



SE Florida Coral Reef Fisheries Stakeholder Committee - Meeting 8 part 1

Virtual meeting via Zoom
6-8 pm, Tuesday November 2nd

Summary – November 2nd

Overview

On Tuesday, November 2nd the first part of two of the eighth Coral Reef Committee meetings was held virtually via Zoom. Facilitators Joy Hazell and Susana Hervas attended the meeting.

Twelve committee members, two members of the public, one Florida Fish and Wildlife Conservation Commission staff, and three Florida Department of Environmental Protection employees attended the meeting.

The meeting objectives were to:

- Review water quality initiatives in the Coral ECA
- Identify potential set of criteria for water quality
- Co-develop survey for constituency

Welcome

The start of the meeting was a quick presentation with an explanation and clarification of the meeting agenda and objectives, reminder of group norms and sunshine law (Slides in Appendix 1.)

Homework Review

The committee members were asked to make a list of water quality projects in the Coral ECA prior to this meeting. These were collated and presented back showing the current projects on water quality that the committee was aware of. They were also asked to identify the gaps that the projects were not covering to base their further discussions on. (Slides 7 and 8 in Appendix). The committee was finally presented with a summary table showing the gaps identified as priorities, current projects related to them, and the *Our Florida Reefs* recommendations that related to those priorities. The summary intended to visually display the projects and initiatives that exist for the committee members to have a context to their priorities which they could work from.

- DEP has revised biosolid rules for Clean Waterways Act to be more restrictive – maybe presentation or more info on that could be helpful
- Recommend getting different agencies involved to tap into to get information. DEP, South Florida water Management District and FWC are key.

- Not sure we got everything in the list, it's not a complete list of what is going on. Agencies probably have those lists, timelines, coordination.
- It's great getting what we know but agencies will have a full list
- Activity was exercise not intended to collect all existing projects
- Bringing agencies in and getting their lists might save us some time
- Also mentioned this before, perhaps Dr. Frazer who was looking after the state from a biology standpoint, or Noah Valenstein who is former DEP Secretary, or Brian LaPoint or Sean Hamilton. Someone who can talk about Clean Waterways Act
- If we get a committee of these people together would be great.
- Lacking DEP information. Good FWC information.
- Include municipality information as well for the areas we are servicing
- Get a database together with all this data
- Database could clarify communication, and cut through red tape that we keep running into
- Make sure that we connect with all the databases and have access to them
- DEP have some databases but not with all the databases requested. Can find links to the ones that exist. But timeline of project is not enough for what it would take to pull different databases together, and add to them (e.g. municipality data). Want to manage expectations, because large database is a great idea and can take steps towards it but cannot create it within timeline. But can be a recommendation.
- If agencies and governments are initiating projects without a database, then that is probably one of the problems that needs to be coordinated and addressed. Must be a central point where we don't do extra work, nor agencies, and we can coordinate.
- Can be creative with recommendations, they could also include ways of improving management and coordination
- check out DEP's website, Protecting Florida Together, <https://protectingfloridatogether.gov>
- Several S FL counties/municipalities have enacted fertilizer regulations, including Miami-Dade.
- There was a great presentation by FWC to the FL House last month on habitat/shoreline restoration projects in the Northern IRL that would be relevant here:
<https://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=3086&Session=2022&DocumentType=Meeting%20Packets&FileName=anr%2010-13-21.pdf>
- There is a lot of research but no action – they study a lot of stuff but not really solving anything
- That might change with all the money coming from De Santis, giving \$33M to Indian Lagoon. There are a lot of good things happening. State and organizations handling water quality projects are not doing a good job at spreading the word.
- There is a lot to be done. Look at fertilizer and Tampa Bay. There are things that could be done relatively quickly that would make a difference
- There is a lot of redundancy in the list. There is a lot of money being put into this
- Long list and extensive. Need to reduce it or come up with our priorities. Lot of these projects cost billions of dollars and there is no will power in the community or overall in the state to spend that kind of money. Biggest and most serious issue is Lake Okeechobee. Phosphorus has increased in twenty years from 40ppm to 240ppm.
- I have been buying bottled water for the last six months in West Palm beach because of tap water being polluted from lake O.

- Water quality is the number one issue affecting corals in SE Florida. Rather than trying to reinvent the wheel, there are a lot of things that are underway, so continuing those priorities, fund them and keep making them priorities might be a good step.
- Florida Keys National Marine Sanctuary has been tied to the South Florida Ecosystem Restoration task force, which deals with everglades restoration, so maybe making link between reef and everglades could be made a priority.
- Collaborating efforts together, know what is working and what not, and not have so many independent groups trying to solve problems alone. Getting all this into a database is important.
- Has been a lot of progress, even just in the last 24 months. But how do we move that data faster to the groups? How can it be trickled down?
- With agencies having common database it would make decision making more effective
- Have made a lot of strides in the right direction. But some things we should not need to still be discussing them.
- We have to get to where we can move things.
- People have ideas for what they want to put in their recommendations

Small Group Activity

Group 1 – George, April and Capt Dan

- Sewer-septic infrastructure – only interested in SEFCRI where the reef is
- Fertilizer reduction – bans for run off months
- Ban weed spraying in freshwater canals especially on the water's edge
- Run-off of major roadways – filter out chemicals and oils (Capt. Dan – noted it was attempted in Miami beach and didn't work well)

Group 2 – Harry, Gary, Patience and Bruce

- Fertilizer, ban in the summertime, identify which communities have bans? Fill in the gaps XX
- Living shorelines/bulkheads, mangroves, and seagrass restoration
- Keep pressure on municipal wastewater updates and run-off enforcements XX
 - Stormwater off I95 and major roads drains into canal and gets flushed out
 - How do we stop and catch more run off (trash in general from the land)
 - Discharge on Miami river when someone hits a pipe or gets rid of sand and a lot of run-off into Biscayne bay from river and downtown – enforcement or getting touch with lawmakers
- Keep pressure on septic to sewer conversion XX – how do we influence this? Determine funding sources? Plans to help with funding? 120K septic tanks in Miami alone
- Pressure for funding XXX
- Live-aboard – enforcing pump-outs
- Increase public awareness on each of these issues (Louis Aguirre at Channel 10) XXX
- Spraying in the canal – WMD

Group 3 – Chuck, Marty and Tom

- Insurmountable problems in Lake O and what does that mean for the rest of SF, pollution from north and south
- Septic conversion to sewage – concerns about cost impacts
- Run-off from all communities
- Generally concerned about costs for all issues and are facing almost unsurmountable odds
- Root cause is just too many people, developing and developing and developing
- Developers retain first 3 inches of water
- Development policy change

Discussion

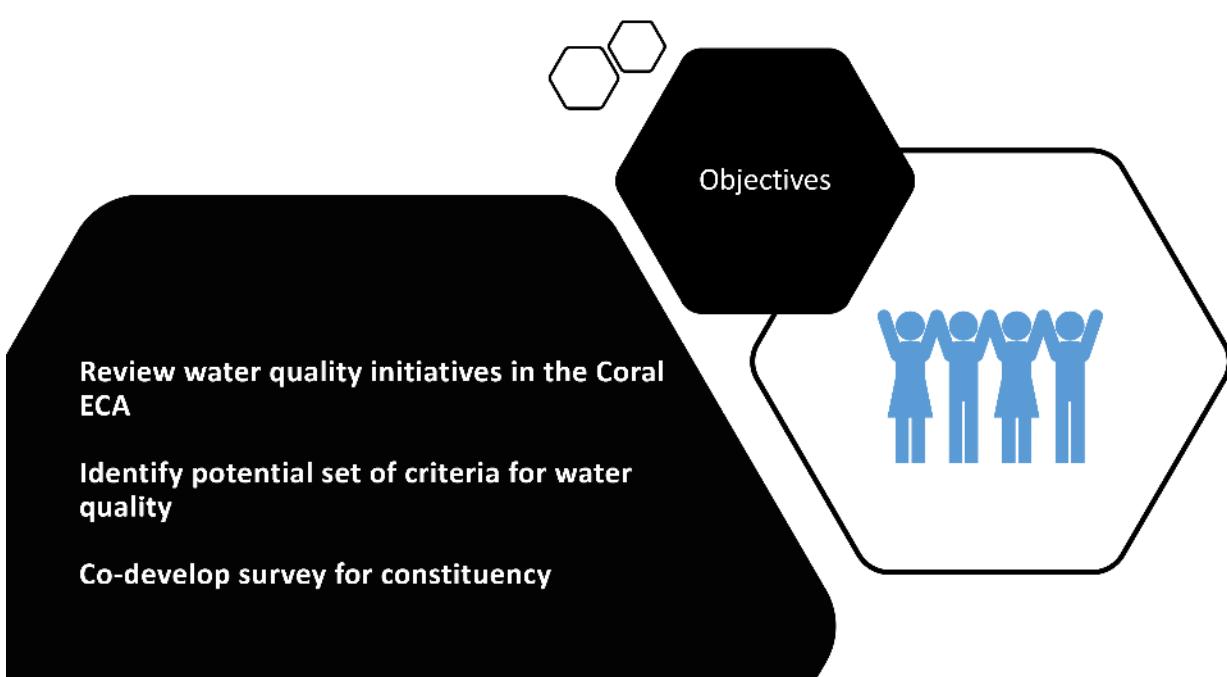
- Climate change as a comparison – is it a loss cause
- Over 550 million allocated and it is happening, way slower than we want but it is happening
- Money, political will, and power –
- There's too many people and there are great things happening but what about all the money being spent on new developments?
- Developers are required to retain first inch of water. That regulation hasn't changed in decades despite the amount of development that happened in Florida. If developers could agree to retain first three inches of water so that the water doesn't lead into the canals, then it would have a great impact. But developers have a stronger voice than fishermen. Hate to be cynical, but it is the reality. There are groups working on water cleansing groups, but all these people coming to the State and development, have a big impact. They have more power because they have high financial impact.
- It's a policy change, not a project
- Meeting today to update the water storm regulations.
- With no money in your pocket there is no power to influence political will
- Agricultural preserve around Boynton, tax payers pay to preserve as agricultural unit and is developed all around, and now these farmers want to sell for profit. They are now fighting for water rights for long term. Not for farming, but to protect their right to water eventually so that they can pave it over and have a new development. They are protecting their long-term investment.
- How can we mitigate long term growth?
- Managing water is not rocket science... it's worse than that
- Until there's the political will and money, these things won't happen
- Policy can happen but has to be backed up by money
- Weed spraying is a horrible idea for decades. Mechanical removal is a better remedy to the problem, but it costs money. You could change the regulation but need the funds
- It takes money, political will and policy changes.
- What don't we take our top three and then take these three and make that one of our recommendations. That we won't be able to make any of these without money, political will and policy change.
- If we have the opportunity to make these type of recommendations, we should because if we are not making those broader changes, then we are not making any changes.
- I am at a loss for words because for the last several years we had tremendous efforts by State government to clean our water ways, and everybody's acting like nothing is happening and that

is not true. Nobody understands how much is being done. I am disappointed. I bring it up in meetings that a lot of good things are happening.

- I am disappointed that nobody from DEP is getting up and talking about it
- \$400M this year but we need \$30B
- There is no political will to get all the things that need to be done

Adjourn

Appendix 1





Agenda

- 6:00 Welcome: Agenda and Reminders
- 6:15 Homework Review
- 6:40 Homework Feedback
- 7:00 Small Group Activity
- 7:30 Report Out
- 8:00 pm Adjourn

Group Norms

Customs, habits and expectations
for how things will be done



- Listen carefully
- Consider each idea
- Everyone participates
- No one dominates
- Tough on the issues, not on the people
- Minimize distractions

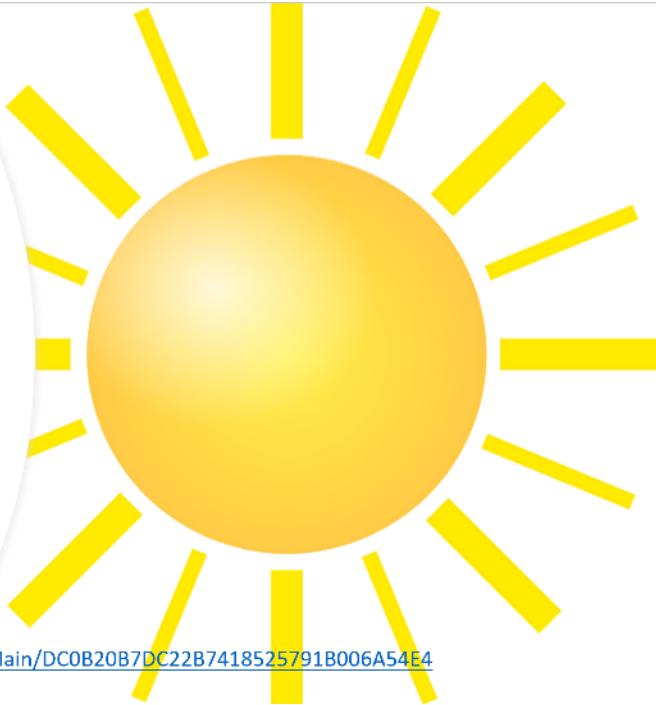
Zoom Related

- Keep your camera on
- Wave your hand to make a comment
- Unmute to speak

Sunshine Laws

- Public can attend the meeting
- Reasonable notice of meetings
- Minutes recorded and open to public
- The law, in essence, is applicable to any gathering, whether formal or casual, of two or more members of the same board or commission to discuss some matter on which foreseeable action will be taken by the public board or commission.

<https://myfloridalegal.com/pages.nsf/Main/DC0B20B7DC22B7418525791B006A54E4>



Homework Review

1. List of current WQ Projects
2. Identifying Gaps/Priorities

LIST OF CURRENT WQ PROJECTS

<p>NUTRIENT DISCHARGES</p> <ul style="list-style-type: none"> Septic tank replacements Keys Regulation septic tanks Sewer discharges phased out by 2024 Stormwater drain retrofits to reduce nutrient load into Lake Worth Lagoon and ocean Updated stormwater rules to address nutrients Contingency plans for power outages to minimize discharges of untreated wastewater for all sewage disposal facilities Financial monitoring of sanitary sewage disposal facilities – ensure fund allocation & maintenance Ensure compliance of ag operations with fertilizer use FWC Aquatic Plant Mngt TAG – stakeholder input on how to deal with invasive plants: maintain recreational use of waterways with reduced concentration of herbicides \$114M in grants to reduce nutrient pollution 	<p>WATERBODIES</p> <ul style="list-style-type: none"> C-51 reservoir: increase water storage, flow into Loxahatchee, reduce discharge Lake Worth Lagoon and inlets Tarpon cove: Create mangrove/spartina/oyster islands in Lake worth lagoon – increase habitat and naturally cleanse water 	<p>LAKE O.</p> <ul style="list-style-type: none"> Cleaning up and distribution of water from Lake O to Biscayne Bay and points south Clean water reservoir south of Lake O Lake O retention areas purchased and prepared Lake O System operating manual (LOSOM) – ongoing process Lake O mngt plan Filter nutrients before entering Lake O by creating bends to slow down and restore flow of Kissimmee river Keep Orlando area stormwater runoff out of Lake O with installation of wells north of lake EAA Reservoir south of Lake O: Store, cleans and sends water south to Everglades. Potentially curbs toxic discharges to St Lucie River
<p>RESEARCH & TECH</p> <ul style="list-style-type: none"> Studying transport of sediments nearshore (UF) SEAHIVE structure to brake storm surge and host corals (UM) Drone for water quality sensing and monitoring (FIU) Study of pollution sources affecting Biscayne Bay New dredging technology to know when and where discharges take place 	<p>IMPROVE FLOW</p> <ul style="list-style-type: none"> Bridges to bring more clean water to Florida Bay Replace Tamiami causeway with bridges: increases flow and filtration – decreases chances of release into St Lucie and Caloosahatchee 	<p>OTHER</p> <ul style="list-style-type: none"> Proposed Marine Reserve in Biscayne National Park Buoys in Jupiter Artificial reefs to combat beach renourishment

ID GAPS

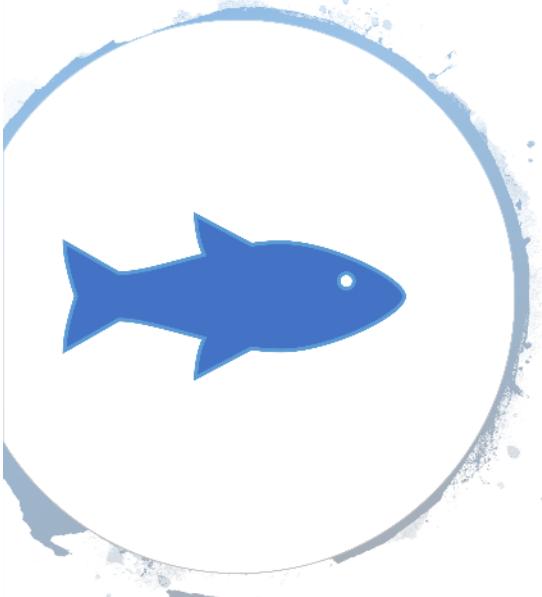
<p>HABITAT RESTORATION</p> <ul style="list-style-type: none"> Nursery areas including mangroves and grass beds in around inlets Living bulkheads need to be installed around all inlet areas to promote safe areas for young fish, crabs, shrimp, etc. Local canal areas lack seagrass and mangroves to naturally filter the waters 	<p>NUTRIENT DISCHARGES</p> <ul style="list-style-type: none"> Stop weed spraying – machine or hand cut Regulate weed killer and fertilizer usage on homes on canals and Biscayne Bay waterfronts consider fertilizer bans during the summer Stop dumping of sewage Changing to sewer system More legislation to convert septic to sewers Septic tank conversion to municipal water retain/distribute more storm water in upland areas before it ever gets released to tide accelerate Septic to Sewer conversions Filtering/Retaining stormwater Controlling pollution levels Better ways to dispose of biosolids banning biosolid laydowns in areas which drain to our lagoons. more aggressive removing built up sediments 'upstream' in our system of freshwater canals before it migrates to estuaries. 	<p>RESEARCH</p> <ul style="list-style-type: none"> Study impact of septic systems to coral reefs 	<p>BEACH RENOUR.</p> <ul style="list-style-type: none"> Alternatives to current beach renourishment 	<p>SPATIAL MNGT</p> <ul style="list-style-type: none"> Network of marine reserves
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YOUR PRIORITIES	CURRENT PROJECTS **	OFR RECOMMENDATIONS
Stop weed spraying – machine or hand cut	FWC Aquatic Plant Mngt TAG – stakeholder input on how to deal with invasive plants: maintain recreational use of waterways with reduced concentration of herbicides	
<ul style="list-style-type: none"> Regulate weed killer and fertilizer usage on homes on canals and Biscayne Bay waterfronts consider fertilizer bans during the summer 	<p>FWC Aquatic Plant Mngt TAG (Technical Advisory Group)</p> <p>Ensure compliance of ag operations with fertilizer use</p>	<p>N-68: Reduce and regulate fertilizers, herbicides, fungicides, and pesticides and promote BMPs to reduce nutrient and pollutant loading to improve water quality and provide protection to the reefs and promote the use of Florida friendly herbicides and pesticides to eliminate adverse impacts to the coastal environment and its watershed (P.1)</p> <p>N-8: Promote public education programs like “be Floridian”, “rain gardens”, “nature scape”, and “Florida Yards and Neighborhoods” to encourage eco-friendly yard and garden maintenance to help reduce the amount of nutrients and other pollutants reaching the reefs through residential run-off. (P.3)</p>
<ul style="list-style-type: none"> Better ways to dispose of biosolids banning biosolid laydowns in areas which drain to our lagoons Stop dumping of sewage 	<ul style="list-style-type: none"> Sewer discharges phased out by 2024 Financial monitoring of sanitary sewage disposal facilities – ensure fund allocation & maintenance Contingency plans for power outages to minimize discharges of untreated wastewater for all sewage disposal facilities 	<p>S-25: Strongly encourage elected and regulatory officials to oppose extensions to dates established in existing sewage treatment outfalls legislation to ensure the timely closure (prior to 2025) of all treated wastewater outfall pipes and build/upgrade infrastructure for advanced water treatment and reuse capacity to improve ocean water quality (P.2)</p>

YOUR PRIORITIES	CURRENT PROJECTS**	OFR RECOMMENDATIONS
<ul style="list-style-type: none"> Changing to sewer system More legislation to convert septic to sewers Septic tank conversion to municipal water accelerate Septic to Sewer conversions Study impact of septic systems to coral reefs 	<ul style="list-style-type: none"> Sewer discharges phased out by 2024 Septic tank replacements Keys Regulation septic tanks 	<p>N-78: Reduce ground water pollution from sources such as septic and storage tank infrastructure to watersheds associated with priority reef areas to improve water quality and reef health (P.1)</p> <p>S-25: Strongly encourage elected and regulatory officials to oppose extensions to dates established in existing sewage treatment outfalls legislation to ensure the timely closure (prior to 2025) of all treated wastewater outfall pipes and build/upgrade infrastructure for advanced water treatment and reuse capacity to improve ocean water quality (P.2)</p>
<ul style="list-style-type: none"> retain/distribute more storm water in upland areas before it ever gets released to tide Filtering/Retaining stormwater 	<ul style="list-style-type: none"> Stormwater drain retrofits to reduce nutrient load into Lake Worth Lagoon and ocean Updated stormwater rules to address nutrients Keep Orlando area stormwater runoff out of Lake O with installation of wells north of lake 	<p>N-82: Support and promote existing and create innovative new initiatives that increase storm water storage, and reduce stormwater runoff, enhance treatment, increase reuse, and reduce nutrients and other contaminants to the watershed, especially from surface water, to restore healthy estuaries (P.1)</p>
<ul style="list-style-type: none"> more aggressive removing built up sediments 'upstream' in our system of freshwater canals before it migrates to estuaries. 	<ul style="list-style-type: none"> C-51 and EAA Reservoirs Filter nutrients before entering Lake O by creating bends to slow down and restore flow of Kissimmee river 	<p>N-69: Support and provide money incentives and initiatives to restore and preserve wetlands north of Lake Okeechobee to stop discharges to coastal estuaries to protect estuaries and reefs. (P.1)</p>

YOUR PRIORITIES	CURRENT PROJECTS**	OFR RECOMMENDATIONS
<ul style="list-style-type: none"> Nursery areas including mangroves and grass beds in and around inlets and local canals Living bulkheads need to be installed around all inlet areas to promote safe areas for young fish, crabs, shrimp, etc 		N-70: Protect and restore mangroves, seagrass beds, oyster reefs and other estuarine habitats. (P.1)
Controlling pollution levels	Drone for water quality sensing and monitoring (FIU)	<p>N-71: Maintain and coordinate a unified monitoring program to detect, identify, and eliminate sources of pollution flowing through inlets to improve water quality and protection to reef. (P.1)</p> <p>N-97: Target, prioritize, and implement LBSP (land-based sources of pollution) reduction activities at identified pollution hotspots within SEFCRI watersheds to improve coastal water quality. (P.1)</p>

YOUR PRIORITIES	CURRENT PROJECTS**	OFR RECOMMENDATIONS
<ul style="list-style-type: none"> Alternatives to current beach renourishment 	Artificial reefs to combat beach renourishment	<p>S-120: Improve management and maintenance activities of beaches to reduce impacts to coral reefs (including nearshore reefs), make beaches more sustainable, and minimize need for future renourishment projects. (P.1)</p> <p>S-124: Facilitate the creation of regional (inlet-to-inlet) beach management strategies, such as can be achieved through a beach management agreement (BMA), which take an ecosystem approach to projects such as beach nourishment and storm-water pipe removal to maintain beaches and protect resources. (P.3)</p> <p>S-110: Eliminate over beach discharge of water to eliminate those sources of beach erosion reducing the amount of beach fill needed which may improve near shore water quality (P.4)</p>
<ul style="list-style-type: none"> Network of marine reserves 		N-146: Establish and implement a Marine Protected Area (MPA) zoning framework for areas of special interest within the OFR region to enable sustainable use, reduce user conflict, and improve coral reef ecosystem conditions. Tools that could be used to improve coral reef habitat may include no-take reserves, no anchor areas, restoration areas, and seasonal protection for spawning aggregations. (P.1)



Small Group Activity

Objective:

- First thoughts on gaps and priorities

Activity (30 mins)

4 groups. Each group will discuss 3-5 main areas related to water quality that they would want to:

- **Emphasize**
- **See changed** (e.g. rewriting OFR recomm.)
- **See addressed** (that isn't already being addressed)