



How Can We Preserve Tippecanoe Bay – for Future Generations & Wildlife?

Peace & Myakka Water Keeper Meeting
April 9, 2022

Judy Ott, Estuary Escapes LLC

What are We Talking About?

Purposes:

- Learn – Tippecanoe Bay
- Understand – Habitats & Threats
- Act – to Protect It

Topics:

- Where is Tippecanoe?
- What Makes it Special?
- Why is it Threatened?
- How Can We Help?
- Take Home Messages

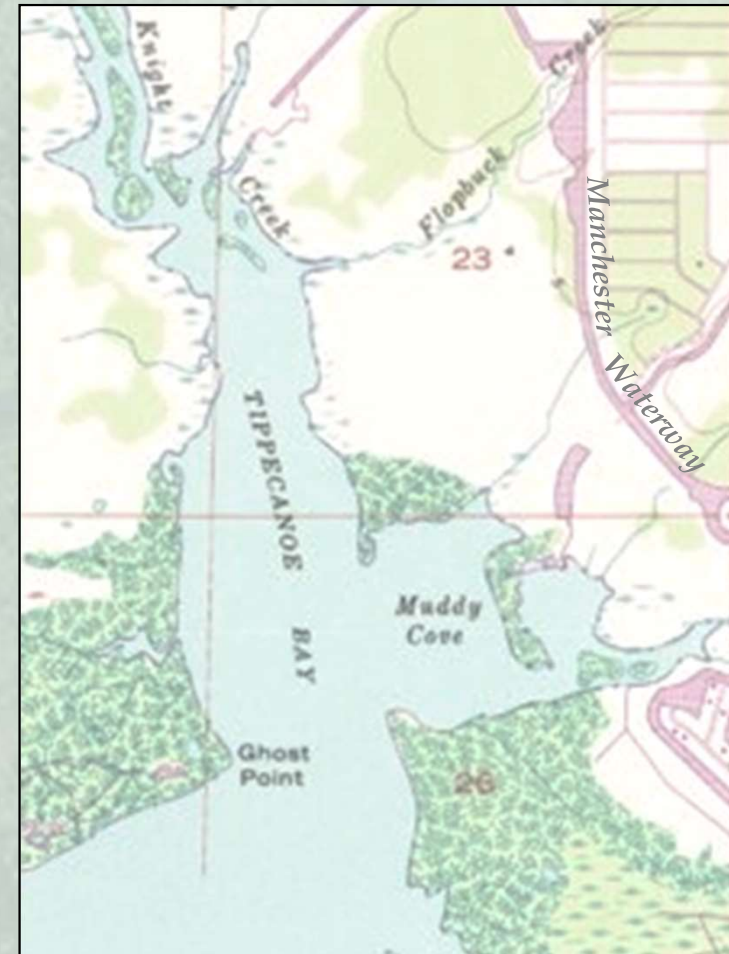
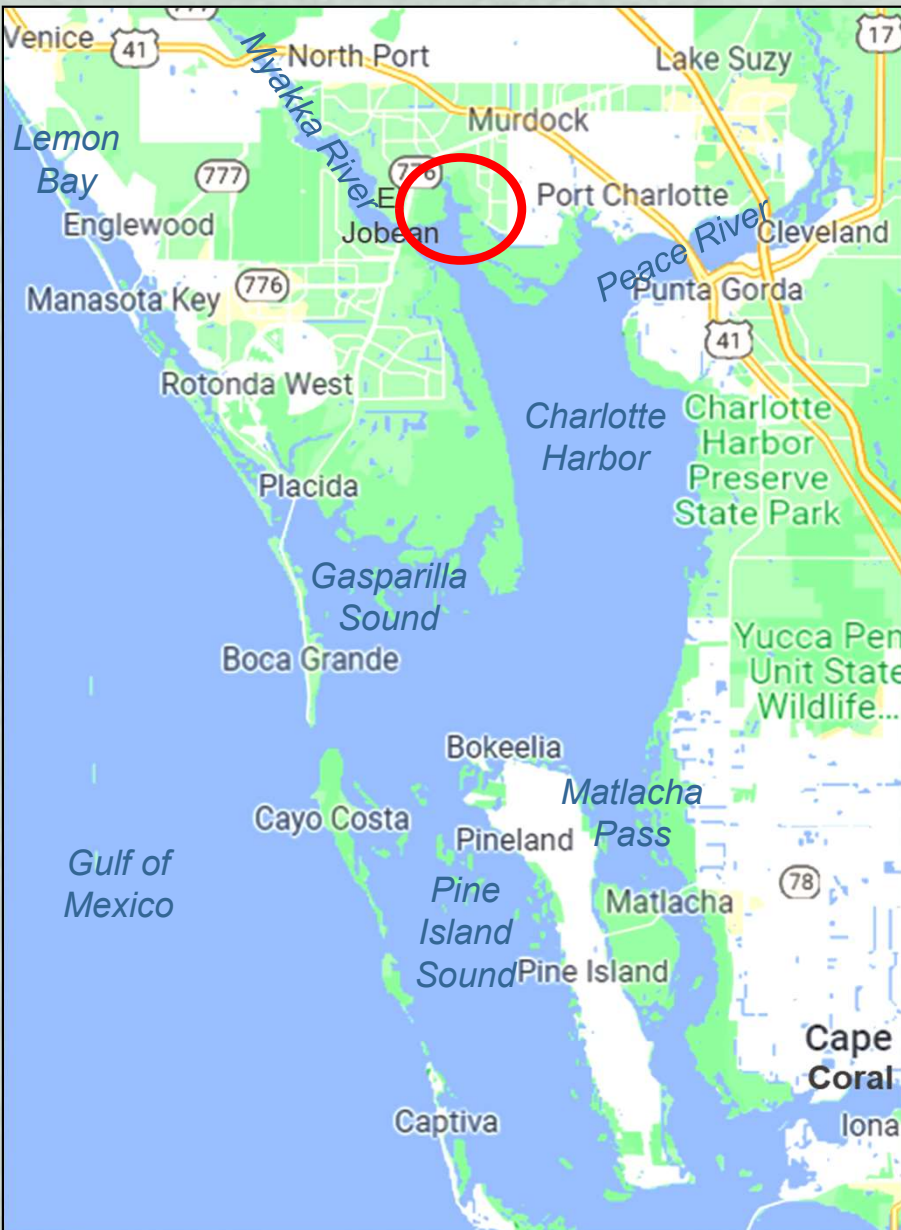


Photo: John Meeder, et al. 2017

Where is Tippecanoe Bay?

At the Mouth of the Myakka River

- East of El Jobean
- West of Manchester Waterway
- In Watersheds of Myakka R & Charlotte Harbor
- Charlotte County



What Makes Tippecanoe Bay Special?

It's an Estuary

- Where Fresh & Salt Water Mix
- Productive, Complex & Fragile
- Productivity is Driven by Tides – Day, Month, Season, Year & Climate

Red Mangroves



Photo: Wikipedia

Cord Grass



Photo: Ann Mu

Turtle Grass

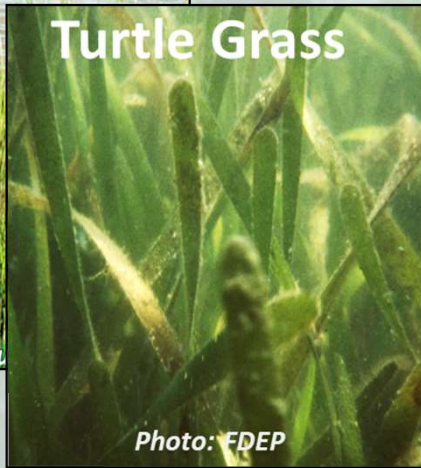


Photo: FDEP

Brittle Star

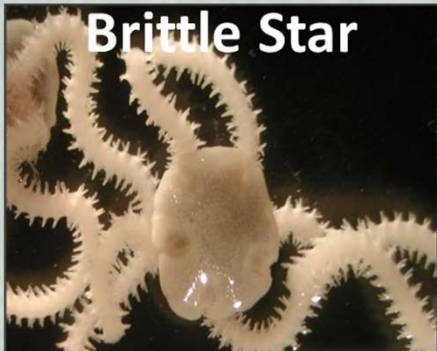


Photo: M

Fiddler Crabs



reg Kahn/NDN

Oysters



Photo: TNC

Otters



Photo: Bob Paty

Snowy Egret

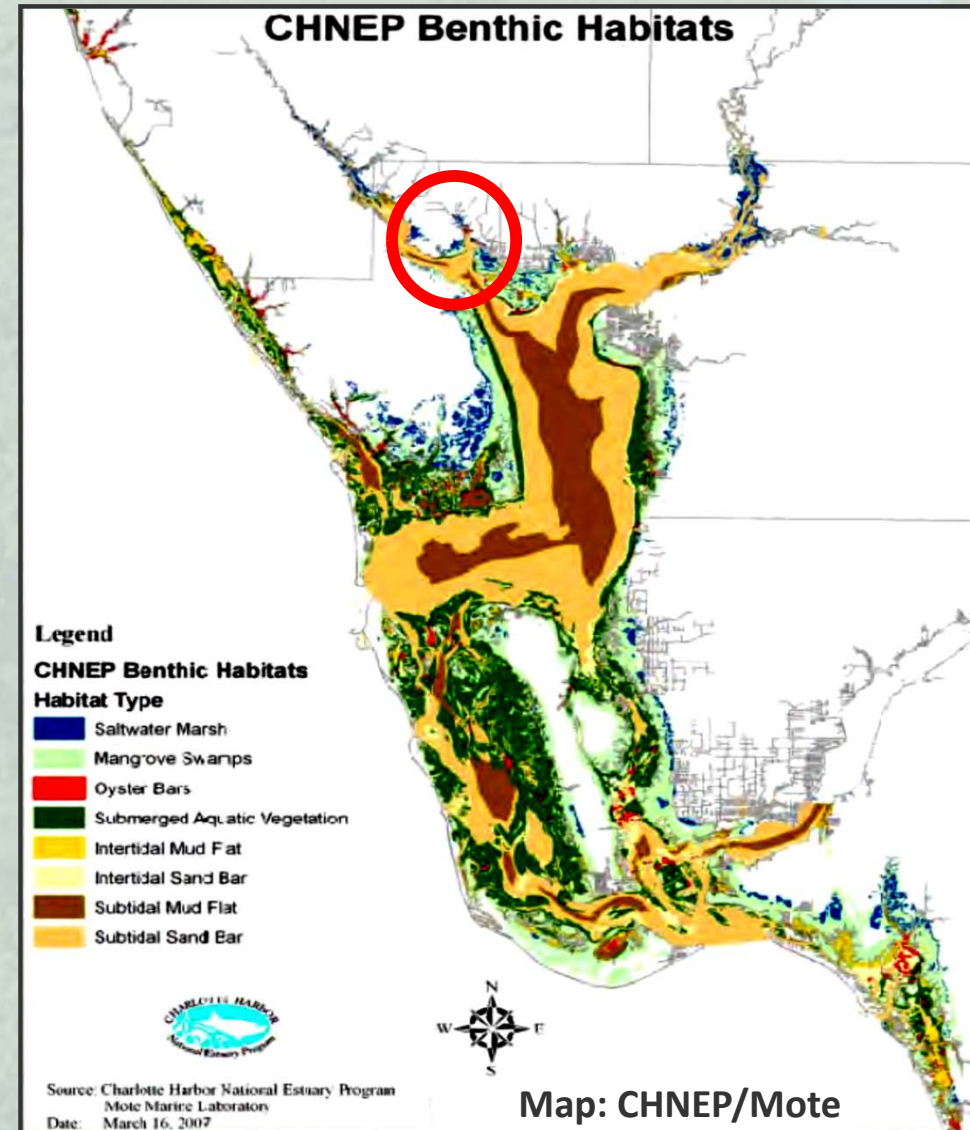
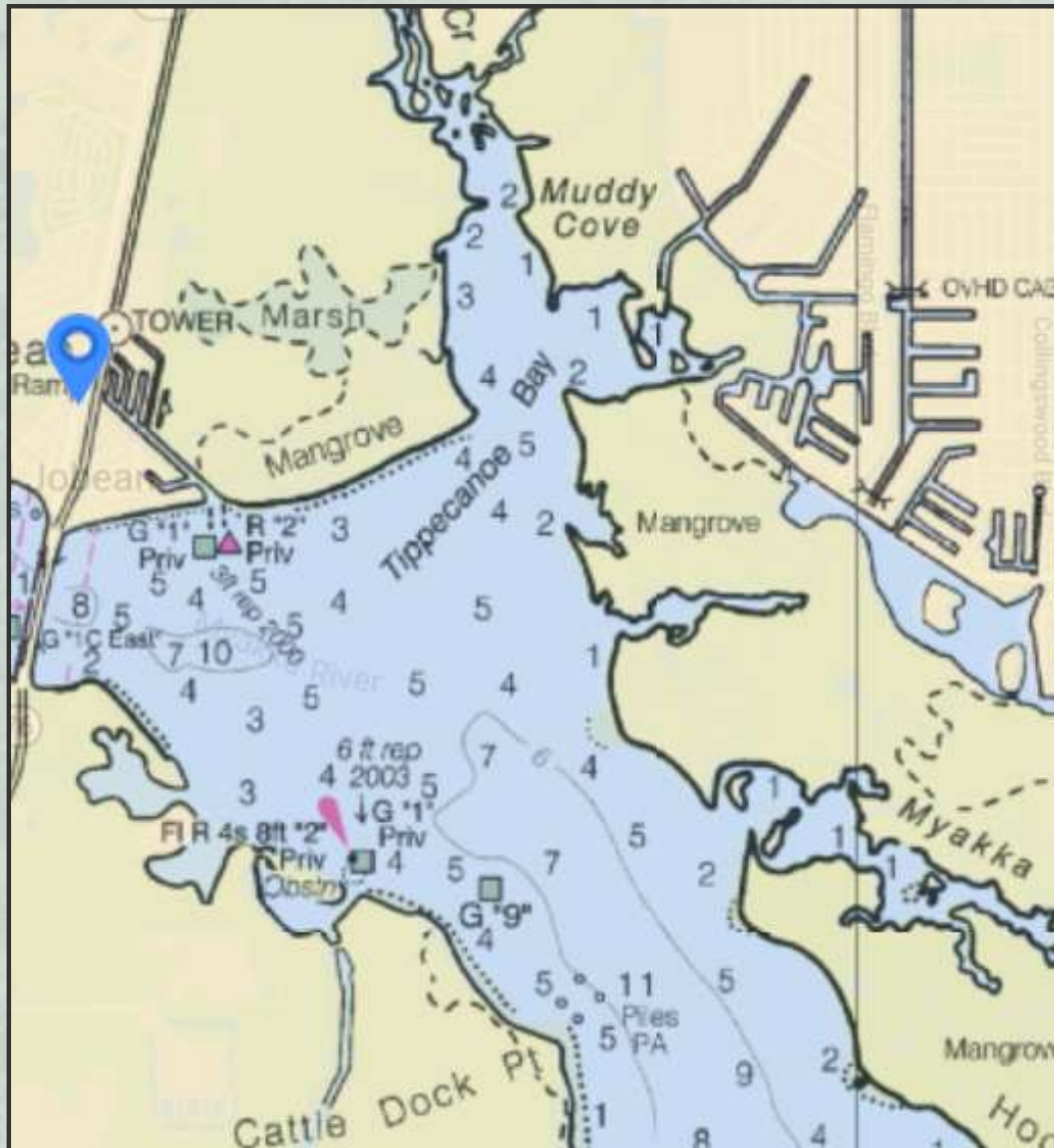


Photo: John Sutton/All About Birds

Mangrove Snapper

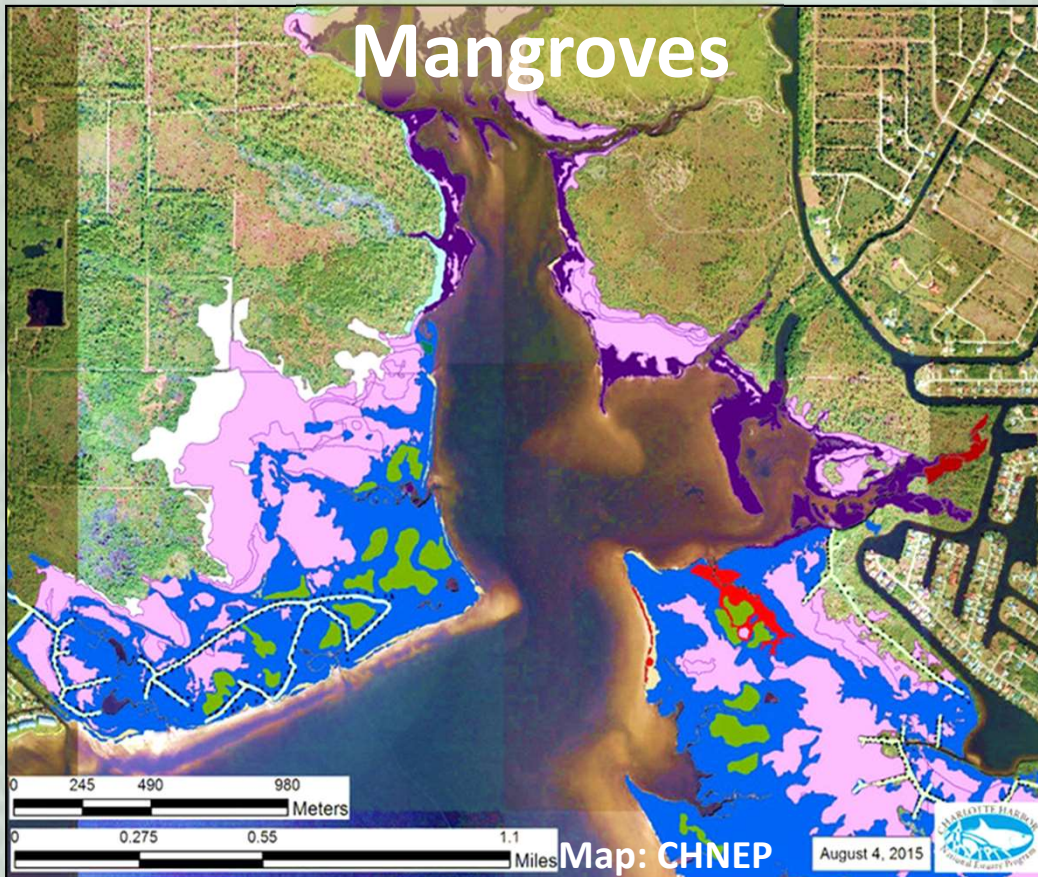


- It's Very Shallow: <3 Feet Deep
- It Supports Many Habitants – Tidal & Underwater & Their Inhabitants



**Mangroves, Saltmarsh,
Seagrass & Tidal Flats**

- Its Shoreline is Fringed with Mangroves & Seagrasses



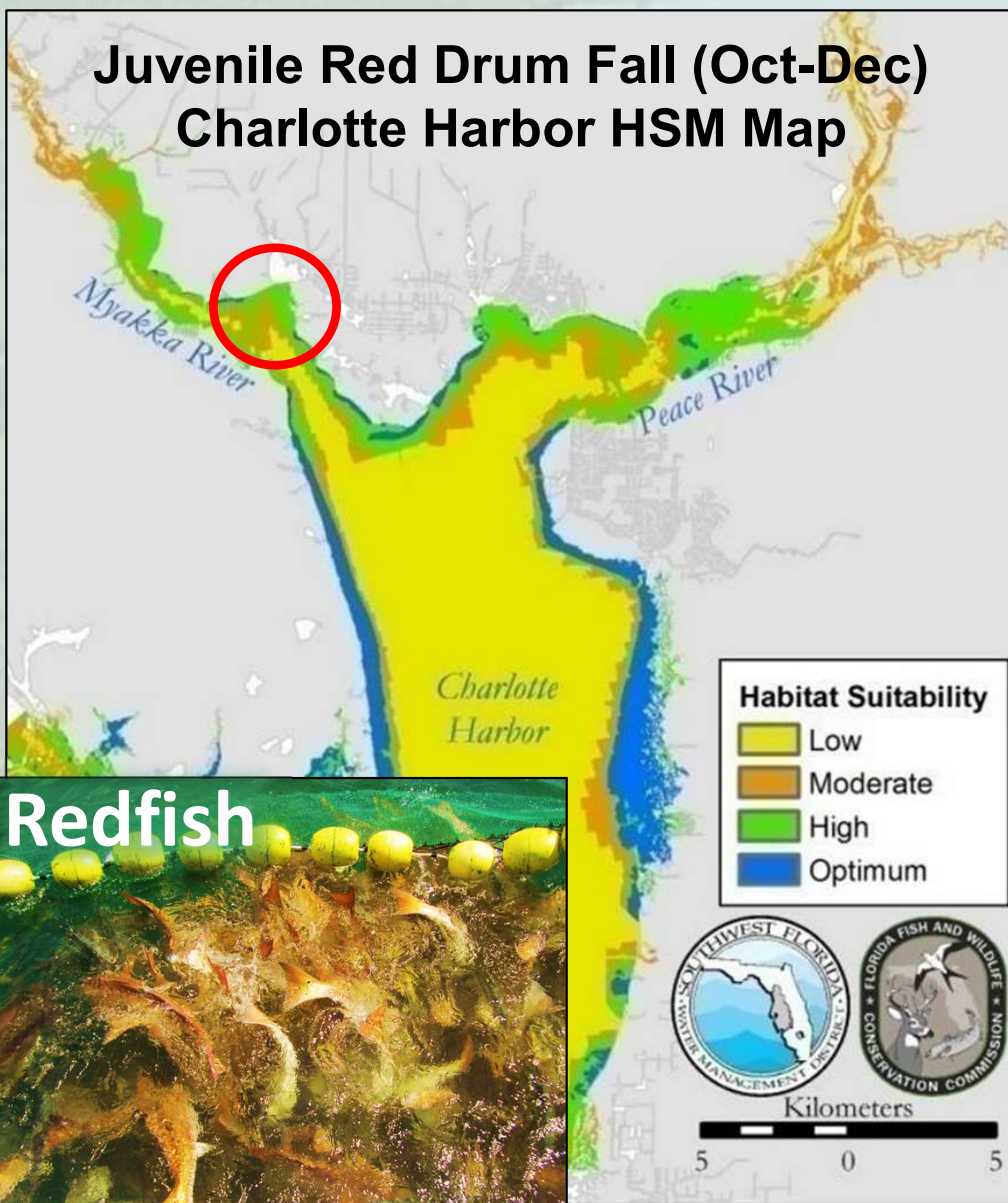
Mangroves = ■ + ■ + ■ + ■
 Saltmarsh = ■ + ■



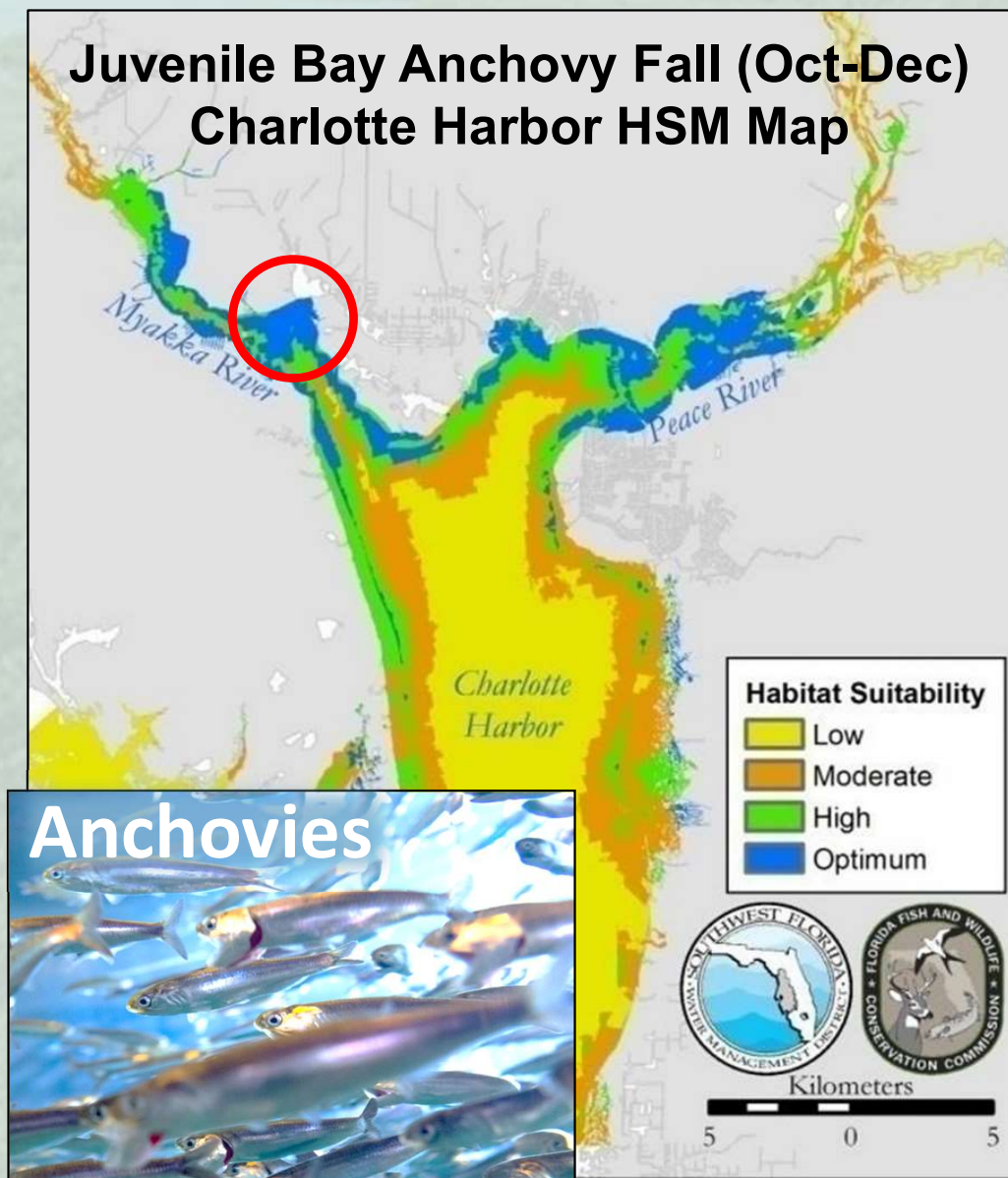
Seagrass = ■ + ■
 ≤ 2.5 Feet Deep

- It Provides Critical Fish Habitat – Especially for Juveniles

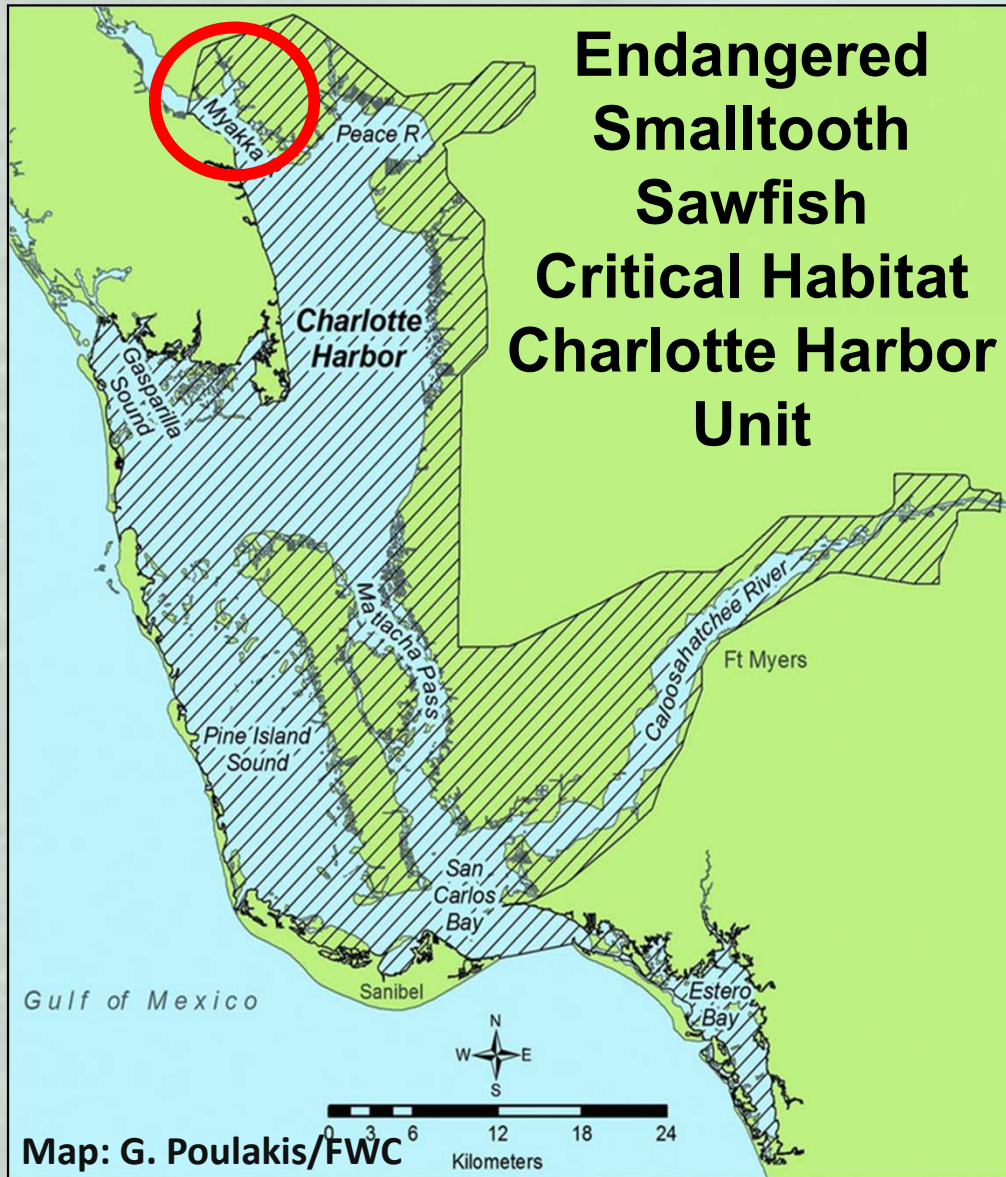
Juvenile Red Drum Fall (Oct-Dec)
Charlotte Harbor HSM Map



Juvenile Bay Anchovy Fall (Oct-Dec)
Charlotte Harbor HSM Map



- Especially Endangered Smalltooth Sawfish Critical Habitat



~ Sawfish are Protected by US & FL Endangered Species Regulations

~ Critical Habitat for Juveniles = Unvegetated Submerged Lands Next to Mangroves <3 Ft Deep

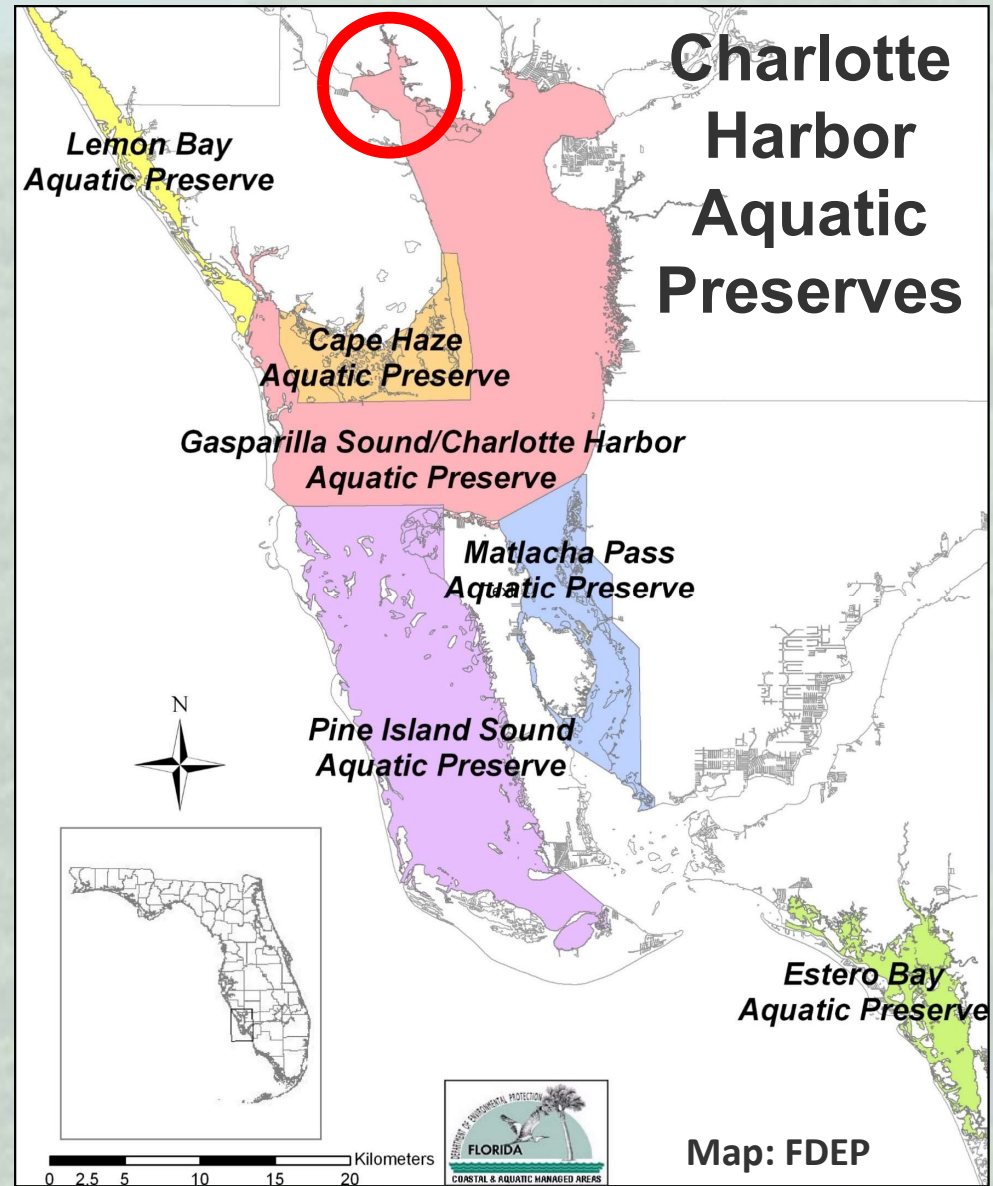
~ Activities in Critical Habitat Require Permits



- It's Located in Both a FL State Park & Aquatic Preserve



Acquired starting in 1979 to protect estuaries, wetlands & uplands.



Designated in 1979 to be preserved in natural conditions for the future.

Why is Tippecanoe Bay's Health Threatened?

Dredging is Proposed Through the Bay

- Manchester Waterway Cut-Through Project
- By Manchester Waterway Civic Association (MWCA)
- As “Navigational Water Quality Improvement Project”
- 3 New Channels
- To 5 Feet Deep in Myakka River



- MWCA to Charlotte Co Beaches & Shores – May 2018
- Dredge Distances are Estimated from Given Information



- **Total Dredging to 5 Feet Deep would = >3.75 miles**
- **Loss of Mangroves, Seagrasses & Sawfish Habitat from Dredging would = >2.25 miles**

Approximate Dredge Lengths through Mangroves & Seagrasses & Sawfish Habitat
Estimated from available information, Charlotte Co. GIS & Google Earth.
Each option estimated to ±5 foot depth in Myakka River.

Option	Uplands	Mangroves	Seagrass	Smalltooth Sawfish Habitat	Open Water	Total (feet)
Christopher WW thru Muddy Cove	500	500	200	3,800	3,000	8,000
O'Hara WW to Tippecanoe Bay	200	700	200	2,400	3,000	6,500
Como WW thru Deerfly Bay	500	1,500	200	2,800	1,000	6,000



Photo: FWC

- Dredging thru Aquatic Preserve would = >3.2 miles
- Dredging thru State Park would = >0.6 miles
- Adverse Impacts to Resources & Water Quality are Explicitly Contrary to Aquatic Preserve & State Park Laws, Rules & Management Plans.
- Activities in Aq Pres Must Have Positive Public Benefit.

Approximate Dredge Lengths through State Park & Aquatic Preserve Estimated from available information, Charlotte Co. GIS & Google Earth. Each option estimated to +5 foot depth in Myakka River.

Option	in Charlotte Harbor Preserve State Park (feet)	in Gasparilla Sound-Charlotte Harbor Aquatic Preserve (feet)	Total (feet)
Christopher WW thru Muddy Cove	500	7,500	8,000
O'Hara WW to Tippecanoe Bay	500	6,000	6,500
Como WW thru Deerfly Bay	2,000	4,000	6,000

- Tippecanoe is an Outstanding FL Water – Water Quality Cannot be Degraded Below Background Conditions – or State Standards – or Manchester WW.
- Mangroves, Saltmarshes & Seagrass Filter Water & Improve Its Quality – Open Channels Not So Much.
- 22 Years of Water Quality Data for Sam Knight Cr & Myakka R by CHEVWQMN.
- Manchester WW is Impaired for Chlorophyll But Tippecanoe Bay is Not.

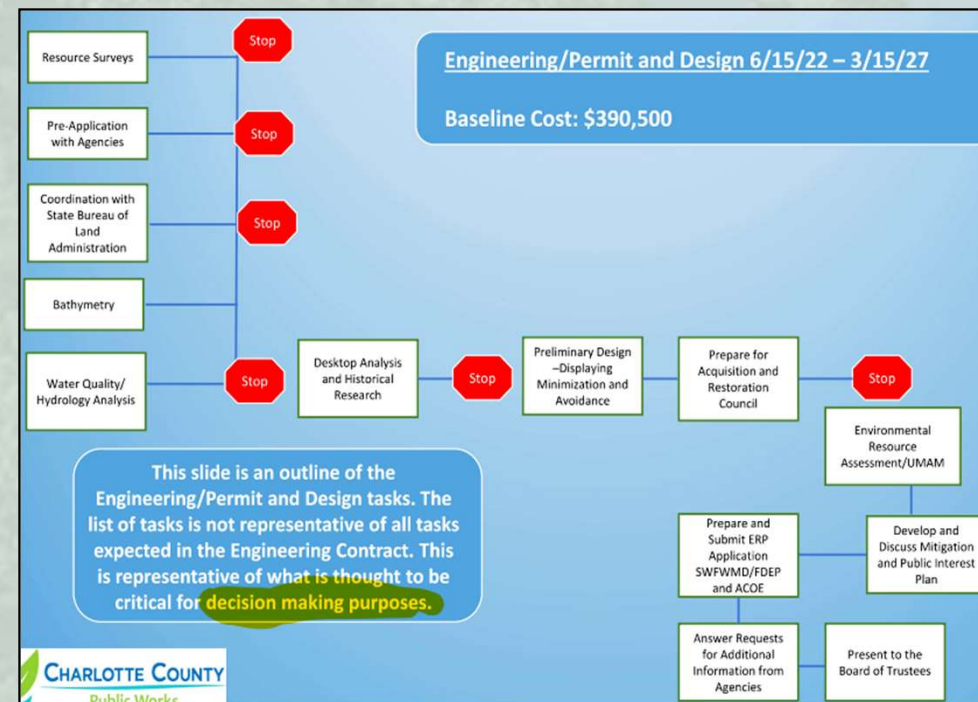
Water Quality Standards from 62-302 FAC for Class III "Fishable Swimmable" Waters.

Basin	Chl (ug/L)**		TP (mg/L)**		TN (mg/L)**	
	Lake	Marine	Stream	Marine	Stream	Marine
Tidal Myakka	20	11.7	0.12	0.31	1.54	1.02
Tidal Peace	20	12.6	0.12	0.5	1.54	1.08
Charlotte Harbor	20	6.1	0.12	0.19	1.54	0.67

What is the Status of the Dredging Project?

Charlotte Co is Currently Doing Preliminary Study

- MWCA to Charlotte Co Staff (Dec 2020)
- Co Staff to Commissioners (March, July & Nov 2021)
- Property Title Search – Owned by FL & SWFWMD; No Easements to Co; Deed from GDC to FL (1978) Prohibits Dredging or Dredge Spoil Dumping
- Cost Estimates:
Pre-Construction = >\$1.1 Mil
& Construction = >\$3.4 Mil
- Baseline Engineering Permit & Design = 5 years & \$390K
- Co. Decision Making Process



How Can We Help Protect Tippecanoe Bay?

Learn



- Read Full Report *Preserve Tippecanoe Bay* (www.tinyurl.com/tippybay) or Scan this QR Code with Phone

Spread the Word

- Tell State Park & Aquatic Preserve Staff Dredging Isn't How You Want Your Parks & Preserves Managed.
- Write Letters to News Paper Editors & Social Media.
- Support Advocacy Groups: Peace & Myakka Water Keepers, Audubon, Sierra Club & Others.



Participate in Dredging Project Review Process

- Check Agendas for Co Commission & Committees (B&S; MAC) (www.charlottecountyfl.gov/boards-committees)
- Send Comments to Charlotte Co Staff: Matt Logan (matthew.logan@charlottecountyfl.gov) & Brandon Moody (brandon.moody@charlottecountyfl.gov)
- Send Comments to FDEP Ombudsman & Permitting Staff: “Heightened Public Concern” Works! Megan Mills (megan.mills@floridadep.gov) & Jacob Newberry (Jacob.newberry@floridadep.gov)
- Get SWFWMD Permit Notifications: (<http://www18.swfwmd.state.fl.us/support/notification/NotificationHome.aspx>).

Notice of Intent to Use an Environmental Resource and/or State 404 Program General Permit

Instructions: This form is for projects that qualify for a General Permit in accordance with Chapter 62-330 F.A.C., and/or Chapter 62-331, F.A.C. General Permits (GP) are provided for certain activities that have been determined to have minimal impacts to the water resources of the state when conducted in compliance with the terms and conditions of the general permit. Complete and submit this form to the appropriate agency as identified in Part 3 below.

If activity is located on, or has the potential to be located on, state-owned sovereignty submerged lands (SSL), the reviewing Agency will begin processing the request for state-owned sovereignty submerged lands authorization. If you know that your project is located on SSL, (i.e., waterward of the line of mean or ordinary high water of rivers, streams, bays, bayous, sounds, the Gulf of Mexico, the Atlantic Ocean, or certain natural lakes, we recommend completing Section F of the Environmental Resource Permit Application. You are not required to complete Section F to receive a General Permit, but it will help the agency process the SSL authorization. Both authorizations are required prior to construction on SSL.

Part 1: General Information

What are the Take Home Messages?

- **Tippecanoe Bay is Special Because It Supports Many Habitats & Diverse Wildlife & Buffers the Estuary from Upland Runoff.**
- **Proposed Dredging Would Cause Irreplicable loss of >2.25 miles of Mangroves, Seagrasses & Sawfish Habitat.**
- **Proposed Dredging is Contrary to State & Federal Laws, Rules & Management Plans.**
- **Sets Bad Precedent & Changes Flow from Peace to Myakka R.**
- **We Can Each Help with Solutions – Especially Heightened Public Concern.**



Tippecanoe Bay 1952

Where Can We Find More Information?

Presentations, Reports & Current Science Links:

ecopapak.org

Water Quality & Other Data:

chnep.wateratlas.usf.edu

Coty Keller

Judy Ott

wckeller@earthlink.net

judy.a.ott52@gmail.com

Peace & Myakka Water Keeper:

Peacemyakkawaterkeeper.org

Andy Mele

andymele@mac.com