CITY COUNCIL WORKSHOP AGENDA
120 LAISHLEY COURT, PUNTA GORDA, FLORIDA 33950
*******AMENDED*******
JANUARY 6, 2026, 5:00 PM

MEMBERS

Debi Lux, Mayor
Jeannine Polk, Vice Mayor
Janis Denton, Councilmember
Greg Julian, Councilmember
Melissa Lockhart, Councilmember

CITY OFFICIALS

Melissa Reichert, City Manager
Sara Welch, City Clerk
Steven S. Leskovich, Interim City Attorney

CALL TO ORDER
Roll Call
Pledge of Allegiance
Announcements
Next Meeting- Regular City Council meeting January 14, 2026 at 9am at Laishley Community Room

PUBLIC COMMENT

Anyone wishing to address the Council on any agenda item may do so at the appropriate time during the meeting. Those who choose to speak must state their name for the record. Each person will be allowed to speak once on each subject up to a maximum of three minutes.

1. **WORKSHOP TOPIC- SUSTAINABILITY**

   1.a Seagrass: Nature's Unsung Hero

   1.b Citizens Partnership for Clean Canals

   1.c Resilience and Adaptation to Flooding

   1.d Proposed Punta Gorda Utility District Bill and Water Supply Coordination

ADJOURNMENT

In accordance with the Americans with Disabilities Act and Florida Statute 286.26, the location of this public hearing is accessible to persons with disabilities. If you are a person with disability who needs any accommodation in order to participate in this proceeding, you are entitled, at no cost to you, to the

provision of certain assistance. Interpreters for the hearing impaired (TTY 941-575-5013) or non-English speaking citizens, and any other special accommodations can be requested by contacting the Human Resources Manager/Non-Discrimination Coordinator whose address is 326 W. Marion Avenue, Punta Gorda, FL 33950, whose telephone number is (941) 575-3371, and whose email address is humres@cityofpuntagordafl.cpm, at least two (2) calendars days prior to the meeting.

CITY COUNCIL
CITY OF PUNTA GORDA
01/ 6/2026

WORKSHOP TOPIC- SUSTAINABILITY

Title:	Seagrass: Nature's Unsung Hero
Funds:	
Recommended Action:	Presentation to Council
Summary:	Presentation from Blue Arc Engineering, Inc. on seagrass benefits for the environment
Department/Division:	City Manager

EXHIBITS:

1. Presentation

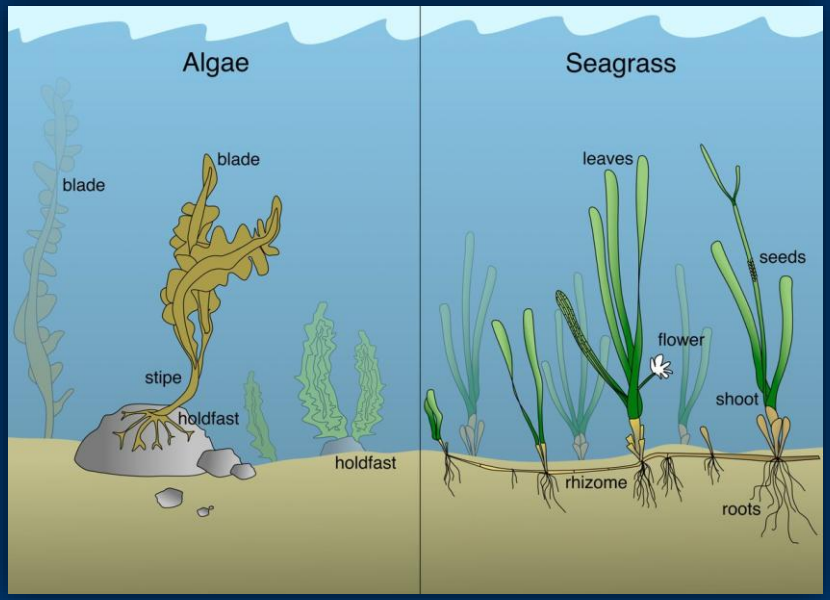
Seagrass: Nature's Unsung Hero

The Foundation of Clean Water, Coastal Resilience, and Community Prosperity



- Presented by: Jack Archambault, P.E.
  - Blue Arc Engineering, Inc.

What Is Seagrass & Why It Matters?



- True flowering plants, not algae.
- Thrive in clear, shallow waters (< 10 ft deep).
- Improve water clarity by trapping sediments
- Produce oxygen and stabilize the seabed
- Form the foundation of Southwest Florida's coastal ecosystems.

Seagrass in Southwest Florida

- Dominant in Southwest Florida:
  - Shoal grass (*Halodule wrightii*):
    - 0–3 ft
    - Shallow depths and fast-colonizing pioneer.
  - Manatee grass (*Syringodium filiforme*):
    - 2-8 ft
    - Key forage for manatee and wildlife
  - Turtle grass (*Thalassia testudinum*):
    - 3-10 ft
    - Deeper depths and major health indicator.
- Rare Species in SW Florida:
  - Paddle grass (*Halophila decipiens*)
  - Star grass (*Halophila engelmannii*)
  - Johnson's seagrass (*Halophila johnsonii*)
    - Federally threatened; mainly SE Florida.





Close up of dense Shoal Grass mixed with Turtle Grass

A Few Examples



Not quite the type of Manatee Grass we are talking about



How Ironic!



Close up of dense Shoal Grass, picture taken from the FDEP website



Close up of Manatee Grass, Picture taken from FDEP website



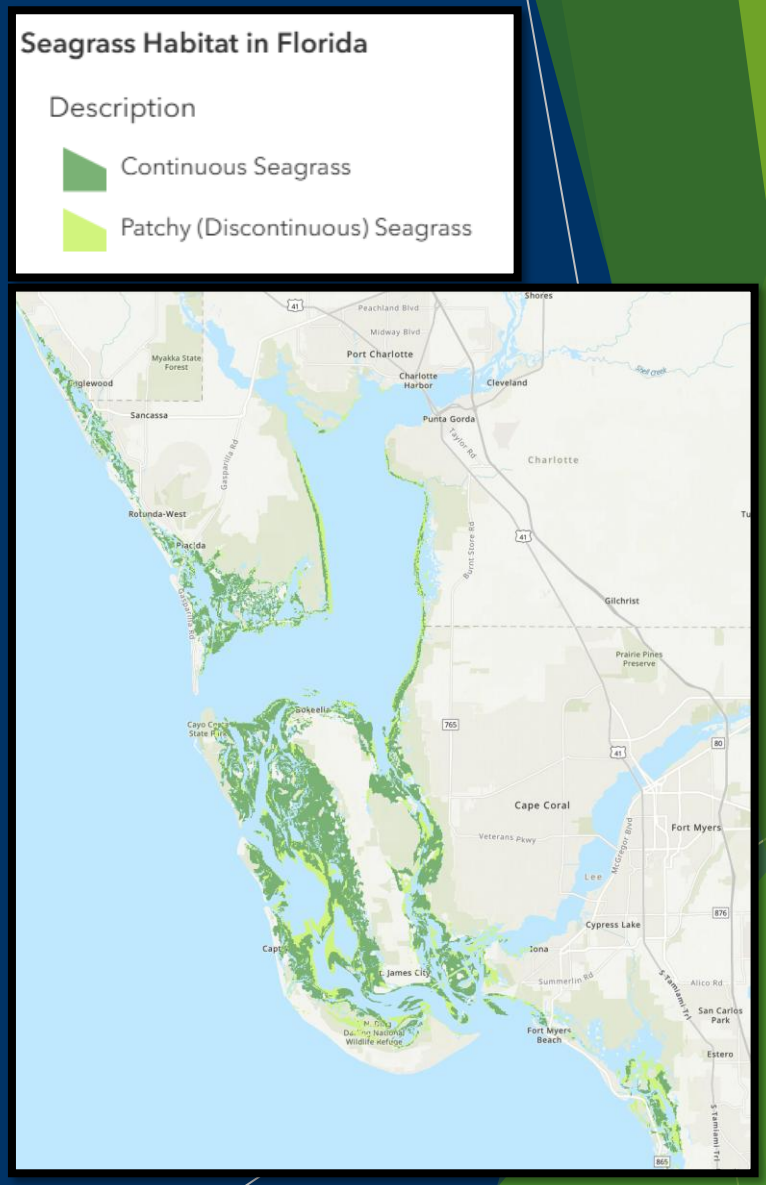
Close up of Turtle Grass, Picture taken from FDEP website



Close up of sparse Shoal Grass, picture taken from the USACE website

Charlotte Harbor Aquatic Preserve

- One of Florida's largest and most monitored estuaries.
- Tracked by FDEP's Seagrass Integrated Mapping and Monitoring (SIMM) and Coastal and Heartland National Estuary Partnership (CHNEP) programs.
- Long-term data show stable seagrass coverage and improving clarity.
- Supports Punta Gorda's coastal resilience reputation and tourism economy.



Benefits To Punta Gorda & Why It Matters

- Eco-Tourism: Manatee and turtle viewing, kayaking, boating, wildlife tours.
- Fishing: Seagrass beds sustain redfish, snook, trout, and tarpon populations.
- Community Value: Clean water enhances property values and business vitality.
- Protecting seagrass preserves Punta Gorda's heritage and economy.



https://youtu.be/ffa3_AsbekA?si=flWUslqHk1VDI5L5

Threats and Stressors to Local Seagrass



Anchoring within a seagrass bed



Image of Matlacha, FL following Hurricane Ian, September 29, 2022



Prop scarring of a seagrass bed caused by reckless boating

- Upland Runoff: Fertilizers and stormwater cause algal blooms.
- Propeller Scarring / Anchoring: Boat props cut trenches and uproot beds.
- Construction Shading: Low or wide docks reduce sunlight.
- Turbidity & Sediment: Wake energy and runoff cloud the water.
- Extreme Events: Storms and salinity shifts delay recovery.
- Preventing impacts through thoughtful planning is more effective than costly restoration.

Planning and Design Around Seagrass

- Depth-Based Design:
  - Waterward extents to meet proper depths for boat access and mooring.
  - Depths can be a limiting factor for the seagrass limits
- Sunlight Penetration & Elevation:
  - Use grated or light-transmitting decking (≥ 43% open area).
  - Maintain docks ≥ 5 ft above MHW where seagrass is present.
- Impact Avoidance Through Planning:
  - Align docks and marinas along open-water corridors.
- Proper consultation and collaboration among engineers, planners, and citizens builds resilient coasts.

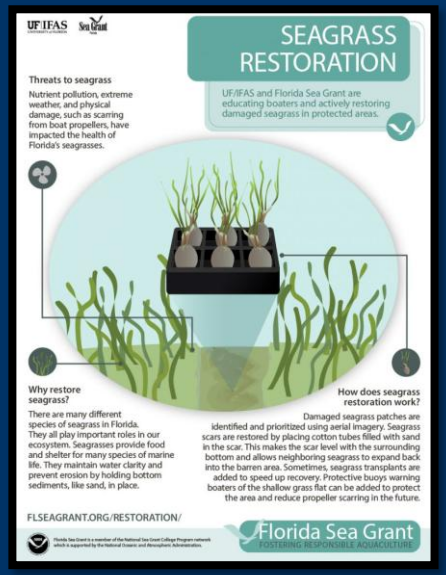


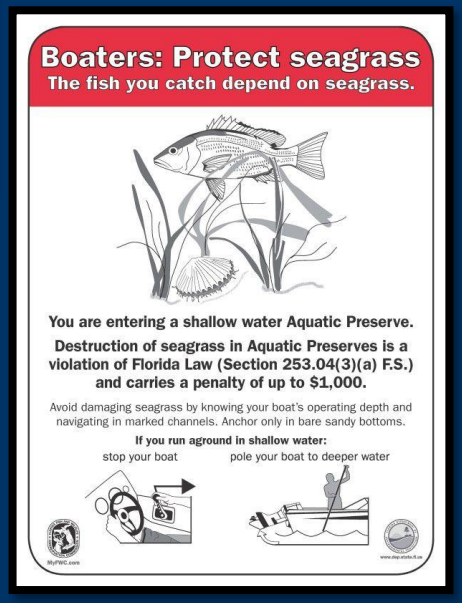
Boardwalk with grated decking for sunlight penetration



Dock design that was configured to avoid seagrass impacts

Seagrass Restoration, Recreation, and Call to Action





- Restoration Methods: Transplant plugs or sods; seed with biodegradable mats; replant prop-scars.
- Recreation Concepts:
  - Seagrass Parks with kayak trails and boardwalks.
  - Manatee Feeding & Education Areas.
  - Demonstration "Seagrass Farms" for schools and tourists.
- Integrate depth awareness and habitat mapping in early planning.

References

- "Ecological Indicator Species - Shoal Grass (Halodule Wrightii)." *Army.mil*, 2018, www.saj.usace.army.mil/Media/Images/igphoto/2002451999/.
- Florida Department of Environmental Protection. "Florida Seagrasses | Florida Department of Environmental Protection." *Floridadep.gov*, 2025, floridadep.gov/rcp/rcp/content/florida-seagrasses.
- Florida Museum of Natural History. "Seagrass Species Profiles." *Florida Museum*, 3 Oct. 2018, www.floridamuseum.ufl.edu/southflorida/habitats/seagrasses/species/.
- Hoose, Natalie Van. "Seagrass 102: 4 Ways You Can Help Restore Seagrass." *Florida Sportsman*, Florida Sportsman, 21 June 2022, www.floridasportsman.com/editorial/seagrass-102/461829.
- Landry, J. Brooke et al. "The effects of docks on seagrasses, with particular emphasis on the threatened seagrass, Halophila johnsonii." (2008).
- "Seagrass Monitoring in Charlotte Harbor Aquatic Preserves | Florida Department of Environmental Protection." *Floridadep.gov*, 2016, floridadep.gov/rcp/aquatic-preserve/content/seagrass-monitoring-charlotte-harbor-aquatic-preserves.
- US Army Corps of Engineers. *Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat U.S. Army Corps of Engineers/National Marine Fisheries Service*. Nov. 2017.



CITY COUNCIL
CITY OF PUNTA GORDA
01/ 6/2026

WORKSHOP TOPIC- SUSTAINABILITY

Title: Citizens Partnership for Clean Canals

Funds:

Recommended Action: Presentation to Council

Summary: Heal Our Harbor project overview and results will be presented.

Department/Division: City Manager

EXHIBITS:

1. Heal Our Harbor Citizen Partnership


HEAL OUR
HARBOR SM

Heal Our Harbor, Inc.℠

We Work For Clean Water

Home | Programs | Leadership Team | Events & Resources | News

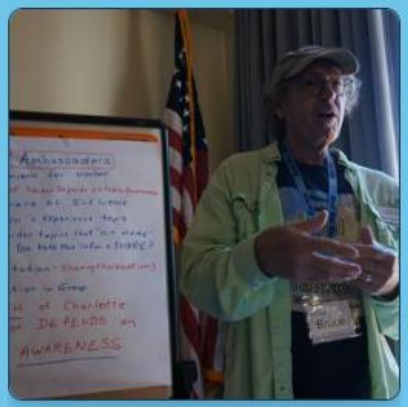
Who We Are

Heal Our Harbor, Inc. is an all-volunteer 501(c)(3) charitable organization, led by scientists and educators, dedicated to restoring and preserving the Charlotte Harbor watershed.

What We Do



Research



Educate



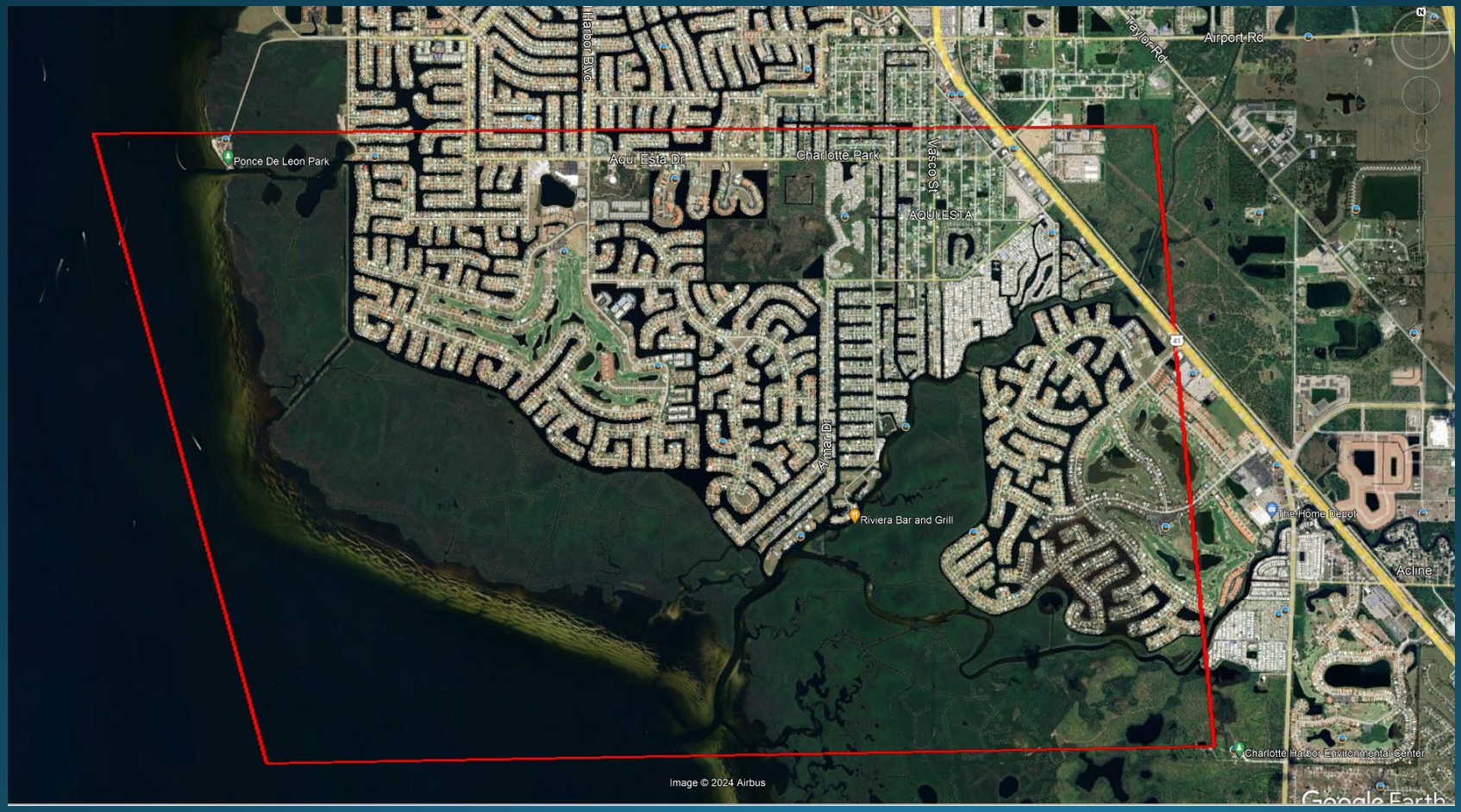
Advocate



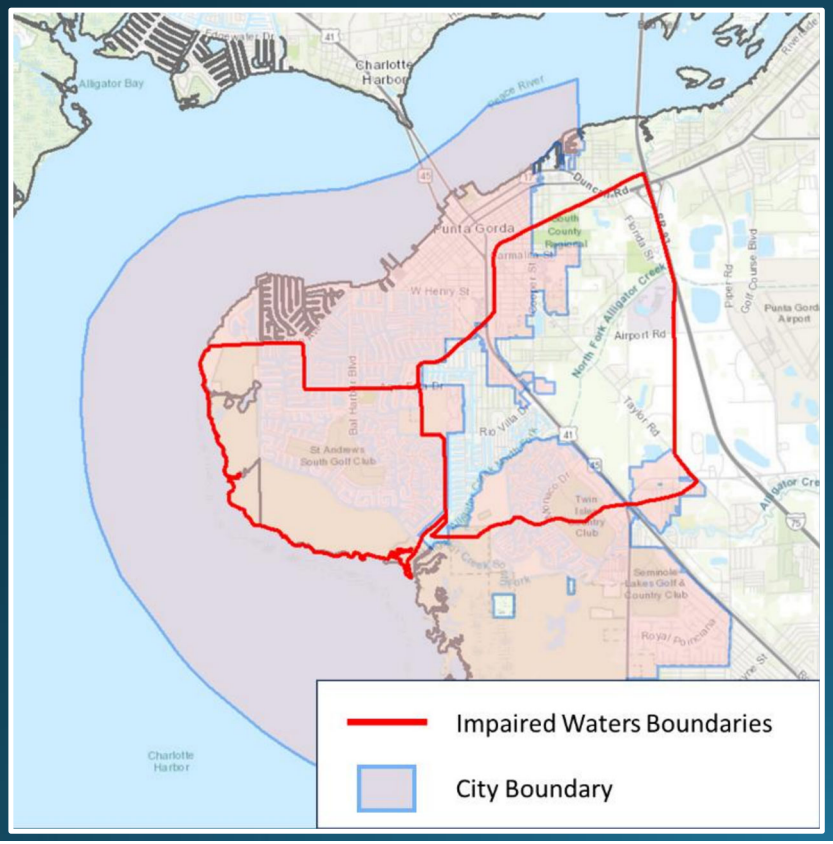
Citizens Partnership for Clean Canals



Area listed by FDEP as non-attainment for Fecal Indicator Bacteria (FIB).



CPCC Monitoring Locations





CPCC Citizen Scientists at Work



Sporting new Team Badges



Caring for a delicate sensor



Sample collection at Ponce Park



Training new recruits

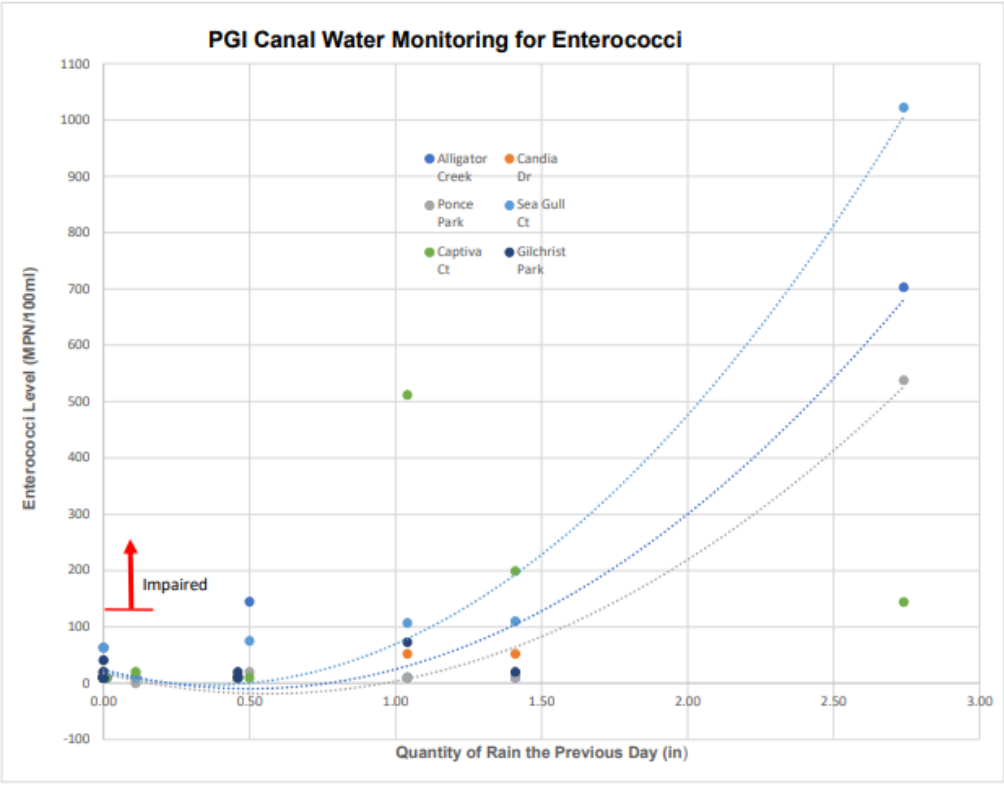


Monitoring at the BSI Lock

Photo Credits to Deb Peterson

Citizens Partnership for Clean Canals (CPCC)

		Enterococci (MPN/100 ml), Subsurface Water Sample					
Sample Date	24-hr Rain (in)	Alligator Creek	Candia Dr	Ponce Park	Sea Gull Ct	Captiva Ct	Gilchrist Park
4/1/2024	0.00	10		10	10		
5/6/2024	0.01	10		10	10		
6/3/2024	0.00	10		10	63		
7/1/2024	0.01	10		10	10	10	
8/6/2024	2.74	703		538	1022	144	
9/3/2024	0.50	145		20	75	10	
10/22/2024	0.11	10	10	Closed due to storm	10	20	
11/4/2024	0.00	63	10		10	10	
12/3/2024	0.00	10	10		10	10	10
1/6/2025	0.00	10			10	10	20
2/3/2025	0.00	10	20	10	10	10	41
3/3/2025	0.00	10	10	10	10		10
4/7/2025	0.00	10	10	19	10	10	10
5/5/2025	1.04	10	52	10	107	512	73
6/2/2025	1.41	10	52	10	110	199	20
7/7/2025	0.46	10	10	10	10	10	10
8/4/2025	0.00	10	10	10	10	10	10
9/2/2025	0.46	10	10	10	10	10	20
Arithmetic Mean		59	19	49	84	70	22
Geometric Mean		16	14	15	21	21	17
Rain-EC Correlation		0.82	0.89	0.83	0.88	0.53	0.45
Log Correlation AC to SG		0.98	Log+1 Correlation AC to SG				0.68



LEGEND	
No rain	Enterococci below minimum detection level
<1" rain	Enterococci detected below impairment level
>1" rain	Enterococci detected above impairment level

CPCC Findings/Observations

- FIB (Enterococci) Levels correlate with rainfall in the previous 24 hours
  - No rain = Enterococci not detected
  - Rain = Enterococci detected below or above regulatory impairment levels
- Monitoring data collected at each site on the same day correlate with one another
- Correlations indicate a non-point source of FIB contamination i.e. run-off
- FIB levels near Charlotte Park were similar to levels detected at the other Punta Gorda locations.
- Low to anoxic Dissolved Oxygen levels (<3 mg/l) occur during late summer months creating stressful conditions/die-offs for aquatic life.
- eDNA results, examined to date, during do not indicate human fecal sources but the study is incomplete.
- More data are needed to support or negate the FDEP impaired designation.

Next Steps

- Cooperate with Charlotte County to expand water quality monitoring programs to other regulatory impaired water bodies using the CPCC model.
- Convey findings to the state (FDEP, Florida Department of Health) Punta Gorda and the Public.
- Conduct discussions with FDEP on their bacteria assessment process and impairment designation of Punta Gorda watersheds.
- Operationalize water quality monitoring of Punta Gorda waterways to collect more data to establish water quality baselines, identify trends and identify anomalies when they occur.
- Complete eDNA studies to determine FIB contamination sources.
- Continue to collaborate with regional and national Microbial Source Tracking research experts to model complex ecosystems such as Charlotte Harbor and to identify pollution sources.

Looking Forward

- Program divided into Monitoring and Research Projects
- Research Phase is nearing completion (led by Dr. Richard Whitman)
- Peer Review Journal format
- Complete eDNA study (too early to say human input will not be found)
- Program findings will be presented when fully completed
- Proper flood and stormwater management planning and ordinances are important to successful state water quality compliance.

CITY COUNCIL
CITY OF PUNTA GORDA
01/ 6/2026

WORKSHOP TOPIC- SUSTAINABILITY

Title: Resilience and Adaptation to Flooding

Funds: None

Recommended Action: Presentation

Summary:

City staff will provide an update and overview of resilience and adaptation for the City of Punta Gorda. Resilience is a community's ability to withstand, recover from, and adapt to shocks and stresses. Resilience is a trait of a Community. Adaptation is the process by which a community evolves its systems, capacities, and infrastructure to prepare for and manage future flooding.

Department/Division: City Manager

EXHIBITS:

1. Workshop City of Punta Gorda

Resilience & Adaptation to Flooding

City Workshop
January 2026

Punta Gorda

Key Factors to Flooding and Coastal Storm

- Natural Hazards:
  - Storm Surge - Causes widespread flooding
  - Sea Level rise - Intensifies flood frequency and severity
  - Coastal Erosion - Weakens shorelines
- Human Factors
  - Development in Vulnerable Areas -
  - Aging infrastructure -
  - Changes in Land Use -

Punta Gorda

Low Lying Coastal City

Local floods affecting Punta Gorda

- Hurricane Milton (October 2024)
- Hurricane Helene (September 2024)
- Heavy Rain (December 2023) - Local flooding
- Hurricane Idalia (August 2023) – Surge and rain
- Hurricane Ian (September 2022) – Surge and rain
- Hurricane Irma (September 2017) – Surge and harbor emptied
- Hurricane Charley (August 2004) – Surge and harbor emptied
- Heavy Rain (June 2003) 16”- 20” of rain
- Tropical Storm Gabrielle (September 2001) – Surge and torrential rain
- Heavy Rain (September 1962) – torrential rain
- Hurricane Donna (September 1960) - Extensive Flooding
- Florida – Cuba Hurricane (October 1944) – Heavy rain
- Hurricane (1896) – Local flooding heavy rain
- Gale (1878) – Heavy rain several days – Inundation and harbor emptied

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USACE & and Local Studies

Has ongoing Coastal Storm Risk Management (CSRM) studies and projects to address these risks.

- USACE Jacksonville District partnered with Charlotte County to conduct a CSRM study
- Evaluating structural, non structural and nature based solutions
- Engaging the public in adaptation planning

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Climate Adaptation Plan 2009

Objectives: 2009

- **Identified 54 vulnerabilities into 8 major categories**
  - Ecosystem degradation, water supply, flooding risk, unmanaged growth, water quality, education and insurance, fire risk & education
- Proposed adaptation strategies
  - Protect mangroves, promote native landscapes, limit high risk development
- Implementation
  - Improve drainage, elevate structures, relocate public work infrastructure

Punta Gorda

Climate Adaptation Plan 2019

Objectives: 2019

- Vulnerability Assessment of facilities and historic properties.
  - Identified focus areas.
- Mapping and inundation scenarios.
  - Modeling to forecast flooding due to sea-level rise and coastal surge was central to the update: these maps and data used to guide strategy.
- Guide city policy.
- Living shoreline and shore protection.
  - Nature based solutions.

Punta Gorda

Local Vulnerability Assessment

Objectives: 2024

- Based on 2024 Resilient Florida SLR scenarios
  - Modeled (tidal, 25-yr, 100-yr flood scenarios)
- High-risk zones identified for intervention

Punta Gorda

Climate Adaptation Plan 2024

Objectives: 2024

- Updated Vulnerability Assessment
  - **Projected sea level rise of .6 - .8 feet by 2050 and 2 feet by 2080.**
  - Focused on critical infrastructure.
- Priority zones
  - Downtown, US-41 commercial area and public safety infrastructure
  - Recommend retrofits and elevation and relocation of infrastructure.
- Water management and drainage.
  - Improve water flow, study flood corridors
- Policy and planning
  - Change policy including LDR's, zoning and code
  - Need for public safety and affordable housing

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Vulnerability Assessment comparison:

	SLR	Flood Hazards	Critical Asset Categories	Asset Counts
2019 Plan	Two Scenarios: 1.5 feet 3.0 feet • *Based on the 2013 IPPCC and 2018 US National Climate Assessment*	12 Total – current conditions and two SLR • Tidal (MHHW) • 25 Year Storm Surge • 100 Year Storm Surge • 500 Year Storm Surge	• General Publicly Owned • Critical Public Facilities • Historic Properties	• 145 Critical Infrastructure Assets • 172 Parcels
2024 VA – Climate Update	Four Scenarios: 2050 IntLow – 0.6' 2050 Int – 0.8' 2080 IntLow – 1.3' 2080 Int – 2.0' • *Interpolated between the two closest NOAA tide stations*	15 Total – current conditions and four SLR • Tidal (MHHW) • 25 Year Storm Surge (4% annual chance) • 100 Year Storm Surge (1% annual chance)	• Critical Community and Emergency Facilities • Critical Infrastructure • Natural, Cultural, and Historical Resources • Transportation Assets and Evacuation Routes	• 466 Critical Infrastructure Assets • 268 Parcels • 2,250 Miles Roadway

Climate Resilience

Defined:

A community's ability to withstand, recover from, and adapt to shocks and stresses. Resilience is a trait of a Community.

Taking Action



Punta Gorda

Climate Resilience Approaches

Adaptation:

The process by which a community evolves its systems, capacities, and infrastructure to prepare for and manage future flooding.

Mitigation:

Tackling the root causes of climate change and acting to prevent those impacts.

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3 Approaches to Address Flooding

1. Land use and policy
   - Ordinance, Regulation and planning
2. Stormwater and drainage
   - Infrastructure to reduce runoff by absorbing or storing water
3. Coastal and shoreline
   - Infrastructure to reduce tidal inundation

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Land Use and Policy

- Public education and outreach
- Zoning and land use regulations (~$500,000)
  - Community Rating system
  - Building-scale approaches
- Watershed-scale and regional planning (< $5,000,000)
  - Property acquisition
  - Relocation / Retreat

Stormwater and drainage

- Raingarden & bioretention – (<$500,000)
  - Urban tree canopy
- Culverts, swales and drainage pipes (<$1,000,000)
- Stormwater parks (~$1,000,000)
- Stormwater basins (~$1,000,000)
  - Pumping systems
- Stream daylighting (> $5,000,000)
  - Floodplain restoration

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Coastal and Shoreline

- Outfall and tidal gates– (<$500,000)
  - Include deployable flood barriers
- Living shorelines(<$1,000,000)
  - Include beach and mangroves
- Coastal and wetland restoration (>$5,000,000)
  - Bulkheads and seawalls

Recommended Actions

Planning

- Downtown flooding study - 2027
- New stormwater master plan - TBD

Policy

- Update codes to reflect SLR projections
- Elevate historic structures
- Manage retreat

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Challenges

- Uncertainty in sea level projections
- Must use flexible adaptive strategy rather than one size fits all

Questions? Comments? Concerns?

CITY COUNCIL
CITY OF PUNTA GORDA
01/ 6/2026

WORKSHOP TOPIC- SUSTAINABILITY

Title: Proposed Punta Gorda Utility District Bill and Water Supply Coordination

Funds:

Recommended Action: Council discussion

Summary: City Council discussion regarding proposed bill.

Department/Division: City Manager

EXHIBITS:

1. *Proposed Punta Gorda Utility District Bill and Water Supply Coordination_Updated

Section 1. Short title.

This act may be cited as the Punta Gorda Utility District Boundary Codification and Utility Transfer Act.

Section 2. Legislative intent.

The Legislature finds that:

(1) The boundaries of the Punta Gorda Utility District (the "District") must be established.

(2) The District is wholly located within the corporate boundaries of Charlotte County, which provides potable water and wastewater utility services.

(3) The public interest is best served by authorizing the County to provide potable water and wastewater utility services for certain uncertificated lands lying outside the District, which will ensure uninterrupted service and efficient regional utility management.

Section 3. Establishment of district boundaries.

(1) Chapter ___, Laws of Florida, as amended, is amended to read:

"The boundaries of the Punta Gorda Utility District are hereby codified to include all lands lying within the corporate limits of the City of Punta Gorda, Charlotte County, Florida, as such municipal boundaries exist on the effective date of this act."

(2) The City of Punta Gorda shall provide the Department of State and the Department of Economic Opportunity a certified map and metes-and-bounds legal description of the city's municipal boundaries as of the effective date of this act. This map and description are incorporated by reference and constitute the official boundaries of the district.

Section 4. Provision of potable water and wastewater utility services.

(1) Notwithstanding any provision of chapter ___, Laws of Florida, as amended, or any interlocal agreement to the contrary, Charlotte County is authorized to assume responsibility for potable water and wastewater utility service, operations, billing, management, and associated assets and obligations for utility functions located in certain lands lying outside the District upon this act becoming a law. The City of Punta Gorda may continue to own and maintain current assets outside of the District as necessary to provide continuity of service for their customers.

(2) The City of Punta Gorda and Charlotte County shall enter into one or more interlocal agreements as necessary to effectuate the assumption described in subsection (1). The first interlocal agreement shall be entered into no later than 180 days after the date upon which this act becomes law. The initial interlocal agreement shall memorialize the steps needed to develop the fully executable transition plan as described in subsection (3).

(3) The City of Punta Gorda and Charlotte County shall provide a written report, either jointly or separately, to the Charlotte County legislative delegation no later than 365 days after of the date upon which this act becomes law. The report or reports shall describe the fully executable transition plans for potable water and wastewater utility service, funding plan, operations, billing,

management, and associated assets and obligations for utility functions located in certain lands lying outside the District.

(4) Until the assumption described in subsection (2) is finalized pursuant to one or more interlocal agreements, the City of Punta Gorda shall continue to provide potable water and wastewater utility functions to existing and new customers and, as owner, must maintain its potable water and wastewater utility infrastructure for so long as is necessary to provide continuity of service.

(5) Nothing in this act shall prohibit the City of Punta Gorda and Charlotte County from addressing related or necessary matters as interlocal provisions.

Section 5. Construction.

(1) Nothing in this act shall be construed to impair, alter, or invalidate any existing bonds, capital improvement commitments, franchise agreements, interlocal agreements, or financial obligations of the district, the City of Punta Gorda, or Charlotte County.

(2) All powers, duties, and obligations of the Punta Gorda Utility District and the City of Punta Gorda shall continue until such powers are lawfully transferred under Sections 4 and 5 of this act.

Section 6. Effective date.

This act shall take effect upon becoming a law.