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

Florida Keys National Marine Sanctuary: Existing Regulations and Marine Zoning

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Goals of this Presentation

Review current resources and status:

• Objectives for this Working Group
• Types of Marine Zones
• Regulations
• Management Issues and Responses
Objectives

- Review and evaluate existing reserves designated for protection of coral reef ecosystems.
- Review current exceptions to regulations in Sanctuary Preservation Areas and Ecological Reserves.
- Review and evaluate Sanctuary Preservation Areas reduction of conflicting uses.
- Recommend new or modified ecological reserves to ensure protection of a diversity of resources:
  - Spawning aggregations
  - Full suite of marine flora and fauna (i.e., seabird, marine mammal, turtles, seagrass, soft corals, hard corals)
Objectives (continued)

- Consider **temporal zoning** to address **seasonal impacts** associated with intense uses or seasonal ecological activities (i.e., nesting, breeding, spawning).

- Ensure the FKNMS zoning scheme **promotes sustainable use** of the sanctuary resources and protects areas that represent diverse habitats as well as areas important for **maintaining natural resources and ecosystem functions**.
Marine Zoning Action Plan

Florida Keys National Marine Sanctuary & Protection Act (1990)
  • Develop a management plan and form Advisory Council
  • Use of temporal and geographic zoning

Management Plan, Zoning Scheme, and Regulations (1997)
  • Sanctuary Preservation Areas (SPAs)
  • Ecological Reserves
  • Special-use Areas (Research Only)
  • Wildlife Management Areas (WMAs)
  • Existing Management Areas
Purpose of Zoning

• To protect and preserve sensitive components of the ecosystem while facilitating activities compatible with resource protection

• Ensure that areas of high ecological importance evolve naturally, with minimal human influence

• Promote sustainable uses, protects diverse habitats, and preserves important natural resources and ecosystem functions
Regulations (15 CFR 922 Subpart P)

- Sanctuary Wide Regulations and Other Management Area Regulations
- Sanctuary Preservation Areas (SPAs)
- Ecological Reserves (ERs)
- Special-Use Areas
- Wildlife Management Areas (WMAs)
- Existing Management Areas (EMAs)
Sanctuary Wide Regulations

Following activities prohibited:

• Mineral and hydrocarbon exploration, development and production.
• Moving, removing, taking, injuring, touching, breaking, cutting or possessing coral or live rock.
• Discharging or depositing treated or untreated sewage from marine sanitation devices, and other materials.
• Dredging, drilling, prop dredging or otherwise altering the seabed, or placing or abandoning any structure on the seabed.
• Operating a vessel in such a manner as to strike or otherwise injure coral, seagrass, or other immobile organisms attached to the seabed, or cause prop scarring.
• Having a vessel anchored on living coral in water less than 40 feet deep when the bottom can be seen. Anchoring on hardbottom is allowed.
• Except in officially marked channels, operating a vessel at more than 4 knots/no wake within 100 yards of residential shorelines, stationary vessels, or navigational aids marking reefs.
Following activities prohibited:

- Operating a vessel at more than 4 knots/no wake within 100 yards of a “divers down” flag.
- Diving or snorkeling without a dive flag.
- Operating a vessel in such a manner which endangers life, limb, marine resources, or property.
- Releasing exotic species.
- Damaging or removing markers, mooring buoys, scientific equipment, boundary buoys, and trap buoys.
- Moving, removing, injuring, or possessing historical resources.
- Taking or possessing protected wildlife.
- Using or possessing explosives or electrical charges.
- Harvesting, possessing or landing any marine life species except as allowed by the Florida Fish and Wildlife Conservation Commission Rule (68B-42 F.A.C.).
Areas To Be Avoided (ATBA)

- Prohibition from operating a tank vessel or a vessel greater than 50 meters in registered length.
Sanctuary Preservation Areas (SPAs)

- Protect shallow, heavily used areas where conflicts occur among user groups and where concentrated visitor activity has led to resource degradation.
- Encompass discrete, biologically important areas.
- Designed to reduce user conflicts and sustain critical marine species and habitats.
- 18 SPAs (together cover a total of 4.97 nm²)
  - Upper Keys- 9
  - Middle Keys- 4
  - Lower Keys- 2
  - Marquesas- 3
Study Areas & Map of Zone
Sanctuary Preservation Areas (SPAs)

Sanctuary Wide Prohibitions PLUS:

Prohibitions:

• Discharging any matter except cooling water or engine exhaust.

• Fishing by any means; removing, harvesting, or possessing any marine life.

• Touching or standing on living or dead coral.

• Anchoring on living or dead coral, or any attached organism.

• Anchoring when a mooring buoy is available.
Sanctuary Preservation Areas (SPAs)

Exceptions:

- Catch and release fishing by trolling is allowed at:
  - Conch Reef
  - Alligator Reef
  - Sombrero Reef
  - Sand Key

- Baitfishing (cast net/lampara net) is allowed in ALL SPAs by FKNMS permit. (92 permits)

- Hair hook baitfishing is allowed by FKNMS permit at 3 SPAs: (18 permits)
  - Conch
  - Alligator
  - Davis

- Lionfish
  - Removal using hand gear (460 permits)
  - Removal using pole spears and hand gear (3 permits)
### Sanctuary Preservation Areas (SPAs)

**Baitfish Gear Requirements (cast net/lampara net)**

<table>
<thead>
<tr>
<th>Area</th>
<th>Gear Requirements</th>
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<tbody>
<tr>
<td>Newfound Harbor</td>
<td>Cast nets which are no greater than 500 square feet in area (no greater than 12’7” radius)</td>
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<td>Sand Key</td>
<td>Cast nets and/or modified lampara nets which are no greater than 500 square feet in area</td>
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<td>Rock Key</td>
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<td>Eastern Dry Rocks</td>
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<td>Hen and Chickens</td>
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<td>Cheeca Rocks</td>
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<td>Sombrero Key</td>
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<td>Coffins Patch</td>
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<td>Molasses Reef</td>
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<td>Cast nets and/or modified lampara nets</td>
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Sanctuary Preservation Areas (SPAs)

Additional requirements of baitfish permits:

- All bycatch shall be immediately returned to the water alive.
- Contact with or disturbance to the seabed is prohibited.
- Catch of baitfish by hook and line is prohibited.
- Baitfish permits are issued free of charge and last for one calendar year.
- Baitfish permits are issued to an individual and may be used on more than one vessel, but may not be used by more than one person.
- All other sanctuary regulations and applicable fisheries regulations still apply and must be followed.
- All baitfish permit holders are required to maintain a catch log and submit this log within 30 days of the expiration date of the permit.
Additional requirements of hair hook baitfish permits:

Permit is issued for October 15 to April 15 for the following activities:

- Fishing using 6 lb. or lower test monofilament line with a bobber or float attached, followed by a maximum of 20” of line, followed by a thin gauge #12 or smaller barbless hook for the purpose of catching ballyhoo, balao, halfbeaks, and/or herring.
- Harvesting ballyhoo, balao, halfbeaks, and/or herring using the gear type described above.
- Discharging chumming materials or bait for the purpose of catching ballyhoo, balao, halfbeaks, and/or herring.
- All fishing must occur between the hours of 5:00 a.m. and 10:00 a.m. daily.
- All hair hooks used for fishing must be barbless.
- You must maintain a catch log throughout the term of the permit and submit it by May 31.
- All bycatch shall be immediately returned to the water alive.
- Contact with or disturbance of the seabed is prohibited.
- A flag that identifies the permitted vessel must be displayed while fishing at all times. Flags are to be a minimum of 12” x 15” in size and must be solid white in color, with a block letter “B” of no less than 9” stenciled in black or blue color on both sides of the flag.
Pop Quiz

Alligator Reef
Sanctuary Preservation Area

18" Mooring Buoy
30" Boundary Buoy
3 - 5 ft. Spar Buoy
Shipwreck
Shipwreck Trail Site

Shallow Rubble
Shallow
Coral
Very Shallow
Island

Sea Grass

80°37.05'W 24°51.1'N
6'

80°37.6'W 24°50.7'N

80°37.3'W 24°50.4'N

80°36.8'W 24°50.8'N

12'
18'
30'
60'

Alligator Reef Light
Ecological Reserves (ERs)

- Largest of the sanctuary zones.

- Able to protect an entire range of marine habitats found in the sanctuary.

- Protect biodiversity by setting aside areas with minimal human disturbance.

- Large, contiguous, diverse habitats help protect natural spawning, nursery, and permanent-residence areas needed for sustainable populations of fish and other marine life.

- 2 Ecological Reserves (together cover a total of nearly 160 nm²)
  - Lower Keys- 1
  - Tortugas- 1
Ecological Reserves (ERs)

Sanctuary Wide Prohibitions PLUS:

Prohibitions:

• Discharging any matter except cooling water or engine exhaust.
• Fishing by any means; removing, harvesting, or possessing any marine life.
• Touching or standing on living or dead coral.
• Anchoring on living or dead coral, or any attached organism.
• Anchoring when a mooring buoy is available.
Tortugas Ecological Reserve (TER)

Sanctuary Wide Prohibitions PLUS Ecological Reserve Prohibitions PLUS:

**Tortugas Ecological Reserve- South**
- Vessels may only enter if they remain in continuous transit with fishing gear stowed. (Diving and snorkeling are prohibited.)

**Tortugas Ecological Reserve- North (2012- 36 permits issued)**
- Access permit required to stop or use a mooring buoy.
- Anchoring is prohibited.
- Mooring by vessel(s) more than 100 feet in total or combined length overall is prohibited.
- No access permit necessary if vessel remains in continuous transit with fishing gear stowed.
Special-Use Areas

- May be designated for:
  - Research and Education
  - Recovery of injured or degraded areas
  - Restoration of resources
  - Facilitate access to or use of Sanctuary resources, or to prevent user conflicts

- Have only designated “Research-only areas” thus far

- 4 Special-Use Areas (together cover a total of .6 nm²)
  - Upper Keys- 1
  - Middle Keys- 1
  - Lower Keys- 2
Special-Use Areas

Sanctuary Wide Prohibitions PLUS:

- No entry or activities without a FKNMS permit.

Prohibitions:

- Discharging any matter except cooling water or engine exhaust.
- Fishing by any means; removing, harvesting, or possessing any marine life.
- Touching or standing on living or dead coral.
- Anchoring on living or dead coral, or any attached organism.
- Anchoring when a mooring buoy is available.
Pop Quiz
Wildlife Management Areas (WMAs)

• Seek to minimize disturbance to especially sensitive or endangered wildlife and their habitats.

• Typically include bird nesting, resting, feeding areas, turtle-nesting beaches, and other sensitive habitats.

• Protect species and/or habitat while providing for public use through access restrictions.

• 27 WMAs
  • 20 WMAs co-managed with USFWS
  • 7 WMAs managed by the Sanctuary independently
    • Upper Keys- 5
    • Middle Keys- 2
    • Lower Keys- 14
    • Marquesas- 6
Study Areas & Map of Zone

- FKNMS Wildlife Management Areas
- FKNMS Boundary
- Florida Keys Regions
- South Florida

PROPOSED STUDY AREAS
- ADDITIONAL AREAS SUGGESTED BY SAC
- SUGGESTED STUDY AREAS PRESENTED TO SAC
<table>
<thead>
<tr>
<th>Wildlife Management Areas (WMAs)</th>
<th>No Motor</th>
<th>Idle Speed</th>
<th>Beach Closed</th>
<th>No Access Buffer</th>
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<td>Sawyer Keys</td>
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Wildlife Management Areas (WMAs)

Marquesas Keys
Wildlife Management Areas

A 300-foot no-motor zone is established around the three smallest islands, a 300-foot no-access buffer zone is established around one mangrove island, and an idle speed only/no wake zone is established in the southwest tidal creek.

West Content Keys
Little Crane Key
Wildlife Management Areas

Idle-speed only/no wake zones are established in selected tidal creeks, and a no-access buffer zone in one cove.

A 300 foot no-access buffer zone is placed around the island.
Existing Management Areas (EMAs)

• Resource management area that were established by NOAA or by another Federal authority of competent jurisdiction prior to the designation of the Sanctuary.

• Sanctuary regulations supplement the existing authorities to facilitate comprehensive protection of resources.

• 6 EMAs total, 4 have specific regulations for marine activities:
  • Key Largo Management Area
  • Looe Key Management Area
  • Great White Heron National Wildlife Refuge
  • Key West National Wildlife Refuge
Existing Management Areas (EMAs)

- Largo
- Looe Key
- Key West NWR
- Great White Heron NWR
Sanctuary Wide Prohibitions PLUS:

Prohibitions:

• Removing, taking, spearing, or otherwise damaging any coral, marine invertebrate, plant, soil, rock, or other material. Commercial lobster and stone crab trapping and recreational lobstering are allowed.

• Spearfishing, and possession of spearfishing equipment, except while passing through without interruption.

• Taking tropical fish.

• Fishing with wire fish traps or similar gear.
Sanctuary Wide Prohibitions PLUS:

Prohibitions within the marine portions of the refuges:
• Operating a personal watercraft, operating an airboat, or water skiing except within Township 66 South, Range 29 East, Sections 5, 11, 12, 14; Township 66 South, Range 28 East Section 2; Township 67 South, Range 26 East, Sections 16 and 20, all Tallahassee Meridian.
Pop Quiz

Looe Key
Special Use - Research Only Area

81°23.9'W 24°34.0'N
81°23.8'W 24°33.8'N
81°23.2'W 24°34.0'N
18' 12' 18'

- Access is restricted to permitted entry only.

Prohibitions:
- Discharging any matter except cooling water or engine exhaust.
- Fishing by any means; removing, harvesting, or possessing any marine life.
- Touching or standing on living or dead coral.
- Anchoring on living or dead coral, or any attached organism.

Looe Key
Sanctuary Preservation Area

81°24.8'W 24°33.1'N
81°24.2'W 24°33.2'N
81°24.08'W 24°32.6'N
81°24.7'W 24°32.5'N
18' 12' 6' 12'
100' 60' 30' 18'

18' Mooring Buoy
30' Boundary Buoy
3 - 5 ft. Spur Buoy
30' Boundary Buoy
30' Boundary Buoy

Shallow Rubble
Sea Grass
Shallow
Coral
Very Shallow
Island
Working Group Resources

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

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