Florida Keys National Marine Sanctuary (FKNMS) Sanctuary Advisory Council (SAC)
Marine Zoning Workshop
Tuesday, March 25, 2008
Key Colony Beach City Hall Auditorium
600 W. Ocean Dr, Key Colony Beach, FL 33051

SUMMARY OF BREAKOUT GROUP DISCUSSIONS

SAC Members Present at Workshop

Chris Bergh
Jeff Cramer
Jon Fajans
Dolly Garlo
Richard Grathwohl
Jerry Lorenz
David Hawtof
Martin Moe
Ken Nedimyer
Bruce Popham
Brad Simonds

SAC Alternates Present at Workshop

Jason Bennis
Peter Frezza
Doug Gregory
Cal Sutphin
Donald Way
Scott Zimmerman

Breakout Group 1:
Facilitator: Joanne Delaney
Scribe: Andrew Crowder
Group members' primary interests included education and outreach (2), conservation (1), charter fishing (1), diving (1), science (3).

Breakout Group 2:
Facilitator: Elizabeth Moore
Scribe: Nancy Diersing
Group members' primary interests included "citizen at large"(1), conservation (1), charter fishing (2), commercial fishing (2), and science (4).

Breakout Group 3:
Facilitator: Jeanette Hobbs
Scribe: Ivy Kelley
Group members' primary interests included conservation (1), charter fishing (1), commercial fishing (2), science (1), South Florida ecosystem restoration (1) and boating industry (1).

Breakout Group 4:
Facilitator: Cindy Lewis
Scribe: Mary Tagliarini

Group members' primary interests included research and monitoring (1), law enforcement (1), conservation (1), charter fishing (2), commercial fishing (2) and "citizen at large" (1).

Below is a compilation of all the breakout groups' comments, as captured by the group scribes. It represents the points of view of the attendees, rather than that of the Florida Keys National Marine Sanctuary.

1. Collectively, do the FKNMS's five current zone types (i.e. Sanctuary Preservation Area, Ecological Reserve, Special Use Area [including Research Only Area], Wildlife Management Area, Existing Management Area) and the unzoned area address the FKNMS purpose and the goals and objectives for marine zones? In other words, do we have all the right tools in the toolbox and are we using the tools that we have effectively? Any suggestions?

Group 1 Comments on Question 1:

The community must be onboard for changes to work.

If political leaders are used changes will gain support.

There needs to be a clarification of the purpose of the SPAs.

Not using our tools:

-Ecological Reserves: (Need to look at migratory species, and also not looking at non-exploited species).

-Need to focus on certain species. (Spawning events).

Can't just use one tool, must be a combination of all of them.
-Are they really working together?

Use temporal zoning to help increase fish stocks.

No spear fishing zones.
-There are no large adult hogfish south of Pennekamp State Park.

Protect spawning.

Need maximum size limits on certain fish. (Ex., Black Grouper).

Are we using Research, Recovery, and Restoration areas enough? (Ex. *Acropora*, Everglades re-plumbing).

Restoration zones could help in the future.

Eliminate catch and release fishing from Conch Reef and Alligator Reef.
-Make it law.

Need to revisit the purpose of the zones.

Consider protecting areas critical for certain life stages. (Ex. mangroves, near shore).

How do you close or change a zone?
-Is it possible or practical?

Keep up with the naming for MPAs.

Takes a whole new look.

Group 2 Comments on Question 1:
In the Great Barrier Reef Marine Park everything is zoned with "rights" for activities in the "open" areas. In the sanctuary's open areas or de-facto areas, things that can't be done are described, but not what can be done. The sanctuary should be more specific about activities in unzoned areas; might want to redefine the process regarding unzoned areas. People are uncomfortable with creating situations that do not allow for change and adaptability, though. If every activity that is allowed/not allowed is listed, then how do we deal with new things that might arise?

There are concerns that an activity currently allowed in the unzoned areas might be prohibited in the future. There is no recognition of "rights" like the right to fish in the sanctuary's open/unzoned areas. The term "rights" used by Australians might not be the same as when used by Americans. When it comes to the marine environment, terms like "dedicated access privileges" are used, not "rights." "Dedicated access privileges" can be revoked.

Since the sanctuary has general use areas, it might be beneficial to have a map.

It could be helpful to see where fishing will be allowed/not allowed in the future.

Non-zoned areas in the sanctuary should be described; a list can be written for the de-facto zones.

It was suggested that the sanctuary consider a general use category sanctuary-wide.

There was concern that zone closures could be placed in a de-facto area unless the de-facto area has "rights."

Group 3 Comments on Question 1:
Lack of data/information about current protected areas.

Lack of public awareness about purpose of zones.

Suggestions: Sanctuary DVD for broadcast (including website) and distribution. Annual Sanctuary Report Card with easy to read synopsis/chart, modeled on EPA's current report card.

Need a better website.

Need “fast track” for new Wildlife Management Areas (WMAs) – cut through or expedite government bureaucracy.

Lack of public awareness of WMAs, especially in the Lower Keys – types, what that means.

WMAs are some of the best bonefishing areas in the Upper Keys – Dove Key, Rodriguez Key, Tavernier Key, Snake Creek.

Don’t need more types of zones, but improved awareness and feedback.

If we don’t give up more hardbottom [for more protected areas] now we will lose our ability to fish at all. Proposed areas for protection: Caloosa Rocks, areas West of Marker 20.

Sanctuary should work with professional trappers and divers to identify future protected areas.

Zoning seems like it should be enough, but we need more proof that the zones are working.

Need to refine or expand locations and increase enforcement and marking of current protected areas.

Need more types of wildlife protected.

Need to reevaluate/move quickly in response to disaster and other sudden effects – more flexibility.

Group 4 Comments on Question 1:

Suggestion was made to change the regulation for some of the WMAs. Example- Rodriguez and Dove Key WMA should be made no entry instead of their current regulation of no-motor zone. People are walking their boats into the shallow flat to drink beer, party and trample the fragile habitat (goniolithan shoal and seagrass.)

Should there be zones related to maritime heritage or cultural resource sites?

What kind of control (or lack of control) does FKNMS have over what comes into the FKNMS (Cuba oil drilling, water flow from the Everglades or Mississippi?) Can the FKNMS have any authority over the upland influences?

Maybe Everglades National Park (marine portion - Florida Bay) needs to be included in the FKNMS zoning plan to better control the water quality.

2. Are the FKNMS's current zones sized appropriately to enable them to achieve the purposes for their zone types? Any suggestions?

Group 1 Comments on Question 2:

SPAs are too small. (Not protecting everything: fish, coral, etc.).

Is 6% of the sanctuary being protected enough?

Group 2 Comments on Question 2:

The Western Sambos Ecological Reserve (WSER) is a lobster reserve that has a great body of knowledge associated with it, including some fish studies. If the goal of Ecological Reserves (ERs) is to protect continuity of the oceanside ecosystem, then the current zone may not be accomplishing this goal--since lobsters show some movement outside of reserve. A decision to move the boundaries to include more lobster habitat will take into consideration the scientific information that is available. By adding a relatively small area (on the outside/southern boundary), there will be a great gain in terms of ecological function. Today we have the sonic technology that allows us to know more about animal (lobster) movement and habitat use. Sonic technology has shown that a female lobster went beyond the 60' contour for reproduction. The amount of traffic (boat-fishing) out there has to be considered, too, when considering a boundary expansion in this area.

Even the largest zone like the WSER doesn't capture the full range of movement of targeted species. Larger seems to be better when it comes to ERs.

The sanctuary should consider the backcountry of Everglades National Park when designing zones since this area is already zoned and serves as a nursery for marine life. Florida Bay is essentially a de-facto nursery for the sanctuary. Everglades National Park is undergoing its own process that involves zoning and resource management. The sanctuary should provide input to the National Park System process. The ENP needs to be considered in terms of the cumulative impacts of regulation and zoning. Management and planning should be kept complimentary to Everglades and Biscayne National Parks. The messages between the sanctuary and the local national parks could be coordinated.

There are concerns about the prop-dredging and scarring in the backcountry of the park (in terms of habitat impacts).

According to the Great Barrier Reef presentation, if the zones are made larger, then the spillover effects will be larger and can be taken advantage of.

The way that this concept (of having larger zones and larger spillover effects) is applied or can be applied in the creation of zones in the sanctuary should be considered.

It was noted that the Great Barrier Reef is a large area with few people in contrast to the sanctuary which is a small area with a large number of people.

The concept behind ERs is that they should be large enough to account for uncertainty and replenishment. The sanctuary should consider adding zones to protect natural resources near the Marquesas, Middle and Upper Keys. This would create a network of protected areas, improve resilience in the system and manage for ecological function. This network might increase the fishing opportunities. The question was asked as to why it seemed necessary to make a claim about improved fishing? What is wrong with just leaving the area alone?

The fore reef and patch reefs are underrepresented in the sanctuary's current zoning protection scheme (except inside the WSER and Tortugas Ecological Reserve [TER]).

Sanctuary Preservation Areas (SPAs) reduce user conflict and protect coral. However, fishermen who are fishing at night have been observed luring the fish out of the SPAs with bait. This is essentially extraction from the SPAs. The SPAs might benefit from having a buffer zone around them to protect them better. This edge effect is not seen in the Channel Islands because the buffers are large.

When considering the closing of areas to fishing, consider whether the area is productive for fisherman. If so, closing them may be a problem.

There is a need for ERs in the Middle and Upper Keys to better represent the Keys.

Group 3 Comments on Question 2:
SPAs are small. We need bigger protected areas, like the ERs.

Address the differences between SPAs and ERs – explain to public.

Need more data, such as fish and benthic surveys, to see if we need to expand or establish new reserves.

Need to balance use in determining type of protected areas to be added/expanded.

Suggestion: More or larger SPAs. Have observed (anecdotal evidence) that areas immediately adjacent to SPAs are very productive. Need more scientific evidence.

SPAs are probably easier to expand or establish in regard to public acceptance and support.

Group 4 Comments on Question 2:
Prefer more SPAs rather than making the existing ones larger (need to protect habitat). Commercial fishers are not impacted by the current SPAS.

To improve fisheries we would need 1 or 2 large SPAs.

We just don't know if they are the appropriate size.

Agree with current zones are being effective for the reason they were established (Ex.- SPA for user conflict reduction).

When a zone is established there needs to be an enforcement plan- you can not just make them with no thought about enforcement.

Identify other critical habitats (besides reef) that may be set up as SPAs or other zones for protection of habitat (Example- seagrass, hard bottom, etc.).

3. Are the FKNMS's current zones located and arranged in such a way that they best meet their intended purposes, or are different locations or arrangements needed? Any suggestions?

Group 1 Comments on Question 3:

There is connectivity between Tortugas, but how about the rest of the Keys? (Ex., Sombrero vs. Coffins Patch).

Larval connectivity, but not sure if they are actually protected by the zones.

There is a need for protected deep water near SPAs. (Especially in the northern Keys).

Everglades are critical to restoration of the Keys.

Need for new SPAs for spawning on seasonal or temporal basis

Group 2 Comments on Question 3:

There is a network to some extent, but it is incomplete because the Upper and Middle Keys and Marquesas do not have reserves. In addition, the mid channel and deeper reefs are underrepresented.

There is no study looking at the connectivity between zones in the sanctuary, which is needed to really answer questions 3 and 5.

There was a discussion regarding the genetic connectivity of corals between the Upper Keys and the Lower Keys. There are no scientific studies to indicate how well-mixed the genotypes are (for example) between the Upper and Lower Keys. Some scientists say that they are well-mixed, whereas others say that the corals are genetically distinct in the different regions.

The SPAs have done what they intended—kept snorkelers and divers away from fishing activities.

The performance criteria for zoning strategies are so obtuse and general. It makes one wonder if people really expected big changes in the ecology of the area since the zones were put in place.

The presentations today were pretty technical and could be "boiled down."

In regards to removing some zones, some in the backcountry (National Wildlife Refuge areas) are worthless today from a bird nesting standpoint. Coon Key in the Great White Heron National Wildlife Refuge needs to be zoned. Boca Grande Key also needs have a closed nesting season since it is a nesting site for piping plovers and other birds. People still visit the colony during nesting season. Flamingoes have also been observed at Boca Grande Key.

Some habitats may be underrepresented in the zoning scheme. *Oculina* coral is vulnerable to fishing and anchor damage and is underrepresented in the zoning scheme.

The system is connected and the backcountry issues like breeding birds and prop-dredging are important. Attention should be given to these areas, too. The backcountry is 90% seagrass and this is a "seagrass" sanctuary. In the past three years groundings in the grassbeds are down.

Some habitats are overlooked in the zoning scheme and may be in need of the protection offered by zones. Marine collectors observe the marine life that exists in many habitats and take from many different habitats and yet there is no stock assessment on the species that are collected by marine life collectors, so the sustainable yield for these species is not known.

Group 3 Comments on Question 3:

ERs are needed in the backcountry. WMAs are small. We need something similar in size to Western Sambos. Not the estuary of the Everglades, but true Lower Keys backcountry. May need different locations or arrangements of current WMAs.

Create connected protection zones to protect migratory species based on scientific evidence.

Consider periodic closures of protected areas.

Having channels (natural or marked) through WMAs does not help to achieve the goal. Consider closing the channels or relocating the protected area.

Do the zones represent all of the habitats in the ecosystem?

Group 4 Comments on Question 3:

Based on some research that was presented, it may be necessary to increase the size of the some of the zones. The increase in size should be for habitat protection. Example- lobster data at the WSER may warrant increase in size since they are leaving the area to spawn. However, 80% of the spawning occurs during the closed lobster season so expanding the size should not be to keep them in a no-take area. They should not be being caught during the majority of the spawning season since it is closed season.

Eliminate hairhooking in all of the SPAs- it is a law enforcement nightmare.

Steve Leopold's [public comment on] user conflicts/confusion on baitfishing was raised.

Commercial fishers have concerns over the possible expansion of the WSER- note- movement/spawning of the lobster is during the closed season

Will the WSER be expanded on the Bayside? If it is, there is a real concern by the commercial fishers.

4. Do any FKNMS zones or zone types have unintended or undesirable consequences for natural resources? Any suggestions?

Group 1 Comments on Question 4:
N/A.

Group 2 Comments on Question 4:
The idea of mooring/id buoys attracting and concentrating people was mentioned in reference to not wanting to see any of the patch reefs in the backcountry of the National Wildlife Refuges marked by buoys. There was no need to attract people who would not otherwise come. Things change so zones might have to change to still be effective.

Whenever a mooring buoy is placed or a designation made, that invites people. An aquaculture zone might sound easier for the collector, but it invites people to partake.

Group 3 Comments on Question 4:
SPA designations/mooring buoys create hot-spots, increase use, and increase damage.

Is there knowledge/data about unintended consequences to non-reserve areas? Are we driving people to exploit previously unexploited areas?

Are new fishing grounds more damaging to fishing gear and boats? (In other words, why weren't people fishing there before?).

Group 4 Comments on Question 4:
Did designating SPAs draw usage to those areas causing increased stress? If yes- can that be measured?

The carrying capacity of SPAs needs to be looked at.

Yes- suggestion was made to change the regulation for some of the WMAs. Example- Rodriguez and Dove Key WMA should be made no entry instead of their current regulation of no-motor zone. People are walking their boats into the shallow flat to drink beer, party and trample the fragile habitat (goniolithon shoal and seagrass).

There is some user confusion over rules in some of the zones. Example- it is a no-take area but there is hairhooking or baitfishing allowed or catch and release trolling.

Eliminate hairhooking in all of the SPAs- it is a law enforcement nightmare.

5. Do the current research and monitoring efforts detect effectiveness of the FKNMS zones? Any suggestions?

Group 1 Comments on Question 5:

Must use the Biology, Fisheries, and Exploitation to determine what changes need to be made to zoning.

Is the right science being done in Ecological Reserves, and is it uniform throughout the Keys? Also, is it working?

The Sambos are the perfect location for research. (Not used to monitor).

The need to use new science to reform the current zoning.

Need research to look at protected areas vs. areas that aren't protected.

Identify the most reproductive areas for zones.

Need more research to determine if and where new protected areas should be located.
-What is threatened?

Need more research to determine if and where new protected areas should be located.
-What is threatened?

Group 2 Comments on Question 5:

The research has involved reef fish and lobster, with not much attention given to sport-fish, which is a big money-maker. There is very little work going on to the economic effects of ERs and zones on the fishing guides and recreational fishing. It was pointed out that there has been little financial support studying flat fishing over the years. This kind of research is important, but more important if it is cooperative research. The bonefish/tarpon studies are cooperative in that they involve the fishermen. Recent data shows that the catch and release fishery makes very little impact on the fishery. The Lower Keys Guides Association anglers practice catch and release fishing most of the time. People come to the Keys from all over the world for the fishing.

There is a need for flexibility and adaptability with regards to zoning. Pelican Shoals was once a tern breeding area, but now is gone due to hurricanes. Other areas have emerged and could be suitable sites for nesting, but they may not be protected. Zoning needs to shift to where the resource is located. It is important to consider how quickly managers can adapt to changing conditions. The state has jurisdiction over certain islands and it takes a long time to make changes because of the process involved.

There is internal competition for grant money. Some data may not be that available. If the data set is not available for a certain project, then that project suffers.

Dave Score explained that the sanctuary will be re-evaluating regulations and considering modifications in the future. In the review process for the new management plan, some

comments were received regarding suggestions about where new WMAs may be located and other areas that are deserving of added protection. These suggestions will be considered as part of the NEPA public process. Other considerations will involve habitat continuity, identifying gaps, and the science. After everything is considered, the sanctuary will enter into a "notice of intent" regarding the rulemaking. The public will have a chance to comment on the proposed zones and modifications can be made from the original plans. This process that the sanctuary will be undergoing could be very similar to the one implemented to establish the Tortugas Ecological Reserve, which involved representative groups. Any changes will also be reviewed to determine if the ecological benefits are well-supported. This ecological benefit analysis may be a separate evaluation.

Basically, there is enough research on some species, but not on others. It would also be helpful to examine the socio-economic trends to see if the zones work or not.

Group 3 Comments on Question 5:

If research is sufficient, the public doesn't know about it. Need more information and better dissemination.

Need water quality monitoring in fixed reserves/SPAs for long term comparisons and an integrated status report of the water quality data.

"Sanctuary" or some entity should synthesize research data (produce a scorecard) relative to its goals on an annual or periodic basis.

Need studies of inshore waters at Western Sambos with a focus on fish.

Get requests into the Local Action Strategy.

Should the sanctuary make a prioritized list of research and information needs?

Group 4 Comments on Question 5:

There needs to be more surveys/research outside of the zoned areas. Research needs to be done in the No-Take Areas, Open Areas and Research Only Areas so they can be compared.

Utilize data/info from the commercial fishers catches- utilize their knowledge and catch results as data.

More surveys/research on benthic habitats and non-commercial species (it appeared that the majority of the research is being done on commercially important species like snapper, grouper, and lobster.)

Great Barrier Reef Marine Park Authority (GBRMPA) utilizes tour operators to gather data/research. It is called "Eyes on the Reef."

Reef Environmental Education Foundation (REEF) may be developing a new data collection module to collect data on invertebrates- this may be helpful.

Improve the accuracy of the data that is collected on the commercial landings data that is already collected (Example- accurate weights and measures, location).

There are questions if the current research is designed to detect zone effectiveness. The presentations by the scientists during the workshop did not seem to address zone effectiveness or present that angle. If there is research no research designed to detecting effectiveness of the zone, then at least some future research should be designed with this as a goal.

Is there water quality testing in the FKNMS zones? If it is not, it should be.

Written Comment Received after Workshop Conclusion (via email, from James F. Anderson, Greengrass Holdings, LLC):

"[H]ave restoration zones, not just for science, but for projects where private and agency can block off 10 acre zones + and restore using science supporting technology and an approved plan, Mark off with buoys and temporary close these areas for one to five years until area has had time to recover. With our science using these sediment tubes its 18 months is what NOAA has documented on vessel groundings. Also up in our area I suggested we have a color buoy that is a recycle color they use for recycle water on the water meters and pipes above ground so all know this is not drinking water. I attached a picture of this buoy that possible could be used, Most boaters look at buoys and they all seem alike, this is different as you can see."