



Coral ECA Fisheries Stakeholder Committee - Meeting 10 part 1 Virtual meeting via Zoom 6-8 pm, Tuesday February 8th 2022

Summary – February 8th

Overview

On Tuesday, February 8th the first part of two of the tenth Fishery Stakeholder Committee meetings was held virtually via Zoom. Project principal investigator Kai Lorenzen, facilitator Joy Hazell and co-facilitator Susana Hervas attended the meeting.

Fourteen committee members, five members of the public, one Florida Fish and Wildlife Conservation Commission staff, and four Florida Department of Environmental Protection employees attended the meeting.

The meeting objectives were to:

- Review emerging recommendations
- 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 – highlighting *listen carefully, consider each idea,* and *tough on the issues, not on the people* - and sunshine law (Slides in Appendix 1.). Committee members were also reminded that we are in the final stages of the project and the end of project is coming up in June 2022. The concept of Gradient of Agreement was introduced as a decision making tool to be used in future meetings, and the members were also reminded about the channels for public input; an upcoming survey to stakeholders and a second public meeting for input and feedback of final recommendations. The zoom chat was available for comments from the team, public and committee (Appendix 2)

Review: Emerging Recommendations

The committee had been sent a survey with the compilation of recommendation ideas that had come up during the meetings. They chose from a 3 degree scale their level of agreement: "Like As Is", "Needs further discussion", and "No, not a recommendation". Fourteen out of eighteen members had responded and the results were color coded and shown back to the committee.

It was again clarified that the recommendations made are taken up by the pertinent agencies and resources must be available to allocate to these. At the same time, knowing that the committee has agreed in a recommendation carries weight of its own.

The last question in the survey asked about missing recommendations, and two came up. These were brought up to everybody's attention: 1) "Ban the discharges into the Loxahatchee river. They have killed the river and the reefs east of Jupiter island are next", and 2) "The challenge of working with four political counties"

Five top water quality and five top fisheries recommendations were presented for discussion.

Group Activity

The activity this session was to begin finalizing the list of recommendations, looking at the top five water quality, and top five fisheries related recommendations. The group discussed them in detail, and eight out of ten were discussed. Below are the notes taken during the facilitated session:

Water Quality Recommendation:

1. Have a goal to decrease herbicide use (amount or percent) through best practices

- Two issues: Companies buy/use herbicides, not the individual homeowner. They can do a better job, they know what they are buying. How many people will involve themselves in those best practices?
- Homeowners abuse herbicides/fertilizer and goes directly into the waterbody.
- Lot of new people moving into Florida who might not know what they are using
- Like it, but how are we going to do this?
- Doesn't need to be operationalized now, that is agencies' role
- There must have been something done on it already.
- Like it but state legislature has disallowed municipalities and counties things like not allowing to use herbicide, etc. Not allowed to do it. Must come from the State, and it doesn't look as it would happen. Get legislature and governor behind it otherwise it won't happen.
- Add pharmaceuticals to this recommendation
- Good to see rake vs spraying boats in freshwater
- Pharmaceuticals can be a different recommendation different mechanisms
- Some bills to look at different ways of collecting, e.g. rakes. Another study in Lake O. funded by DEP and FWC and legislative bill to get more funding to get these out mechanically instead of spraying. Getting government and legislature behind it is a whole other process
- There is seasonal ban on herbicide and not sold. Raises awareness among users (done in Massachusetts). Could be done here as well.
- FWC is focusing on larger projects. We can focus on individua homeowners to understand not to use these chemicals.

- This group encourages the state to continue their exploration of alternative methods of herbicide use in large waterbodies while encouraging to educate homeowners to reduce herbicide use and fertilizer.
- FWC TAC meeting at UF and toured plant management facility. They work day and night not make sure we don't use excessive amounts of chemicals. We don't need to reinvent the wheel.
- Also canal systems, because they feed into Bay system and chemical spraying leads there
- Rake dredging already dead plants
- Break it down per county or to state go for a larger picture and bring in different aspects under this
- Herbicides and fertilizers have different effects on plants
- Herbicide municipality and government issue and fertilizer are an individual user issue, backyards.
- Also an agriculture issue.
- Not mix chemicals in one same recommendation. Chemicals vs herbicides.
- High level agreement with this issue with clarifications
- Need to define what is a large water body? Maybe state managed waterbodies
- Different level of governance for water bodies
- Maybe split it up to herbicide and fertilizer and encouraging government and individual action

2. Create an education program for homeowners to reduce herbicide use and herbicide best practices

Discussion:

- How can it be designed effectively for someone to review and let it sink in
- Tampa Bay was successful doing this research that and verify that it was the case. Could model after their program
- Homeowners associations can be very powerful. Have canals going through. One got in conversations about herbicides and talked about mechanical removing. They came up with a hybrid. Both spray and mechanic. Does not need to be all or nothing. Aim is to reduce.
- Hard to have people to comply so have State play a role in this one and lead by example.
- HOA in Martin would like it and state could lead by example.
- PR effort that had all counties involved in conjunction with the state. But different agencies in different counties doing different things.

3. Clean up lake Okeechobee

- Huge problem nobody talks about
- Farms north of the lake send water down with phosphorus

- Nutrients accumulate in Lake O.
- When water is high, water is sent out into both coasts
- Nowhere to send the water
- How do we keep farms from sending this cow manure and fertilizer down
- How do we clean it up?
- Lake is so polluted it will not recover. We continue to discharge from north. Have reservoirs to clean it to keep it from going south.
- Conversations for reservoirs north of the lake.
- Pollution continues to come in from north
- Sugar cane fields that back pump to lake
- Now tap water is also contaminated
- We will be second most populated state in the country
- Very complex issue big problem is the dike around it
- Rich soil for agriculture came from lake. But dike for flood protection and water supply, does not allow sourcing soil anymore. It will take a long time to fix
- We should include concept of everglades restoration. But worth keeping in.
- If we don't fix this, south Florida is going to be in trouble. So need to send the message even if we don't know how to do it.
- Everglades restoration looks at cleaning everything south of the lake, but will continue discharging east and west. Affecting St. Lucie and Loxahatchee.
- Is it possible that if we allow aquatic vegetation grow it could filter the water?
- Fishing in canals canals have openings to Biscayne bay, so when tropical storms come, they dump large amounts of water out. If we allow hydrilla grow there, then water won't be able to get out, and flooding will occur. That is why they are spraying.
- We shouldn't have built houses there.

4. Prioritize septic to sewer conversion in areas close to water systems

- Some neighborhoods don't want to do it unless someone else pays for it
- Agree totally but who pays and what is fair?
- Seagrass decreasing in past 15 years and manatees are starving
- But agencies are allowing water discharges, so starvation is man made
- With new mayor in Miami Dade homeowners won't have to pay for it, that's what we have to do. Possible to do it elsewhere
- Is it worth putting something about funding?
- Amount to hook up and pay in installments
- Make something mandatory if you're at a certain distance.
- "Prioritize and incentivize"
- Pull dollars together by communities
- Some counties you cannot repair septic. Must change

- Get tax rebate like for electric vehicles and solar panels. Can have a tax break to incentivize the homeowner.
- Not doable
- Coral Gables don't have sewage system. Would have to spend millions then homeowners would have to spend between 10-40k per house. Difficult to get this to happen
- Not optimism but a problem to be addressed
- 5. Filter run-off or retention spots to collect sediments and trash before it gets into the watershed i.e. I 95 widening projects.

Discussion:

- All of our roads run into the bay not just one project.
- Generalize this a bit more?
- Improving run off filtration from our roads.
- Sewage can comingle with stormwater and ends up in the water
- Anything that happens inside ends up in the reefs
- i.95 has retention

Fisheries recommendations:

1. Deploy more artificial reefs of varying structures to make habitat for different life stages and sizes of fish. Near the natural reef (not on it) and also inshore for bait fish.

- Given that 98% of reefs are dead maybe we are looking at it the wrong way.
- Have specially designed cement structures and placed long running on certain relief on depth zones, where key bottom fish come to spawn. Not on top, maybe running parallel. Now these fish have relief to spawn, and concrete will be hard to destroy. So it can sustain ecosystems long term.
- With ocean acidification, artificial reef can be deteriorated.
- Fish need relief. Relief grows other things that might not be stoney corals.
- Make tetrahedrons from cement blocks and use for artificial reefs
- Building reef darts for five years finding species that have not been found there before. Vertical relief attracts animals, can create new networks
- What we have talked about, has already been happening.
- Logisitically doesn't work out waterfront staging sites hard to find
- We are already doing it. Fishing club, and CCA. We can do more of it if there is more money
- What are we lacking? What areas? This can help leverage funding.
- Legwork from individuals and associations get things done. Connect with local stakeholders.
- Attempt to shorten the timeline, e.g. Permit times
- Concrete structure will absolutely work
- Anything that comes out, this should be at the top of the list and can make a huge difference.

- Can put in the intercoastal where we are losing habitat
- Artificial reefs have been supported

Wrap up and Adjourn

Appendix 1







Agenda



6:00	Welcome: Agenda and Reminders
6:15	Internal survey review
6:45	Group Activity
7:45	Wrap up
7:50 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

Clarifications



This is challenging discussion – strong feelings on each side

We (UF/DEP/FWC) have no preconceived ideas of how this should come out

We (UF/DEP/FWC/Hopefully you) do want a robust and respectful discussion

I will be facilitating carefully

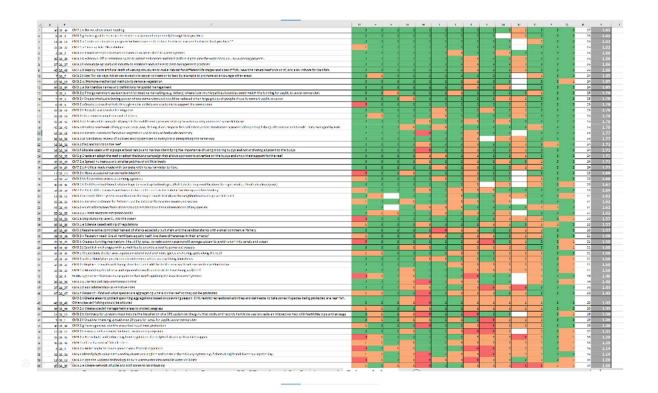
Sunshine Laws

- · 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

Review: Emerging Recommendations



What's missing

- Ban the discharges into the Loxahatchee river. They have killed the river and the reefs east of Jupiter Island are next
- The challenge of working with four political counties reminder to point out the broader picture considerations (political will, funding and policy change)

5 Top Water Quality Ideas

1. Have a goal to decrease herbicide use (amount or percent) through best practices

2. Create an education program for homeowners to reduce herbicide use and herbicide best practices

3. Clean up lake Okeechobee

4. Prioritize septic to sewer conversion in areas close to water systems

5. Filter run-off or retention spots to collect sediments and trash before it gets into the watershed i.e. I 95 widening projects.

5 Top Fisheries Ideas

Concept	Current status
1. Do not allow shark feeding	Already prohibited in state waters (entire Coral ECA)
Deploy more artificial reefs of varying structures to make habitat for different life stages and sizes of fish. Near the natural reef (not on it) and also inshore for bait fish.	
 Develop a network of key groups, CCA, ASA, fishing clubs, tropical fish collectors and to standardize a process of reporting fishing information and trends - data managed by FWC 	Already done, but not in a formalized way.
4. No anchoring on the reef	No anchoring allowed, but maybe enforcement is an issue?
Educate users with signage at boat ramps and marinas identifying the importance of using mooring buoys and not anchoring adjacent to the buoys	

Group Activity

Objective:

To begin drafting recommendations

Activity (30 mins)

In a large group discuss potential draft recommendations for the top 5 water quality and 5 fisheries related recommendation ideas



Next Steps

Thursday 10th 6-8pm

Appendix 2

ZOOM CHAT

00:33:46 Joy Hazell (she/her/hers): https://i2insights.org/2021/05/25/gradients-ofagreement-tool/

01:11:47 April Price: St. Lucie County also has a fertilizer ordinance in place. We are the county just north of the system that we challenged with

01:22:04 Katelyn Armstrong - PBC : Palm Beach County and several municipalities within PBC have fertilizer ordinances in place - some more effective than others. Reducing fertilizer loads is also a Southeast FL Regional Climate Change Compact goal, so more power behind the punch if you all work together on a solution.

Agreed on the power of HOAs. They have tons of power of large tracts of land.

Joy, what about the FL Friendly Fertilizer BMPs the state put out x years ago?

01:24:18 williamparks: Palm Beach County Parks sprays the shoreline in their shoreline areas of Lake Ida in Delray Beach and other places leaving barren shorelines.

01:26:26 Kellie Ralston: Maybe expediting Everglades restoration would be a better description of what is needed/intended here.

01:28:26 williamparks: The waters of Lake Okeechobee are the color of cocoa - completely compromised.

01:59:06 Katelyn Armstrong - PBC : Just in case it's helpful, we have 150 plus artificial reefs off of PBC alone. 54 of those are ships, the rest are reused concrete such as culverts, prefabricated modules and statues, and limestone boulder piles, all designed for relief. On Pbcreefs.gov you can see our interactive map of each reef with photos.

02:02:28 April Price: I agree Tom, just takes \$\$. Storage is a huge issue

02:03:25 Katelyn Armstrong - PBC : Please feel free to email me for info on the possibilities for artificial reefs. I'm the reef coordinator for Palm Beach County and permit each site

02:03:53 Katelyn Armstrong - PBC : Karmstrong@pbcgov.org

02:05:05 Katelyn Armstrong - PBC : Thanks, Derek! Yes we definitely design each site for specific purposes and everything Tom said is true about waterfront staging sites being the biggest issue at the moment.

02:09:24 Katelyn Armstrong - PBC : pbcreefs.com* not the link I sent before