



Fisheries and Conservation in the SE Florida Coral Reef Ecosystem Conservation Area (ECA): A New Stakeholder Process Public Meeting #1

Virtual meeting via Zoom 6:30-8 pm, March 11th, 2021

Summary

Overview

On Thursday, March 11th the first Public Meeting for "Fisheries and Conservation in the SE Florida Coral Reef Ecosystem C Conservation Area (ECA): A New Stakeholder Process" was held virtually via Zoom. This public meeting followed four Fisheries Committee meetings that began in June 2020. Project principal investigator Kai Lorenzen, facilitator Joy Hazell, project coordinator and online producer Susana Hervas hosted the meeting.

Fifty-eight stakeholders attended, including two Florida Fish and Wildlife Conservation Commission staff, two Florida Department of Environmental Protection employees, and one NOAA consultant, who compose the Project Team; fifteen (out of eighteen) Committee members; and thirty-eight members of the public.

Ana Zangroniz	Public
Andrew Duke (Andy)	Public
Angela Delaney	Public
Angela Smith	Public
	Committe
April Price	e
	Committe
Art Sapp	е
Arthur Mariano	Public
Barry Holeve	Public
Beth Dieveney	Public
Brian Walker	Public
	Committe
Bruce Marx	е
Bryan Brennan	Public
Call (unknown ID)	Public
Call (unknown ID)	Public
Cameron Jaggard	Public

	Committe
Captain Bouncer Smith	e
Cambain Dan Kinnia	Committe
Captain Dan Kipnis	e Committe
Chuck Collins	e
CJ Sweetman	Public
David Vance	Public
Dave Gilliam	Public
David Moss	Public
Dayana Castillo	Public
Derek Cox	FWC
Derek Cox	Committe
Ed Butch Olsen	e
Ella Castellon	Public
Erick Ault	FWC
Erik Neugaard	Public
	Committe
Gary Jennings	e
, 0	Committe
Goerge Poveromo	e
	Committe
Harry Vernon	е
Jack Harari	Public
Jamie Monty	DEP
Jennifer Baez	Public
	Committe
Jim Chiefy Mathie	e
Jimmy Zong	Public
John Houston	Public
	Committe
John Sprague	е
Joy Hazell	UF
Kai Lorenzen	UF
Kathy FitzPatrick	Public
Kellie Ralston	Public
Krissy Hewes Wiborg	Public
Kristi Kerrigan	DEP
Kurtis Gregg	NOAA
Liz Dutra	Public
Maria Dutra	Public
	Committe
Martin Arostegui	е
Melissa Sathe	Public
Michael Dixon	Public

Rebecca Ross	Public
Red	Public
Ryan	Public
Sara Thanner	Public
Shelby Thomas	Public
Sid Dobrin	Public
Stephanie Stinson	Public
Susana Hervas	UF
Thomas Reinert	Public
	Committe
Tom Twyford	е
	Committe
William Taylor	е

The meeting objectives were to:

- Share and inform about the project and the committee.
- Gather input on perceptions of reef ecosystem status and management/conservation issues and options.

Welcome and Project Presentation

The Project Team, and committee members were introduced to the public. The facilitator presented the agenda, objectives, group norms, described opportunities for input, clarified expectations for the meeting, and presented general results from a qualitative survey (Appendix A) that was completed by thirty members of the public who registered to the event. (PowerPoint presentation of this section can be found in Appendix B). Following this, the project principal investigator presented on the project (PowerPoint presentation in Appendix C).

Q&A and Information gathering

This section lasted one hour and twenty minutes and encouraged questions about the process and input on management and conservation issues. It was highlighted that the scope of this meeting was data gathering, not decision-making, therefore input was taken verbatim. Transcript is available in Appendix D. Committee members also had the opportunity to express their views and perceptions with the constituency.

Below is a short summary of the points made by the people who spoke. Other public input for public record received through the Zoom chat and online public comment form are available in Appendices E and F, respectively.

Summary of main topics during Q&A

Both public and committee members had varied perspectives. The topics that came up were the following (in order of appearance):

- What happens to conflicting recommendations?
- What is the focus of the project?
- Opinions on Marine Protected Areas (MPAs) [recurring topic]
- Need to define MPAs [recurring topic]
- Shark depredation
- Water quality [recurring topic]
- Contaminated canals and ways to stop it [recurring topic]
- Beach renourishment
- Artificial reefs [recurring topic]
- Finding a holistic / out of the box approach [recurring topic]
- Reduce ocean acidification
- Re-engineer the reef based on bringing in coral with different DNA subspecies

Wrap up

In closing, the public was thanked and reminded that there would be a public comment form available on the website for 7 days (from March 11 to March 18), and the next Fisheries Committee meeting date was announced (April 1) where the main discussion topic is to review the feedback from this meeting. The public was reminded of the project website

(https://www.flseagrant.org/fisheries-conservation-coral-eca/), and told that the team would create a mailing list with their email addresses and the meeting report would be sent to them directly.

Appendix A

Survey

A short survey was sent prior to the public meeting to those registered to the event. Out of the 105 registered public, 34 responded. This was a qualitative exploratory survey as a means to gather input from the interested public. These were the questions asked:

- 1. Name
- 2. Email
- 3. What stakeholder category do you identify with the most?
- 4. What is your biggest concern about the reef ecosystem and associated fisheries?
- 5. What are the three most critical actions to be considered?
- 6. If there is anything you would like to register for public record, please comment below:

Appendix B

Welcome Presentation



UF Team

Agencies – FDEP, FWC

Committee

Welcome and Introductions

Meeting Objectives

Share Inform about the project and the committee

Gather input on perceptions of reef ecosystem status and management/conservation issues and options

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Agen	W7

6:30 pm Welcome and Introductions -	
the	Committee and project team
7:00	Project presentation
7:15	Q&A about the project and collection of input
7:55	Wrap up and Adjourn*

Opportunities for Input



https://www.flseagrant.org/fisheries-conservation-coral-eca/

Concerns

improved genetics improvements

effectiveness diversity gamefish
kill beneficial assessment depressed investment
ecosystem recreational affecting fertilizer
larger behavior commercial acute bypassed individual regulations exploring good cover corals protection dredging careful fisheries across stony quality climate bag, genetic species gear concerned canals pollution disease sctld issues condition efficiency areas inshore fish coral water due response groups resiliency increasing reef fishing etc aggressive juvenile generally resource tissue habitat beach marine

effects animals decline growth divert adults health challenges including measurable deliberation las human continued restoration entanglement dramatic importantly harvested impact

Actions

Word	Length	Count	Weighted Percentage (%)
water	5	10	4.39
quality	7	8	3.51
reef	4	7	3.07
coral	5	6	2.63
disease	7	5	2.19
restoration	11	5	2.19
reefs	5	4	1.75
areas	5	3	1.32
fish	4	3	1.32
marine	6	3	1.32
active	6	2	0.88
chemicals	9	2	0.88
direct	6	2	0.88



Norms

- · Tough on issue, not on the people
- · Various participation methods will be an imperfect system
- Please hold your questions to the end of the presentation we will provide directions at the end
- Listen

Appendix C

Project Presentation

Fisheries and Conservation in the SE Florida Coral Reef Ecosystem Conservation Area (ECA): A New Stakeholder Process













SE Florida Reef Tract



Conservation/management initiatives so far

- U.S. Coral Reef Task Force adopted a National Action Plan to conserve coral reefs (2000).
- Florida DEP and FWC formed Southeast Florida Coral Reef Initiative (SEFCRI): Improve support for conservation and management of coral reefs in the Southeast Florida Coral Reef Ecosystem Conservation Area (ECA).
- SEFCRI conducted the Our Florida Reefs (OFR) process, a community planning process that identified and prioritized Recommended Management Actions (RMAs) (http://ourfloridareefs.org/).

What about fishing and the fishing community?

- Fishing stakeholders were included in the OFR Community Working Groups
- Their participation proved difficult to sustain and they expressed concerns about some of the fisheries-related recommended management actions (RMAs).
- Why? Fishing stakeholders perceived the existence of distinct "angler" and "diver/environmental" networks, and felt that the OFR process was driven by the latter.
- Fishing stakeholders felt marginalized and disempowered.
 They disengaged from the OFR process but opposed some of its outcomes through political channels.

SEFCRI, Fishing and the Fishing Community: A New Approach

- Fishing stakeholders have continued to express interest in promoting conservation of coral reef ecosystems and associated fisheries resources in the ECA
- The current project aims to re-engage the fishing community in SEFCRI to harness its capacity to promote coral reef ecosystem conservation and fisheries resources management in the ECA.
- Process is focused on the fishing community, facilitated by UF/IFAS team on behalf of SEFCRI.

Purpose

To harness the capacity of the fishing community (fishing stakeholders and industry) to advance conservation of the Southeast Florida Coral Reef Ecosystem Conservation Area (ECA).

(Capacity includes knowledge/experience, outreach/advocacy, and standing and commitment to achieving conservation outcomes for coral reef ecosystems and associated fisheries resources).

Appendix D

TRANSCRIPT

Getting started with zoom

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Joy: Hello. We can hear you.
And hi everybody we're just letting people in right now so we're going to give
it a few minutes. We are going to start right on time today.
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If everybody could just make sure they're muted, unless they're going to be speaking, just so we don't end up with a lot of background noise, that would be really helpful.

And we do have power to mute you.

Captain Dan, what?

George Poveromo: Joy, can you hear me.

Joy Hazell: I can hear you.

George Poveromo: Thank you.

Joy Hazell: So while we're waiting here I just want to let everybody know that we are waiting a little bit, we still have a minute before the meeting actually starts and will probably give it a couple of minutes after 6:30 because we did have 120 people signed up. We will not wait long because we have a really packed agenda and we knew people will come in and out but I'll just give them a few minutes because Sus and I are doing sort of the tech parts of this meeting and she's doing most of the heavy lifting letting people in and that sort of stuff.

Joy Hazell: I also want to let you know and I'll explain who I am in a bit, but my computer and Internet has already frozen twice in the last 30 minutes, so if I disappear or freeze Sus is going to take over she's got it, she knows what she's doing.

And then, if she freezes Kai will take over. And then, if all of ours freezes then Captain Dan is gonna take over.

Susana Hervas Avila: Maybe while we're waiting, this is Susana, I'm the person Joy was talking about. Maybe, while we're waiting whoever wants to change their name to whatever they want to be addressed by then that'd be great.

Joy Hazell: If you don't know how to change your name what you want to do is hover over your little screen, the little square that has you in it, and you should see a small blue box, with three dots. Click on that. And then you're going to go down six options and you'll see rename.

Captain Dan Kipnis: Can anyone hear me.

George Poveromo: yeah.

Captain Dan Kipnis: I can hear you.

Joy Hazell: Can you hear us.

Bill Taylor: yeah.

Joy Hazell: Dan if you can hear us give me a thumbs up.

Captain Dan Kipnis: I'm going away and coming back.

Joy Hazell: Actually, why don't we test that so everybody who's here if you can hear my abnoxiously loud voice give me a thumbs up and you can do it two ways. Give me a physical thumbs up. For those who we can see under reactions, you can give me, you can click on reactions and give me a thumbs up. Awesome.

Bill Taylor: Awesome, awesome. Where is reaction?

Joy Hazell: Reactions is at the very bottom of your screen, who asked you that?

Bill Taylor: That's Bill Taylor.

Joy Hazell: Ok Bill, are you on a computer or an iPad?

Bill Taylor: computer.

Joy Hazell: Okay, so, if you look across the bottom of your screen it should say mute, stop video, security, participants... No wait, I have too much. Chat, share, screen and then reactions.

Bill Taylor: Right

Joy Hazell: Can you see reactions?

Bill Taylor: Yep

Joy Hazell: Click on that. And then you should see a thumbs up. Yeah there you go. Okay. And then you click on it again and your hand goes down in theory. Mine is not going down.

Bill Taylor: I don't see my face up there, any more than, I lost you there.

Joy Hazell: Yeah we can't see your face either.

Welcome and Introductions

Joy Hazell: Okay, so it is 6:33, so why don't we go ahead and get started.

Yeah, so some of you won't have reactions if you're joining from a browser or if you're joining from your phone so we're just sort of limited in what we can do and we're going to make the best of it trying to make space for everybody to be able to contribute and provide input. So, we're going to get started, and while we're getting started today is going to be letting people in.

So what I'd like to do is I'm going to take a quick minute and pull the audience and we're going to use the same thing we're going to use either reactions or a hand raised physically or verbal hand raise it doesn't matter which.

What I'd like to know is who's here, and so my first question, I always ask every audience is, if you are raised born and raised in Florida go ahead and give me a reaction or raise your hand.

Ana, I don't think this works.

Okay, so we got quite a few. That's fantastic. If you consider yourself somebody who loves the Southeast Coral reef tract go ahead and give me a reaction or raise your hand.

Okay excellent if you participated in the Our Florida Reefs project, which we'll be discussing, which this is an auxiliary of, go ahead and give me a reaction to raise your hand.

And yeah any reaction will do you can do a thumbs up, you can do, you know, open mouth, I'm surprised, anything.

If you are a fisher please raise your hand, and you can be more than one of these things if you're a diver. There are some divers in here, if you are somebody who works in the management of the coral reef tract go ahead and raise your hands or give me a reaction. Okay, if you are super excited to be in a public meeting at 6:30 on Thursday go ahead and raise your hand.

Yeah we're all here. I sometimes think, you know, one of the benefits of these public meetings in this new space there's actually a couple benefits. I think it really opens up people's ability to participate and that's fantastic, it also means if you have your camera off and even if you don't have your camera off, you can participate with an adult beverage if that's your choice. Those of us who are working today are not participating in that way, so with that I'm going to go ahead and share my screen and tell you what to expect for the day or I'm going to share my screen just as soon as I open the PowerPoint that closed when I had to restart my computer. That kind of day.

Can everybody see the document that I just put up? Okay, so I now cannot see you so Sus is going to help me out. With this we're just going to go through this really quick and what I'm doing right now is I'm sort of setting the stage for the rest of the meeting.

So I want to start with welcome and introductions. We started with you all got a little bit of knowledge about who you are. There are 49 people in the meeting, so we can't go through each individual person, but what I would like to do is first, introduce the University of Florida team, so you know who we are, and I'll start I'm Joy Hazell. And I am the lead facilitator of this project and I'm located in Gainesville. So Sus.

Susana Hervas Avila: I'm also working in Gainesville. I am the coordinator of this project and the person you'll be receiving emails from and communicating with.

Joy Hazell: And Kai.

Kai Lorenzen: I'm Kai Lorenzen and I'm a professor of fisheries and also the leader of the Fisheries and Aquatic Sciences program also located in Gainesville.

Joy Hazell: Then I'm going to have the agency folks who are partners on this introduce themselves. I'm going to start with the Florida Department of Environmental Protection and Jamie.

Jamie Monty: Hi everybody, I'm Jamie Monty, so I am the southeast regional administrator for the Florida Department of Environmental Protection, so I oversee DEPs Coral Reef Conservation Program. Biscayne Bay aquatic preserves, the Florida Keys aquatic reserves, and the whole management of the Florida Keys natural marine sanctuary, which is a partnership between NOAA and DEP.

Kristi Kerrigan: Hey my name is Kristi Kerrigan, I'm the manager of conservation program and we manage the northern third of the reef tract within the southeast Florida coral reef ecosystem conservation area, which is the focus of this project.

Joy Hazell: Derek.

Derek Cox: Derek Cox with Florida Fish and Wildlife Division and Marine Fisheries Management. I'm the regional biologists for southeast Florida.

Joy Hazell: Erick.

Erick Ault: Hey I'm Erick Ault I am the research administrator at the Tequesta field lab and my group primarily handles marine fisheries research.

Joy Hazell: And Kurtis Gregg.

Kurtis Gregg: Good evening I'm Kurtis Gregg a contractor with NOAA fisheries service southeast regional office habitat conservation division. My position provides technical assistance and support for the state of Florida's conservation program as well and NOAAs quality conservation program.

Joy Hazell: Those were the agency folks but at the end the most important people in the room, the people who you will be here to listen to you and working on this project and volunteering a ton of their time are the committee.

And what I'd like committee folks to do is go ahead and raise your hand and keep it up there, so people can put their eyes on you. I'm not going to necessarily have you all go through and introduce yourselves, because I think it would just end up taking so much time. You probably know a lot of these folks. Keep your hands up just for another minute. I'm going to let people kind of scroll through who we have here.

Their information, I'm going to give you a website in a little bit, and you can find all their names and info on the website too.

I suspect, a lot of you in here know a lot of these folks, and they have been instrumental already in getting the Info out about this meeting and talking with their stakeholders and are looking forward to hearing from you today. I'm sort of putting words in their mouth, but, seeing as they all showed up I'm going to assume that's true.

Okay, thanks folks, so why are we - although we've had, I believe, four committee meetings, Sus, Jamie, am I right? okay.

We're still really in the stage setting part of this project and Kai is going to go through and explain what this project is. What we wanted to do at the stage setting is get everybody who's interested up to speed on the process of the project and the purpose of the project. And then we want to gather information like we've gathered from our folks over the first time we're meeting just basic information on what you're concerned about around the reef and to this end we did send out a survey that I'll go over in just a second, but this is what the meeting agenda looks like so we're in the welcome and introduction section, and I am trying to keep it as brief as possible so that we can get into the meat of it. Then Kai will spend about 15 minutes going over the project.

And then we're going to open it up and talk about what that looks like. Okay and the purpose of opening it up are twofold: So the first is to answer any questions about the project that you have, and the second is to gather some input on some very specific questions. And that's going to be a fun. A fun challenge, I think, with about 55 people in the room, so we are going to - which is exciting - but we're going to ask for patience as we gather input.

Speaking of input we're going to provide multiple ways, methods and opportunities to provide input. On the left hand side you're going to see the way you can provide input around today's meeting.

So the first way is - we're going to talk about when we're done how you can speak. okay.

If you choose to speak, we're going to create a system of speaking I'm not going to go into that now because it's just going to be confusing. We'll wait until after Kai is done.

But if you're the person who doesn't like to speak in public or is more articulate in writing or anything like that you can use the chat box and provide input through the chat box, that will be saved as public record.

You can do it to everybody, you can do it privately to Sus or I, and we will take your name off it, but it will be public record.

Because of the number of folks in the room it'll be virtually impossible for us to monitor the chat and respond to it so really be just a collection of information and public record. Does that make sense for the chat?

Okay, we are also going to - we have provided you with the survey.

How many people were able to reply to the survey that Sus sent out? So for those who didn't, we're going to put the link in the chat right now, and you can feel free to jump put stuff in so we have it, we do have the results of that in a second.

And then, finally, if you know folks who have not had the opportunity to come to this meeting, we are recording it. And you can watch it on the website which is down here I'm going to put in the chat at the end and we're going to share the page with you in a second, so you can, if you want to you can take a photo of it, or you can wait till it goes in the chat and we will send it out in the email, because we have all of your emails, etc. Okay.

And there will be a seven day comment period with a form that you can provide input on that website, so this are the three main methods of providing input and then of course verbally, which again we'll create space for after the presentation. But we just have to do it very intentionally to make sure, because I can't see everybody and I won't necessarily see everybody if you're trying to speak so I want to make sure we create a fair system.

I also want to acknowledge this is the first in a series of opportunities for public input on this process and so probably within the next six months, if I recall correctly, on the schedule – Sus, you have a better sense of that, I think that I do – we will be sending out a survey trying to gather really in depth information from not just the folks who can show up to meetings, but all sorts of people who have a stake in the resource.

We will have we have committee meetings once every other month and we do send out public notices of all those, and you are now all in our email list so you will be notified of all these meetings, and then we will have an additional public meeting so this is not the only time to provide it.

So, speaking of input we did write to you and ask you to provide information to let us know what your biggest concerns were about the reef as well as three potential actions. And this was not a quantitative survey, but we thought it was going to be interesting and so Sus put them into a word cloud so I'll give you a minute to take a look at this PowerPoint, and we'll also make pdf's and put on our website to take a look at what we've heard from people. And I will say the response rate right now is 30 people responded to it, so we've got 55 people in the room and 30 responded but it's still an interesting number and

 $\ensuremath{\text{I'm}}$ just going to give you all a few minutes or a few seconds to read that over.

And while I'm doing that, okay, we also asked actions and we found it actually a little bit challenging to put this into a PowerPoint slide.

So in the chat you should see a PDF document, if you choose to open it and then has a little more detail on the recommended actions we just want to sort of show you what we heard so far.

Can everybody see the chat and see the documents? Okay, well, I see at least a few people can and again that will go on the website so just to sort of start to put a starting point, what we've heard, and these are the kinds of things we're going to want to hear from you as move forward.

I mentioned the website, we do have a dedicated website, again, we'll put the link in the chat. We'll do it several times, because if you're anything like me you won't open it the first time and then it'll get lost in your chat you won't know what's going on.

In addition, this is just a picture of it, in addition to all the public meetings we're going to have recordings, anything you want to see all transcripts those kind of things. There's also Sus' contact information email. I want to say she's wonderful at being the contact person and getting back to you, so if you have any questions she's who to speak to.

And finally, I want to sort of go over a few of what we call norms so sort of status of what to expect for this meeting, and I just put a few up here, we want to start with: We knew that there is a lot of passion and love for this resource and we want to really engage you in conversations, but, this is something I use universally in all of the meetings I facilitate we ask people to be tough on the issues, not on the people. We mentioned the various participation methods and I'm pretty familiar with zoom but it's harder with this many people so we're just going to do the best we can, and I don't mean that like we're just going to do the best we can. We really have a plan we're going to work at it, it's going to be imperfect, so we asked for a little bit of patience. I've already mentioned that my computer's frozen twice already today and it's just sort of hard to see you all so if you are having very specific problems you can feel free to try to private chat with Sus or I or just unmute yourself and say, hey I've had my hand raised for a while and I haven't been heard from.

When Kai gives the presentation. Once he's done, we're going to stop. We're going to put up a word document and we're going to ask who wants to speak and we're going to ask first for people who have questions about the process and then for people who want to gather input and we're going to create a list on that word document and we're going to go down that in order. Does that make sense? That's sort of what the process is and what we're expected to do.

I see some thumbs up.

That's the part that I'm really going to - Sus and I are going to work really hard on and make sure it works, but I would like you to let me know if I'm missing somebody you know, without necessarily everybody yell at me but, you know, Jamie the same thing, like Jamie if you see somebody or Erick or all those folks, the more people paying attention to participation, the better it

will be. It's much easier in a room where I can actually see you all but we're online.

And then, this is another thing that we always put up there just listen empathically to people that you typically, that you might disagree with. We don't expect universal agreement, and this is really just an input gathering space, but I just always put it up there.

So with that I am going to... Does anybody have any pressing questions about the process right now?

And if you do go ahead and use the reactions and the hand raise. Okay excellent and it should be noted, you should have all seen this when you came in, we are recording this. And, of course, all comments in chat and verbally are public record, I think, as you know, this is in the sunshine so just so you're aware of it, and with that I'm going to turn it over to you, and Kai you can start sharing your screen. Don't forget to unmute yourself.

Presentation

Kai Lorenzen: Thank you, can you hear me.

Joy Hazell: Yes.

Kai Lorenzen: Okay, and can you see my screen.

Joy Hazell: Yes.

Okay, let me make sure... There we go. Okay, yeah, well thanks, thanks Joy and thanks everyone for joining us this evening. So what I want to do is give you a little overview of this project which we call Fisheries and Conservation in the Southeast Florida Coral Reef Ecosystem Conservation Area ECA: The new stakeholder process. And so the area we're talking about, you can see, on the map here in orange, so it's the northern most part of the Florida reef tract and it's an area that is characterized by coral reef ecosystems close to shore. Very urbanized, fishing being very, very important fairly high fishing effort in the area and so far less of a coordinated management conservation plan than the more heavily protected areas to the south, so the Biscayne Bay National Park and the Florida Keys National Marine Sanctuary in terms of conservation management initiatives so far. The US coral reef Task Force, adopted a national action plan in 2000 and upon that the Florida DEP and FWC formed the Southeast Florida Coral Reef Initiative or SEFCRI and so that's a multi stakeholder multi agency collaborative if you like, with the aim of improving support for conservation and management of coral reefs in that area.

SEFCRI conducted a major stakeholder process called Our Florida Reefs a few years ago, basically a Community planning process that identified and prioritized recommended management actions for this area. Fishing stakeholders were included in the OFR community working groups, in fact, some of you who are here today were involved in that process.

However, the observation was that their participation proved relatively difficult to sustain and they expressed concerns about some of the fisheries related recommended management actions and Susana, who is here, actually at the start of our project did some very extensive interview studies, with people who were involved at that stage and found that really, there was a

perception of sort of two fairly distinct networks that were involved more of an angler community and the diver environmental network. And the fishing stakeholders felt that the process was very much sort of driven by the diver environmental network and they felt somewhat marginalized as a result of that. Eventually many sort of disengaged from that process and opposed some of the recommended management actions through other channels.

So, what we're looking to do is basically to fill the gap that was sort of left in the management recommendations that came out of the OFR process, specifically with respect to fisheries and the fishing community. And fishing stakeholders have continued to express an interest in promoting conservation of the coral ECA and the fisheries resources within it. And so what we are doing with the current project is really to try and re-engage that community in the SEFCRI process to harness its community to promote coral reef ecosystem conservation and fisheries resource management within that area and so it's a process that is focused on the fishing community facilitated by the UF IFAS team, on behalf of SEFCRI.

So the overall purpose as I said is to harness the capacity of the fishing community to advance conservation of the coral ECA. And capacity here includes multiple things that includes their knowledge and experience, ability to engage in outreach and advocacy around conservation of the coral ECA, standing and commitment to achieving conservation outcomes and for both the coral reef and the associated fisheries resources. And specific objectives are to strengthen the engagement of this community and SEFCRI, review the broad recommendations from the overall process and progress with implementation, and so also opportunities for fisheries stakeholders to promote uptake of recommended management actions they support. Also develop a set of fishing related management recommendations to enhance both coral reef ecosystem conservation and fishing quality, communicate with the wider fishing and other stakeholders about project process and outcomes and to consult with the SEFCRI team, the technical advisory committee or TAC and other stakeholders to obtain feedback from diverse perspectives.

So this is how this is sort of made up, but basically at the heart of it is a committee that was already introduced and everyone on that committee pretty much is there as a representative of a larger constituency, and so we have people from the recreational, fishing charter, from commercial fishing from the Marine industries and others, and so the Committee will provide recommendations to the SEFCRI Chair and SEFCRI will then basically, promote those recommendations to the relevant management agencies and the UF IFAS team is here to support this process through facilitation, communication, providing access to science. The UF team is here you've already seen us all, really, in the Center here is Susana Hervas who is our project scientist and coordinator for this project Joy Hazell who is our chief facilitator and myself as the overall leader of this project.

This is the activities sort of timeline and basically, we started middle of last year, and so we're a little over half a year into the process now. The whole process is meant to take two years and we started with forming the committee, talking about perceptions of reef ecosystems status management issues and options, review of scientific information, so we had a series of presentations of scientific information on both the reef ecosystem and fisheries.

And at this stage, so this is when we have a public meeting that's what we're having tonight. Originally, we had intended to have sort of multiple public

actual in person meetings but Covid threw a spanner in those works, but we hope that future meetings we can have in person and somewhat distributed in the area of the ECA.

And so here it's about informing the public about the project and obtaining some input. And next we will continue our review of the broad OFR recommended management actions, identify potential fisheries management actions and then we'll undertake a synthesis of scientific information in relation to those. And we will develop and co-develop with the committee a stakeholder survey to get feedback on potential recommended management actions. And then, so that's another time but we're reaching out to the wider constituency and then we'll review the results of that survey and prioritize recommended management actions and there's going to be another public meeting or a set of public meetings at that stage and then we're hoping to finalize those recommendations.

So, what will happen with recommendations, as I said, the committee will make recommendations to the SEFCRI Chair and the Chair will provide those to the appropriate management agencies and then those agencies will decide what to take forward in the work plans and the rule making process, so, and this is so that there are questions of course, we are having a process that is meant to engage this stakeholder group, and you know, help us collaborate and come up with good recommendations.

And of course people ask questions about accountability and the voice of non-fishing stakeholders and basically, of course, this fishing stakeholder process is auxiliary to SEFCRI and agency rule making so it's not a replacement of the other things that SEFCRI does or of the rulemaking of agencies. It's meant to be additional to that. All the meetings that we have, and that goes for the public meeting here, as well as for all the committee meetings, are in the Sunshine, so they're noticed, they're public there are opportunities for comments and there are minutes that you can look at and we are getting feedback on the stakeholder process through multiple avenues, including regularly every time there's a SEFCRI meeting, either the team meeting or the technical advisory committee meeting we go and we talk about this process and its outcomes as those develop and gather feedback. There'll be the survey and, of course, there are public meetings of which this is the first one. And that concludes my presentation.

Q&A and Gathering Input

Joy Hazell: Thanks Kai so yep, so what we're going to do now is I would like to hear, and we're going to put this into two different sections so I'd like to see if you have a question about the PowerPoint about the project.

Go ahead and either physically raise your hand or use the reaction button and raise your hand and keep it there because we're going to put together a list of folks.

Question or comment about the process.

Am I missing something? Are we not seeing anything?

This is not what we expected, you guys!

John, I'm going to go ahead and let you go.

John Sprague: It seemed to me there we're more aimed at more fishing regulations and the input into that. Is that kind of a take that we're just looking at the moment, or is that the main... Because when you look at other things like water quality, or whatever, that's one of the big points to all of us. And sometimes fishing regulations can be perceived as low hanging fruit compared to some of the much more complex upland causes to problems with the reef fisheries and everything else associated. So anyways is that just a wrong take on my part, or just the first element or, help me with that.

Joy Hazell: So, Kai I want to put that to you and then Kathy I want to let you know I see you have your hand raised. You'll be next.

Kai Lorenzen: Yeah well, the aim is to consider both. It's things that you know, the fishing community can advocate for in the broader conservation realm including water quality and issues like that, and it's considering fishing in itself, as well as, as you know, something that we have particular expertise and particular interest clearly.

And so it's an opportunity for the fishing community to really consider these things and decide whether, and what they might like to do. So it's not... we're not here with an agenda of we want, we want this, or we want that. We want the committee to consider these issues and see where they want to go.

Joy Hazell: Jamie did you want to add something?

Jamie Monty: Yeah, just real quick. So it's good question John and I think you know, we kind of, the project team has debated this on several different levels, but essentially you know, to reiterate what Kai said: There are, you know, many different effects of fisheries, right? So it's the fish themselves, size abundance and location. It's the habitat that they grow up in and then before they move on to the reef, it's the water quality that they're living within, so all those things are certainly fair game.

But as we discussed the previous process Our Florida Reefs did go into quite a bit of detail on some of the water quality and other issues, and so, while the Fisheries Committee isn't, you know, stuff on just making recommendations about fish, we are going to look back to them or our recommendations and make sure we're not just kind of throwing those out the window. If there are things there that resonate with you all, you can certainly move those forward or compose some edits to them to make them your own, or if they're still separate as part of the overall OFR recommendations that have been finalized.

But you know, perhaps it could be improved upon, so you won't be limited to just talking about fish but just recognize that the gap that we have from all of our recommendations is really about fishing and less so about the habitat and water quality stuff.

Joy Hazell: So I have Kathy and then I have Chuck. I'm going to make sure I'm not missing anybody else. Kathy.

Kathy FitzPatrick: Oh yeah and it does kind of follow on nicely with what Jamie just said. In one of the last slides that Kai had it showed the really the process and how all this moves forward. And it showed the recommendations from this group coming to the SEFCRI chair and then being promoted to all the other agencies.

And as you said, this is an auxiliary to the OFR, they're different but they play in the same sandbox and I'm just wondering what happens if we have conflicting recommendations, how do we know that these recommendations automatically get recommended to the implementing agencies without having some input from the SEFCRI team itself?

Joy Hazell: So, I think that's probably a Kai and Jamie question again.

Kai Lorenzen: Maybe more of a Jamie question in fact. It's about the process but...

Jamie Monty: Yeah, so Kathy the draft recommendations that come from this fishing committee will go before the SEFCRI team and technical advisory committee for their review similar to actually exactly the same, I envision it as what happened with OFR so you know, if this recommendation works like run with it, or you know you might want to think about this data set or you know, the methods that you're proposing for this one I'm not really sure they're going to achieve your objectives that kind of feedback. So, you know, we're not going to say no, you can't do this, but ways that we can improve upon the recommendations that come out of the Fisheries Committee. Now, after the draft is reviewed by the SEFCRI team and the Fisheries Committee finalize their recommended management actions again just like Our Florida Reefs, they are recommendations to the agencies. And so the things that DEP can work on, you know, I take those up my chain. For things that FWC can work on or NOAA can work on, you know we work within the partners that we have on the SEFCRI teams to help them take up their respective chains.

There is no guarantees, you know that any agency is going to take up or not take up any one particular recommendation and so where there are things that may conflict, it will be up to the agency that has the authority to implement that for of which way they want to go, and I think, as we have those conversations, it will likely be a couple years down the road, but we can certainly engage the SEFCRI team if the agencies, you know, want some feedback, as far as which way we think our recommendation should go if we have conflicting ones.

Joy Hazell: Thanks Jamie, Chuck you had your hand raised.

Chuck: Yeah, I think John brings forth a very valid point regarding low hanging fruit and I think that was the purpose of this committee was to put together a lot of fishermen.

Chuck: To actually give input, not that it's low hanging fruit, but by putting together fishermen and people, divers, boaters, people like that a...

Joy Hazell: Did I freeze or did chuck?

Jamie: I think Chuck froze.

John Sprague: Chuck froze.

Chuck:... Have a good impact to positively affect the reef and not affect fishermen. I think it's important to get the fishermen's impact because if the rest of the folks involved with SEFCRI are making decisions and not including fisherman, there's going to be, number one, you're not going to have the buy in, and number two, there's always the law of unintended consequences that'll

end up biting us. So it's good to get the input from the fishermen. I think it'll make for a much better resolution to some of the issues.

Joy Hazell: Liz I saw you had a thumbs up. I wasn't sure if that was sort of an agreement thumbs up or if you wanted to provide an input or ask a question, and this is Liz Dutra or Detra.

Liz Dutra: I was just agreeing.

Joy: Okay.

Maria Dutra: Thanks, I'm here.

Joy Hazell: Okay Bruce I see your hands up.

Bruce Marx: Yeah, hi, thanks joy, thanks everybody. Just on this topic, and it comes crashing back to like yesterday when this happened, I can speak for myself and a lot of folks that I got involved in that SEFCRI action when they were talking about the N-146 issue.

And Chuck hit on it and some other folks did hit on it as well. I think that before any type of action is considered not only do you get the input of the fishermen, but the fishermen and the divers need to come together and ensure that they are speaking about the same thing.

A lot of folks on this call will remember that one of the reasons why I got so involved was because I saw the no take zone definition, I don't think that that was an intended consequence, but people didn't appreciate that when you went from the coastline out three miles you're now into the sail fishery.

And I went to a few meetings, and I said, listen I'm objecting to all of this because one, nobody really knew about the comment, and then, two, it was too late and I got an extra, I don't know, 1100 comment cards by everybody that was protesting the idea of moving the no take zones to the sail fishing grounds. And people at the meeting were like, no that's not what we intended, but I said, listen you did not intend that, but that's what your own documents say and that's why there was some uproar there so just speaking, you know, I'm a lawyer by trade, fishermen by passion.

Before you can regulate anything, especially when you're talking about no take zones, we got to make sure that everybody, that's in that zone has the opportunity to talk about that, and then talk about the areas and question otherwise.

We do get the blowback and that's why that N-146 I think got tabled because everybody realized that this is not exactly what we want to do to protect the reef and cause illegal fishing, when people are up there, flying their kites in an area that for the SEFCRI zone documents was a no take zone so I just wanted to throw that in there.

Joy Hazell: Thanks Bruce. I see Ipad, who I don't know who that is, has their virtual hand raised and Captain Dan. So, if Ipad could unmute themselves and tell us who you are.

Kai Lorenzen: Maybe I pad doesn't know that they're iPad.

Joy Hazell: Yeah. So, if you have your virtual hand raised and you're not Captain Dan if you could unmute yourself. I think you're moving around.

Joy Hazell: I can see you but you're still muted.

Captain Dan Kipnis: There's movement there but they gotta unmute. There you go. Unmute.

Joy Hazell: Do you want, you can put it in the chat. I'll keep an eye on you and if I see you unmuted Art, I'll go ahead and call on you. I'll move to Captain Dan now.

Captain Dan Kipnis: Thanks so much. Love to see this turnout. Bruce, one of the reasons I'm involved here is because of what happened, okay. So far, in all of our meetings we're not talking about no take MPAs at all. It hasn't even come up as... Now I'm not saying we won't go there, we still have another year to do or so, year and a half, but we have not, I think that one made a big impression, and what happened on SEFCRI and so far we have not really discussed that as an alternative.

We have discussed spawning aggregations and closing those to fisheries and protecting certain areas from anchoring, you know things of that nature water quality chemicals sewage all kinds of stuff. But we have not really talked about closing large areas of the reef and I don't know if that's even going to come up in this. Thank you.

Joy Hazell: And I didn't ask this before, but those on the committee when you do, do speak, please let us know, let the audience as Captain Dan's on the committee. Chuck who spoke is on the committee, John Sprague who spoke was on the committee, so these people are here today to hear from you.

Joy Hazell: I don't.. other than Art if he can unmute I don't have anybody else in my queue.

Captain Dan Kipnis: Is that Art Sapp that's there on that?

Joy Hazell: Yeah it is.

Captain Dan Kipnis: Come on, Art, we need to hear from you and he's on the committee too. Good email and text them.

Joy Hazell: Yeah you can. We're also, don't forget the committee's here to hear from you all who turned out so your input is really important

Joy Hazell: Bill did you want to say something.

Bill Taylor: Yeah, my biggest concern is water quality.

Bill Taylor: I run a charter boat out of the Jupiter inlet and we've in the last three years, started experiencing discharges from Lake Okeechobee and it's wiped out our whole river, every oyster every barnacle every piece of seagrass, which was crazy three years ago is gone and this discharge is going to kill all the reefs off of Jupiter island where the richest people on the planet live and that's not nice. So my concern, I went to college in South Jersey got a degree in marine science 45 years ago and my concern is, they banned septic tanks 45 years ago in New Jersey. Florida needs to come up with something to start cleaning up the water, the water is what's going to kill

the fishery. And it's not catching too many fish or catching the biggest or smallest fish, it's a matter of catching any fish and that's why I'm on this committee. I'm gonna push and push and push to see if we can clean up some of our water. So that's me that's all I want to say tonight.

Joy Hazell: Thanks Bill. Ana, I see you've got your hand raised.

Ana Zangroniz: Thanks Joy. And Bill, if you went to school 45 years ago you fooled me. Everyone, Ana Zangroniz, IFAS extension Florida Sea Grant and I'm also here as an extremely avid frequent recreational diver and I was also involved in Our Florida Reefs process, so I had just a couple follow up thoughts to some of the discussion. And I've met and worked with some of you in the past and it's nice to meet everybody else. With respect to the scary, I don't want to diminish some of the other comments, but with respect to N-146 marine reserves or closures. I just want to stress Jamie mentioned this in the beginning, that if that were a recommendation that came from the work that the committee is doing that would then turn and fall towards the agencies who actually have the capacity to implement that.

So they would still be seeking input, there would not be arbitrary lines drawn on a map or anything closed without substantial public input so I just want to stress that a recommendation is just that and it would be reviewed turned upside down, inside out, backwards and forwards, before anything became any sort of actual law or policy. And I also wanted to follow up to Bill's comment. I can't speak to what's happening in Broward and Palm Beach but Miami-Dade water and sewer is really actively working to try and make septic to sewer conversion possible. It's an extremely high priority and there's certainly a lot of challenges associated with that, including not just funding limitations, but you know, different homeowner, different demographics that make it more challenging. So I just want the group to have those things in mind.

And it certainly doesn't mean to stop making your suggestions heard because, ultimately, that really helps to start moving things forward thanks.

Joy. Thanks Ana, so I see Harry, but I see Art is back, so see if can unmute himself, and then Harry and then who Sus?

Susana Hervas Avila: No, I was going to say $\operatorname{Art'}$ s back so maybe we can hear from him.

Joy Hazell: He's unmuted so we're gonna hear from Art and then Harry.

Art Sapp: I traded machines here. Seems to be working now, so I wanted to know that Our Florida Reefs N-146 is not by any means tabled, that it is still their top recommendation, and [inaudible] fisheries management already let's do coral management, let's try to figure out how to save coral. Fish are doing what they're doing, and the managers are doing what they're doing and all on all things are not near as bad as a lot of people want to try to make it out to be, other than the shark situation. The shark situation is absolutely horrific.

379

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Art Sapp: And it's in too many situation not enough, but [inaudible] there's an agenda here that you're gonna have a hard time getting fishermen to join you [inaudible] again.

You can't hear me?

Joy Hazell: You're freezing a little Art.

Art Sapp: I apologize if you can't hear me. Is that what I'm understanding?

Joy Hazell: We can hear you in sort of fits and starts so I'm going to summarize, and I think you know what this is, this is just me summarizing. What Art was saying was that his input to the Committee, we have heard this is that FWC well manages the fisheries and they should be left with... I'm not, this is not my opinion I'm just summarizing what I've heard

Art Sapp: As well as the South Atlantic Fisheries Management Council we're gonna lose the fishermen.

Joy Hazell: And sharks have come up quite a bit too in the committee. Okay.

So, I'm gonna go Harry and then Arthur.

Susana Hervas Avila: Joy, there's a comment that I'd like to put in there when there's a moment.

Harry: Can you hear me all right.

Joy Hazell: Okay, one sec. So, Harry, Arthur and then Sus.

Joy: Harry are you the 305 number?

Harry: Yea.

Joy Hazell: Yeah we can hear you.

Harry: Okay, no, I just want to reiterate, you know, I'm on the committee also but they sprayed in the canal, this is the chemicals that a lot of people come and talk to me about and just last month, they sprayed down the canal, and I told you, sea grass was coming back I haven't seen them in a long time.

All that grass is already coming up, it's floating out into the bay. And it's just by the time the grass is already dying after they sprayed, and that was just recent, that was the last time I saw you. We had the meeting, so I just, it's something that we seriously need to stop right away is spraying with whatever they're using because it's killing everything which goes out to the bay.

Joy Hazell: Thanks Harry. I'm going to go Arthur and then Sus and then while we're going, Arthur is not on the committee but I really want to encourage the non-committee members to provide input because this is the purpose of this public meeting. I really appreciate that non-committee members are hearing the sort of discussions that committee members are having but what we're really here for is to hear from the non-committee members. This is your opportunity.

So for the committee members I'm going to try to ask you to not raise your hands for a little bit and see if we can create space for the non-committee members, is that okay?

Arthur: You want me to say anything now or not.

Joy Hazell: Yes I do, you're the next person Arthur.

Arthur: Okay Arthur Mariano here, professor of Oceanography at the University of Miami. Let me verify what Bill said because I went to school with him that many, many decades ago - he looks a lot better but, anyway, as a scientist it's no doubt we have water quality issues and that needs to be handled it's an expensive problem. It should be one of the number one things we're pursuing, but it is a very expensive problem, but something that we can do at a much cheaper cost in a much shorter time scale that would have the most positive impact on the reef is to establish marine protected areas.

There are hundreds of peer reviewed scientific papers that show the benefit of marine protection areas. This shouldn't even be discussed at this point in time, you know I could see discussing this a couple decades ago, but right now the science is overwhelming in favor of using marine protected areas, and if you set them up the right size and you give them adequate protection and actually make sure people are not fishing in them, they work and they work really well, I want to retire and fish here. We need marine protected areas, so you all you fishing in here really rethink your stance, we have groups like CCA, Keep America Fishing, that's against marine protected areas.

It goes against all science, so if you really care about the fishing in this area, get behind marine protected race.

Joy Hazell: Okay sus you want to add something.

Susana Hervas Avila: Yes, so there's a comment from someone and then Melissa wants to speak too so this comment comes from D Vance.

"What can we do to increase fish availability to help offset any limitations. For example, sinking more clean wrecks to foster fish as well as diving opportunities. Expensive, but some philanthropists might also support whether wreck are on the edge of no fishing or not. We know they spill outside to fishermen's advantage."

Okay, so that's his comment that he wanted to voice out and then well D Vance if you're there, and you can unmute yourself and want to add something else, please do so, otherwise Melissa wanted to speak.

Joy Hazell: Okay, Melissa and then, I have Alanna in here too, and I really thank you all for creating the space for us to sort of work through the zoom fun. So, Melissa.

Melissa Sathe: Hi, thank you for giving me the opportunity to speak, my name is Melissa Sathe I was involved with OFR. And I'm going to speak as a private citizen here born and raised in South Florida big diver I still work as a marine biologist. I'm going to basically just reiterate what Arthur said I know water quality is a giant issue, I'm very concerned with our stony coral tissue last disease recovery, I believe that water quality is going to take a giant societal shift to alleviate. But I feel very, very strongly and it's a long time coming, that certain areas, our reefs need protecting there's plenty of science behind marine protected areas actually improving our fisheries.

And if we can just get together and work together, I think it will be a massive, massive help to our reefs, and there are some beautiful, beautiful areas that could just use that extra protection and if we get the right amount

which there's a lot of science behind the acreage and area necessary to improve our ecosystems to protect that will help the non-protected areas of the ecosystem. There's just so much data and it is low hanging fruit, but there's a reason it can really help so that is my piece, and thank you for letting me speak.

Joy Hazell: So I've got three people in line and I see I've got Jimmy, Sid and Shelby in line, and am I missing anybody Sus?

Susana Hervas Avila: Then D Vance had something else to add and then Alannah has a question and Anna wants to make another comment if there is time.

Joy Hazell: Yep, so Alana is actually.. Jimmy you just changed your name right?

Jimmy Zong: Yeah I logged in with my daughters, so I'm trying to catch up with a lot of what you're saying for like this is the first time I'm hearing this N-146 MPA zoning framework recommendations, and I kind of briefed over it as you guys were talking and what I don't see on here is I don't see any references to this beach renourishment program and I'm a local beach diver for maybe 10 years since I've been here and it's very apparent that when I... So even like five, six years ago around Dania Beach around Hallandale, Dania Beach, Pompano, you'll see the first tract reefs being smothered by sand.

Every hurricane season it gets worse and worse and you can't, I mean there won't be fish if there's no reef and I don't see anything in this N-146 recommendation that addresses that. Is that even in your radar?

Joy Hazell: And Jimmy that's a really good question I'm not here to necessarily answer questions, but I will say that beach renourishment has come up in the committee. And we're going to take notes of your comments, and the committee will take this into play.

Jimmy Zong: Okay, as a private fisherman, I mean it's kind of like a tit for tat process I don't, we don't want to be the only ones to be giving up rights and freedoms, if we're not going to address every... everyone has to, you know, everyone who's causing a problem has to be addressed so when I see things that's been skipped like cities and their beach nourishments so that kind of causes a conflict.

Joy Hazell: Thank you, and like we said, the goal here is just to hear from you, so the Committee can come back and take in all of these comments for discussion, so I don't mean, I'm really just, we're just sitting on a listening process right now, so I have Sid, Shelby, D Vance and Andy is in my list and Ana, I have not forgotten you. But if you're okay with it, what I'm trying to do is go through people who have we have.. thanks. So, Sid is our next speaker.

Sid Dobrin: Thanks, I'll be pretty brief. I'm sort of responding to what Arthur said. Arthur I appreciate the identification of the data and the science in terms of closures.

The one thing I want to add to that conversation, particularly in high population areas, we also have data that shows when we do have closures in particular areas given the numbers of people, we have on the water that we increase pressure on other areas when certain areas are closed off, and so we have to really think about how that data is going to impact areas that are not

part of the closure areas as well, and so, while I appreciate everything you said Arthur I think that the picture has to be a little bit bigger than just closure, because it has not only impact on other non closed areas.

But it also then has direct effect on the economics of the surrounding areas both higher impact and lower impact, so I do think that, looking at that data is important but there's a little bit more to it than just closing equals this. So just wanted to put that in there.

Joy Hazell: Thank you. Shelby is next.

Shelby Thomas: Hi, can you hear me OK? I think I may know some of you guys. Just a little background — I'm finishing my PhD at the University of Florida right now in fisheries and aquatic sciences and I also work with the ocean rescue alliance which we develop different artificial reef structures for both ecotourism as well as biological settlement. I was wanting to echo on to Arthur and Melissa's comment relative to the MPA need and necessity and also was wanting to see if the committee was considering providing alternative artificial reef sites.

That could serve as a supplement to some of these areas that are close. That can help to sustain different businesses for diving or ecotourism as well as even for supplemental restoration if you're going to involve like an ecotourism opportunity as well.

Joy Hazell: Hey Shelby, once again we'll put that into committee. I do know that at least once artificial reefs have been discussed.

But we're really not at decision making processes at all right now, so this is why we're having this meeting currently. So I've got D Vance, Andy and then Kelly, and when you're done if you can put your hand down, so I make sure that I don't recall, and thanks Shelby.

David Vance: I'm David Vance, I'm part of Friends of Our Florida Reefs also I'm relatively new to the issues but, just like Shelby, I guess, my comment was now, if we're going to put some pressure on the fishermen, how do we take the pressure off to get their support? So whether.. what kind of artificial reef whether it's sinking ship or anything else we can do to increase the fish populations and also, I think, set off the issues that Dr Dobrin raised to that, yeah, the unintended consequences, if you limit the fish in one area you overfish elsewhere.

So, you know, what can we do to create more fish, and it seems like artificial reefs is one thing that might help. And then again I'm a novice, I don't know the science, but I do know we spent a lot of time growing salmon and other fish on land and now we're growing corals on land to put them back out. You know, are there ways that for some of the game fish, that we could actually do something in, you know, ponds and things on land to increase the supply to go out there and again let the fishermen have their chance. I did put in my comments that, yeah besides reef sites.

I love all the nature, and I'm also a supporter of friends of Loxahatchee the National Wildlife Reserve. And, about a year and a half ago, before covid I went to their meeting about their five year plan and there was great concern by the duck hunters the alligator hunters the boaters that we were going to, you know they were going to restrict what they did, and they did a very good job of trying to figure out how do we allow enough duck hunting enough

alligator hunting enough boating that we can protect the environment, you know, then the ecology, but still maximize the use of the resource, to the benefit of everybody, and they actually had phenomenal buy in from the duck hunters and people that they really listened and did what they need so again.

I hope we can find ways if we're going to have necessary restrictions, how are there, what ways can we offset that to keep the fish going, and you know artificial reefs it's a double win of hopefully more efficient, but also more diving, now I'll shut up.

Joy Hazell: Thanks David. I have Andy and then Kelly, and then I see Kathy has her hand raised but Kathy I'm going to have Ana go on first, since you both have already spoken so keep that in an order of who's already spoken, since Ana did have a comment quite a bit earlier. So Andy.

Andy: Hi there, can you hear me?

Joy: Yep

Andy: Okay, so my name is Andy and I am a recreational fishermen about once a week, and also a diver recreational diver every other week, so I see both sides of it and experience, both sides of it. Very interested in this whole thing. My question, though, about the MPA, I'm in the camp that believes water quality is the major issue for everything fishing and reef and diving my question about the MPA, though, is this, how does an MPA help coral reefs grow better?

Joy Hazell: So I think Andy has a really interesting question that I don't think it's the purview of this meeting to answer, but what I would invite, sorry Andy, what I would invite people to do is if just because it would end up in a super complex place, but I think I want to put a hold, a pin in that for the committee itself. Because I think that's something that would be helpful to have an answer to so I'm not dismissing your question, I'm just kind of putting a hold on it, and if people in the meantime have good links to some research that they could put in the chat feel free to do so.

LINKS

Andy: So the genesis of my question is simply we're having MPA in the Keys, and if you transport dirty water that can go to port Everglades twice a day to the Keys in that empty area. how's that. that's not going to help reduce. it's going to hurt it I would think, so I don't quite understand the concept of an MPA helping the reefs recover to the point we'd like them to recover to. I'd like to hear the science, hat's all okay.

Joy Hazell: Okay, thanks Andy.

Andy: You're welcome.

Joy Hazell: Kellie.

Kellie Ralston: Thanks Joy. Kellie Ralston, I'm with the American Sportfishing Association. I think I know a lot of folks on this call so good to see everybody tonight and appreciate the conversation that's happened so far and I guess kind of piggybacking off of what Andy was just saying, you know, I think

something for the group really to consider or what are the real, what are the real issues that you're trying to fix and I know there's been conversations about closures, what are you actually trying to accomplish with the closure?

Are you trying to improve coral health? Are you trying to work on fisheries? What are the issues with the fisheries, what fisheries are we talking about exactly? I know this group has seen, you know, several presentations but only one of them really has identified any southeast coral reef tracts specific issues and those have been very broadly defined in a circle graph kind of thing not necessarily targeting individual fisheries or fish species that would be associated with reefs, and so I guess that that clarification is something that I think is important for the group to know and understand before you can really even decide whether a closure is necessary or warranted. Our group actually just supported a seasonal closure at Western Dry Rocks South Florida Keys, because it was a site of multiple spawning aggregations and the science was there to support that those aggregations were there overlapping and important.

And so we support the FWCs decision to close that area for four months to protect a lot of different species, but you've really got to know what the problem is that you're trying to solve first and so with that i'll close for the night, but really appreciate the opportunity.

Joy Hazell: Thanks Kellie. My next is Ana and then Kathy and guys we've got 20 minutes so keep putting your little um what are they called, virtual hands up.

Ana Zangroniz: Thanks Joy. I wanted to take a minute actually, went and grabbed my pen because I had a bunch of thoughts, but I just want to address, something that was mentioned earlier, and one individual expressed it, and it wouldn't surprise me if others felt the same way, but it is that bad on the reef. And my understanding is that the process that the committee is undertaking is to think through and come up with recommendations fisheries and otherwise, to help the ultimate health of the coral reef in the northern third of the reef tract. This year March marks my 20th year anniversary of diving. I'm older than I look, I color my hair, so you don't see the grey, but I've been diving in Florida since before I lived here, and even in the last eight and a half years since living here, I've done over 1000 dives just in Florida. I also am a volunteer at Biscayne National Park and I maintain and replace every single one of the 14 mooring buoys on the way to being 65. We installed 25 new pins this fall and I have observed that changes, yes, it's water quality, yes it's beach nourishment yes it's this there's... the death by 1000 cuts was coined as a metaphor for a reason. And that's why the approach has to be comprehensive and holistic, as well as considering all different types of solutions.

And with respect to the creation of more artificial reefs, artificial reefs are wonderful there's no denying that there are tons of fish that are attracted to them, divers come to dive them. However, I want to make sure that it's clear that artificial reefs will not replace the structure and the function that are afforded by our reef tract which is our first line of natural defense against hurricanes, which we are only going to be seeing larger and more intensity from, so please bear that in mind.

I will not deny anyone an artificial reef. I'm in them all the time underwater, but we need to also remember that the focus of this process is the natural coral reef system in the northern third of the reef tract. Thank you.

Joy Hazell: So if Kathy, and then I have Captain Dan.

Kathy FitzPatrick: Well, as usual, Ana beat me to at least one of the punches instead of far more eloquently than I could.

One of the comments I had was, I just wanted to caution against looking for a silver bullet or a couple of silver bullets and keep in mind that we have to do everything at once, when we can, and even if it's the small thing is the thing we can do right now we shouldn't ignore it, because we have our eyes on a bigger thing.

One other thing without getting totally off topic and I saw that Jamie had her hand up at the time, I just want to make a very quick clarification that we talk about N-146 but the reason it's 146 is because we numbered those suckers. So, there were a bazillion recommendations that I can't remember how many made it to the report, but I am a coastal engineer by trade so let's do fishermen feel that you are the only ones being quote picked on um yes beach renourishment is in those recommendations as well, challenging us to do a better job on what we're doing and there's lots of other things, so I just, for whoever's entering it, doesn't know what that report looks like, there are recommendations that cover a very wide array of issues that can impact coral reefs, and the last thing is, Kellie, thank you very much for your comment, and I did hear you speak on Western Dry Rocks, and I appreciate it all the comments you made them and your point is very well taken I too heard the one presentation that talked about, for lack of a better word, looking at the entire ecosystem, or why fisheries matter with coral reefs and it seemed to be... It certainly didn't appear, the committee felt like there were facts and figures there, so I would just ask challenge whatever.

To make sure that you have more presentations that speak to this and not just disregard them, which I'm not saying that you are, but if that's the thing that you don't feel like you have enough information on, I'm sure there are other people who would have that information and that's it for me okay.

Joy Hazell: Thanks Kathy so I've got Captain Dan, Scott, oh I've got, oh no I don't have quite as many. Captain Dan, Shelby, well they're not in the order they came in, so let me get this correct maybe Sus you can help me, I know, Captain Dan was next I think Scott, Shelby and then David. Am I correct?

Susana Hervas Avila: I think so.

Joy Hazell: Okay, and just so everybody knows, we are going right now, or until eight o'clock. And we only have a minute to close out so we'll definitely get those four ins, if you do have comments or questions, please stick your hand up. We don't want to miss you, and if we end up having a gazillion, a few of us can stick around and listen and record too. We don't want to cut people off either. Captain Dan.

Captain Dan Kipnis: Trying to be quick to the people who don't sit on this committee and that don't know what I've done, I'm an ex-Florida Marine Fisheries Commissioner, I sat on SEFCRI, I don't anymore. But I've been involved in this process for a long time. Commercial fisherman, recreational angler, charter boat captain, fish house owner, etc, etc, okay.

There is no doubt in my mind having helped Miami-Dade County put out 100 artificial reefs with Ben Moscow who worked for the county at the time that

these work. Now this is the issue that we're dealing with, we have a coral disease that has decimated all the hard corals other than elkhorn and staghorn from up here, where I live in Palm Beach County and even North of St Lucie all the way. And it's almost to the Dry Tortugas, okay. We don't have the reef ecosystem that we had before.

I agree that reefs and the relief that they offer gives an attractive place for fish to hide, graze and grow, alright. If we don't have a coral reef and with ocean acidification with climate change eating up the relief we have there and turning it into rubble on the bottom — just go look at Carysfort reef and see what's happened there. We're going to end up with no relief at all, so I believe personally that artificial reefs, and I don't mean ships, okay, I mean stuff on the bottom that gives relief that looks like a real reef and stuff grows on it. You know, soft corals etc, etc, that is what we're going to need to do here, besides water quality and all that, okay. MPAs don't work unless you have a place that is proper for it. Western Dry Rocks, absolutely, any spawning site, absolutely.

The Dry Tortugas Sanctuary, a great success. I helped when I sat down on South Atlantic Council, snapper grouper advisory board, established MPAs off the Carolinas and Georgia. Crazy. those were artificial reefs, you couldn't fish on it, fish went there to spawn okay guys.

We, because of climate change have lost the way that we have had the ability in the past to regulate everything we did having to do with our oceans, so now here in South Florida looking at where we're faced right now, and if you want a, you know multi decadal recovery and I'm talking, you know 50, 60, 100 years if even possible. We got to look outside the box and do this in a different way, and when I broach this subject to a lot of environmental groups, they said I was out of their minds, they would fight any artificial bottom that went out there, okay. I want you to know as a member of this committee where I'm coming from.

When I'm going to put... I'm not going to recommend putting an MPA any place that it won't work so well that it has to be there and so far, no one other than Dry Tortugas or the Western Dry Rocks, that have showed me that that is what we need to do, we need to look outside the box and I'm gonna fight, fight, fight the end of my life here. I'm over 70 years old, I'm going to fight to make sure that we got a shot at least keeping some fish around and a place for them to live. Thank you.

Joy Hazell: Thanks Captain Dan. And so I lost my order, I think it was Scott, Shelby and David, okay, I didn't write it down this time, thanks Sus. Scott.

Scott Salyers: Yes, thank you. My name is Scott Salyers, I'm on with Bonnier Corp. We publish a few magazines you guys might be familiar with and solar sportsman sport fishing and marlin.

I am a second generation Miamian, I don't sit on any of these committees, I have been an avid fisherman all my life, my father raised me to be a fisherman I certainly enjoy fishing, diving and I have seen some of the things that have caused concern obviously over the time here. I'll say that.

I do agree with what Dan just said and Kellie said earlier, I did support the closure for Western Dry Rocks. I think it is effective, I think it's a known entity there. I think that there's value that comes from that, I do know that fish, know no borders. I think Sid was referring to that as well, so I feel

like before we talk about MPAs and closures and things along those lines, we better be buttoned up very tight, because there is a lot of economics that goes behind it as well.

I also wanted to bring up the fact that when Harry brought up earlier, gentleman mentioned earlier, what is the quickest thing that we could do about having some sort of impact on what Harry mentioned earlier by eliminating fertilizers and weed killers going into the bay immediately if we put sanctions on that, I think that there would be some impact there and that would be the first step in water quality.

I like to, as I said, not only fish, but I also like to dive and snorkel, so I think that you know water quality is obviously the overwhelming challenge here, but I think we can start with some of those things and keeping things out of the bay that we actually kind of put there immediately, so if we could sort of curtail that, through our political processes and maybe FWC's pressure or maybe what the committee could recommend, I'm not sure how that would work, but certainly there's a lot we can do in the interim, and no, I am not for any type of closures at this time, so thank you.

Joy Hazell: Thank you. So I'm just going to go through my list so people know where they are. I've got Shelby, David, George I see your hand raised. So, you're next on my list and then Liz. So, George you don't have to keep your hand up I've got you written down if you want. You're welcome to keep your hand up. But you don't have to. So Shelby is next.

Shelby Thomas: I'll try to make this fast as I know there's not much time just specific to artificial reef considerations for the committee, just as some of you have mentioned, especially Dan, relative to a lot of artificial reefs that are out currently there's not as much complex habitat space so certainly... Is there any considerations to doing artificial structures that further create complex habitats and are designed to help increase the efficiency of recruiting bio diverse fish species?

As I mentioned, I work with a nonprofit called the Ocean Rescue Alliance and we're designing different artificial reef structures, as well as hoping to create some weight reduction modules as well that expand on biodiversity and complexity of habitat space, but there's definitely a clear need for more research into different artificial reef substrates and habitats. Has that been a consideration for the committee, and is there any focus around that with implementing that with MPA areas or the clear ability to hopefully also translocate reefs in the future with this capability as well?

Joy Hazell: As Shelby, and we should make a note that we are taking notes and we are going to transcribe these so there will be meeting report, so we have all of these comments in one place, I didn't say that before, okay, I've got David, George and then Liz.

David Moss: Thank you, my internet's been iffy all day so I will be brief as I can. Ana kind of said a lot of what I was thinking that, you know, the coral reef coral reef system offshore here has really had that death by 1000 cuts, which means that we need to have, I guess, solutions that number almost as many as the death slash cuts that we've gone through here. I don't know that much should be off the table obviously water quality is a huge huge issue which we all know that we can do it we what we can.

The other thing I will note, and this is just a general thing for freshmen that it's important to understand that not all MPAs are created equal and just because you know one MPA like, let's say, Riley's hump is a complete no take zone doesn't mean that all MPAs have to be that way and they can function very differently depending upon where they are and what the purposes. Thank you.

Joy Hazell: Thank you. I'm going to ask if you have spoken already to lower your hand just because it also doesn't confuse me and I've got Liz, George and John, I saw your hand raised. is that.. did you want to..? okay. Am I missing anybody Sus that you've seen?

Susana Hervas Avila: Wondering if Jimmy, but I think he's just moving okay.

Joy Hazell: So George.

George Poveromo: Okay, George Poveromo on the committee, although I am not speaking for the committee and speaking on a personal level here. Native Miamian, my industry is fishing, and I can tell you what Dan Kipnis said, and also to what Scott Salyers said and called in with. My opinion, any marine protected closures or zones should be the absolute last resort. Okay, I totally agree what's going on down toward Tortugas way. Now we've already proven that with sensible closure, seasonal closures size limits and bag limits that we can govern a lot of our recreational species and keep them at sustainable level so we're showing there that it works, but with only one or two percent of the coral reefs remaining alive in some of these areas.

When Dan Kipnis had brought up about establishing artificial reef zones more around the concrete type structures, where these contours are or develop them more the species spawn and those preferred depth zones that's gonna be something that we need to be looking at. I think that can be a major issue. Especially with the warming waters unless there's some type of super coral that we could raise that could be reintroduced or introduced back out there.

I just think that the main issue that a lot of people still overlook is that water quality, again, I grew up in North Biscayne Bay fishing sea trout, and those grasses in North bay are pretty much all gone. There's so many juvenile forage fish species that thrive within the bay that move out to the reef plus the water quality, what comes out of that bay also affects the health of our reefs, on top of everything else.

George Poveromo: So I know I've heard people say that water quality is a major issue it's a big undertaking and it almost sounds like they're sort of hedging let's do something less, but I think that has to be a main focal point to ensure the health of our reef species and then also looking at more of a concrete type structures to enhance what we have all out there already, and again, marine protected areas, I am against it, because you close some areas you are just going to put more pressure on the existing or open areas, and there are other ways to do it. Again, we've proven it with sensible fishing size limits, and if the species needs adjustments, we could go back to the management aspect of it so again, speaking from a personal level and not that of the committee I just - I didn't want to take anybody's time but I just felt compelled at least let my point known. Or points.

Joy Hazell: Thanks George. Next, I have Liz, John and then April. And I'm going to say it's three minutes to eight, so I wanted for those who, I think this is a great conversation, and we want to hear from everybody. For those

who have another commitment to make that they have to be out, just to let you know we are going to record this meeting.

We've heard really good input, this is super useful, the report will go to you via email and will be put on the website, as well as the recording and there will be other ways to provide input.

Captain Dan Kipnis: But this is the first time. Let these suckers go as long as these people want to be involved in this.

Joy Hazell: We are here, yep that's the plan, I just wanted, if anybody has to go, then to understand what was happening, but we are here and we hope the committee's here, because this is a really useful conversation. so Liz why don't you.. we'd love to hear what you have to share.

Liz Dutra: Hi everybody, Liz here, wonderful conversation so far, I just would like to point out a few things. I'm a marine biologist, I used to work with NOAA on their ocean acidification team. I've lived here my whole life, love the beach, I've been diving for over 15 years. But now I'm in the nonprofit profit sector and I just really want to highlight that I really think we really need to engage our community on making small changes. Water quality is such a big issue, and I think engaging community a bit more on making, you know, those small reductions is really going to have a huge impact.

Especially with ocean acidification looking at our municipalities and looking at our transportation sector, how can we improve transportation reduce carbon emissions locally those types of things I really think that that can really play a big role in this. I'm also an avid fisherman I would hate to see a spot that I wouldn't be able to fish or take from so I can understand that, but we definitely need a multidisciplinary approach to solving this crisis that we have in our reefs here, so thank you guys for letting the community speak tonight. I appreciate it.

Joy Hazell: Thank you Liz. April, what would you like to share? And I should point out April is on the committee in case you've forgotten to.

April Price: John was gonna go ahead of me.

Joy Hazell: No, no, let me let John go, I'm so sorry. This is what happens when I'm doing multiple things at once. April you go. John is saying he'll go after you. Thanks John

April Price: I just wanted to thank everybody for being involved. I'm President of the Marine industries Association for the state of Florida. This fishing conversation and all what it means to this area was only absent from SEFCRI, and Our Florida Reefs process, I believe, because of the duration it took and a lot of these people have, you know, real jobs and work and they weren't in a position to dedicate themselves to the time it took to be committed to those meetings which a lot of us here have spent many, many hours weeks years of our lives, working on, but for everybody here, I think a lot of people said a lot of clear stuff.

I served as a Commissioner to the state of Florida Atlantic States Marine Fisheries Commission from 2005 to 2008 and back then water quality was barely on the radar and fisheries, and now it's dominating the radar and when I came in as representing Florida to that group that was all the Atlantic States I knew that that was a huge component they were missing in all their science and

I appreciate all the science, but there's more than just managing fish when it comes to the health of our resource. so I think that you know the artificial... we need to take everything we can and use it in our toolbox, and the MPAs are not going to be effective unless there's a real reason and they're designated and we've proven that we can. We have proven that we would get - I know Arthur you don't agree - but we've proven that we can get on side of MPAs for the right reason and that we want, everybody wants to fish and everybody wants to dive and everybody wants clean water for their family, so I think everybody's working in the right direction.

I would appreciate everybody staying at the table, and I appreciate listening to all your comments tonight and I'll leave it at that Joy. Thanks.

Joy Hazell: John What would you like to share? John you're muted.

John Sprague: I chair governmental affairs of the Marine Industry Association so I'm probably the black hat of the group but I'm really happy to see that we're trying to get the fishing and the diving industry. You know, we kind of represent the water access side and our customers are the divers and our customers are fishermen, and you know our boats are sold… 68% of the people buy a boat because they fish.

So we want to keep everybody happy, but the main thing is that the resource, the reefs and the fish are why our customers buy boats and buy products and create a \$23 billion industry in the state of Florida on an annual basis. So with that, I'm very happy that I think we're moving more into the water quality, what I would like, though, is as a committee we can be fed more information on how the water quality is being taken, where, water depths how often you know mapping, what are we looking for.

So, over time, as we worked on fishing issues and divers and interactions by everybody, what kind of updated, because some of our groups also go to the legislature and help drive money to do certain things, and so you know I think it's real important to make sure that we keep focusing in that area because that's going to take a long time to fix and kind of take a lot of money, but it's got to be continually done on an annual basis.

And I think overall when we look at our fisheries and our coral still believe this, the most important component that we got a serious problem, whenever is, granted we know we got sea level rise and we got a warm atmosphere, whatever and all makes a difference, but water quality, I think, is one thing that we can control a lot better than the temperature of the globe. Anyway, that's it.

Joy Hazell: Thanks John. Scott, do you still have your hand raised or is that residual from before?

Scott Salyers: Residual, sorry about that.

Joy Hazell: No it's no problem. And I see Captain Dan's hand raised, but I want to, if you're okay with this Captain Dan, I want to see if somebody we haven't heard from wants to share. I want to make sure we get an opportunity.

676

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Joy Hazell: And, Marty. For I can even encourage people to speak! Marty, you are muted.

Martin Arostegui: We've had experts come before us and tell us that levels of fish, reef fish in South, in many parts of South Florida are at unsustainable levels. I happen to agree with that. Having been fishing and diving here for 50 years I totally agree with Arthur. I urge each and every one of you in this committee and the ones that are outside of this committee to learn about marine reserves and marine protected areas, it is very easy to politically be against them but they, in my opinion, will be an extremely important part of solving our fisheries problems. Yes, the water quality issues are tremendous. I live in Coral Gables and I have a septic tank and I just found out that to change my system is going to cost billions of dollars. So, what does that mean? That means that politically that's not going to happen very fast.

But we can deploy a network of marine protected areas in the whole reef system with South Florida and science has already proven over and over again that it works. It works, so please learn about it before you just object to it, thank you.

Joy Hazell: And I should say Marty is also on our committee so as you see there is what I appreciate most both about the committee and this group is the diversity of opinions right, because if there was an easy solution here, we would have already come by it, this is a complex problem with complex solutions. Captain Dan.

Captain Dan Kipnis: Okay Marty, I agree with you in many places. MPAs work really well. The really unfortunate thing about where South Florida is right now is that our Coral disease have decimated 98% of all living corals all right and it's systemic. So, if you grow a little teeny coral and put it back and attach it or corals, the ones that are left spawn they die from it again. We haven't yet... you know, this is like covid. You can't wear a mask you can't vaccinate these suckers yet, unless we're going to do some crisper manipulation of the coral species itself and the cruise ships from the port of Miami has taken it all around the Caribbean in their ballast tanks and let it go there. My guess is it's going to go even farther. This is coral covid. Realize that, okay, realize that. Now we don't have to have live corals to have viable reefs, whether you put MPAs on them or restricted areas or do like the Western Dry Rocks because fish go to spawn, but you must have relief. Without relief on those reefs, you know where it goes from zero to five feet to eight feet crevices and this and that. Sponges and things even algae grows on it.

You won't get any more fish, no matter what you do, you can put all the fisheries regulations or you can put all the MPAs you want on dead areas. Dead areas that are not coming back if you don't meet the minimum criteria of what a reef is. Minimum criteria, you're not going to get it back and I gotta tell you, I strongly believe that we are in a new epoch of fisheries and resource management, in a new world. And we need to come up with absolutely out of the box remedies to take care of this resource that we love so much, even though the resource is basically gone bro, it's gone Marty.

Okay it's gone. we still go catch a few fish here and there, I caught a mutton snapper last week and had it for dinner. Thank you so much for letting me say that. To all the people who are listening, think out of the box, understand how big this thing is. This is something we have never ever ever had to deal with. This is the first time, and we are the pioneers so let's do something that will make this work guys, we have a year left according to what we — maybe they'll give us another year — a year left to do it, and you know I have to say it like it is. It's my only shot to do it and I got a great audience

here and I really appreciate you being here. Thank you and my committee members as well.

Joy Hazell: Thanks captain Dan, and I see Arthur's hands raised, I do want to once again... What I really appreciate, people are sticking around, but I want to make sure we've heard from people who maybe we haven't heard from so I'm going to let Arthur speak, and then I really want, if you want to say something go ahead and raise your hands, and if we start hearing from all the same people I'll probably go ahead and bring us to some good closure so Arthur and then Ana.

Arthur: Thank you, Captain Dan. I respect all the work you've done for our environment, you know we've had a lot in the past, and I agree with 90% of what you've said so far. Water quality is a big issue, climate is a big issue, I believe that we need to re-engineer the reef based on bringing in coral with different DNA different subspecies. I agree that water quality, the state has to do something, unfortunately we're in a state where politics isn't, you know, hasn't lend itself to that. But you all have to realize that marine protected areas, right, on one breath you're saying how well it worked in these areas, Riley's hump. You want to know why it works so well at Riley's hump? We have a strong, advective system here. We have one of the most energetic parts of the ocean right next to our coastline. Diffusion here is greater than anywhere else, advection here is really great. So what that means is, if you put the marine protected areas in the right places the conductivity in this area is much greater than the conductivity in other areas where marine protected areas have been shown to be very successful by increasing fish diversity, including having fish that eat the macro algae which competes with the coral. So marine protected areas, isn't just about protecting the fish it's about protecting the whole ecosystems.

So I put a couple papers, there was a very balanced review.

[The Society for Conservation Biology (wiley.com)]

[Well-being outcomes of marine protected areas | Nature Sustainability]

One says what's bad, what's good about marine protected areas. There's another one, you know it's a review of over 100 papers. You all need to look at this stuff and as I said, I'm a president of a fishing club, the Hollywood Hills Saltwater Fishing Science and Social Club. My group is into fishing, we want to fish, I said I want to retire, the only one of the things we need to do really is the marine protected areas in the right spot. We've already seen that doing this in this whole larger domain has worked. Now we need to concentrate on the southeast Florida coral reef tract and do the right thing for it folks let's get behind some of this.

You know everybody's thinking, the closing this stuff closing stuff out to the sail fish ground, it was never said, like that. All the areas weren't put in stone, they were proposed areas at the right size range, based on the science so let's get behind science, you know. You want to really help the reefs out here, you really want to have the fishing good for your future? The science is telling us what to do, don't ignore it.

Joy Hazell: So i'm going to go Ana and then I'm going to go Bruce who had his hand raised and then I think we're going to close it out to respect people's times and I'll sort of summarize what I think we've heard, and I think to

Captain Dan's... because I think what's happening now is we're really getting into the meat of this discussion, which I think the committee is going to be having and I think that's valuable, but I also want to honor people's time so Ana, and then Bruce, you'll close this out.

Ana Zangroniz: Thanks Joy, I want to acknowledge Captain Dan's words. Dan I've known you since BBRCT days before you were part of SEFCRI, and so I think it's important that you're a member of this process. And I do, I want to mention for those of you who might be newer to it that the conversations of water quality issues and resistance to any sort of MPA, whether it be a reserve, which is a closed zone or another sort of designation, that has been ongoing since I started at DEP in 2014, so it is well acknowledged. That's a big reason why this group has been convened, was to try and speak more in depth about these issues and Dan again, I've had 1000 dives in Florida, in the last eight years and I watched only coral tissue loss disease from the very start, however, the reef isn't dead.

There has been quite a lot of recovery and, although it has taken a brutal hit, that doesn't mean that we get to just, or you get to just move on and decide, okay, well we're done with the natural reef so we're going to move on to artificial reefs. Again, everything has a place, a purpose, a designation and it all has to be researched and considered, so the reefs aren't gone, there's still an opportunity and yes, the stony coral tissue disease has been devastating and I will be the first one, I cried underwater twice in this, and that's not because I'm a woman, it was because it was that bad, but I've also been on the flip side of that and seen how some areas have since bounced back.

And there is a pretty substantial response effort with 10 different teams who have not only done massive coral rescues, genetic preservation, trials for interventions, as well as probiotics. So those teams are ongoing, for when we get to that point to begin and trying again to start restoring the reef on a larger scale, but even though that is all still happening those response teams recognize that other management actions still have to take place and that's why you're here. You all, not just you Dan thanks.

Joy Hazell: Thanks Ana. And Bruce.

Bruce Marx: Hi everyone. I wasn't going to speak again, but it's interesting that, after I spoke at the beginning about N-146 there was an initial interpretation that why we're here about right now is not fishing closures and somehow we morphed into a very spirited debate on fishing closures. So I just wanted to say this, I was born in Miami I went off of triumph reef. I caught lobster there while diving. I saw beautiful reef that's not there anymore, only little sections. I'm a fisherman, I dive, I understand them, I'm not against closures.

What I am against is having an unclear process. Like Arthur just mentioned nobody ever meant for this to sound like this. I can't believe it was 2015 when I collected over 1000 comment cards and sent them to the DEP saying stop, don't vote on this because you've got a document. People yelled at me in the audience saying that's not what we meant.

Be careful what you say, because people will interpret it as what you mean. I'm looking at the SEFCRI boundary. St. Lucie inlet to the north. Norht border of the Biscayne National Park to the south. Mean height tide to three miles offshore. Now anyone that's fished the area here will understand that three miles offshore takes you right past the reef that everyone wants to protect.

It puts you in the blue water, where we fly our kites and catch our fish, so Arthur with all due respect, I know where three miles is and I couldn't free dive three miles offshore, I can assure it's all catch sailfish there, but I don't want an MPA out three miles off shore and I raise this only because it's important that everybody is on the same page. If SEFCRI puts out a boundary that they're promoting, wingnuts like me, are going to object and wingnuts like me, are going to go rally a fishing crowd and I know how to wind them up, and I can get over 1000 comment cards and halt them so no one sits in its tracks. That's what I did.

I'm happy to agree to MPAs, but they've got to be reasonable they've got to be well thought out and they've got to be part of a discussion. You just don't slide them in there in between eight hundred MPAs and hope that it snakes through, because I can promise you there's a lot more me's out there, that will object.

So I just wanted to steer it back to I'm not an anti MPA guy because I do recognize, I've seen the decimation on our reefs, it's just that, if we're going to get to the drawing board of this discussion, we all have to be on the same page so Arthur, you don't say that's not what we meant, because maybe it's not what they meant but it's certainly what they said, and as a lawyer, I gotta look at that stuff because I have to live with the consequences of action that goes into government process and said something that means what it says, so, I just wanted to raise that.

Joy Hazell: So I think Bruce gives us actually really good ending point which is on the process right and on the transparency of the process and that's where my inner geek shows.

And so let's sort of talk about that in the process, this is a first step in gathering input. No decisions have been made, new recommendations have been written down, we are trying to hear from you and we heard a really good robust discussion from people with differing points of view and different understandings of what's going on, which was to me this meeting was a success in that space, and I think Captain Dan said this earlier and I hope the committee agrees that they heard a lot of varied opinions and input.

Joy Hazell: Once again, this is not the only time we are going to get input and of course I lost my thread, where I was yep, or the only opportunity to provide input and I am going to once again put the website into the chat I encourage you all to click on that link and save it. We will update it for each meeting, we will provide if you have comments you can provide Sus, we will let you know when committee meetings are happening. Hopefully we will get to a point where we can do this, all in person, which makes it much easier.

We appreciate that we saw particularly towards the end people putting some comments in the chat we are paying attention to that, and they will go into the public record and to consideration for the committee we don't mean to not address those, and we will create a public meeting report a report of this meeting, and provided to you, within two weeks of today. Sus is that good timing does that give you enough time?

And we will directly email it to you to the email that you signed up for with the email you use to sign up with for the EventBrite, as well as posted on that website.

Susana Hervas Avila: And one thing I want to add from what you're saying through that website, there is also a public comment form that will be up for a week that was mentioned before, so if it's not for you or, if you want to send it out to people, you might know people that want to give their input or who couldn't be here, send that along and there is a very clear link on that webpage to do so.

Joy Hazell: What I'd like to do is, I would like to thank everybody who showed up and sat with us for almost two hours tonight. I can see just how engaged and involved you are. I want to thank the committee for volunteering their time and meeting regularly and for being here and listening to you all. And we look forward to continuing this conversation in future meetings and like I said, hopefully in person in the near future. And with that don't forget there are comment cards and other ways to get in touch with us and we'll be having a really robust discussion about everything we heard in the next committee meeting.

1:54 END

Appendix E

Zoom chat:

18:44:34 From Susana Hervas Avila: SURVEY: https://ufl.qualtrics.com/jfe/form/SV 3KLsMnhzAeKEhGS

18:52:48 From Joy Hazell: Here is the website:

https://www.flseagrant.org/fisheries-conservation-coral-eca/

19:19:15 From dvance: What can we do to increase fish availability to help offset any limitations. For example, sinking more clean wrecks to foster fish as well as diving opportunities. Expensive, but some philanthropists might also support. Whether wreck are on the edge of no fishing or not. We know they spill outside to fishermen's advantage.

19:26:16 From dvance: I fear we can only get fishermen's support if we can offer things to help fish directly and them indirectly. Got to be balanced. Protect, but also can we foster more supply. Can any fish be farmed like we are non farming corals again to get more fish faster.

19:26:20 From Ana Zangroniz to Everyone: I have another comment, if there is time.

19:31:05 From dvance: I am David Vance, a colleague of Melissa Sathe's on the Board of Friends of Our Florida Reefs. I also participate with Loxahatchee Wildlife Refuge. They worked very hard to give boaters, duck hunters, and alligator hunters, among others, chances to use the refugee so they would support maintaining the refugee.

This meeting and project is a great effort to help fishermen to earn their support.

19:42:11 From Arthur to Everyone:

reference:https://conbio.onlinelibrary.wiley.com/doi/10.1111/conl.12638

19:43:33 From Jamie Monty - FL Dept Envtl Protection: 68 RMAs were finalized, N-146 is just one of the

19:43:59 From dvance: I absolutely want to protect reefs, but can we get more support from fishermen if we provide more fish from artificial reefs. Not to replace the reefs, but to nuture fish to support fishing.

19:44:58 From Arthur: very balanced study https://www.nature.com/articles/s41893-019-0306-2

19:52:55 From Andy: I believe some counties have already banned harmful fertilizers....

19:53:13 From Arthur: yes around Tampa Bay

19:53:23 From Ana Zangroniz: Several municipalities in MDC have fertilizer ordinances in place.

20:03:37 From Shelby Thomas: I was wanting to expand upon the capabilities of using artificial reefs to provide supplemental structure. Focused around creating habitat complexity that promotes fish biodiversity. Through the creation of artificial reefs that are designed to mimic habitat space provided by natural reefs. Have artificial reefs that are designed to have more of a natural reef design been considered as a potential implementation?

20:04:48 From Bruce Marx: HI All, When I first spoke this evening and recounted the concerns I had over the closures which were the subject of N-146, there were comments that closures were not the present focus of this group. However, it seems that given some of the comments which came after me (including Art Sapp's comments which were compromised due to the feed) closures may, indeed, be a focus of some. Thus, I want the notes of this meeting to be clear that we need to ensure we have a base line on our future discussions and whether closures are going to be source of discussions of future recommended action. If so, we need to be clear on this issue going forward. The last thing I want to have to do is champion another cause against closures which I had to do in response to N-146 given the proposed boundary that extended into the sailfishery. Thanks so much.

20:07:21 From Shelby Thomas: There is still a need to continue artificial reef research, as some existing artificial reefs can increase catchability of some species. Although there are not many artificial structures that expand to new innovative designs. There seems to be a valuable potential to not only create complex reefs that add supplemental structure but can also serve as ecotourism opportunities that can connect and engage the local communities. We are trying to implement some of these ideas with the www.oceanrescuealliance.org but would like to see if this could be scaled by many other current artificial reef programs along with further research that guides more effective and efficient designs.

20:12:21 From Brian Walker: The reef is not dead yet! Please scroll through this storymap to see some amazing corals still alive. It's not too late.

https://novasoutheastern.maps.arcgis.com/apps/Cascade/index.html?appid=cf2bf16f698d40968d437d402199e027

20:12:59 From Maria Dutra: Consider MPA's being on rotations based on science

20:18:06 From Melissa Sathe: Artificial reefs are not the answer. There have been many many attempts to replicate our natural hardbottom with artificial structures. It is not possible. They are a useful economic driver of our dive and fishing industry but can not be used to replace natural habitat. Our reefs are not too far gone. I encourage everyone to look at Brian Walker's story map he linked above.

20:18:18 From Ana Zangroniz: agreed on confusing messaging, Bruce. It will help this process tremendously to have 100% effective communication, especially as it comes from the source (the committee).

20:19:42 From Joy Hazell: https://www.flseagrant.org/fisheries-conservation-coral-eca/

20:21:22 From April Price: Thank you all!

20:21:30 From David Moss: Thank you for the discussion

20:21:37 From Liz Dutra: Thank you! Great discussion!

20:21:44 From Jamie Monty - FL Dept Envtl Protection: Thank you all for participating tonight!

20:21:46 From Shelby Thomas: Thank you for this opportunity to hear more about this project and engage with you all.

Appendix F

Public Comment Forms on Webpage

One comment was received in the seven day period for public meeting through the online public comment form available at https://www.flseagrant.org/fisheries-conservation-coral-eca/

David - Recreational Fisherman

The sharks off of the east coast of Florida are unbearable to our fishery. As soon as you stop the boat you can almost guarantee they are lurking below eating any fish of quality you catch. The fishery is the worst I have seen as a born and raised floridian. A commercial fishery needs to be open to help the control of this apex predator that has been trained to rely of humans for food. The shark feeding tours also need to be ended. On land you can not feed alligator or bears do to training them to feed from humans. The same rules should be applied to federal water just like the state water have done already.