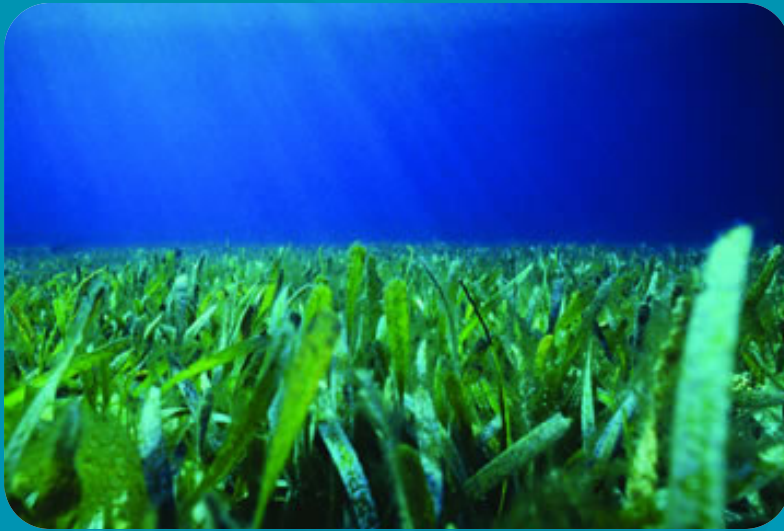




Shallow Water Wildlife & Habitat Protection Work Group: Recommendations to FKNMS SAC



Jack Curlett: Working Group Chair
Sanctuary Advisory Council – Recreational Fishing
Bruce Popham
Sanctuary Advisory Council – Boating Industry
Working Group Member



Sanctuary Advisory Council Members

- Jack Curlett, Working Group Chair, SAC Recreational Fishing
- Justin Bruland, SAC Commercial Fishing
- Bruce Frerer, SAC Recreational Fishing
- Pete Frezza, SAC South Florida Ecosystem Restoration
- Richard Grathwohl, SAC Fishing Charter Flats Guide
- David Makepeace, SAC Citizen at Large – Upper Keys
- Bruce Popham, SAC Boating Industry
- Jessica Pulfer, SAC Conservation and Environment

Working Group Membership



Community / Public Members

- Aaron Adams, Bonefish and Tarpon Trust
- Carla Bellenger, Key West Eco Tours, Inc.
- Mike Bresette, InWater Research Group, Inc.
- Tad Burke, Florida Keys Fishing Guide Association
- Charlie Causey, Florida Keys Environmental Fund
- John Coffin, Coffin Marine Services Inc.
- Roy Herndon, Marine Life Collectors
- Meaghan Johnson, The Nature Conservancy
- Bill Keogh, Big Pine Kayak
- John O'Hearn, Lower Keys Guides Association

Working Group Objectives



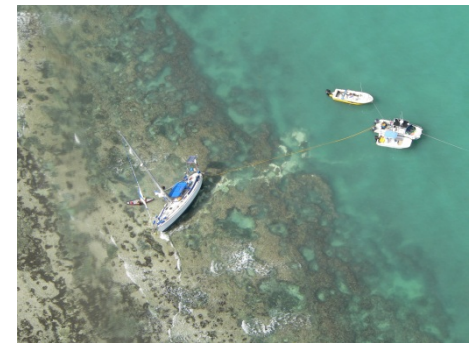
1. Evaluate existing Wildlife Management Areas for effectiveness.
2. Develop recommendations considering existing regulations and zoning to further protect shallow water habitats.
3. Address concentrated uses that diminish or destroy habitats.
4. Identify where high impact activities known to occur should be allowed.



Working Group Objectives (con't)



5. Identify seagrass and shallow water habitat areas for exclusion to allow for research control areas.
6. Evaluate mangrove habitat protection for bird nesting.
7. Reduce damage to natural resources from improper vessel salvage methods.



Seven Working Group meetings over 6 months



In Summary

January 30: Clarified Role and Authority of Working Group.

February 20: Identified habitats and resources at risk and impacts and uses that affect those resources.

March 12: Identified criteria to use for developing options and recommendations.

April 2: Identified data layers needed to facilitate development of habitat protection recommendations.

Seven Working Group meetings over 6 months



In Summary

April 30: Assessed Wildlife Management Areas and associated access restrictions. Identified potential modifications, new or status quo recommendations.

May 21: Developed a recommendation on management options for dealing with natural resource impacts from improper vessel salvage methods.

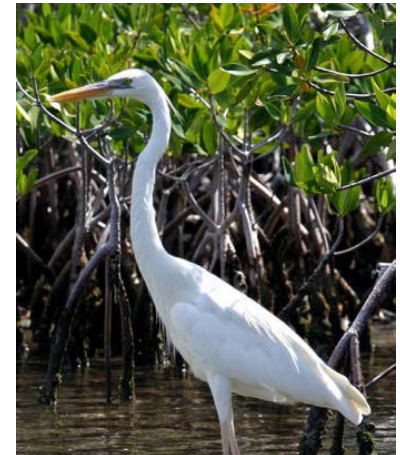
June 11: Developed site specific recommendations on management options for existing Wildlife Management Areas, new areas and refined regulations.

Shallow Water Habitat and Resources



The following **Resources of Concern** were identified for Shallow Water, Wildlife and Habitat Protection:

- **Habitat:** Coral (Patch reefs, Reef Margin and Fore Reefs), Seagrass, Hardbottom, Beaches and Coastal Mangrove
- **Resources:** Marine Mammals, Reptiles, Birds, Fishes and Threatened and Endangered Species

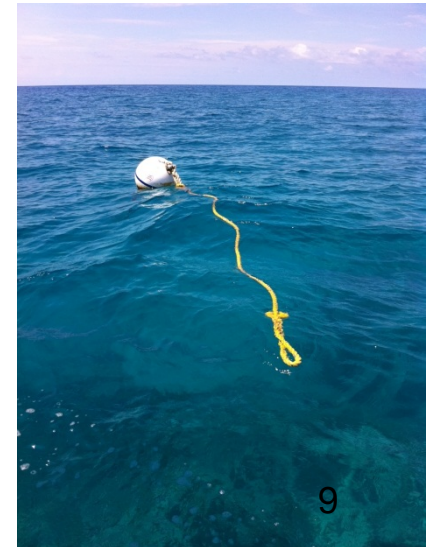


Activities and Uses that Impact Shallow Water Habitat and Resources



Determined current or potential impacts to those resources:

- **Existing:** i.e. Research, Eco tours, diving, snorkeling, boating, fishing.....
- **Emerging/New:** Kite boarding, thrill rides, zodiac tour boats.....
- **Concentrated:** Diving, party zones, jet ski tours, boat races.....
- **High Impact:** Dredging, Marine Salvage, derelict vessels.....



Zone Types and Access



- Consider impacts to existing users.
- Manage and enforce zones by the types of access and access restrictions compatible with the goals of natural resource protection.
- Create consistent and fair access restrictions.





Zone Types and Access (con't)

- Identify and designate zones closed for research purposes and associated reference sites.
- Consider a balance of areas restricted or closed for certain high use/ high impact activities.
- Encourage the National Wildlife Refuge to take a proactive approach in managing human activity that could negatively impact near-shore and shallow water resources of concern.



Incorporate Adaptive Management Mechanisms



- Allow for effective and adequate resource protection:
 - ✓ Temporal zoning, buffer zones, specific buoys for zone restrictions that can move for specific resource protection goals
- Proactive in addressing shifting and new high use and high impact activities:
 - ✓ Party zones, new islands/ sandbars



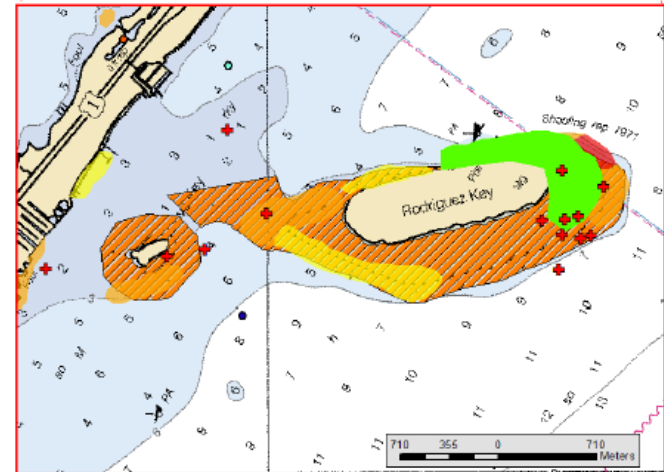
Zoning for Shallow Water Resource Protection



- Reviewed **27 existing** WMA for modifications to access restrictions.
- Reviewed **27 new** proposed zones for some type of increased protection for shallow water resources.

Recommendation:

- Remove 2 existing zones
- Status Quo for 4 existing zones
- Modify 21 existing zones
- Proposed 24 new zones



Zoning for Shallow Water Resource Protection



Modifications/Recommendations included:

- Establish additional no motor, idle only and closed zones.
- Make larger, contiguous zones where appropriate.
- Use buffer zones- both temporal and permanent for wildlife protection.
- Identify zones that include and protect a range of resources.

Zoning for Shallow Water Resource Protection



Marking, Mooring and Use of Zones:

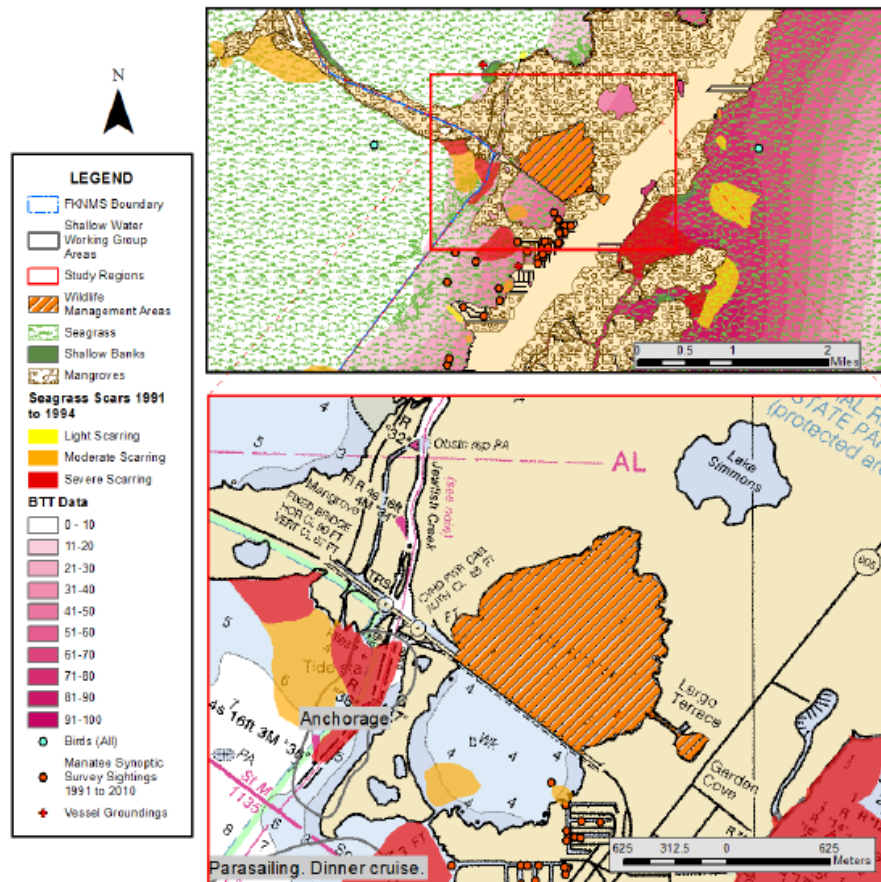
- Ensure adequate marking of zones.
- Mooring buoy usage- no anchoring where mooring buoys are provided.
- Address Managed Mooring fields.
- Consider better channel marking for established travel lanes where seagrass damage is prevalent.
- Consider creation of “intelligent” markers.



Mapping Example: Recommendation-Status Quo



Eastern Lake Surprise Wildlife Management Area



Eastern Lake Surprise: Protect the endangered American crocodile and West Indian manatee that inhabit the area from vessel traffic.

Access Restrictions: Idle speed only/no-wake zone east of highway U.S. 1.

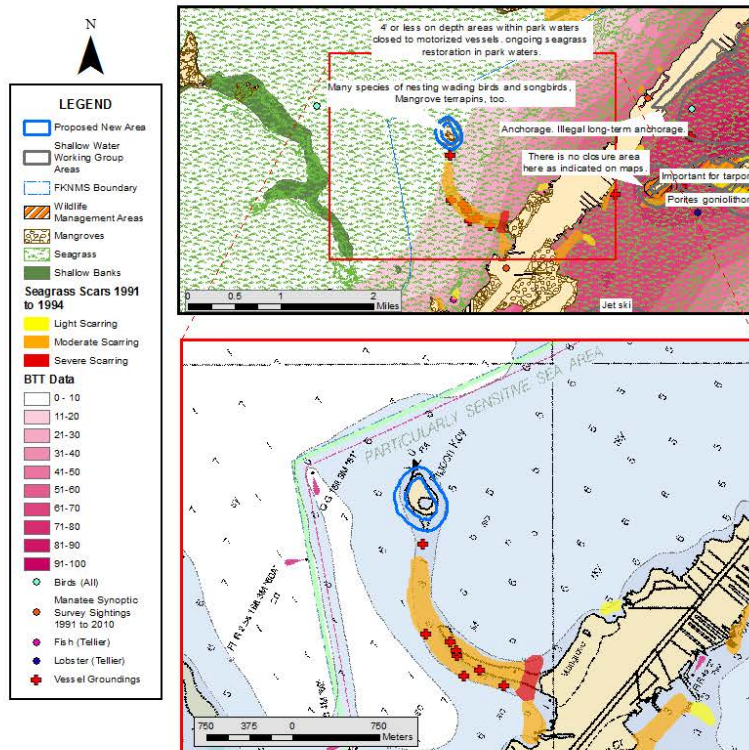
Proposed New Area, Comments, or Recommendations: Area zoning provides adequate protection.

~~Retain to decrease disturbance to crocodiles, manatees, and other wildlife.~~

Mapping Example: Recommendation-New Zone



Pigeon Key – Florida Bay (proposed new area)



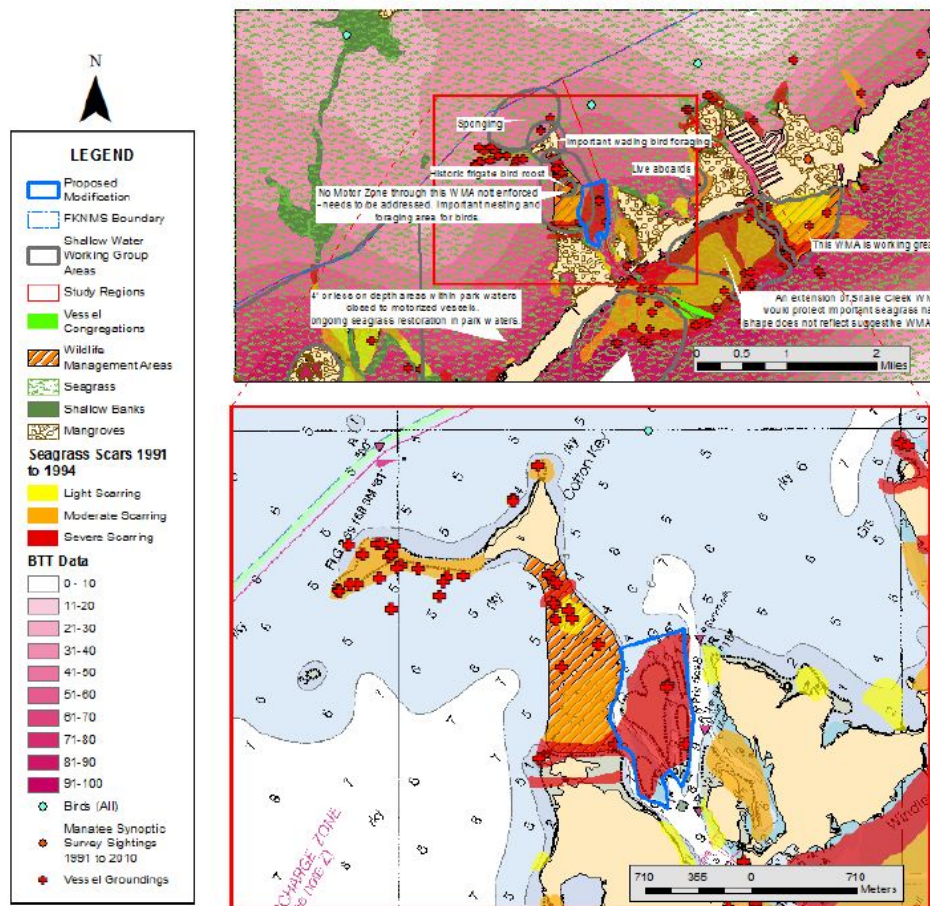
Pigeon Key: This is the only island of its kind in the upper keys within the FKNMS that supports high and significant numbers of nesting wading bird species as well as unique reptiles. It is adjacent to the intra-coastal waterway so gets impacted heavily by boaters.

Proposed Recommendation:
Establish 100 yard No Entry Zone around island.

Mapping Example: Recommendation- Modification



Cotton Key Wildlife Management Area



Cotton Key: It is an area of very shallow flats that are heavily used by a variety of birds as well as bonefish and other desirable fish species. There are also several small mangrove islands that serve as nesting sites for a variety of birds, including pelicans, cormorants, and at least four species of herons. Cotton Key is also a preferred roost for magnificent frigate birds.

Existing Access Restrictions: No-motor zone on tidal flat.

Proposed Recommendation: Maintain existing restrictions and expand zone to include bayside Whale Harbor Flats, islands, and deep channels with Idle Speed/No Wake Zone in channels.

Objective 7:

Reduce damage to natural resources from improper vessel salvage methods.



Implement a towing and salvage permit program in the FKNMS:

- Use established and successful programs from Biscayne National Park as a guide.
- Establish a SAC Towing and Salvage Work Group to ensure dialog and coordination with the towing community.
- Include Standard Operating Procedures (use C-Port, USCG, BNP for guidance).
- Promote innovation of techniques.
- Allow for adaptive management.

Working Group Resources



Florida Keys National Marine Sanctuary Marine Zoning and Regulatory Review: floridakeys.noaa.gov

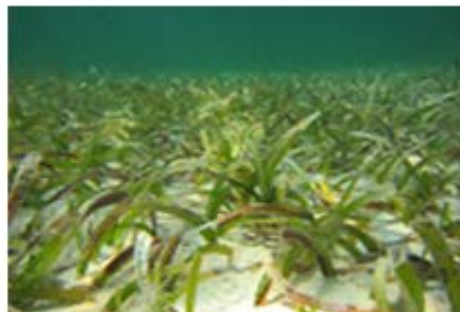


Marine Zoning & Regulatory Review

Maps, Data, and GIS Resources: http://ocean.floridamarine.org/fknms_zone_review



Coral Reef Ecosystem Restoration Working Group
Coral health in the sanctuary has declined over the past several



Shallow Water Wildlife and Habitat Protection Working Group
Hardbottom communities and



Ecosystem Protection: Ecological Reserves, Preservation Areas and Wildlife Protection Working Group