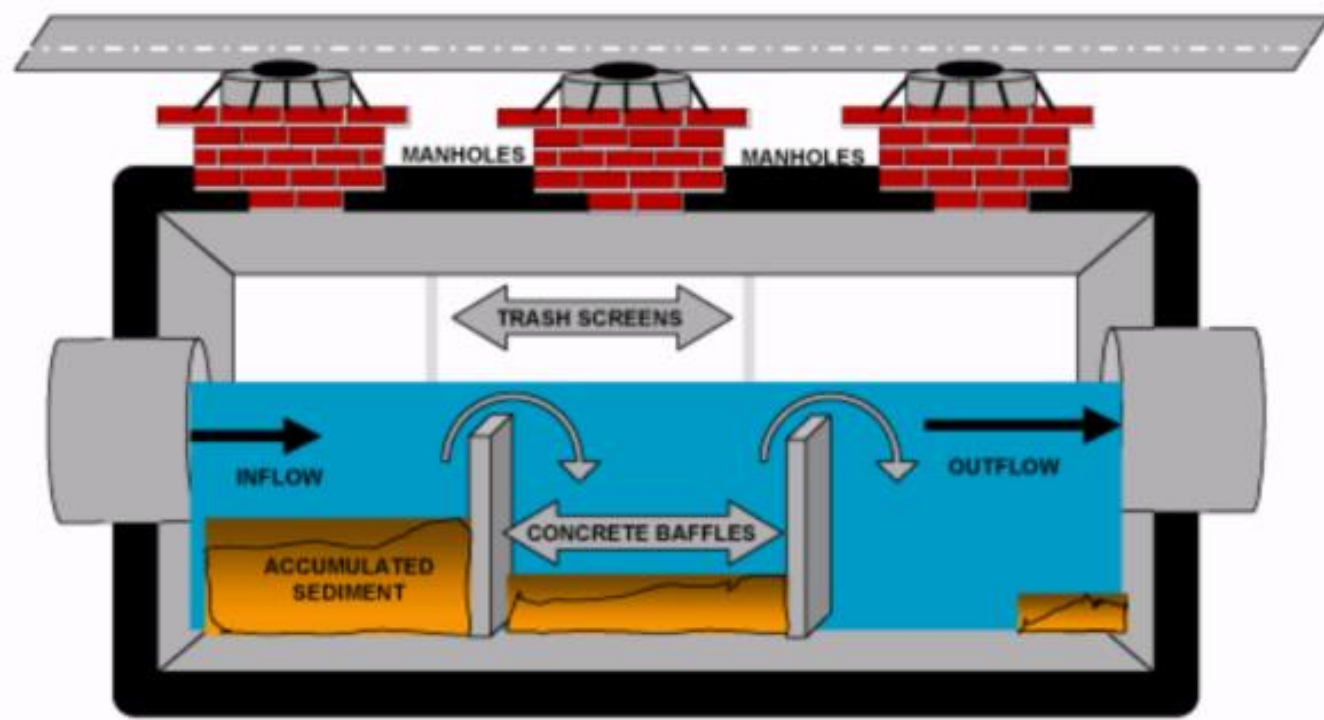
- ▶ Insufficient data to determine TN or TP trend
- ▶ TN load reduction requirement of 2,950 lbs/yr
- ▶ BMAP does not give credit for septic to sewer projects



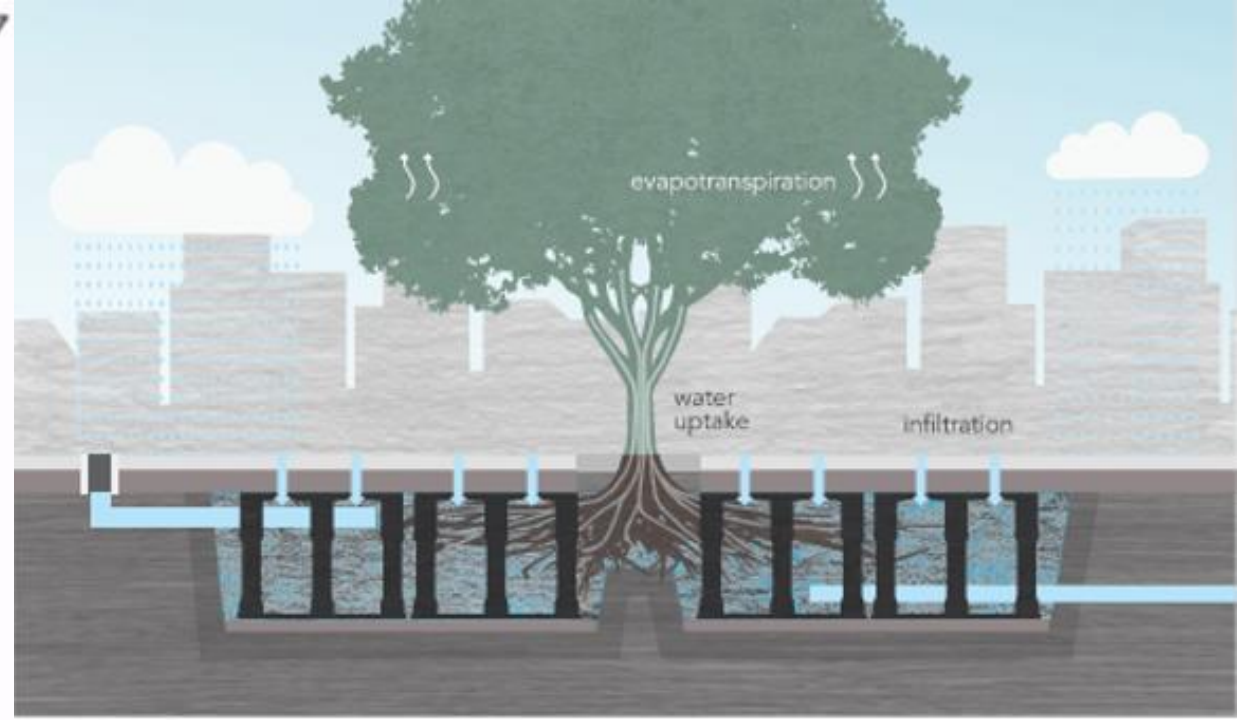
Actions to Achieve Nutrient Load Reductions

- ▶ 5 projects
- ▶ Includes septic to sewer conversions & WWTP improvements
- ▶ Over 860 customers coming off septic





Sources: EPA Storm Water Technology Fact Sheet Baffle Boxes Schematic of a Baffle Box



Source: Silva Cell System





Photo Source: University of Florida, www.flickr.com/photos/gardeninginaminute/sets/72157625238679118/







Current Status

- ▶ Already converting septic to sewer
- ▶ Exploring SW opportunities to improve water quality
- ▶ Upgrading their utilities to plan for the future
- ▶ Seeing increased development and reduction in ag lands

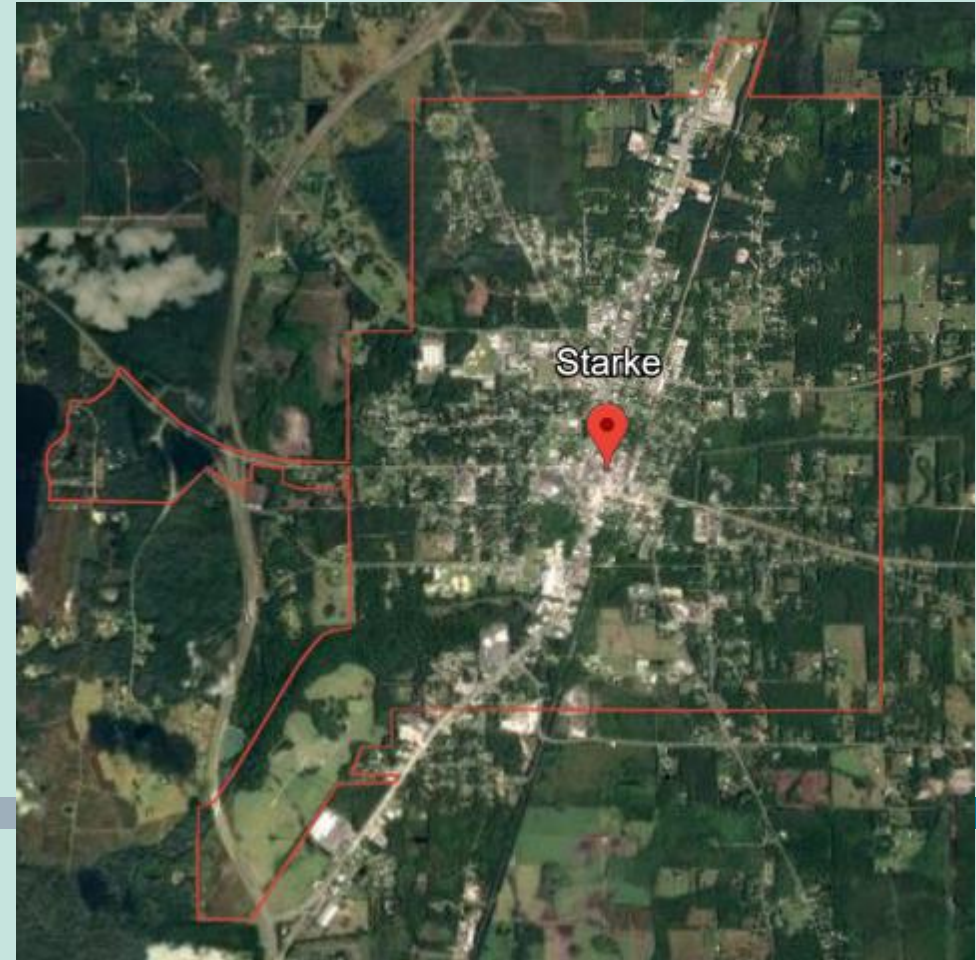


Closing Thoughts For LaBelle

- ▶ Perfectly positioned for urban sprawl
- ▶ LaBelle needs assistance to handle the increasing pressures
- ▶ They are an environmental justice community
- ▶ Need to acknowledge water quality improvement projects and provide support for
- ▶ Need additional water quality monitoring

City of Starke

Southern Hospitality at Its Finest



Starke Downtown
Redevelopment Project
CONCEPT PLAN



Legend

- CRA Boundary
- City Owned Parcel
- Project Category**
 - Alligator Creek Restoration
 - Brick Roadway Improvement
 - Building Improvements
 - Conservation/Floodway Improvements
 - Charging Stations
 - Parks and Recreation
 - Private Development
 - Publicly Accessible Parking Lot
 - Street Scope and Pedestrian Improvement
 - Vacant Lots - Not owned by City
 - Water/Wastewater Upgrades
- DOT Overpass Project (Under Construction)**
 - Bridge
 - Pond

KEY:

1. Old Bus Barn
2. Thomas Street Park
3. Wainwright Park
4. WMD Conservation and Flood Compensation
5. Starke Water Plant
6. First Baptist Church
7. City Hall
8. City Walk Park
9. East Call Street Lift Station (Under Construction)
10. City Electric Substation/Charging Stations
11. FL Power and Light Company Electric Utility Yard
12. Townhome Development
13. Veterans Memorial Park
14. Starke Police Department
15. Starke Water Plant
16. Starke Wastewater Plant

0 100 200 300 Feet



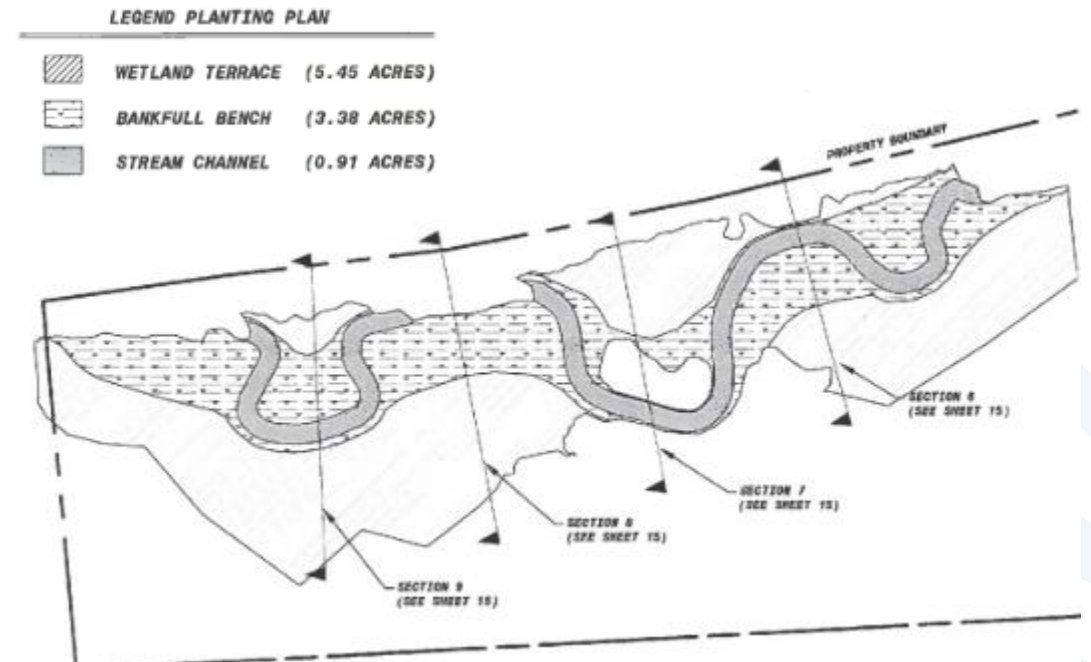
210 S. Hendricks, Suite 201
Starke, FL 32924
Project #: 21000001-01
Map Created: November 2020

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- ▶ Previously restored 1,790 ft to 2,430 ft
- ▶ Added sinuosity and bankfull bench
- ▶ Provided area for flow to spread out and slow down



Existing Stream Issues

- ▶ Flashy flows subjecting improperly vegetated banks to extreme erosive forces
- ▶ Lack of habitat
- ▶ Limited opportunity to interact with nature
- ▶ Viewed more as a liability than an asset



Opportunity

- ▶ Restore an additional 9,000 ft
- ▶ Improve resiliency
- ▶ Stabilize banks
- ▶ Improve fish & wildlife habitat
- ▶ Provide recreational use
- ▶ Reduce maintenance
- ▶ Improve water quality
- ▶ Increase species diversity
- ▶ For Starke, provide connectivity!



Inland Florida Communities

**Mascotte, LaBelle, Starke,
Groveland, Bushnell, Orange City,
Newberry, Montverde**





ARCADIA, Florida — Tias Lias thought she was doing a nice thing, driving her kids to get Chinese food the day after Hurricane Ian tore through their rural town 50 miles inland from the coast.

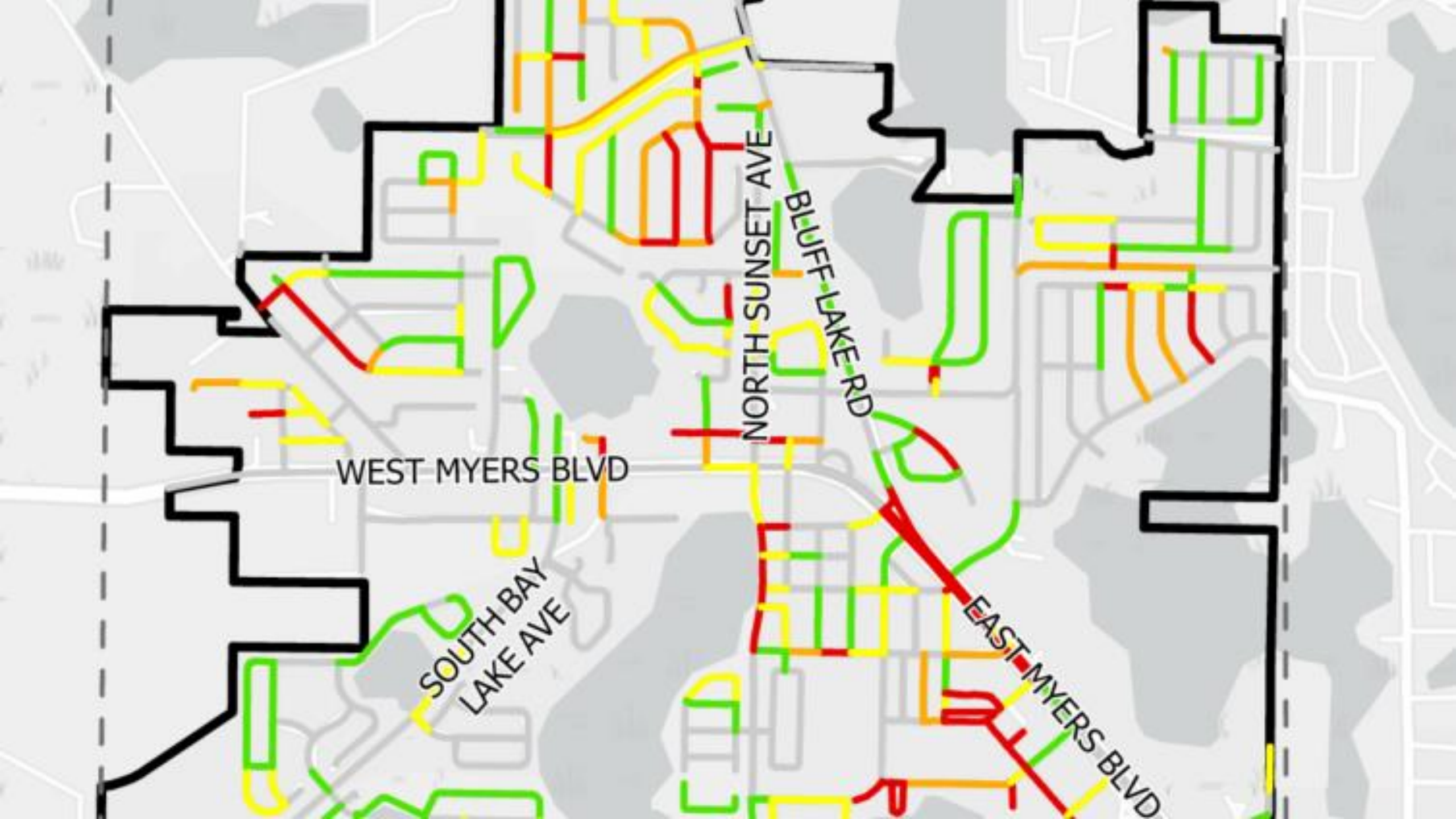




WEST MYERS BLVD

BAY LAKE AVE





What's the Point?

- ▶ Meets FDEP requirements
- ▶ Opens up multiple opportunities for funding
 - Not just Resilient Florida, some are considered environment justice communities
- ▶ Provides a mechanism to manage failing infrastructure

Can Small Cities be the Underdog for Stormwater Management?

... YES!

- ▶ The next wave
- ▶ Mutually beneficial