

**Southeast Florida Coral Reef Initiative (SEFCRI)
 Joint Team and Technical Advisory Committee (TAC) Meeting
 Report of Proceedings
 August 4-5, 2015**

**National Coral Reef Institute
 Nova Southeastern University Oceanographic Center
 8000 North Ocean Drive
 Dania Beach, Florida**

MEETING ATTENDANCE

Technical Advisory Committee (TAC)

Last Name	First Name	Organization	Day 1	Day 2
Banks	Ken	Broward County- Environmental Protection and Growth Management	X	X
Byrne	James	The Nature Conservancy	X	X
Craig	Nancy	Broward County- Environmental Protection and Growth Management	X	X
Dodge	Richard	NSU-OC/ National Coral Reef Institute	X	X
Dustan	Phil			
Fauth	John	University of Central Florida	X	X
Gardinali	Piero	Florida International University	X	
Gilliam	Dave	NSU-OC/ National Coral Reef Institute	X	X
Gramer	Lew	NOAA/ NMFS		
Gregg	Kurtis	NOAA/ NMFS Habitat Conservation Division	X	X
Griffin	Dale	United States Geological Survey		
Lang	Judy	Atlantic and Gulf Rapid Assessment Program	X	X
Lirman	Diego	University of Miami- Rosenstiel School of Marine and Atmospheric Science		
Lopez	Jose	NSU-OC/ National Coral Reef Institute	X	X
Lunz	Kate	Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute		
Mariano	Arthur	University of Miami- Rosenstiel School of Marine and Atmospheric Science		

Miller	Margaret	NOAA- Southeast Fisheries Science Center		
Paul	Valerie	Smithsonian Marine Station at Fort Pierce		
Peters	Ester	George Mason University	X	X
Shivlani	Manoj	University of Miami- Rosenstiel School of Marine and Atmospheric Science		
Stamates	Jack	NOAA-Atlantic Oceanographic & Meteorological Laboratory		
Walker	Brian	NSU-OC/ National Coral Reef Institute	X	X
Wusinich-Mendez	Dana	NOAA Coral Reef Conservation Program	X	X

Southeast Florida Coral Reef Initiative Members (SEFCRI)

Last Name	First Name	Organization	Day 1	Day 2
Arpayoglou	Irene	FDEP- Environmental Resources Permitting Program	X	X
Ault	Erick	FWC Gish and Wildlife Research Institute	X	X
Beal	Jeff	Florida Fish & Wildlife Commission	X	
Bingham	Dave	FWC Division of Law Enforcement	X	X
Bohnsack	Jim	NOAA Southeast Fisheries Science Center		X
Buck	Eric	FDEP- Biscayne Bay Aquatic Preserve	X	X
Buck	Stacey	Coastal Planning and Engineering	X	X
Clark	Dan	Cry of the Water	X	
Clark	Stephanie	Cry of the Water	X	X
Davis	Paul	Department of Environmental Resources Management- Palm Beach County	X	
Fitzpatrick	Kathy	Martin County/ Administration	X	
Freedman	Justin	E Sciences, Inc.	X	X
Garis	Greg		X	
Gregg	Lisa	Florida Fish & Wildlife Conservation Commission	X	X
Jenkins	Mike	Applied Technology & Management Inc.	X	X
Jordan-Sellers	Terri	US Army Corps of Engineers- Jacksonville District SAD	X	X

Karaszia	Jocelyn	NOAA/ NMFS Habitat Conservation Division	X	X
Knoeck	Linda	US Army Corp of Engineers		X
Kenny	Ivana	FDEP- Beaches, Inlets, and Ports Program	X	X
Lesh	Amy	DiveEncounters	X	X
McDevitt	Erin	FWC Division of Habitat and Species Conservation	X	X
Merz	Dave	Intermedia Outdoors	X	X
Miller	Cheryl	Coastal Eco-Group, Inc.		X
Monty	Jamie	Miami-Dade County- Department of Environmental Resources Management	X	X
Morrel	Nick	Reef Guard	X	X
Phelan	Shana	Pura Vida Divers	X	X
Quinn	Pat	Broward County- Environmental Protection and Growth Management		X
Sadowitz	Ruth		X	
Schmidt	Frank	Lighthouse Point Saltwater Sportsman Association	X	X
Sheckman	Scott	iSheck Consulting	X	X
Smith	Angela	Shark Savers/ WildAid	X	X
Smith	Mason	FWC Division of Marine Fisheries Management	X	X
Thanner	Sara	Miami-Dade County- Department of Environmental Resources Management	X	X
Tichenor	Ed	Reef Rescue	X	X
Torode	Jeff	Greater Fort Lauderdale Diving Association/ DEMA	X	X
Vacin	Don	FWC Division of Law Enforcement	X	X
Voss	Josh	Harbor Branch Oceanographic Institute at FAU	X	X
Welch	Leanne	Palm Beach County- Department of Environmental Resources Management	X	X

Department of Environmental Protection (DEP) Coral Reef Conservation Program (CRCP) Staff

Last Name	First Name	Organization	Day 1	Day 2
Báez	Jennifer	FDEP CRCP	X	X
Balling	Meghan	FDEP CRCP	X	X
Egan	Kelly	FDEP CRCP	X	X

Sathe	Melissa	FDEP CRCP	X	X
Sinnott	Mollie	FDEP CRCP	X	X
Walczak	Joanna	FDEP CRCP	X	X
Waters	Lauren	FDEP CRCP	X	X
Zangroniz	Ana	FDEP CRCP	X	X

MEETING SUMMARY:

Tuesday, August 4th – Wednesday, August 5th 2015

Meeting Guidelines

Lauren Waters, Coral Reef Conservation Program (CRCP) Assistant Manager and Maritime Industry & Coastal Construction Impacts Coordinator, welcomed all in attendance to the Southeast Florida Coral Reef Initiative (SEFCRI) Joint Team and Technical Advisory Committee (TAC) meeting. She reviewed meeting participation guidelines for members and observers, which included roles of facilitators, guidelines for discussion, consensus rules, comment card procedures, and the use of meeting evaluation forms. Lauren then reviewed the day's agenda and summarized the meeting objectives; for small groups to review and provide feedback on *Our Florida Reefs* (OFR) Community Planning Process draft recommended management actions (RMAs) provided by the *Our Florida Reefs* Community Working Groups (CWG), and providing guidance and information for identified gaps in the draft RMAs.

All in attendance, including SEFCRI Team members, TAC members, FDEP staff, and public observers, introduced themselves.

Overview of OFR – Meghan Balling, FDEP CRCP

Meghan reviewed the OFR Community Planning Process timeline and accomplishments, decision support tool, and current RMAs (80 total: 27 Combination RMAs, 51 Clarified, 2 spatial RMAs). She then discussed process planning by the CWG members and encouraged attendance at future meetings.

Questions and comments (overview)

1. (Judy Lang): *Do you really intend to have about 80 RMAs in total come next January?*
(Meghan Balling): *It all depends on the feedback we get today and the Community Working Group members will discuss and work through them. Ultimately it is up to the Community Working Group members and they can choose to accept or decline the feedback that you are offering today on the RMAs. I doubt we can get them down to smaller than 80; they were already condensed down from 124 RMAs to the current 80 combinations.*
2. (Frank Schmidt): *Is there a dollar amount associated with these RMAs? If so, is there a designated funding channel?*
(Meghan Balling): *It is captured in the documents you will see today under the Tier 1. That being said, the estimates the Community Working Group members came up with might not be the same numbers so they can vary drastically. In some cases a funding channel may be designated but that is not always the case. If you have ideas for funding, today is the day to mention them.*
3. (Dan Clark): *Will there be time to discuss things currently going on the reef (bleaching, disease, other current events)?*
(Lauren Waters): *Public comment available today or tomorrow. Based on comments and feedback from the last meeting, we did discuss with the vice chairs about having a current events section for this meeting and at this time there will be no current events section due to other high priorities.*

Small group discussions – Lauren Waters, FDEP CRCP

The first activity of the day was to discuss a portion of the RMAs assigned to each small group and offer feedback on each of them. SEFCRI members were directed to phrase their comments and feedback through clear, concise content with actionable recommendations for working group consideration. At the end of the allotted discussion sessions RMAs will be presented to all in attendance and feedback from SEFCRI members were solicited.

o Guidelines for small groups:

- Review the information provided by the Community Working Groups (CWG) in the Tier 1 and Tier 2 worksheets, and review the feedback provided by the SEFCRI Team and TAC members from the January meeting.
- Identify if there are additional information gaps and if more information could enhance the RMA. If more information is needed, table facilitators will capture the information throughout the document in the appropriate location within those documents.
Assign a point of contact for each RMA. The point of contact will review all the information discussed and captured during the meeting along with review the document for additional clarification. The updated RMA will be due via email on September 7, 2015.

Questions and comments (Small group discussions 1)

1. (Nick Morrel): *Do we have to make the presentation for public meetings, are we thinking about it today?*

(Lauren Waters): *No, flesh out RMAs and work on how to make it actionable for the Community Working Groups. The RMAs will still have to go to the next Community Working Group meeting this fall.*

2. (Judy Lang): *In the case of combined actions, do we assume that combined action is most reasonable?*

(Lauren Waters): *The one in bold is the one Community Working Group members felt best represented the most important intent for that action. Some of the Community Working Group members actually revised the title to reflect what they felt was the most important part of the action.*

3. (Terri Jordan-Sellers): *Where do we put our recommendations/ feedback?*

(Lauren Waters): *Facilitators at each table have the Community Working Group documents on their computers and will record the notes of their table members.*

4. (Frank Schmidt): *Who assigns the homework? How do we get acceptance from all table members?*

(Lauren Waters): *Assign homework within your own table as you find appropriate, if someone is more knowledgeable about the RMAs assign the homework to them.*

Report out #1

Group 1 (Dave Bingham, Dave Merz, Lisa Gregg, Jamie Monty)

1. N-32: Perform efficiency/retention study of the FWC law enforcement to ensure the best use of current and future funding to improve compliance of existing regulations

(Jamie Monty): *We started by talking about the issues here for both retention and new officers. We suggest combining with S-95.*

2. S-95: Improve law enforcement management efficiency to match assets and personnel to public need and threats for more effective enforcement

(Jamie Monty): *We have a new title for the working group members to consider "Create a study to improve law enforcement management roles to match assets and personnel to public need, and improve efficiency/retention study." We suggest for efficiency have the study conducted by someone external to the agency, specifically college students in either the social science or criminal justice realm that would take this on with little to no cost to the agency.*

3. S-89: Enforce bait fishing regulations within beach zones to protect fish biomass nearshore

(Jamie Monty): *FWC will continue to monitor, manage, and create an annual report on status and trends of foraging fish. This is the resolution to this RMA.*

4. N-36: Raise the cost of lobster stamp (both commercial and recreational) to use money to put towards enforcement of laws

(Jamie Monty): *Suggested they refine language of title to include money from stamp to only be used in region it is collected. The FWC already raised price from \$2 to \$5 in 2010 and they do not see a reason to increase the fee so soon. The stakeholders would need to find a legislative aid to take this issue to the Commissioners.*

5. S-93: Increase presence of enforcement of land-based fishing violations to protect fish biomass

(Jamie Monty): *FWC re-evaluated their requirements for law enforcement officers. Now vessel hours no longer include just butt-in-the-boat hours, officers can patrol piers, jetties, beaches, marinas, etc.; the objective has already been taken care of by this recent change.*

Group 2 (Scott Sheckman, Jeff Torode, Angela Smith)

1. N-15: Develop, promote, and maintain citizen supported organizations (CSO) (i.e. Friends of Southeast Florida's Coral Reefs) to enable better community engagement in coral reef efforts and target funding for conservation activities more effectively and efficiently

(Scott Sheckman): *We decided to remove the word 'develop' since it is here already, just say promote and maintain. One of the questions we had was should this be inclusive to CRCP? It has a model of success already. We decided to remove N-3.*

2. S-52: Create an effective reef protection mascot/logo campaign to increase awareness for protection

(Scott Sheckman): *Not too many notes on this one. We decided it was best to leave the CSO alone and combine N-3 with S-52.*

3. N-5: Develop and implement a Florida reefs and ecosystems curriculum for K-12 that includes educating educators on available resources to provide science-based foundation for making future decisions to protect coral reefs and to also educate the community

(Scott Sheckman): *Think this is great but it is very broad based. Could be dropped to “Explore these options...” or county/city level not statewide. We could make it a pilot program so we do not have to take on something as large as the state. Make it voluntary for schools. A 10 year timeline is too long should be shorter. The cost is underestimated.*

4. N-23: Create a marine industry program (e.g. Bluestar) for industry users, including commercial and private, to raise awareness and reduce impacts to coral reefs to show promote local shops and boats that are approved and participate in local marine conservation and awareness

(Jeff Torode): *Had questions about Bluestar program, how to fund/implement. First of all there needs to be an incentive to get operators to do it (involve hotels or tourism boards). Down the road if we have a different management plan for that area, it could fall under the management plan or you have to be a Bluestar operator to enter that area. Voluntary program, but enforcement through entity (NGO or 501c) that runs Bluestar with annual inspection. Private boaters are too big of a challenge; commercial entities only. Suggest to pattern after FL Keys program.*

Group 3 (Irene Arpayoglou, Justin Freedman, Dan Clark, Kathy Fitzpatrick, Linda Knoeck)

1. N-114: Reinstate funding for regulatory agencies (reinstate FDEP Dive Teams throughout the state) to monitor reefs, assess potential impacts, and assist other agencies (fish/coral surveys) with protection and monitoring

(Justin Freedman): *This was a combination of two original RMA’s (N-88 and N-114). We like this recommendation but needs to be more specific because by combining the two recommendations it got muddy. It should be a regulatory action to reinstate the DEP dive team so that they could do permit compliance. Right now this is not a funded program and DEP cannot check a monitoring report. So we changed the title to reflect that.*

2. S-101: Create/enhance “LEED” –like certification program for coastal construction companies and projects, as well as individuals working in the industry, to encourage smart development and best practices for coastal construction

(Justin Freedman): *LEED is a great program but LEED is expensive and for-profit certification. DEP has a program for landscapers that is very similar about fertilizer, where if you apply commercial fertilizer you have to take this DEP class that teaches you about best management practices on how not to get the fertilizer in the water. We think there should be something like that for project managers for coastal projects, seawalls, dredging projects, anything on the coast, you will have had to take this class by a certain year in order to even be considered for a permit. Did not have Tier 2 information so we went ahead and filled in Tier 2. We set a 5-7 year time frame but other group member wants three-year time frame for implementation.*

3. N-25: Strengthen penalties and fines for non-compliance of reef-related regulations to enhance voluntary stewardship, to discourage illegal activities, and to express that violations will not be tolerated

(Justin Freedman): *This was a combination of N-22 and S-78. Part of what we looked at was clarifying reef protection type violations, not just increase penalties but a larger sweep of options for penalties and violations.*

Group 4 (Ivana Kenny, Ed Tichenor, Cheryl Miller, Mike Jenkins, Terri Jordan-Sellers)

1. N-106: Minimize the use of beach renourishment and other coastal construction projects to prevent negative impacts and destruction of near shore environments, by using appropriate, and improved, available strategies such as bypassing and dune creation

(Terri Jordan-Sellers): *This was a combination of four other projects. We were talking about trying to focus on adding new features that don't previously exist, to promote the use of bypassing (coordination O&N dredging of inter-channels). Right now there is a big disconnect where federal authorization requires the least cost alternative to be used but the state requires the sand to be placed on the down drift beach or the most impacted beach adjacent to it but there is no money to pay that delta if it costs more; therefore if it costs more, the cost falls to local community but if state is requiring it, the state should pay so we don't lose sand in that system because the sand could be lost in open water.*

2. S-104: Set new and appropriate water turbidity standards for marine construction to limit damage from coastal constructions to reefs and associated habitats

(Cheryl Miller): *The way we discussed it was the 29T standards need to be looked at in areas that are ecologically important. Gear it towards when projects are specifically constructed around those resources. Right now, you still have the 29T standards monitoring and the DEP has the ability to lower the standard next to seagrass when dredging by those resources.*

Group 5 (Erin McDevitt, Stephanie Clark, Pat Quinn, Ken Banks, Richard Dodge)

1. S-1: Remove tires and debris from failed artificial reef projects and reef tract to reduce damage to existing corals and habitat and create better recruitment substrate

(Pat Quinn): *We tweaked the verbiage updating current status, changed projected cost, as well as the agencies to work on this project. Technical challenges include tires stuck in sediment and expanding make the effort county-wide, not just in one particular tire field. The timeline was changed as well because if we are asking the legislature for money, that is a two to five year process.*

2. N-19: Update NOAA Nautical Charts to include reef habitat layer to create a better educated boater

(Ken Banks): *In concept that is a good project, but in reality NOAA will not change the way they create charts. Boaters do not use charts anymore, as it's all digital. We wanted to expand this to put coverage on chart plotters. FWC can develop coverage that can be slipped onto GPS systems that are already in use. Hopefully it can be free for boaters.*

Group 6 (Josh Voss, Nancy Craig, Jose Lopez, Piero Gardinali, Kurtis Gregg)

1. N-69: Support and provide money incentives and initiatives to restore and preserve wetlands north of Lake O in order to stop discharges to coastal estuaries to protect estuaries and reefs

(Josh Voss): *One of the major issue with this RMA was who will manage this program. The existing program is good mechanism to start this. There needs to be further engagement with counties that are north of the water basin because there are different*

priorities between the north and south part of the basin. This RMA's goals is too lofty, just improving the watershed is sufficient.

2. N-70: Prioritize the protection of existing and the restoration of historical mangrove, seagrass, oyster and other estuarine habitats, to redirect historical freshwater flows, increase habitat, improve water quality, and support nursery areas for reef fauna

(Josh Voss): We suggested a revised title and RMA to "Prioritize actions to improve the protection of mangroves, seagrass, oysters, and other estuarine habitats." We noted that restoration and enhancement fall under the broader goal of protection. A potential con about introducing unwanted species but we disagree with that as a con and suggest opening it. The other con we disagree with is cost. Cost is not a con, just a challenge. But the RMA benefits outweigh costs.

3. N-78: Reduce ground water pollution in targeted watersheds associated with priority reef areas to improve water quality and reef health

(Josh Voss): This RMA was very nebulous and large in its intended results. We suggested a number of more discrete actions to provide measureable targets, such as reductions in septic tank use, recommendations for advanced wastewater treatment, and improve infrastructure to increase system capacity, thereby reducing storm treatment pollution events.

Group 7 (Shana Phelan, Nick Morrel, Leanne Welch, Brian Walker, Eric Buck)

1. N-6: Continue education and outreach about lionfish, including teaching people to capture and prepare lionfish and educating the public on the dangers of invasive species, to increase pressure on lionfish, relieve pressure on current reef fish, and decrease popularity of invasive species to pet owners

(Shana Phelan): This is actually already occurring by FWC and REEF. We suggest rewording it to "Support existing efforts..." and not take on as a separate program since those organizations already have something going.

2. N-21: Develop and distribute welcome packets for new FL residents that provide information on impacts to reef systems and how they can be addressed to raise awareness and influence behavior change to reduce impacts on reefs

(Shana Phelan): Suggested that if this was going to continue in a different form we drop printing forms and consider a digital form, like a welcome to Florida PSA or website banners. That way you can target not only new residents but also visitors, hotel guests, college students. Doing it in a digital form would make it more feasible and easier to change over time.

3. N-33: Install webcams to catch offenders and keep people informed on weather and water conditions

(Shana Phelan): We suggest dropping it as it stands now because we already have surf report cams by other organizations. Coastal construction project webcams can be put on permits depending on permit use and public versus private use to view.

Group 8 (Dana Wusinich-Mendez, Mason Smith, Jim Bohnsack, James Byrne)

1. N-64: Require registration and tagging of lead line for all cast nets and traps, as well as reporting the coordinates of any lost nets to FWC for retrieval, for commercial and recreational fisherman, within St. Lucie State Park to prevent and track lost gear (ghost nets)

(Dana Wusinich-Mendez): *We had questions about the technical feasibility and how exactly this would work. We suggested possibly putting tags on floats that can be seen from surface. Suggestions to ensure that there would be reporting of lost nets would be a penalty for retrieved nets that were not reported or a guarantee to return nets that had been reported and were retrieved.*

2. S-87: Modify or enhance existing regulations to increase protection for parrotfish and other important herbivores for coral ecosystem protection

(Dana Wusinich-Mendez): *There has been extensive research on the key role of parrotfish on reef systems, therefore we don't need new science to establish that. The current legal take of parrotfish through permits and the aquarium trade is about 3000 each year, which is not a significant impact. The main impact on these populations is from illegal fishing. We recommend educating public so they understand it is illegal.*

3. S-97: Maintain lobster mini season but reduce the bag limit to six lobsters per person per day to be consistent state wide and require the review of educational materials and completion of an educational quiz in order to receive annual license

(Dana Wusinich-Mendez): *Some discussion on what is the focus - conserving lobster population or habitat protection? We recommend the Community Working Group focus on that habitat protection element. Had more concern about requirement to take quiz and how it would be difficult to implement, but we suggest providing pamphlet when lobster stamps are purchased so the public can understand importance of protecting the corals.*

Group 9 (Erick Ault, Sara Thanner, Paul Davis, Stacy Buck, William Cline, Frank Schmidt)

1. N-68: Reduce and regulate fertilizers and pesticides to reduce nutrient and pollutant loading to improve water quality and provide protection to reefs, and promote the use of Florida friendly herbicides and pesticides to reduce or eliminate toxic chemicals

(Erick Ault): *This is definitely a good thing and makes common sense. Pinellas County bans sale of fertilizers during rainy months. How to sell this idea to the public: fertilizer is not good during rain because you just waste your money because it gets washed away. We could make pamphlets for hardware stores where fertilizer is sold. Going back to the other counties who have done this, we need to see if there is actual improvement in the water quality.*

2. N-1: Educate the public on the effects of land-based sources of pollution to reduce the amount of pollutants entering storm drains and waterways

(Erick Ault): *A better direct route could be to address the public perception through public service announcement for a more immediate response. We keyed in on the word "public" in this RMA.*

3. S-116: Coordinate regional "living shoreline" objectives to promote the use and protection of natural infrastructure (e.g. coral reefs, native vegetation, mangrove wetlands) to provide natural barriers to storm surge and maintain coastal biodiversity

(Erick Ault): *The two objectives for this were that it provides nutrients for shorebirds, and to a less extent it prevents or helps slows down beach erosion. We suggest promoting no clearing of the beach wrack and if you must, at most every 3 or 4 days. Individuals who perform service get the permits not the individual landowner.*

Group 10 (Jocelyn Karazsia, Judy Lang, John Fauth, Esther Peters, Dave Gilliam)

1.S-3: Implement a management plan to better monitor and research coral reef disease, working with the Coral Disease Consortium, to reduce coral mortality

(John Fauth): *We discussed this one, especially the scientists in the group, and we love the idea but coral disease is not management in nature, it is science. So to redirect this we suggest getting scientists to coordinate and plan with universal protocols. Amphibian folks cracked this pretty quick so there is a lesson to be learned from them.*

2. S-65: Nominate SEFCRI region for consideration as a National Marine Sanctuary to engender protection and benefits, a legal forum, discussion, understanding and collaboration, and to balance uses towards sustainable resources

(John Fauth): *Mainly on this one we addressed some technical issues, i.e. what would be the eastern, wester, norther and southern boundaries, as well as the relative time frame. More feedback to the Community Working Group members.*

3. S-54: Apply for UNESCO world heritage site status for entire Florida reef tract to increase awareness and protection of Florida coral reefs

(John Fauth): *We had a lot of discussion about this and what our suggestion revolved around was, whether there would be sites of quality to qualify for this? There are some sites within the Florida reef tract that would qualify for this, such as the Dry Tortugas and Pennekamp State Park. We suggest focus on sites within the reef tract that would qualify for this not just the whole reef.*

Public Comment

Directions for public comment:

- Please fill in a Comment Card and give it to the floating facilitators or registration staff if you wish to speak.
- Public comment is limited to 3 minutes for each person speaking unless there are less than 5 comments; Then up to a maximum of 5 minutes will be allotted.
- Only comments submitted in writing on a comment card will be included in the meeting minutes.
- If you have materials you wish to give to the SEFCRI TAC, please provide copies and leave them at the Registration Table.

Dan Clark - Cry of the Water

Video

Report out #2

Group 1 (Dave Bingham, Dave Merz, Lisa Gregg, Jamie Monty)

1. S-99: Increase number of FWC enforcement officers; funding for enforcement; recruitment and retention of on-water officers to improve enforcement for better protection of resources

(Dave Merz): *Beneficial but could be enhanced by results of N-32 and S-95 once they are acted upon to improve retention of law enforcement officers.*

2. N-35: Develop and implement a cross-training program for local marine units and beach patrol officers, to improve recognition of conservation regulations, increase law enforcement presence on the water and provide additional enforcement for peak periods to build relationships between agencies and decrease marine-related violations

(Jamie Monty): *We heard some examples from officers here at our table. It currently only occurs during mini season and limited to information exchange, not a cross-training. The way to go about is that officers themselves must make contact before agencies will create training with other agencies.*

Group 2 (Scott Sheckman, Jeff Torode, Angela Smith)

1. S-67: Provide incentives to divers and fishermen to eradicate invasive species of marine organism proliferating the SEFCRI coral reef system to provide a natural ecological balance of marine and plant life for the coral reef system

(Scott Sheckman): *We felt invasive species is just lionfish, and incentives have already been played out. We weren't sure what an ongoing incentive would be, but we coined the phrase "inSPEARation" as moral compass to encourage divers and fisherman. We decided to take out commercial fishing incentive as that is a different kind of incentive altogether.*

2. S-75: Initiate collection of a user fee from divers via licensed dive boats and/or annual license to fund state-sponsored or state approved reef conservation, protection, programs, or projects

(Scott Sheckman): *We felt it would not work with the dive community unless it is for an enhanced area as diver use only. It would take legislative effort for user fee anyway; it is not a simple process. Did not designate what the user fee would be.*

3. N-123: Develop a sustainable finance plan to support coral reef conservation effort in the SEFCRI Region and implement specific fundraising mechanisms from that plan. Could include benefit races, concerts... this would increase local capacity to conserve SEFCRI coral reef resources

(Scott Sheckman): *We felt we should take out concerts/benefit raises, as not sustainable because they are annual events or one time only. The additional monetary support needed is paid by taxes, as well as trust funds, CSO, donations. Did not account for all of the potential revenue ideas.*

4. S-52: Create an effective reef protection mascot/logo campaign to increase awareness for protection

(Scott Sheckman): *Could fall under larger program and can be combined with N-123. Seemed to be marketing oriented. Who is mascot and logo for (SEFCRI has one already)?*

Group 3 (Irene Arpayoglou, Justin Freedman, Dan Clark, Kathy Fitzpatrick, Linda Knoeck)

1. N-113: Eliminate Lake Worth inlet dredging project to reduce siltation on coral reefs and keep coastal communities and habitat balance

(Justin Freedman): *We struggled with this one. Project already in works and we wanted to turn it into a management recommendation. Questioned process of state-level review for federal projects? It could be archived or redirected.*

2. S-110: Eliminate coastal storm water runoff to eliminate land-based sources of beach erosion reducing the need for renourishment projects and improve near shore water quality

(Justin Freedman): *We recommended that the management action incorporates already existing regulator structure used during runoff events, identified possible gaps in regulations already in place. Incorporate the ability to fix gaps in storm water master plans.*

3. S-114: Apply lessons learned from past projects to future projects to minimize impacts to resources and improve success of mitigation activities

(Justin Freedman): *Pretty good idea overall.*

Group 4 (Ivana Kenny, Ed Tichenor, Cheryl Miller, Mike Jenkins, Terri Jordan-Sellers)

1. S-106: Minimize the use of beach renourishment and other coastal construction projects to prevent negative impacts and destruction of near shore environments, by using appropriate, and improved, available strategies such as bypassing and dune creation

(Ivana Kenny): *We thought a certification program was not good because small group of users. Permitting process shorter for training program.*

2. S-108: Revise/create UMAM (Uniform Mitigation Assessment Method) for coral reef environments to improve application of this rule to coastal ecosystems, to provide more consistent/ accurate calculations, and to ensure ecological functions are maintained

(Ivana Kenny): *Currently underway. Will it be included in those already being used? We will check on that.*

Group 5 (Erin McDevitt, Stephanie Clark, Pat Quinn, Ken Banks, Richard Dodge)

1. N-8: Develop a public education campaign, like “Be Floridian,” to encourage eco-friendly yard and garden maintenance to help reduce the amount of nutrients and other pollutants reaching the reefs through residential run-off

(Erin McDevitt): *Add N-87 as component of this RMA. Create education material for yard maintenance so not harmful to reefs. Ask other programs like “Be Floridian” to distribute material on their websites as opposed to SEFCRI creating their own site for this information.*

2. N-87: Promote existing “rain garden” programs to relevant landowners to reduce rainwater runoff and the chemical load of water released to sea

(Erin McDevitt): *Combine with N-8.*

3. N-120: Pass legislation and local ordinances to restrict or to ban one-time-use plastic bags and Styrofoam to protect marine environment (i.e. turtles)

(Erin McDevitt): *Florida legislature has a ban that you cannot ban plastic bags. So to do this, must take up issue with legislature and undo the action that already exists. Could be better to influence other organizations that are larger to take up this issue with the legislature. Creating a voluntary basis for consumers to become more aware of their use of bags. Caveat to this is that local municipalities can ban them, in place in Crystal River.*

Group 6 (Josh Voss, Nancy Craig, Jose Lopez, Piero Gardinali, Kurtis Gregg)

1. N-82: Support existing and create innovative new initiatives that increase storm water storage, and reduce stormwater runoff, enhance treatment, increase reuse, and reduce nutrients and other contaminants, from all surface water to restore healthy estuaries

(Josh Voss): *We suggested a revision to title “...improve water quality”. Estuarine focused does not fit into decision support tool as it currently exists. While it could be coordinated by municipalities eventually it would need coordination at the regional level.*

2. N-89: establish partnerships with local government to uphold, enhance, or create restrictions on seasonal use of fertilizer ordinances to reduce nutrient load on reefs

(Josh Voss): *There is an existing FEDP draft language of an ordinance to fix state ban on bans. Once again the goal is to reduce fertilizer use, and ordinances are just one way to reduce fertilizer use. We suggest focusing on local government and include revision for seasonal use. Pesticides and herbicides must be appropriately labeled for usage instructions on the bag themselves.*

Group 7 (Shana Phelan, Nick Morrell, Leanne Welch, Brian Walker, Eric Buck)

1. N-75: Promote/offer free pump out stations to better water quality and allow boats a better option than dumping offshore

(Nick Morrell): *This management action is fairly complete. It referenced all of the points. We just edited a bit.*

2. S-121: Review shipping and yachting industry sewage dumping rules to make sure discharge areas are far from SE FL coral reefs to reduce nitrogen threats to reefs

(Nick Morrell): *There is a conflict result here, one is to move shipping lanes and one is to reduce sewage output. We feel that shipping lanes could be under N-137. The current discharge rules for sewage ok at the moment.*

3. N-137: Designate the entire SEFCRI region as a particularly sensitive sea areas (PSSA) to reduce direct impacts from large vessel grounding and cable drag events on the reef

(Nick Morrell): *We have rewritten the title to emphasize danger from impact and ATBA (area to be avoided). The Florida Keys currently has both of these designations in place.*

Group 8 (Dana Wusinich-Mendez, Mason Smith, Jim Bohnsack, James Byrne)

1. S-86: Ban live mounts of all shark species to reduce shark mortality due to charter fishing practices that ensure mount sales and dockside marketing

(James Byrne): *For 30+ species of sharks it is illegal to take sharks out of water already in Florida. The idea is to promote best release practices for species that are allowed to be caught (10 species). Another thing is to make sure federal regulations mirror those in FL.*

2. N-65 & S-98: Standardize catch size limits for commercially/recreationally important species with similar life histories and appearance to make it easier to enforce regulations and catch within limits. Simplify FWC rules and regulations to reduce complexity (fish size fork length versus overall- snapper one size, grouper one size, pelagics) to make rules simpler

(James Byrne): *Both are about trying to simplify catch regulations, grouping families of fish for caught size purposes. Looking at it from a biological perspective it is not useful for families of fishes. The way you measure fish needs to simplify regardless of tail shape. Another area to simplify is catch size and bag limits on both Gulf and Atlantic fish, standardize across the state, make it easier for compliance. We recommend those two get combined into one RMA.*

Group 9 (Erick Ault, Sara Thanner, Paul Davis, Stacy Buck, William Cline, Frank Schmidt)

1. N-45: Require certification for fishing license and/or course for younger generations to increase awareness of local laws and promote ethical angling practices

(Erick Ault): *We suggest creating a test for fishing license. The process for a test to be created would have to be a legislative task. The questions we asked are how to be implemented and how to be paid for? This action required for license.*

2. N-7: Offer an online exam to receive a discount on fishing licenses (create an incentive-based program)

(Erick Ault): *Offered test for discount on license when born after a certain date. However a fishing license only costs \$17 so what kind of a discount are you talking about? We came up with something like the hunter's safety course. If you were born after a certain date you would be required to take the test.*

3. N-18: Develop culture-based fishery and coral reef education program (stakeholder<-->managers) to anticipate adverse impacts to non-traditional (Floridian) fishery populations

(Erick Ault): *Thought of this in regards to people from the Caribbean who come here (i.e. an area from where the fishing culture is different). People from other states make mistakes due to lack of knowledge not intentionally making fishing violations. Should you offer a fishing test in different languages?*

Group 10 (Jocelyn Karazsia, Judy Lang, John Fauth, Esther Peters, Dave Gilliam)

1. S-8: Develop strategies for coral population enhancement through restocking and larval recruitment to establish recovery zones and recruitment for corals and fish

(John Fauth): *After a lot of discussion we had difficulty on the intention of this RMA. One idea that did come up with was an 'Adopt-A-Reef' program so restoration programs focus on certain areas. Restoration groups focus on certain areas and doing things such as removing the tires, etc.*

2. S-15: Restore ESA listed coral species by researching and sustaining coral nurseries plus transplanting to natural reefs. Creation of corals will restore reefs, increase coral populations and engender natural reproductive success

(John Fauth): *Already ongoing under ESA. You can propagate and grow as many corals as you want but if you don't fix the natural environment you will not fix the issues.*

Adjourn

Day 2 Summer 2015 TAC Meeting

Introduction

Lauren Waters introduced herself as the CRCP Assistant Manager, welcomed all in attendance to the 4th Southeast Florida Coral Reef Initiative (SEFCRI) Technical Advisory Committee (TAC) meeting, reviewed meeting participation guidelines for TAC members and observers, which included the facilitators' role, guidelines for discussion, consensus rules, comment card procedures, and the use of meeting evaluation forms. Lauren then reviewed the day's agenda.

Meeting purpose is to finish reviewing and synthesizing the *Our Florida Reefs* draft recommended management actions (RMA) into clear and actionable RMAs and review interest

Report Out #1

Group 1 (Dave Bingham, Dave Merz, Lisa Gregg, Jamie Monty)

1. N-44: Educate judges and prosecuting attorneys on the importance of imposing penalties for environmental violations that are severe enough to prevent future violations

(Don Vacin): *Have a major or captain from each region do a meet and greet with the judge. Offer an airboat ride or an ecological tour to build a rapport so the judge does not throw out cases. If they say "no" that's fine but I've never seen anyone turn down a ride.*

2. S-125: Amend 403.93345 Statute of the Coral Reef Protection Act to allow FWC Officers discretion to issue a citation or a warning for reef damage, which includes anchoring, to give FWC officers more discretionary authority in enforcement

(Dave Merz): *Their intended outcome was to change the citation because right now it is only a civil violation and the way the statute reads currently is that FWC can issue citations. Talking with the members here, especially with the FWC, one of the potential downsides of a very well-meaning management actions is that when you open up that statute for amendments it is open for anything to be amended on it, which could potentially negatively affect the strength of the statute. Basically what the law allows them to do, they do currently and the general consensus was that if we open that up, we could wind up with a statute that goes away which would hamper them. There was discussion about taking or destruction of corals but there are a lot of other things that could be a negative. So while a well-intended one, we are not recommending action on it because of the downside potentially being even worse.*

(Dave Bingham): *I want to add when you said opening up take and defining "take", recommending doing that through the FWC rule that would make that a criminal violation. So instead of changing that state statute and going through the legislative process we would try to petition the FWC to do a little bit more. Explain what the*

destruction and damage of coral would be through the rule process to better define "take".

3. S-64: Include all state and federal MPAs on Florida DEP website to improve public outreach and education, promote state and federal communication and cooperation, promote holistic ecosystem perspective, and clarify currently misleading map

(Lisa Gregg): I just made a phone call to our research institute to see if we, the FWC couldn't just go ahead and put this together since they already provide all of the GIS support for oil spills and things like that already. We've got a lot of the outstanding Florida waterbodies, state parks, and federal parks. We have a data layer with all of data in it already. They said they would go ahead and start working on a map on the FWC site that way we could update it as needed. Most boaters and anglers go to the FWC site if in need of this information. So we will go ahead and house it. They went to an IT conference a couple of weeks ago and they said they will try and make it interactive with GIS so that you could see exactly where you are on that map, when you get to it you could hook it up to you boat device. They are already working on it so this action will be accomplished.

Group 2 (Scott Sheckman, Jeff Torode, Angela Smith)

1. S-91: Develop a telephone app to allow the public to photograph violations and document time, boat numbers, GIS coordinates, and violation to state FWC and federal enforcement personnel to improve regulatory compliance and enforcement and improve public involvement, outreach and education concerning coastal protection in Florida

(Angela Smith): We went back into this today and really helped them out by putting in a budget and asking each of the target questions. Basically they just wanted to know whether this was achievable and we knew from some research this was achievable and there is even an app development company up in Delray that can help out with this.

2. N-5: Develop and implement a Florida reefs and ecosystem curriculum for K-12 that includes educating educators on available resources to provide science-based foundation for making future decisions to protect coral reefs and also to educate the community

(Angela Smith): In going back and answering the questions, the management action we thought should be a voluntary program so it doesn't have to go through legislature. Amy found a website for educators that can be very helpful.

Group 3 (Irene Arpayoglou, Justin Freedman, Dan Clark, Kathy Fitzpatrick, Linda Knoeck)

1. S-107: Encourage region-wide biological monitoring (e.g. via BMAs) to document condition of resources that may be impacted by nourishment projects and inform regulatory decisions to ensure ecological functions are maintained

(Linda Knoeck): *They told me that I need to take this home and do it. I'm not sure what people are talking about, they intent of this is similar to what Palm Beach County already has which is beach management agreement for certain cell stand so perhaps they want to do that for all of the areas in SEFCRI so Broward county, Martin county, and Miami. There are some holes as far as who would be responsible for doing that and facilitating all of the stakeholders involved in doing that, different types of monitoring, and what the ultimate goal is. One way of doing that is understanding the sand cell and how it functions, differentiate between variabilities of the system itself and project related. There is some more information that needs to be defined.*

Group 4 (Ivana Kenny, Ed Tichenor, Cheryl Miller, Mike Jenkins, Terri Jordan-Sellers)

1. N-117: Revise reef mitigation process for permitted and non-permitted activities

(Terri Jordan-Sellers): *One of the things we were talking about was determining the intent and focus. When they merged them together, they may have lost the focus on the individual four. One of the main factors was taking into account the ecosystem as it is now and all of the functions, and recognizing that although state law says you must replace 100% function, currently we don't know what the function of all of these ecosystems are. So how do you replace functions that we can't even find? That is one of the challenges in asking them about mitigating for what's there now and adding things like relocation of corals or critters of any sort at an impact site, survivability of those, and coming up with a recommended plan for those.*

2. S-124: Facilitate the creation of regional beach management agreements (BMAs), which take an ecosystem approach to projects such as beach nourishment and storm-water pipe removal to maintain beaches and protect resources

(Mike Jenkins): *We started out with some discussion about the two purposes of this. One is renourishment and the other is storm water pipe removal, and noted it was noted that those two, depending on the scope, may or may not be under the same regulatory programs within the state. We do need to have more definition regarding that because it may be overlapped programs that need support. In terms of BMAs, we had some considerable discussion on the current BMAs. There is currently only one active one. What a BMA is, was also part of the discussion. At one level it is a regulatory document, an agreement between; at other levels it is a framework or strategy for better management. Depending on how you look at it, its different things to different people. What we noted is the current BMA really has to be initiated and the current results of it are not processed. We really need to get more feedback about what works and what hasn't worked. We need a better informed future uses of that concept.*

Group 5 (Erin McDevitt, Stephanie Clark, Pat Quinn, Ken Banks, Richard Dodge)

1. N-94: Develop and implement a “Green Club TM” certification program for golf courses (similar to Bluestar for dive industry and clean marina programs) to provide an incentive mechanism for golf courses to reduce their impact on marine environment

(Ken Banks): *The document itself is okay but they big issue we came up with is why would they do this? The golf course would have to reinstall all of their turf with saltwater resistant salt grass at a huge expense and make their irrigation system saltwater resistant. It sounds nice but it is not feasible.*

Group 6 (Josh Voss, Nancy Craig, Jose Lopez, Piero Gardinali, Kurtis Gregg)

1. S-28: Support restoration of historical/natural Everglades’ water flow to minimize pulses of freshwater and protect marine ecosystems from poor water quality (nutrients)

(Josh Voss): *We revised it slightly to try and identify who would provide support (SEFCRI). When we started reading through this RMA and looking at it, it came out that it was an RMA to adopt a strategy to enhance communication and exchange between coral reef stakeholders in the SEFCRI region and Everglades’s stakeholders. To date there has been limiting interaction between these stakeholder groups with the influences of SEFCRI groups on those planning processes so we added to an intended result on this RMA, the creation of a working group to participate in the planning process. So SURF and SEFCRI can go forward no matter what; to have SEFCRI and coral reef interest aligned in that process.*

2. N-97: Target LBSP reduction activities and identified hotspots and water shed of nonpoint source pollution along SEFCRI reef tract to improve water quality and reef health

(Josh Voss): *The idea behind this one is not necessarily just non-point source or point source but rather look at areas we know are hotspots of pollution. There has been some additional information that can influence or provide scope and background for his document. If you are deciding which areas to prioritize for improving water quality in estuaries there are going to be differences of opinion from your different groups, municipalities, counties, etc. Particularly as information and data are available we expect there to be big points. While there could be a scientific driver for those areas of reduction there was also a recommendation that perhaps a de facto organization is used for communities to identify this as way for issue to be resolved. Those areas that do it first are those areas that push that hardest.*

3. N-71: Develop and implement a monitoring program to detect, identify, and eliminate sources of pollution flowing through inlets to improve water quality and protection to reef

(Josh Voss): *The first thing we said was that a water quality monitoring program can't eliminate sources of pollution and can't improve water quality. So monitoring does not result in a change of water quality. As many of you may be aware, there is already a project ongoing and funded by NOAA to look at development of this strategy.*

Group 7 (Shana Phelan, Nick Morrel, Leanne Welch, Brian Walker, Eric Buck)

1. S-92: Establish a no-anchor zone on reefs during beach festivals (air sea show, music events, etc.) to protect reefs from anchor damage by the multitude of boats viewing or listening to the events

(Brian Walker): *We thought this action was done pretty well except we really want to change the title because we felt it does not list how to accomplish this. We renamed it to "Protect reefs from anchorage during beach events." Within the document of information itself, we listed several different items that could be used for enforcement of coral reef protection act. Possibly establishing a permit condition to require events that are on the beach to get permits for vessel spectators and have a plan for how those vessel spectators will be managed to enforce the Coral Reef Protection Act.*

2. S-100: Redefine the Port of Miami anchorage zone to remove four areas with reported coral from the existing anchor zone, reduce anchor damage currently being caused by ships anchoring zone which includes some coral reef

(Brain Walker): *We had a lot of discussion about this one, mostly because it's an ongoing issue with several agencies working on it at the moment with the coast guard trying to resolve it. We updated this recommendation with the latest information and we recommended a redefinition of the title to "support ongoing effort".*

Group 8 (Dana Wusinich-Mendez, Mason Smith, Jim Bohnsack, James Byrne)

1. N-59: Ban the practice of spearfishing on SCUBA to enable sustainable use of our Florida Reefs

(Dana Wusinich-Mendez): *Not a consensus of support for this action from our table. We discussed pros and cons and documented those for the Community Working Groups to consider. A couple of specific things we called out were that we wanted the Community Working Group to consider the potential impact for the removal of lionfish so we need to ensure there is an exception for the removal of lionfish because we don't want to reduce that. And secondly, considering some less restrictive alternatives to minimize conflict with stakeholders instead of banning all fishing on SCUBA. Consider looking at expanding the list of species that cannot be taken with a spear gun to include those that are most impacted.*

Group 9 (Erick Ault, Sara Thanner, Paul Davis, Stacy Buck, William Cline, Frank Schmidt)

1. N-37: improve existing FWC hotline to more efficiently report emergencies or violations, send pictures, and be able to report a problem to assist agencies to enforce the regulations that protect our coral reefs

(Sara Thanner): *We had some discussion on this and reviewed some comments from FWC. We believe at this time this one should be archived because there is already methods to collect photos and such. FWC is working to develop an app to report it via your phone so we believe this one could be archived as long as the promotion of reporting via our phone is incorporated into one of the other RMAs.*

2. N-116: Coordinate regional “living shoreline” objectives to promote the use and protection of natural infrastructure (e.g. coral reefs, native vegetation, mangrove wetlands) to provide natural barriers to storm surge and maintain coastal biodiversity

(Sara Thanner): *As a group we think the "living shoreline" is a great idea but confusing and conflicting wording in Tier 1 and Tier 2. As we read the main objectives it seemed like the intended, so we'll go back to the working groups. We think this one needs homework to clarify what is meant by “living shoreline” because there are comments about reefs, but reefs are not necessarily the shoreline, so that topic needs to be broadened.*

Group 10 (Jocelyn Karazsia, Judy Lang, John Fauth, Esther Peters, Dave Gilliam)

1. S-25: Revisit and amend ocean outfall legislation to ensure the timely closure (prior to 2025) of all treated wastewater outfall pipes and build/upgrade infrastructure for advanced water treatment and reuse to improve ocean water quality, reduce destruction algal blooms, and increase water reuse in the SEFCRI region

(Jocelyn Karazsia): *Overall our group recommended against effort to revisit or amend the ocean outfall legislation. We think that revisiting or amending the legislation could potentially lead to unintended conflict.*

2. N-14: Develop and distribute educational materials highlighting the economic and recreational values of southeast Florida reefs to enhance awareness by residents, elected officials, and visitors

(Jocelyn Karazsia): *Overall we thought this one looked pretty good but we felt that there is a need for updated data on economic and recreational values. We just got the framework that was done on the St. John's River basin and we ask that the working group review that.*

3. **N-41:** Collect a “reef impact fee” to fund enforcement, education, and mitigation programs

(Jocelyn Karazsia): *Our recommendations to the working group are to steer away from anything related to violations, penalties, or fees because there are already federal, state, local law enforcement framework that deal with these issues. The RMA could be revised more to focus on conservation management.*

Spatial Update

Meghan Balling

Reviewed January’s feedback from the working group which included spatial RMA progress, prioritized spatial RMAs, and the main objectives of the RMAs they prioritized to work on today. Spatial RMA’s S2 (mooring buoy to protect reef from damage) and N146 (establish MPA zoning framework for SEFCRI region). South area protect high density coral areas, no take zones, unique areas, vulnerable species, and costal construction. North voted to protect 20-30% of each reef, protect spawning aggregations, protect reef associated species.

Lauren Waters

What is decision support?

Methods and software to help incorporate best available information (data) into decision making process. There are many different software types out there but essentially what they all do is help organize your data, visualize your data and sort your information as needed.

- OFR Marine Planner
- Existing Data+ Input= Visual Support Tool

Questions:

1. (Lisa Gregg): *With regards to the information that is in there I see Acropora layers and pillar corals, what about other listed species?*
(Lauren Waters): *Not yet.*
2. (Lisa Gregg): *Spawning Aggregations? What information did you use for that?*
(Lauren Waters): *All of the information we had available at the time, which is general locations. All the data you can click on, you can find out where the data layer came from in the program.*
3. (Lisa Gregg): *What about oceanographic, do we have currents and eddies and oceanographic data in there?*
(Lauren Waters): *Not at this time and it honestly really hasn’t come up yet as far as a need. We can always add layers in. As far as having that filter, again as that need arises it is something we can develop into the tool. It is pretty easy to add a new layer to the filter function. If there is a need, then we can do that.*
4. (Lisa Gregg): *When we come to the Tortugas, both the ecological reserve and the research natural area when both of those were established that was one of the main considerations that was made for both the Tortugas areas. They were geographically located and centered around some important oceanographic currents and eddies and things like that. Because of those oceanographic characteristics there was going to be a benefit to the area and throughout the region, not just in those areas where they were centrally located. That was the*

primary factor in the Tortugas. I think that is a big consideration that needs to be taken. If we have that information to put in there we really need to.

(Lauren Waters): To respond a little to that real quick, once we look through these and we start to see what the objectives are we will start to have a better sense of what data we need for these areas.

(Brian Walker): We did consider physical aspects of oceanography but the problem is physical resolution and the dynamic aspect of those data cannot be displayed well.

5. *(Jeff Torode): Are oceanographic currents always a consideration requirement when you are setting up some sort of marine reserve? Is there user data on this spatial planning map, Brian, for instance anchoring, boats, diver surveys, etc?*

(Brian Walker): Yes.

(Dana Wusinich-Mendez): Oceanography depends on objectives of the map and interconnectedness - are you looking at larval connectivity, what are you looking at? The answer is 'it depends'. It depends on what the objectives of your requirements are, if you are looking at interconnectedness then I would say it's probably not.

What have the Community Working Groups been doing with this information?

Questions:

1. *(Ken Banks): What is percent area in SEFCRI region? Reef or water?*

(Lauren Waters): The percent area, all that is square meters, just total bottom not reef specific. Now the reef percent, which is what you are talking about, I did include. I copy and pasted it, not to the mooring buoy ones but in the next set.

(Brian Walker): That percentage is based on entire grid, so it is the ratio, the number of cells collected versus the entire grid. The grid is basically the entire mapped space that we have nearshore. It goes up to north of St. Lucie and south of Key Biscayne.

2. *(Erin McDevitt): It's the whole box with no consideration*

3. *(Erin McDevitt): How do you define coral for the purposes of this?*

(Lauren Waters): Hard coral. In particular it is hard coral percent cover.

4. *(Ivana Kenny): How do you tell if points are long term or short term?*

(Lauren Waters): Yes. Click on the "i" but you cannot filter based on length of data set.

What is the goal for today?

1. *(John Fauth): Within the data set are there some layers that have more data density vs. others that have little data like the Acropora? Are there discrepancies in there?*

(Brian Walker): I'm not sure about what you are getting at. Data helped guide where they focused so if they said let's look at data that meet these criteria or these values and we also want to include areas that have values such as greater than 10% coral. It's not showing you all areas on the reef that have 10% coral but it is showing you areas that have been measured in the past and that helped working group member make decisions because it is a confirmed spot.

2. *(John Fauth): Is there more saturation of data?*

(Brain Walker): *I don't know. We didn't look at it.*

(Lauren Waters): *Definitely if you are talking about boater use and diving, it is high but it is limited as well. We have what we have. We are limited based on surveys from the past.*

3. (John Fauth): *From the benthic habitat maps, you can predict where certain things will be. Notion based on best available data is not the best. You can predict things based on previous knowledge. Assume coral may be there based on benthic habitat.*

(Brain Walker): *Well it's not necessarily that simple and it's not necessarily true. In terms of this effort we specifically did not attempt to model data. We wanted to show the empirical data as it stands so that is driving people's decisions. In a lot of cases, there were more surveys within a planning unit than just one. Some planning units may have had 4, or 5 to 10, surveys while other planning units had zero. So within the planning unit that had a lot of survey data we were focusing on the key values for that. So we would take the maximum richness value for all of the surveys that have occurred in that area. We did not attempt to model the seafloor because those models and relationships are not well understood and it was way outside the scope of what we were doing for this.*

(Lauren Waters): *And to also point out you will see that in the list of data you can see the max and average of all of the survey values. So if there were 10 or 1 in there you are seeing the average of potentially multiple surveys.*

(Dana Wusinich- Mendez): *In addition to data, there is a lot of local knowledge on the Community Working Groups. I think that complements the data to help inform these decisions as well.*

(Brain Walker): *We are not trying to give them the answer. We are trying to them the best available data to support their decisions. So we did not want to attempt that next step. We could interpolate all of the data but we have no justification or understanding if those interpolations are real unless we go out and test them. That is a whole other involved process.*

4. (Jeff Torode): *Was user data from Don Behringer used? The flyover data?*
(Lauren Waters): *Yes.*
5. (Ester Peters): *Things can be done, management action will develop and do surveys to confirm what is there and if it is a successful strategy to put buoys there.*
6. (Terri Jordan-Sellers): *Were data sets from permitted projects or surveys incorporated into this?*
(Brain Walker): *Yes. All data we could get our hands on.*
7. (Erin McDevitt): *Is our goal to change boxes or just inform them?*
(Lauren Waters): *Depends on time frame.*

S-2 Mooring Buoy: Review of spatial areas being considered

Lauren Waters

Questions to consider when reviewing these spatial analyses:

1. Are the right data and features being considered to address the objectives? If not, what are the additional data or features?

2. What additional data/local knowledge do you have about resources in this area?
3. What additional data/local knowledge do you have on how this area is being used?
4. What are the potential threats or issues on the resources in this area?
5. What are the potential mgmt. approaches to address these threats?

Area #1 Discussion- St. Lucie

1. (Jeff Torode): *Can you put usage data over the top of that?*
(Lauren Waters): *Yes.*
2. (Ken Banks): *This maybe be a stupid question, is this just an example of how to use the tool? We met with diver operators to find out where they want buoys. It wasn't about resources, it was about where people are going and what they are using. That is just an example of what we did. I would expect that is what they would do in Palm Beach.*
(Stephanie Clark): *But when we were doing this with the OFR team we had dive operators, fisherman, divers, etc. They were people with local knowledge.*
3. (Jeff Torode): *What is the legal depth based on the Coast Guard? I don't think you can put them out deep because of some navigational hazard.*
(Irene Arpayoglou): *That was an area we had looked at because at one time it had mooring buoys, but some of them went through storms and things have been lost. And I think it was all within St. Lucie State Park.*
(Dana Wusinich-Mendez): *Can you apply maximum depth of criteria?*
4. (Richard Dodge): *Where is the reef line? Is it the red square?*
(Lauren Waters): *The reef line is the green and blue. The red jagged box is the entire area we are considering.*
(Lauren Waters): *Yellow is the answer to your questions/ habitat you are talking about.*
5. (Mollie): *They have 12 pins installed and currently two buoys. Cannot find pins on the reefs to put the buoys on.*

Questions for site #1

1. (Dave Bingham): *I don't see specific corals taken into account? It could just be lime rock.*
2. (Richard Dodge): *What are the moorings for? Diving, fishing, both, etc.*
3. (Erick Ault): *Seasonal aspect to anchoring*
4. (Erin McDevitt): *In general, a consideration for moorings is the long term maintenance funds for moorings. I think the RMAs need to keep that in consideration.*
5. (Ken Banks): *What you just said is relative. If you have 10 buoys here and then 5 more down there, price cost of maintenance is also a spatial consideration.*
6. (Dana Wusinich-Mendez): *This is the first of many areas, at this rate it will take us way more than four hours to get through this. We might not even get to the MPA recommendations.*
7. (Brain Walker): *One of the decisions for making polygons was Behringer data. These data showed there was very high anchoring in the area.*

8. (Erin McDevitt): *Jeff mentions large corals in the area, I would make a recommendation not to put mooring buoys too close. You want to put them close so people will ancho, but need to consider high value corals when you place the actual mooring.*
9. (Jeff Torode): *The only problem is that people are interested in diving so you cannot place mooring buoys not by the coral. If you put all the mooring buoys in the crappy area they will anchor over by the good area anyway. I see what your backside point is.*
10. (Judy Lang): *In some places they designate lousy areas for less experienced, novice divers and better areas for more experienced based on dive operations.*
11. (Jeff Torode): *I understand as far as commercial but in this area there are far more private vessels than we ever take out diving.*
12. (Brian Walker): *The working group members instead of focusing on the resources of where to and not to do a mooring, they looked at areas that are already known for high anchoring already, not what is in those places.*
13. (Ester Peters): *Looking at the proposed management action will generate another level of action.*
14. (Lisa Gregg): *Is there any information just generally about mooring buoys based on what kind of substrate they do better on, what kind of depth? That kind of thing.*
15. (James Byrne): *The one thing I think we all need to come back to is reducing anchor damage on coral reefs as the main goal. General areas that make sense to put buoys, specific needs by site area in the future.*
16. (Stephanie Clark): *Local members were used to make these planning suggestions.*

Area #2 Discussion- Breaker's Reef

None

Questions for site #2

1. (Erin McDevitt): *Janet Phipps and I designed this buoy system for FWC. We got a grant to put buoys out in front of the hotel. Can't go any farther out due to the Gulf Stream. Janet has 40 buoys in Palm Beach County now. Monitored buoy use, busy on weekends, some people would anchor right next to the buoy. Reefs in the area come and go as a result of burial from beach renourishment. Palm Beach does not want any more buoys on the reef.*

Area #4+5 Discussion- Suzanne's Ledge

None

Questions for site #4+5

1. (Jeff Torode): *Ken, is that what you call Suzanne's Ledge?*
(Ken Banks): *Yes.*
2. (Dave Gilliam): *What exact boxes are you talking about?*
3. (Don Behringer): *Is the designated area for mooring buoys or anchorage?*
4. (Stephanie Clark): *Make a visual landmark on land for FWC law enforcement officers so it is easier to see the boundaries.*
5. (Erin McDevitt): *No. They should be separate RMA.*

Area #6+7 Discussion- Aerojacks + Hollywood 2nd Reef

None

Question for site #6+7

1. (Terri Jordan-Sellers): *Northern sites fall under the RMAs jurisdiction.*
2. (Joana Walczak): *It is a no anchoring zone now but it is not enforced.*
3. (Brian Walker+ Dave Bingham): *BSO currently tells people no anchoring zone.*

Area #8+9 Discussion- Middle Canyon/Graceland + Pillars/South Canyon

None

Question for Site #8+9

None

N-146 Establish an MPA zoning framework: Review of spatial areas being considered

Do these areas make sense spatially?

(Brian Walker): *The shapes are not reflective of all of the activities.*

Areas #1#2 #3 – St. Lucie (generalists-boundaries of St. Lucie State Park and Bathtub Reef)

1. (Linda Knoeck): *Are there any layers for existing permit layers?*
(Lauren Waters): *No we only considered the data we had available. If they were available, then existing permits were considered.*
2. (Cheryl Miller): *Bathtub reef needs to have data added.*
3. (Jeff Torode): *Is there the ability to put up fishing users in that area? You restrict access to people with small boats because they cannot travel long distances from the inlet.*
4. (Jamie Monty): *In addition we should look at Shivalni data set for commercial and character data sets. There are spawning aggregations for this data layer.*
5. (Mason Smith): *Is this an area for exemption? Why King Fish Hole? Seasonally there is no purpose protecting this area because Spanish Mackerel are seasonally in the area and they move around so much. I don't see this species in need of any type of protection currently. You cannot further protect the Goliath Grouper more than is already done. I don't see the benefit for this particular area.*
(Lauren Waters): *Local knowledge says King Fish Hole is highly popular so went north and south of that area in order to purposely exclude that area because it is so popular.*
(Brain Walker): *There is a lot of fishing gear on benthic habitat in this location.*
6. (Kurtis Gregg): *Spanish mackerel should not affect habitat, but Brain cleared up the answer.*
7. (Dave Bingham): *There is poaching in that area.*
8. (Mason Smith): *There could be a separate recommendation for this area for fishing gear. What is the goal?*
9. (Kurtis Gregg): *I can help give you insight. The gear is a connectivity- related issue.*
10. (Judy Lang): *What are they poaching?*
(Dave Bingham): *They are spearfishing in the park and there is poaching of Spanish mackerel and Mullet.*

11. (Erin McDevitt): *There are different authorities in charge off beaches, wildlife refuges and state parks.*
12. (Richard Dodge): *We could merge two smaller areas into one larger area.*
13. (Jeff Torode): *How far out does the boundaries extend? And to what depth?*
(Lauren Waters): *The boundaries extend into the state park.*
14. (Dave Gilliam): *Does the area represent the recommended MPAs? All no take zone, no anchor zones, etc.?*
(Lauren Waters): *All of the above.*
15. (Erin McDevitt): *There are a number of problems regarding marine debris from mackerel fishery. We should consider increasing the number of cleanup events in the area.*

#4 +5 - Offshore south St. Lucie

1. (Jocelyn Karazsia): *We should consider the MPA in 200 ft of water already, which I think is just east of here.*
2. (Terri Jordan-Sellers): *We should get DEP sand source data for Martin County.*
3. (Erick Ault): *This is a heavily used commercial King Fish area, just something to keep in mind.*
4. (Mason Smith): *Did you say the design is specifically for fishery purposes?*
(Lauren Waters): *Yes, around spawning aggregations.*
(Brain Walker): *We had the Community Working Group members select habitat from both depth and shallow areas from each region in SEFCRI.*
5. (Erin McDevitt): *I know we chose areas that would be more accepted by the public because they are less used already.*
6. (Terri Jordan-Sellers): *Is the state federal boundary line a shape file, outside of state line, in federal waters?*
7. (Richard Dodge): *Were these designed for no take?*
(Lauren Waters): *I don't know yet. Just general areas at this point. The Community Working Group members will go over all of them at their next meeting.*
8. (Erin McDevitt): *I think the issue is that fisherman did not recognize any problems in this area at this point.*
9. (Jocelyn Karazsia): *This proposed MPA looks very close to the South Atlantic Council's MPA.*
10. (Josh Voss): *I think the polygon is in the wrong area. It should be deeper than that. It should be in 220ft of water.*
11. (Judy Lang): *What is known about seasonality of spawning in this area?*
(Erick Ault): *The species listed spawn in the summer (June/July).*
12. (Mason Smith): *Are these 2 species part of the rationale behind this MPA? There can be no further protection for the Goliath Grouper than they already have. There is no more need for protection of these species.*
13. (Shana Phelan): *At some point there may not be a moratorium on Goliath Grouper, and then they could be targeted.*
14. (John Fauth): *Are those areas drawn to reach the 20-30% of the area?*
(Lauren Waters): *The areas drawn had more than one purpose.*

15. (Kurtis Gregg): *I think we captured the objectives of the particular area.*
(Brian Walker): *These boxes protect the habitat the species uses.*
16. (Jim Bohnsack): *Two groups came up with the same boxes, but you should be using an ecosystem tool not an individual fishery tool.*
(John Fauth): *I second that statement. We should only be using things we know.*
(Josh Voss): *There is no randomness from this box, as you move north the first reef disappears, therefore you could not slide the boxes to the north.*
17. (Kurtis Gregg): *The issue from small groups is that you want something visual from the water, like a water tower, to tell if you are in the MPA or not.*

#6 - Jupiter Inlet

1. (Meghan Balling): *There has been considerable push back from fisherman, but the area is already preserved.*
2. (Linda Knoeck): *There is an existing project in the area.*
3. (Erin McDevitt): *At the moment there is only terrestrial based protection. There is no protection into the water.*
4. (Erick Ault): *Local knowledge was heavily used for snorkeling data.*
5. (John Fauth): *Could you show percent coral cover?*
(Lauren Waters): *There is no coral cover. No surveys with data to show.*
(Brian Walker): *There is Siderastrea in the area.*
6. (Jeff Torode): *Based on what Jim said earlier, does it really give us anything ecosystem based? Probably not?*
(Meghan Balling): *It is the only area with warm rock, and sea turtle nesting is high in the area.*
(Justin Freeman): *Is nesting really relevant?*
(Lauren Waters): *For this group, yes it was.*
(Terri Jordan-Sellers): *This is already critical habitat for Loggerheads.*
(Justin Freedman): *It specifically says "nesting".*
(Brain Walker): *Is there value for turtle foraging?*
(Justin Freedman): *I don't know.*
(Terri Jordan-Sellers): *If you look at NMFS habitat website for protection under federal ESA it will tell you the critical habitat area.*

#7+8 - Jupiter Inlet

1. (Brain Walker): *This group attempted to get at 20% of the deep ridge complex. They wanted to be away from inlet and avoid high dive/boat use area.*
2. (Justin Freedman): *There are several planned and permit future uses in this area.*
3. (Erick Ault): *This is also a shark migration area. It is heavily used for commercial diving. Some shark feeding in the area.*
4. (Lisa Gregg): *State law prohibits it, but it happens in federal waters.*
5. (Jeff Torode): *You cannot cover area over entire inlet. Small boats have limited range and cannot travel too far.*
(Lauren Waters): *It could depend on what the management strategy is.*
6. (Shana Phelan): *Plans to put in artificial reefs in the area for the Andrew Red Harris Foundation. There are 40 reef cells in the area.*

7. (Erin McDevitt): *This area could use increased enforcement.*

Public Comment

Stephanie Clark- Cry of the Water

Bill sent Dan this slide show from is video of before and after on Fisher's Pedestal. I'm not saying that these are the disease that these corals have. What I am saying is that we have the start of a disease outbreak. If Port Everglades dredging goes forward adding excessive silt and sediment to the ecosystem we could have the same disaster they have in Miami Dade County around the port. We don't know what is happening with our corals without testing. We do know that once it is gone it is gone. Dead is dead. It seems that some in the room want to say it will take 10 years for these RMA's can be implemented- that is what we heard 10 years ago. We don't have 10 more years. By then the reefs and the fish will be gone.

Scott- Friends of Our Florida Reefs

#9 - John D. MacArthur St. Park

1. (Erick Ault): *We have an acoustic fish monitoring receiver that is deployed off the reef.*
2. (Shana Phelan): *The main uses are kayaking and snorkeling. There is patchy warm rock in the area.*
3. (Erin McDevitt): *For some reason, multiple sailboats wash up along the shore due to Gulf Stream at this park.*
4. (Shana Phelan): *It has a dark stretch of beach at night for dumping. There should be no use conflicts because hard to get dive gear out to beach. It's a long walk from the parking lot through the mangroves to the beach.*
5. (Jeff Torode): *Does it need extra protection?*
(Lauren Waters): *State park have 400 ft of water protection already.*

#10+11- Blue Heron Bridge/Lake Worth Inlet

1. (Lauren Waters): *This area is technically no take in the park already but there is very low enforcement.*
2. (Erin McDevitt): *This spot is famous for people night diving in area for invertebrates. It is one of the best spots to see invertebrates and fishes for photography.*
3. (Jeff Torode): *Could you make a gear restriction to stop collectors?*
(Lisa Gregg): *The only way the county can manage fishing regulations is if it affects public safety or welfare.*
4. (Shana Phelan): *I have history with the park because my dive shop is right there. We tried to make no-take in the snorkel trail, which got rid of some of the boat traffic with the snorkel trail. If you have a collectors permit, you cannot bring your catch through the park.*
5. (Jeff Torode): *The only thing excluded in St. Lucie is spear fishing. Can you have that here?*
(Kurtis Gregg): *The process would be to go through FWC to fix the regulations, which could be lengthy.*
(Shana Phelan): *North side of park has a submerged land lease.*
6. (Jeff Torode): *The RMA suggestion is a gear restriction (tropical fish net)?*
(Lisa Gregg): *You can only harvest those species in that area.*

(Judy Lang): *County park harvesting regulations are confusing.*

Lake Worth Inlet

1. (Shana Phelan): *There is a large coastal construction proposal on the table from the Port of Palm Beach to widen and deepen the Port to get large ships in. There is already an organization formed called 'Save Our Inlet' organization. There are persistent sea grass beds that could not be mitigated.*
2. (Jocelyn Karazsia): *We should look at the most recent sea grass bed papers that just came out.*
3. (Justin Freedman): *This area is highly ephemeral.*
4. (Terri Jordan-Sellers): *This is a niche harbor that deals with smaller vessels that attracts certain class of vessels. A report was signed and project is currently in review but it has no fiscal dollars in 2016.*
5. (Joanna): *There are known Snook spawning aggregations in the inlet.*
6. (Cheryl Miller): *May want to update map because it could be old.*

#12+13- Breakers

1. (Cheryl Miller): *Regarding the plots on the south end, do coral data get generated from natural sites? County has coral on artificial reefs sites for their nurseries.*
2. (Jeff Torode): *There is an outfall site near here.*
3. (Justin Freedman): *Seven telecommunication lines through area.*
4. (Shana Phelan): *The entire reef is used by commercial diving vessels.*
5. (Justin Freedman): *There are scheduled renourishment projects in area.*
6. (Cheryl Miller): *It is regulated by the state.*
7. (Dave Gilliam): *I have a ton of long term data sets there from SEACRIMP.*

#14- North of Boynton Inlet

1. (Justin Freedman): *Is there brain coral buried?*
(Lauren Waters): *Based on local knowledge.*
2. (Brain Walker): *Why did they not extend it to the outer reef?*
(Joanna): *I agree. They should have.*
3. (Shana Phelan): *The management of region would affect how successful it is.*
4. (Kurtis Gregg): *We originally drew the whole reef but it included too much sand between inner and outer reef.*
5. (Ed Tichenor): *Propose outer reef up to Paul's/ Bath and Tennis.*

#15- South of Boynton Inlet

1. (Ed Tichenor): *There are pillar coral present in the area.*
2. (Angela): *Seems to be steering clear of diving area, but just because area is protected doesn't mean divers can't use the area.*
3. (Jeff Torode): *It is a heavily fished area.*
4. (Ed Tichenor): *There is not much fishing because reef is too narrow.*

#16+17+18- Delray Grouper Hole

1. (Jeff Torode): *Heavily fished area for pelagic fish due to eddies. I've noticed there are high diving areas.*

#19+20+21+22

1. (Jeff Torode): *The idea is for people to enjoy and use these resources, not take away the resources and make them inaccessible.*

2. (Stephanie Clark): *I think all the way out by Ft. Lauderdale artificial reefs put down by the county.*
3. (Jeff Torode): *Range marks are key for better enforcement of the MPA zone. I recommend no take for #19. We need more mooring buoys than the ones already in place, as well as some in the north for fishermen.*

#23+24 - John U Lloyd

1. (Stephanie Clark): *The Navy would support it.*
2. (Don Vacin): *Large amount of lobster in the area.*
3. (Jocelyn Karazsia): *The Navy wants MPA here, they will support it.*
4. (Jeff Torode): *We should protect the best area.*

#25+26- Hallandale to Sunny Isles

1. *There are popular fishing areas.*
2. *The Tenneco Towers should be excluded.*
3. (Sara Thanner): *Not much charter diving, therefore not much opposition.*
4. (Brain Walker): *There are large Acroporas and other large corals in the area.*

#27+28

1. (Kurtis Gregg): *The group put green box inshore due to the connectivity.*
2. (Angela Smith): *One of the key parts to MPAs is isolation.*
3. (Nick Morell): *Most of the reef in Key Biscayne is outside of state waters.*
4. (Joanna): *Does the aquatic preserve layer overlay in southern layer?*
(Lauren Waters): *Yes.*
5. (Terri Jordan-Sellers): *Off Key Biscayne there is an area to be avoided, northern extension of the marine part. The large vessels are kept further offshore to avoid groundings or destruction of coral.*

Adjourn