

**Florida Keys National Marine Sanctuary
Marine Zoning & Regulatory Review
Ecosystem Protection: Ecological Reserves / Preservation Areas and Wildlife Protection
March 6 & 7, 2014**

Working Group Meeting Summary

Meeting Agenda – March 6

1. Review of charge from Sanctuary Advisory Council, schedule and draft process
2. Discussion: interests and objectives for the process
3. Discussion: problems/challenges reserves may help address
4. Presentation: Data available for the Florida Keys (Shay Viehman and Angela Orthmeyer)
5. Discussion: questions the data may help answer
6. Presentation: Spawning aggregation science (Will Heyman, Senior Marine Scientist, LGL Ecological Research Associates Inc.)
7. Public Comment

Meeting Agenda – March 7

8. Mapping and Analysis Done for the working group: Agency Screen and Remove
9. Geographic Information Systems: Examples of data integration and analysis and working group discussion
10. Trial run of exploring options and developing recommendations: Dry Tortugas
11. Working group discussion
12. Public Comment

Meeting Summary – March 6

1. Review of charge from Sanctuary Advisory Council, schedule and draft process
 - Introductions of working group members including new individuals involved in the working group and process:
 - New working group member
 - Rob Harris, Sanctuary Advisory Council Member: Fishing – Charter Sports Fishing
 - New Staff Participants
 - Heidi Stiller, Professional Facilitator, NOAA
 - Shay Viehman, Scientific, data & information support, NOAA
 - Angela Orthmeyer, Scientific data & information support, NOAA
 - Review of working group objectives and charge:
 - The Sanctuary Advisory Council charged this working group with a set of objectives related to considering new or modified marine zones for ecosystem protection. The full suite of objectives can be found here: <http://floridakeys.noaa.gov/review/reserves.html>
 - The working group will focus on the following primary objective:
 - Recommend new or modified marine zones to ensure protection of a

diversity of resources, including spawning aggregations and the full suite of marine flora and fauna.

- Schedule and draft process:
 - The overall schedule is a series of six 2-day meetings between now and July 2014. For dates, locations, and agendas (when available) see: <http://floridakeys.noaa.gov/review/reserves.html>
 - The process and meetings will be conducted through a regional approach. The first and last meetings will be introduction and summary meetings and will be held in the middle keys. The middle four meetings will each focus in on a different region of the Keys. Meetings will be held regionally when those regions are being discussed.
 - Each meeting will include a review of biological and socio-economic information pertinent to the region being discussed.
 - The goal is for the working group to reach consensus on recommendations for new or modified marine zones; however if full consensus is not possible majority and minority opinion will be captured and included in the recommendations that are forwarded to the Sanctuary Advisory Council.
 - John Hunt (FWC) and Sean Morton (NOAA) continue to co-chair

2. Discussion: Interests and objectives for the process

Working group members were asked to share their interests and objectives for this process including what they care about considering, protecting, valuing; who they represent; and how this series of meetings can help them represent their interests. The following bullets are the statements made by individual working group members.

- Take ownership of the charge and provide recommendations to the Sanctuary Advisory Council.
- Use the science available and work to understand, evaluate, and have open and transparent discussion.
- The process should aim to accurately reflect both desires and concerns of the myriad users in the Florida Keys.
- Develop consensus recommendations, maybe several, for potential changes to sanctuary management.
- Recognize there has been a lot of science since the original sanctuary implementation in 1997, this science must go hand in hand with making recommendations about sanctuary resource use. While this regulatory review process is Congressionally mandated, it should be a dialog between protection and sustainable use. Sustainable use meant something different when the sanctuary was established, our challenge is to define what that balance means now.
- Concern about how things have or have not been managed in the past. Concern that things are not being protected the way they should be.
- Concern about disproportionate burden of impact to one user over another; hope to come up with a better balance among resource protection and users.

- Contribute to the process as there was a perceived lack of engagement from the charter fish sector.
- Ensure all user groups have equal access to areas; if closed to one, close to all.
- Ensure this effort does not duplicate effort of other bodies (noted Fishery Management Council efforts). Important to recognize and consider the number and range of rules and regulations and the public's knowledge (or lack thereof), particularly those who are not from the area.
- Support the use of data and information including historical data, and recognize the limitations to the data.
- Stay open minded, identify clear definable objectives to include all user groups.
- Support increased enforcement to slow degradation of reefs.
- Promote a process that is open to the public; that the public is informed of what the working group is discussing, is aware of the progress and understands that there are not final, finite lines on maps.
- Improve effectiveness of the management of the sanctuary. Ensure these improvements are clearly defined, are measured over time, are fair, enforceable, and enforced.
- Make sure traditional user groups are preserved (noted specifically fishing, that commercial fishing is decreasing while tourism is increasing).
- Noted the many different layers and agencies, which can seem overwhelming. Make sure working group is aware and considers these various layers and agency authorities.
- Serve as a liaison between the science and the practical, on-the-water perspective; to help weave these components together.
- Achieve consensus as a group to do something significant moving forward
- Facilitate greater stewardship in the diving industry to be more aware, trained, and discuss with users before they enter the water about what to do to protect the reef. Support for Blue Star and promote greater participation in the program.
- Represent the recreational person and ensure resources are here now and in the future; help make the right decisions to support this outcome.
- From a business perspective, ensure that the resource is sustained.
- Concern raised about what is meant by consensus for this working group – as when the sanctuary was first implemented, there was consensus that the public did not want the sanctuary, yet the sanctuary was put in place.
- Concern that the condition of sites are worse now than when first put in place.
- Need to know what will be allowed in a zone before identifying a zone for protection; currently there is a large number of zones and a range of different regulations that apply.
- Concern that science presented on one side could be refuted by a scientist on another side.
- Concern about unintentional consequences of displacing users and noted the need for a carrying capacity study (the first people who should be allowed in are those that live here).

- Need to address poor water quality, lack of enforcement, and lack of education.
- Noted that there are currently enough protected areas just need to manage them, consider closing these areas to all users and increase protection in those areas. Could accomplish goals of the sanctuary without adding more zones.
- Concern about users and impact from users, particularly impact from dive industry.
- Like the fresh start for this working group and the focus on transparency.
- Here to make recommendations, not rules. Here to make sure we have regulations in place that support tourism, sustainable ecosystem and sustainable tourism product.
- Support education and outreach; simple things can be done (billboards on Highway, AM radio station to report out on the sanctuary).
- Noted enforcement, need more and not enough money for it. Have effective people doing a good job with very little resources.
- Foresee more people moving/traveling to Keys and need to consider this.
- Consider professional zone/limited entry as a tool to manage the sanctuary; could help empower responsible users.
- Consider a range of creative tools to support sustainable tourism (creating fish factories in areas that are considered not productive to potentially replenish other areas; also a few large zones work to protect fish, smaller zones do not work).
- Consider the potential to get the most productive results through making large zones in some places.
- Noted the many different perspectives to consider, want everyone to be able to make a living, enjoy the resource, and make a difference. We really all want the same thing just have different ideas of how to get there. Wants the working group to come to an informed decision and make a difference.
- Noted the number of zones and various different regulations, would like to consolidate and simplify.
- Explore ways to keep fisheries open year-round as it is incredibly difficult to make a living and enjoy; doesn't make sense to have to throw fish back; closed seasons disrupt seafood dealers, restaurants that then begin to import; charter boats are selling the anticipation to catch a fish, people not likely to charter a boat if they have to release everything caught.
- Identify specific spawning sites, leave the fish alone there and allow fishing to take place in the other areas year-round.
- Need to have clarity on goals of this process and encourage the working group not to get lost in the details too quickly.
- Noted that zoning is one way to partition use.
- Have to be able to enforce; myriad regulations in place is a patchwork and doesn't always work.
- Recognize that zoning is not a panacea to the heavy impact from resource users, many in Monroe County not from here, support local ownership of resources.
- While the working group has to address the charge from the Sanctuary Advisory Council (SAC), we should give a charge back to the SAC, if not would be doing the

resources a disservice. The working group is charged with making more zones and yet we see violations of regulations every day (example of divers getting out with spear-guns near zones). Concern of impacts to current zones that are not getting protected right now. Charge to SAC to take care of what we have right now.

- Noted that several working group members are SAC members, the outcomes of last series of working group meetings to focus on water quality, enforcement, and education are being addressed at the SAC. Ensure that this working group focuses on the zoning question. In the ways that water quality, enforcement, and education intersect with zoning address those issues.
- Focus on intelligently designing important areas that will enhance productivity and make them easier to patrol and understand.
- Noted that ideas to shrink zones, potentially remove zones can be considered. Like the idea of reducing the number of zones and creating larger zones that include a range of habitats, make things better resource wise, and enhance enforcement. Consider less and more productive zones, not more.
- Consider steeper penalties; the chance of getting caught and a steeper penalty could maybe deter people.

3. Discussion: problems/challenges reserves may help address

The working group was asked to identify problems or challenges that reserves have been or may be able to help address, keeping in mind that reserves can vary in size, temporal duration, and allowed uses.

- Enforcement –
 - Design and potential consolidation of reserves can make them easier to enforce and easier to understand what is allowed where and could enhance compliance.
 - Infractions by visitors – need for education and accountability measures
- Design Zones based on Science and Measure Success –
 - Difficult to measure success of current zones; as new or modified zones are identified need to ensure success of zones is measureable and is evaluated. (Example: Historic decline of coral, areas that need intensive restoration may be appropriate to protect through zoning. Could set an objective for percent recovery and re-open when that objective is met.)
 - Many small areas may not be providing the benefits we hoped. This may be an opportunity to design zones based more on science, less politics
 - Opportunity to ensure zones are based on science.
 - Through this process could agree to measurable goals and reopen an area once those goals are met.
 - Can explain why and where the zones are implemented and show that scientific basis for the zones and how zones will be evaluated.
 - Consider letting nature take its course in some places and leave other areas open to use.

- Consider artificial reefs in areas not being used now and study the potential of artificial reefs to restore ecosystem components.
 - Endangered species –
 - Protecting areas through zoning could potentially contribute to restoring that species and can perhaps help delist species.
 - Some protected species (sharks, goliath groupers) are growing in numbers and may be overpopulated and impacting species that need protection
 - Equity –
 - Zones and regulations can apply to all users to protect the ecosystem as a whole.
 - Sustain livelihoods and maintain professions that rely on resource while not opening to any and all use
 - Zones can help address user conflicts through separating uses
 - Perception that closures are always permanent, this may be an opportunity to give back some areas, show good faith
 - May need to look at controlling numbers of different uses – in managing a limited resource may need to have limited entry; however may not need limited entry since property costs, taxes, costs to get into a business effectively limit entry.
 - Different interests don't want zones in different areas; each interest has their own special areas.
4. Presentation: Data available for the Florida Keys (Shay Viehman and Angela Orthmeyer)
The presentation can be found at:
<http://floridakeys.noaa.gov/review/ecosystemprotection>.
5. Discussion: questions the data may help answer
The working group discussed how this data can help them think about marine zones and reserves, including the challenges marine zones can address and issues to consider.
- Representation, replication – Keys wide and considering the 5 regions. Do existing zones achieve this?
 - Patterns of resources and use – are there areas with high biological value and relatively lower use?
 - Request for more recent use data and have it broken down by user group
 - Identify where zones would have least impact on users/livelihoods
 - Show existing protected/managed areas
 - Show recreational impact, not just use
 - Need to have an way to add working group members' knowledge to the existing data
6. Presentation: Spawning aggregation science (Will Heyman, Senior Marine Scientist, LGL Ecological Research Associates Inc.)

The presentation can be found at:

<http://floridakeys.noaa.gov/review/ecosystemprotection>.

Showed maps of the shelf edge of Belize barrier reef where the reef bends like an elbow and drops 90 degrees. Multi-species spawning areas at these areas and is consistent in many different areas throughout this region – areas where there is a lot of vertical relief and a bend. These are magical places, not a ton of them out there, but these are volcanoes of reproduction. I hope you can identify these places and protect them.

Questions:

- What are spawning aggregation ranges?
 - Small bends and reliefs show less consistent aggregations than bigger geomorphological areas. Currents and current direction also play a role in the locations of spawning.
- Have you identified these areas in the Florida Keys reef tract?
 - Personally no, but others have. One example given is an area of black group and mutton spawning. The area has the same geomorphology of the areas he has studied: high relief and big bends.
- Does time of year and water temperature affect spawning?
 - Each species has a seasonal time for spawning. Time of year varies for species and for location (i.e. fish (a) could spawn at a particular time of year in the Caribbean but might spawn at a later time in the South Atlantic)
- Can you overlay where and when the species will spawn on the maps. Can you pinpoint it? If it works in Belize, would it work in the Florida Keys?
 - Spawning is not simply dependent on the geomorphology, it is also affected by the temperature, current, etc. there are a multitude of factors.
- Were these areas in Belize in protected areas?
 - The older fishermen were adamant that these areas get protected. They convinced the administrators to close these areas in 2003. A decade later, anecdotally they saw juvenile species all over the place. Close it for a decade or two, fish came back.

7. Public Comment

Public comment was provided by one individual:

- Michael Belitzky, National Marine Manufacturers Association (NMMA).
I am encouraged. Thank you all for being here.

Written public comment was provided by three individuals. Those written comments can be found here: <http://floridakeys.noaa.gov/review/reserves.html>

Meeting Summary – March 7

8. Mapping and Analysis Done for the working group: Agency Screen and Remove
At the September 30, 2013 working group meeting, the working group requested that the Co-Chairs conduct an administrative/feasibility review of the individual working

group member ideas for new and modified marine zones. The Co-Chairs presented the results of this screen and remove and through discussion with the working group determined that the working group should start this process completely fresh.

9. Geographic Information Systems: Examples of data integration and analysis

The working group reviewed a few options for how the data could be integrated and analyzed to answer various management related questions.

10. Trial run of exploring options and developing recommendations: Dry Tortugas

The working group began to use the data and information to explore options for potentially modifying marine zones in the Dry Tortugas Region. This was a trial run allowing the working group the opportunity to practice using the data and information and work through how they might develop consensus (or majority/minority) ecosystem protection recommendations for the Sanctuary Advisory Council.

- Each working group member was asked to provide input on ideas for potential modifications to the Dry Tortugas region. Ideas included:
 - Extend the sanctuary boundary from the top of Tortugas North Ecological Reserve (TNER) to western side of the study boundary
 - Extend the sanctuary boundary to include Tortugas South Ecological Reserve (TSER). Essentially close the gap so that general sanctuary regulations would apply in this area.
 - Make no change to northern boundary of either the sanctuary as a whole or the TNER.
 - Extend TSER boundary to the west to include areas potentially important for fish spawning
 - Move the TSER southern boundary north, removing some area that is now included in the ecological reserve (note from working group member that need to know what resources are in that area before considering that modification).
 - Extend the Area To Be Avoided (ATBA) to include Riley's and Tortugas bank
 - Extend sanctuary boundary to include the entire study area
- The working group did begin the process to more fully review the existing data to evaluate the above ideas.
- The working group did not develop any preliminary recommendations for the Dry Tortugas Region.
- The working group will revisit the Dry Tortugas meeting at the June 10 & 11 meetings in Key West when the Marquesas Region will also be discussed.

11. Working group discussion

Working group members provided the following final statements.

- Appreciate the fresh start to these discussions, however request that the working group consider what to see/do differently. The working group needs to query the data set as we did not use the data to its greatest extent (re: suggestions for Dry

Tortugas). We need to be able to give rationale and justification for how and why we draw lines on the map.

- Requests for more information (re: process) to reach the public so they can attend and be involved/engage.

12. Public Comment

Public comment was provided by two individuals:

- Michael Belitzky, National Marine Manufacturers Association (NMMA).
I have been in attendance (to these meetings during this process) since July 2013. I represent NMMA. I come from a Floridian family. I am very encouraged. You guys have really come a long way. I commend all of you. I hope you continue the good work. I did not see much sociological impact data. Include economic data and I would like to see the data. I can provide some to you. I would like to see how the zoning will impact economic livelihood.
I would never want to pit a user against another user. Re: close something to one, close to all. Angling has not been brought up yet and recreational tourism is huge here. Recreational anglers and boaters strive to protect the area and follow regulations. I would like to see recreational anglers have some input as well. When we have our anglers observe (the meetings) we can help educate you all. I love the transparency and openness and how this is coming along. When we have the next regional meetings, we'll get the local guys representing us to those meetings.
- Jim Teague, Key Colony Beach (KCB) Fishing and Boating Club.
I've been in all the meetings since last summer. I represent the KCB fishing and boating club. I am personally observing as well. The maps released were pretty scary. I think the process and data are great. I agree with Michael. There hasn't been much economic data. This is very important to us, the club. If restrictions are going to take place, how is this going to affect those that live here? Are we going to be able to catch our dinner? The clean slate is the best thing I heard here. This group's recommendations can affect so many areas of the economy. I know you can find out how many boats are here, registered, who contributes to the economy and in what way. The boaters contribute hugely to the economy and the sanctuary here. What's the economic data? What negative economic affects can happen due to regulations? Boat manufacturers have data, etc. I would like to see that data when you start the regional meetings. Seeing this so far has made me optimistic.

Follow-Up Actions for Working Group Members

There are no follow-up actions at this time.

Decision Items of Note

No decisions have been made at this time.