Coral Reef Ecosystem Restoration Working Group: Progress & Next Steps

Ken Nedimyer
Sanctuary Advisory Council Lead
Working Group Chair
Sanctuary Advisory Council Members

- Dave Vaughan (WG Co-Chair), Research and Monitoring
- Clinton Barras, Tourism – Lower Keys
- Alex Brylske, Education and Outreach
- Jeff Cramer, Fishing – Commercial (Fin/Shell)
- Don Kincaid, Diving – Lower Keys
- Rob Mitchell - Diving
- Martin Moe, Education and Outreach
- Bob Smith, Diving - Lower Keys
Working Group Membership

Community / Public Members

- Patti Gross, History of Diving Museum; USCG Auxiliary
- Caitlin Lustic, The Nature Conservancy
- Jeff Neidlinger, A Deep Blue Dive Center
- Marius Venter, Fury Water Adventures
Review Objectives

- Identify specific areas and zones for **active restoration** of coral reef ecosystem
- Identify **regulatory impediments and appropriate permitting conditions** for active restoration of coral reef ecosystem species
- Identify **adaptive management measures** for re-opening area closed for restoration purposes (i.e. performance standards for “sunset”)
Review of state and federal marine managed areas in the Florida Keys
January 31, 2013 Meeting 1

• Reviewed:
  ✓ Goals
  ✓ Key definitions

• Identified need to:
  ✓ Consider this a 20-year management scheme
  ✓ Value and recognize rights and interests of stakeholders
  ✓ Address entire coral reef ecosystem
  ✓ Consider various zone management options
  ✓ Consider lessons learned from other sites
  ✓ Foster partnerships w/ user groups
  ✓ Develop guidelines for “reef user etiquette”
Review of FKNMS existing management zones and coral reef habitats
February 21, 2013 Meeting 2

Benthic Habitats of the Florida Keys and South Florida

Review of FKNMS existing management zones and coral reef habitats
Identified:

- Resources to consider for active restoration
- Activities potentially incompatible with restoration efforts and possible management solutions
- The value of allowing public access to sites
- Existing challenges arising from State/Federal co-management of Sanctuary
- Need to streamline restoration permitting process
- Importance of engagement by local agency staff
- Need to develop best management practices manual of criteria for permitting
Reviewed maps of FKNMS with overlaying data layers:

- Management zones
- Benthic coral reef habitats
- Vessel grounding restoration and FKNMS permitted restoration research sites
- Coral nurseries and out-planting sites
- Lobster trapping exclusion zones
Reviewed maps of FKNMS with overlaying data layers:

- Management zones
- Benthic coral reef habitats
- Vessel grounding restoration and FKNMS permitted restoration research sites
- Coral nurseries and outplanting sites
- Lobster trapping exclusion zones

Detail of map in the Molasses/French reef area
Identified:

- Criteria to consider when identifying active restoration zones
  - Biological, ecological and physical factors
  - Socio-economic factors
- Tools for managing use/activities within restoration zones

Using charts of the five regions within FKNMS (Upper, Middle, Lower, Marquesas and Dry Tortugas), the working group employed the identified criteria to delineate specific areas for potential coral reef ecosystem restoration.
April 3, 2013 Meeting 4

- Reviewed/discussed potential restoration areas identified from last meeting – where and why
- Reviewed/edited draft restoration zone criteria table and identified:
  - Adaptive management triggers
  - Managed access strategies
  - Size/area considerations, esp. regarding biodiversity vs. species-specific restoration approaches
  - Historical use considerations
  - Coral recruitment vs non-recruiting site as selection factor
  - Considerations for monitoring/reference area site selection
Potential restoration areas transferred from NOAA charts marked up by CRER WG at March 13, 2013 meeting
Detail of previous map highlighting Upper Keys areas
Decisions of Note

• Administrative decisions
  ✓ Identified species of concern within the coral reef ecosystem
  ✓ Identified biological/ecological factors for developing zoning recommendations
  ✓ Identified social/economic factors for developing zoning recommendations
  ✓ Identified activities/uses and their impacts within each region
  ✓ Identified restoration zone management strategies

• No formal recommendations for Advisory Council at this time
Upcoming Meeting Agenda

Wednesday, May 1 – Marathon Garden Club

- Review criteria and framework for making recommendations
- Identify recommendations for active coral reef ecosystem restoration zones
- Develop a plan for next steps for WG to effectively evaluate, prioritize and finalize recommendations for the specific areas and zones for active restoration of coral reef ecosystem
Meeting Schedule & Locations

Marathon Garden Club

• Wednesday, May 1
• Wednesday, May 22
• Wednesday, June 12
Working Group Resources

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

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
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