FKNMS
Marine Zoning & Regulatory Review
Coral Reef Ecosystem Restoration Working Group Meeting
Thursday, February 21, 2013
Marathon Garden Club

Working Group Meeting Summary

Meeting Agenda

1. Defining Key Terms (Ken Nedimyer and Beth Dieveney)
2. FKNMS Restoration Zones & Activities (Bill Goodwin)
3. Discussion: geographies, habitats, target resources, and criteria (Ken Nedimyer and Beth Dieveney)
4. Public Comment

New materials were distributed to working group members: Maps, Science Summaries and an updated work group participant contact list.

Major Points of Discussion

1. Defining Key Terms
   The working group discussed and developed a common understanding of key terms:
   - Coral Reef Ecosystem
   - Active Restoration
   - Adaptive Management

   Terms, definitions, and working group discussion is included at the end of this meeting summary.

2. FKNMS Restoration Zones & Activities
   Bill Goodwin, FKNMS Resource Specialist, provided background on the current FKNMS management zones and associated regulations, including highlights of FKNMS conducted and permitted restoration activities.

   Working Group Discussion:
   - Questions regarding the current state of coral reef ecosystem restoration science, including criteria and monitoring considerations; request for presentation at the next working group meeting.
   - Requested information/pictures on restoration successes (i.e.- pictures of pre and post restoration at *Connected* site)
   - Identified the need to more clearly understand existing zones and associated regulations; discussed simply adding a "restoration" zone within the special use zone category. Working group was reminded that they are not limited to the existing zone types when developing options and recommendations.

- Highlighted the importance of communicating the need for and value and benefits of coral reef ecosystem restoration to the general public and other targeted use groups including snorkelers, divers, and fishers.

3. Discussion: geographies, habitats, target resources, and criteria for active coral reef ecosystem restoration

Working Group discussion to identify resources to consider for active restoration:

- Identified a range of potential species to target for active restoration including reef builders, cornerstone species, and occasional users (i.e. predators and grazers).
- Highlighted the importance of the need to maintain and potentially restore the physical structure of the coral reef ecosystem.
- Considered alternative types of restoration including experimentation (i.e. invasive algae and other phase shift species removal).

Working Group discussion to identify activities potentially incompatible with restoration efforts and possible management solutions:

- Identified activities that impact coral reef ecosystem restoration activities including anything that physically touches the bottom (i.e. anchoring, certain fishing types, potentially dive and snorkel activities)
- Discussed a range of potential management solutions including:
    - Develop reef etiquette program and guidelines
    - Manage Access to restoration sites
        - Open
        - Closed
        - Managed – manage impacts to the ability to conduct/ maintain restoration
            - restricted access – temporal or activity type
            - incentive access – user fees, funding entity access, innovative partnerships
            - Demonstration Sites
    - Ensure adequate communication tools
        - Use of technology, specifically GPS, to show closed/managed areas
        - Signage
        - Mooring
        - Marking
- Discussed the value of allowing public access to sites
    - Education
    - Engagement

Working group discussion to identify current regulatory impediments and permitting conditions:

- Identified existing challenges and uncertainty due to State and Federal Co-management and the need for clarification when single and/or joint permits are needed
- Highlighted importance of engagement by local agency staff (state and federal) due to greater level of local knowledge of the partners, issues, and resources
- Identified the need to streamline the permit process to:
    - Allow for simple modifications
    - Promote ease of permitting if locations are predetermined
    - Consider "qualified" agency permitting requirements
    - Consider use of the FKNMS permit through which "qualified" agencies could operate
- Suggested development of a best management practices manual of criteria for permitting

4. Public Comment
   One individual provided public comment at this meeting:
    - Chris Bergh, Nature Conservancy and Sanctuary Advisory Council Co-Chair, offered to provide the working group with the public comment scoping comments related to coral reef ecosystem restoration as submitted by The Nature Conservancy. Highlighted the value of having a range of management options in restoration zones, including restoration only zones and zones where restoration occurs and other activities are allowed.

Next Meeting

Wednesday, March 13, 9:30 am, Marathon Garden Club

Follow-Up Actions Items

1. Review previous meeting notes, resources of concern, and management implications and solutions identified related to coral reef ecosystem restoration activities.

Decision Items of Note

No decision items were before the working group at this meeting.

Coral Reef Ecosystem Restoration Working Group
Key Terms Defined

Coral Reef Ecosystem

CFR Title 15, Part 922, Subpart P – Florida Keys National Marine Sanctuary; §922.162 Definitions

- *Coral* means but is not limited to the corals of the Class Hydrozoa (stinging and hydrocorals); Class Anthozoa, Subclass Hexacorallia, Order Scleractinia (stony corals); Class Anthozoa, Subclass Ceriantipatharia, Order Antipatharia (black corals); and Class Anthozoa, Subclass Ocotocorallia, Order Gorgonacea, species Gorgonia ventalina and Gorgonia flabellum (sea fans).

- *Coral area* means marine habitat where coral growth abounds including patch reefs, outer bank reefs, deepwater banks, and hardbottoms.

- *Coral reefs* means the hard bottoms, deep-water banks, patch reefs, and outer bank reefs.

Coral Reef Conservation Act of 2000; P.L. 106-562; 16 U.S.C. 6401 et seq
SEC. 210. Definitions.

(3) *CORAL*.—The term ‘‘coral’’ means species of the phylum Cnidaria, including—
(A) all species of the orders Antipatharia (black corals), Scleractinia (stony corals), Gorgonacea (horny corals), Stolonifera (organpipe corals and others), Alcyanacea (soft corals), and Coenothecalia (blue coral), of the class Anthozoa; and
(B) all species of the order Hydrocorallina (fire corals and hydrocorals) of the class Hydrozoa.

(4) *CORAL REEF*.—The term ‘‘coral reef ’’ means any reefs or shoals composed primarily of corals.

(5) *CORAL REEF ECOSYSTEM*.—The term ‘‘coral reef ecosystem’’ means coral and other species of reef organisms (including reef plants) associated with coral reefs, and the nonliving environmental factors that directly affect coral reefs, that together function as an ecological unit in nature.

Active Restoration
Ecological restoration aims to recreate, initiate, or accelerate the recovery of an ecosystem that has been disturbed (environmental changes have altered ecosystem structure and function).

Vaughn, K. J., Porensky, L. M., Wilkerson, M. L., Balachowski, J., Peffer, E., Riginos, C. & Young, T. P. (2010) Restoration Ecology. Nature Education Knowledge 3(10):66)

Working Group discussed additional words and ideas:

- Consider that coral reef ecosystem restoration occurs on a continuum
- Recognize that restoration is a dynamic process
- Consider including the word augment
- Include and allow for innovative restoration techniques
- Consider use of the word degraded instead of disturbed; however ensure regulations do not limit ability to conduct restoration activities

Adaptive Management

- Adaptive management is commonly used as a systematic process for improving environmental management policies and practices.
- Adaptive management as a strategy emphasizes the need to change with the environment and to learn from doing.
- Adaptive management, when applied to ecosystems, makes sense considering ever changing environmental conditions.