Horseshoe Cove and Suwannee Sound Workshop

9-11 March 2021

8:30 am – 12:30 pm




Hosted by
Florida Fish and Wildlife Conservation Commission
Fish and Wildlife Research Institute

Planning Team Introductions

FWC

Paul Carlson, Ph.D.

Steve Geiger, Ph.D.

Caroline Gorga, M.S

Ryan P. Moyer, Ph.D.

Kara Radabaugh, Ph.D.

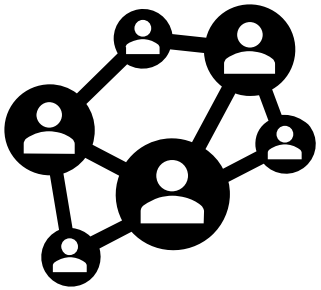
CoastWise Partners

Rich Batiuk, M.S.

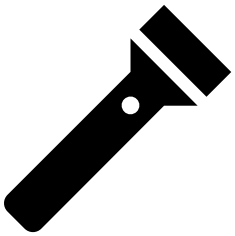
Holly Greening, M.S.

Introduction to Workshop and FWC's Integrated Mapping and Monitoring Programs

Workshop Purpose



- Opportunity for the conservation community to connect (or re-connect!)



- Highlight a (somewhat) overlooked region of the Big Bend and bring it to the attention of decision makers and funding entities.

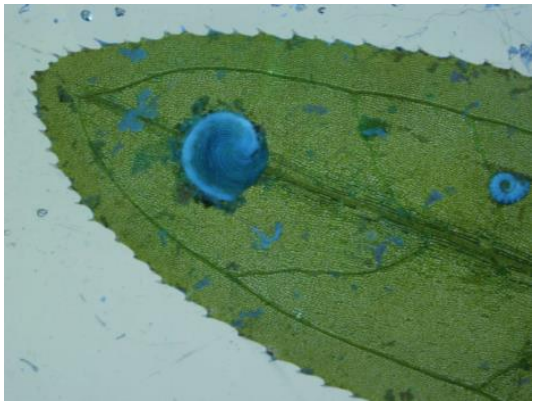
Why this region?

Horseshoe Cove and Suwannee Sound are unique:

- Documented losses:
  - Seagrass
  - Oysters
- Many research and monitoring data gaps
- Low human population
- Many recently funded restoration projects
- Regional interest & support

Why FWRI?

Integrated Mapping and Monitoring Programs



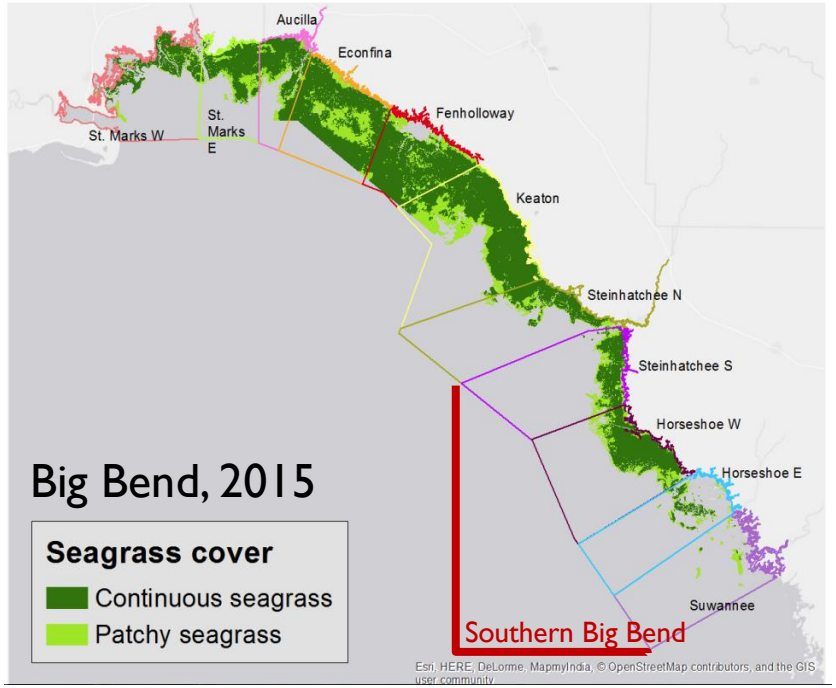
Seagrass

Coastal wetlands

Oyster reefs

Seagrass Integrated Mapping and Monitoring Program (SIMM)

- Statewide report available at http://myfwc.com/research/habitat/seagrasses/projects/active/simm/
- Provides statewide and regional summaries of seagrass status
- Regionally-focused chapters include information on mapping, monitoring, threats, and recommendations for seagrass
  - Southern Big Bend Chapter (v 3.0, 5/2019)
  - Suwannee Sound, Cedar Keys and Waccasassa Bay Chapter (v 2.0)

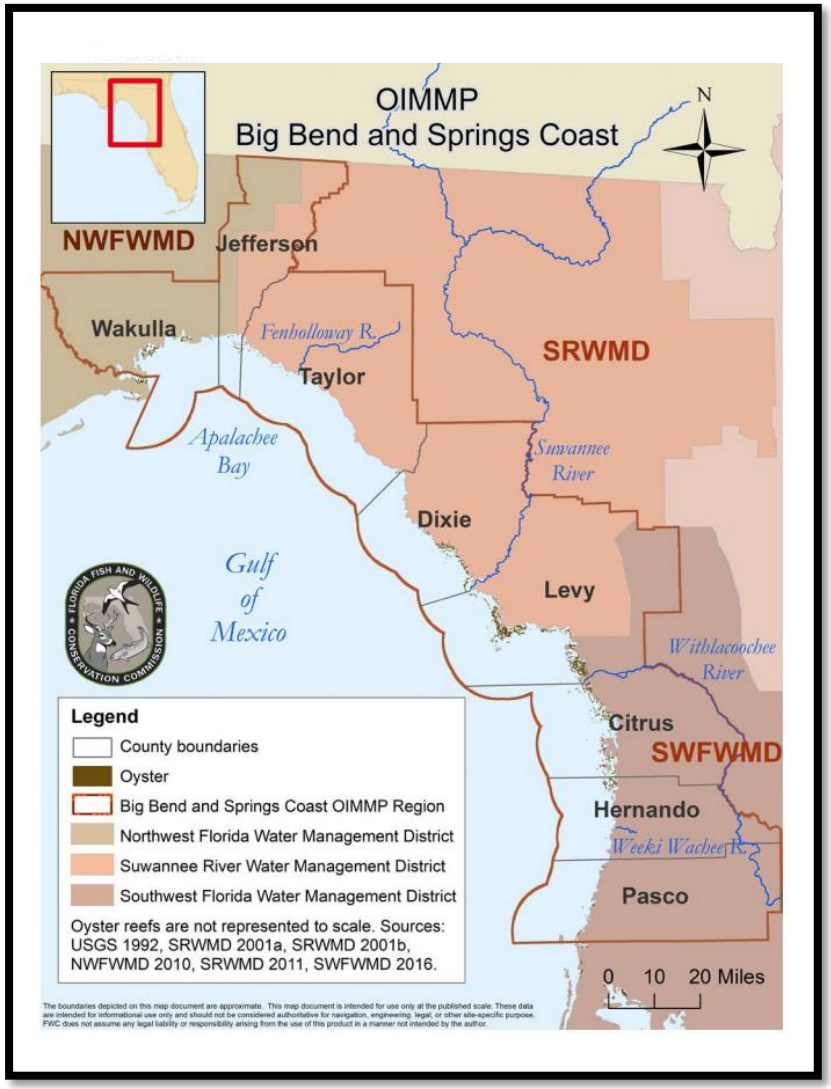


Coastal Habitat Integrated Mapping and Monitoring Program (CHIMMP)

- Statewide report (2017) available at https://myfwc.com/research/habitat/coastal-wetlands/projects/chimmp/
- Regionally-focused chapters
  - Chapter 3: Big Bend and Springs Coast (update to be released 2021)
- Coordinator maintains email listserv and hosts partner workshops http://ocean.floridamarine.org/CHIMMP/

Oyster Integrated Mapping and Monitoring Program (OIMMP)

- Statewide report (2019) available at: https://myfwc.com/research/habitat/coastal-wetlands/projects/oimmp
- Created the most comprehensive map to date: https://geodata.myfwc.com/datasets/oyster-beds-in-florida
- Regionally-focused chapters
  - Chapter 4: Big Bend and Springs Coast (update to be released 2021)
- Coordinator maintains email listserv and hosts partner workshops: http://ocean.floridamarine.org/OIMMP/



IMMPs – what next?

Successfully connecting partners within and outside of Florida ✓

Technical Report (v 1.0) published ✓

Continuously seeking funds to update the reports and address data gaps identified. ✓

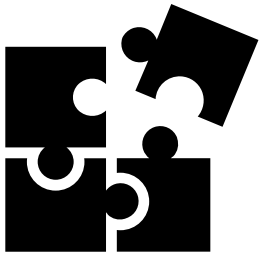
↓

Mapping & Monitoring → Management Action

Take a regional, multi-program approach

Workshop Goals

- Discuss status, needs, and opportunities for living resources in the Horseshoe Cove and Suwannee Sound and its associated watershed.



- Facilitate communication and coordination among local experts, land managers, and funding entities working in Horseshoe Cove and Suwannee Sound

Agency and program summaries

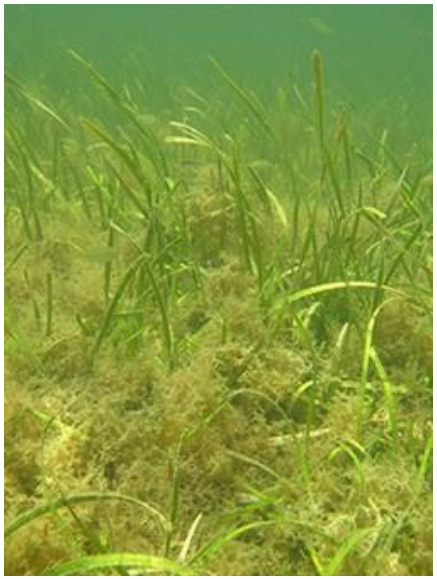
See PDF of program summaries for further information, resources, and contacts regarding activities in the region

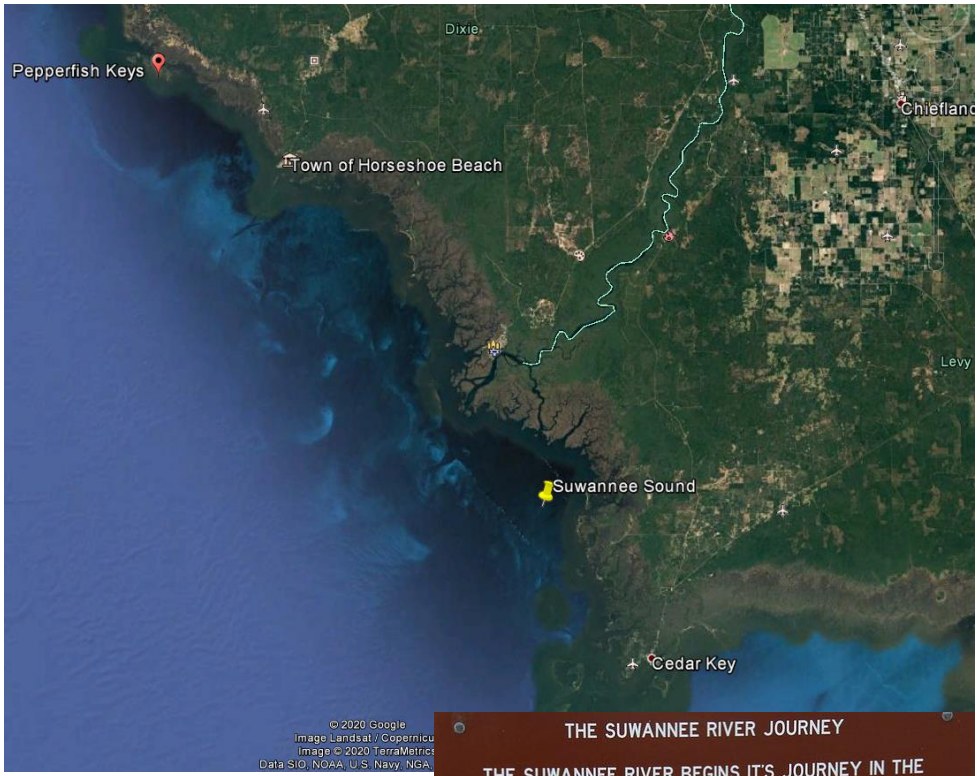
Agency: Florida Department of Environmental Protection
Program or Department: Office of Resilience and Coastal Protection – Big Bend Seagrasses Aquatic Preserves
Summary: Big Bend Seagrasses Aquatic Preserve (BBSAP) was established in 1985 encompassing approximately 985,000 acres of submerged land spanning five Gulf Coast counties of Florida from the St. Marks River southward to the mouth of the Withlacoochee River. The surrounding uplands bordering BBSAP's 1,200 miles of dynamic coastline are dominated by State or Federally managed land holdings or are undeveloped private lands. This creates one of the most pristine coastlines in the state, allowing for effective baseline management of BBSAP's aquatic resources. Big Bend Seagrasses Aquatic Preserve boasts ideal conditions for aquaculture and its productive estuaries provide ample commercial and recreational harvest opportunity for many target species like red drum, spotted sea trout, snook, blue crab, shrimp and stone crab. Staff focus primarily on water quality and submerged aquatic vegetation as two indicators for overall health of this aquatic preserve. Historical continuous water quality data is available for the Suwannee Sound region from 2009 to 2016.
Relevant websites: Big Bend Seagrasses Aquatic Preserve | Florida Department of Environmental Protection
Contacts: Timothy.W.Jones@FloridaDEP.gov , Trisha.Green@FloridaDEP.gov
Relevant references: Big Bend Seagrasses Aquatic Preserve Management Plan: publicfiles.dep.state.fl.us/cama/plans/aquatic/Big-Bend-Seagrasses-AP-Management-Plan.pdf

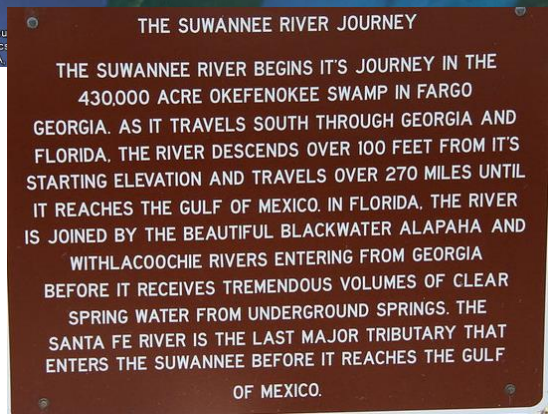
Horseshoe Cove and Suwannee Sound Workshop – Day 2

10 March 2021

8:30 am – 12:30 pm







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Recap of Day 1 – Fish & Wildlife

Goal: Discuss status, needs, and opportunities for living resources in the Horseshoe Cove and Suwannee Sound and its associated watershed.

- Oyster restoration, mapping, monitoring & aquaculture
- Habitat needs of birds (oyster reefs & salt marsh)
- Fisheries independent monitoring
- Monitoring and management gaps and needs (excellent and engaged discussion)

Conceptual Ecosystem Model for Horseshoe Cove & Suwannee Sound

Process:

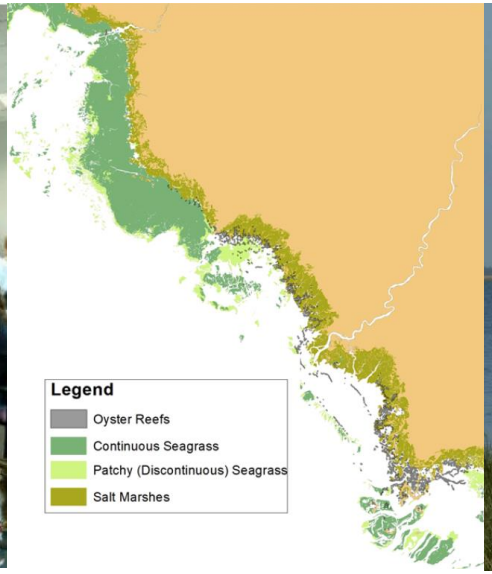
- How does it work?
- Provide feedback on most important drivers of ecosystem-scale stability or change in the region
- Raise hand or use chat box to provide feedback
- Draft CEM will be updated on the fly
- Viewable at:

https://jamboard.google.com/d/1MWkVOY4AY0IkCgDfvBcErcXGS1RbIZRHLjP5pOv96Kw/edit?usp=sharing

Horseshoe Cove and Suwannee Sound Workshop – Day 3

11 March 2021

8:30 am – 12:30 pm



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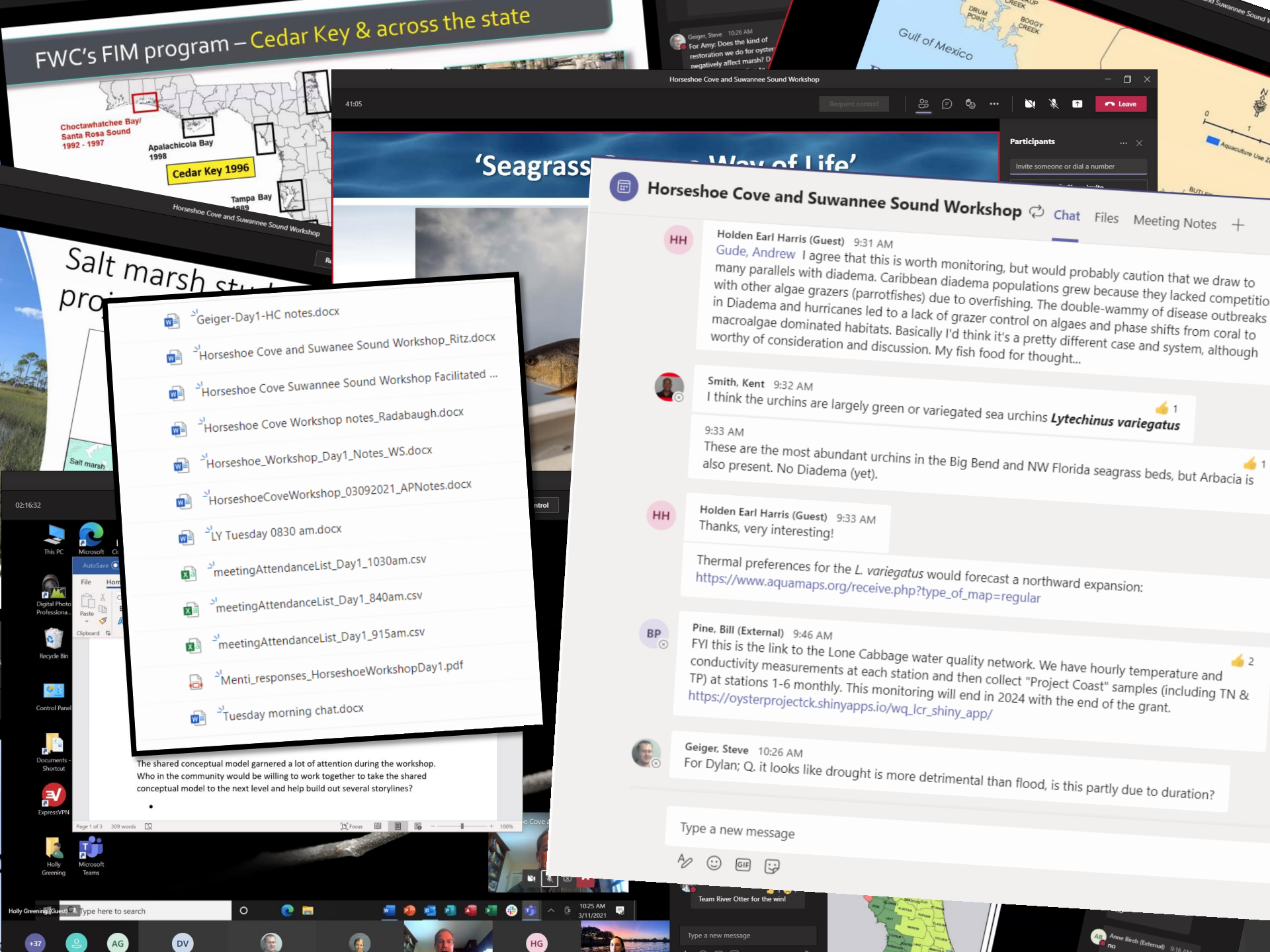
Recap of Day 2

- Ongoing habitat and water quality research and monitoring
- Agency overviews from DEP, SRWMD, USACE
- Discussed key information gaps and identified management actions
  - Data synthesis!
  - Freshwater discharge a big driver in the region
  - Gaps in current monitoring networks and long-term support of this data collection a concern
- Telling this region's story
  - Conceptual model discussion

Upcoming events

- FL TIG NRDA Restoration Plan 2 Webinar
  - Tonight at 5pm! (see chat from Gareth for details)
- Annual Forage Fish Data Workshop,
  - Virtual, May/June 2021
  - Email Justin jgrubich@pewtrusts.org for details
- OIMMP workshop planned for Fall 2021 or Spring 2022
  - Email Kara.Radabaugh@myfwc.com to join email list if interested
- UF Big Bend Science Symposium, 2022
- Webinar: *State of Florida Ecological Report Card*
  - March 30th (2-3pm) & 31st (11:00am-noon)
  - Email Nicole.Burns@myfwc.com for details

Workshop Conclusion


FWC's FIM program – Cedar Key & across the state
Choctawhatchee Bay/
Santa Rosa Sound
1992 - 1997
Apalachicola Bay
1998
Cedar Key 1996
Tampa Bay
Horseshoe Cove and Suwannee Sound Workshop
Salt marsh
Geiger-Day1-HC notes.docx
Horseshoe Cove and Suwannee Sound Workshop_Ritz.docx
Horseshoe Cove Suwannee Sound Workshop Facilitated ...
Horseshoe Cove Workshop notes_Radabaugh.docx
Horseshoe_Workshop_Day1_Notes_WS.docx
HorseshoeCoveWorkshop_03092021_APNotes.docx
LY Tuesday 0830 am.docx
meetingAttendanceList_Day1_1030am.csv
meetingAttendanceList_Day1_840am.csv
meetingAttendanceList_Day1_915am.csv
Menti_responses_HorseshoeWorkshopDay1.pdf
Tuesday morning chat.docx
The shared conceptual model garnered a lot of attention during the workshop. Who in the community would be willing to work together to take the shared conceptual model to the next level and help build out several storylines?
Horseshoe Cove and Suwannee Sound Workshop
Participants
Invite someone or dial a number
Leave
Chat
Files
Meeting Notes
Holden Earl Harris (Guest) 9:31 AM
Gude, Andrew I agree that this is worth monitoring, but would probably caution that we draw to many parallels with diadema. Caribbean diadema populations grew because they lacked competitio with other algae grazers (parrotfishes) due to overfishing. The double-wammy of disease outbreaks in Diadema and hurricanes led to a lack of grazer control on algaes and phase shifts from coral to macroalgae dominated habitats. Basically I'd think it's a pretty different case and system, although worthy of consideration and discussion. My fish food for thought...
Smith, Kent 9:32 AM
I think the urchins are largely green or variegated sea urchins Lytechinus variegatus
9:33 AM
These are the most abundant urchins in the Big Bend and NW Florida seagrass beds, but Arbacia is also present. No Diadema (yet).
Holden Earl Harris (Guest) 9:33 AM
Thanks, very interesting!
Thermal preferences for the L. variegatus would forecast a northward expansion: https://www.aquamaps.org/receive.php?type_of_map=regular
Pine, Bill (External) 9:46 AM
FYI this is the link to the Lone Cabbage water quality network. We have hourly temperature and conductivity measurements at each station and then collect "Project Coast" samples (including TN & TP) at stations 1-6 monthly. This monitoring will end in 2024 with the end of the grant. https://oysterprojectck.shinyapps.io/wq_lcr_shiny_app/
Geiger, Steve 10:26 AM
For Dylan; Q. it looks like drought is more detrimental than flood, is this partly due to duration?
Type a new message
Gulf of Mexico
Aquaculture Use Zo
Team River Otter for the win!

THANK YOU, RICH & HOLLY!

CoastWise PARTNERS

Holly Greening & Rich Batiuk

We'll work for (good) food!

After long careers with two of the most successful watershed management

Need some help with your collaborative watershed management strategy?

We can...

Want some advice on framing your Comprehensive Plan update?

Looking for experienced assistance with watershed program governance, management or scientific

GOAL-SETTING | ESTABLISHING CRITERIA | TECHNICAL ADVICE | MONITORING DESIGN | WORKSHOP PARTICIPATION | PEER REVIEWS

Holly Greening was both Executive Director and Senior Scientist of the Tampa Bay Estuary Program. Holly has served on the Estuarine Research Federation Governing Board, the National Academy of Sciences Ocean Studies Board, and four National Research Council committees. She was Co-Chair of the 2011 Coastal and Estuarine Research Federation Conference, Chair of the Association of National Estuary Programs, and Associate Editor for the scientific journal Estuaries and Coasts. She has authored more than 25 peer-reviewed publications with a focus on estuarine ecology and collaborative watershed management, and is the recipient of regional and national awards for coastal stewardship.

Holly is available beginning Spring 2018. She is based in St. Petersburg, FL.

Holly can be reached at **hgreening@coastwisepartners.org** or **941-462-1339.**

Rich Batiuk spent more than three decades with U.S. EPA and the Chesapeake Bay Program partnership, where he led the integration of science into multi-partner collaborative decision-making. He was the principal architect of the Chesapeake Bay TMDL, a groundbreaking pollutant accountability system spanning six states and the District of Columbia. Rich has led the development and expansion of one of the world's most comprehensive estuarine and watershed monitoring networks, designed to assess an array of water quality standards, environmental indicators and outcomes directly linked to management.

Rich is available beginning Fall 2018. He is based in Annapolis, MD.

Rich can be reached at **richbatiuk@gmail.com** or **410-268-5226.**

https://prepestuaries.org/01/wp-content/uploads/2018/10/CoastWise-Partners-Holly-Greening-and-Rich-Batiuk.pdf

Funding Acknowledgement

Funding for this workshop was provided by the Florida Fish and Wildlife Conservation Commission, Florida's Wildlife Legacy Initiative, and the U.S. Fish and Wildlife Service's funding support of Florida's State Wildlife Grants Program Monitoring and Aquatic Restoration Projects


Thank you for your participation!