

Stakeholders Engagement in MPA Development and Management

Florida Keys National Marine Sanctuary



Lisa Symons, Deputy Superintendent
Florida Keys National Marine Sanctuary
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The National Marine Sanctuary System

NATIONAL MARINE SANCTUARY SYSTEM



Scale varies in this perspective. Adapted from National Geographic Maps.

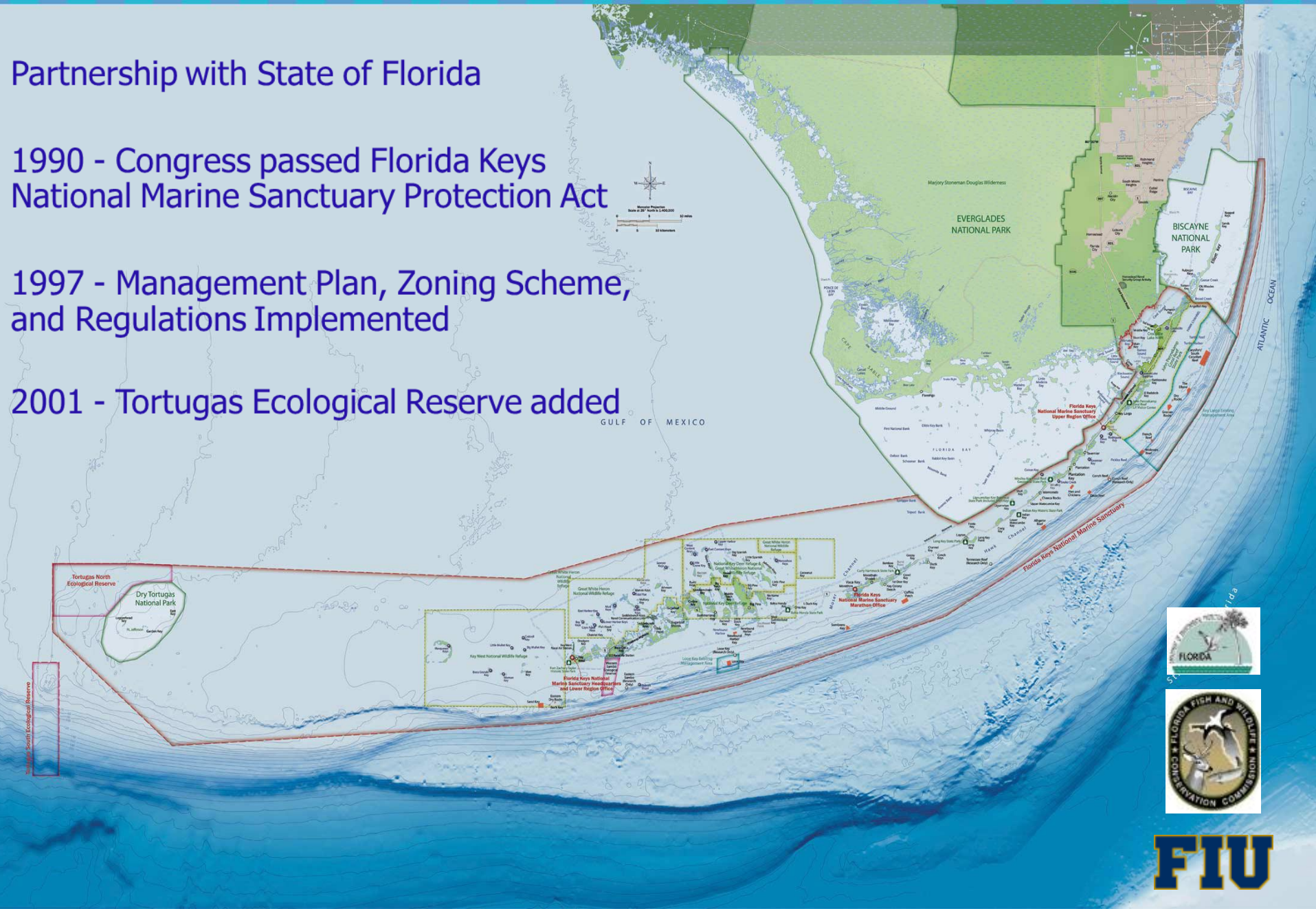
FLORIDA KEYS NATIONAL MARINE SANCTUARY

Partnership with State of Florida

1990 - Congress passed Florida Keys National Marine Sanctuary Protection Act

1997 - Management Plan, Zoning Scheme, and Regulations Implemented

2001 - Tortugas Ecological Reserve added



FIU

Welcome to the Florida Keys!



Population:	77,136
Total Annual Visitors:	2,910,700
Cruise Ship Visitation:	796,960
Hotel Occupancy:	79.5%
Key West:	87.1%

Economy (Gross Sales):	\$4,493,971,903
Unemployment Rate:	3.4%
Top Employer:	Accommodation, Food Service & Retail (33%)
Total Employment:	58,202

Average Temperature:	75 F/24 C in January
	90 F/ 32C in August



\$2.7 Billion – Tourism Value to Keys Economy



What types of activities does the Sanctuary regulate to protect resources?

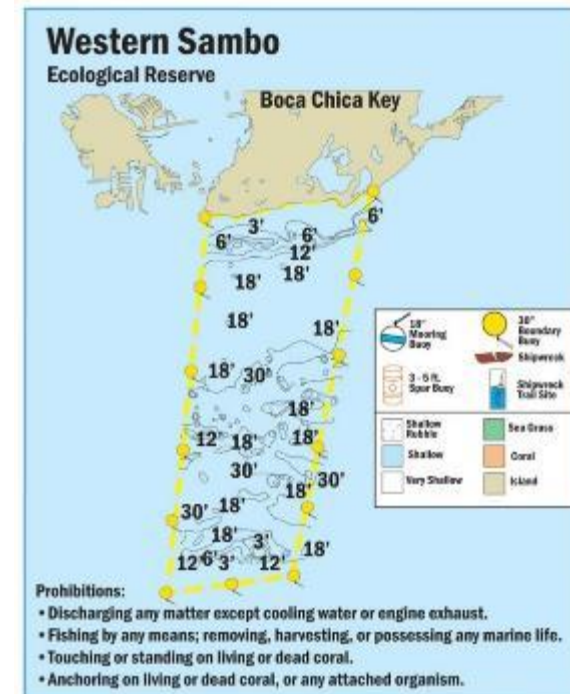
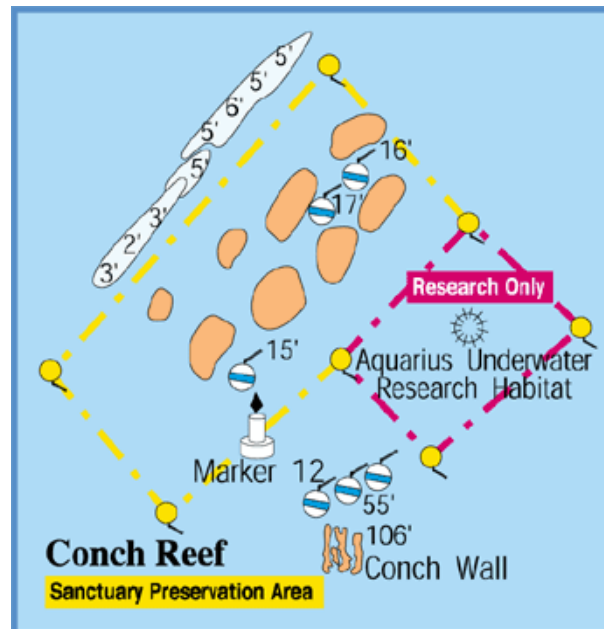


- Spearfishing
- Marine Life / Aquarium Collection
- Fishing / Trapping
- Personal Watercraft
- Airboats / Waterskiing
- Vessel Speed / Wake / Motor
- Vessel Size
- Anchoring / Mooring
- Access Restrictions
- Diving / Snorkeling
- Any touching / harming coral
- Vessel Discharges
- Oil and Gas Development
- Dredging



Marine Zoning Plan for Resource Protection and Limiting User Conflicts

- Sanctuary Preservation Areas
- Ecological Reserves
- Wildlife Management Areas
- Special Use Areas (Research Only)
- Area To Be Avoided: Large Ships > 50m

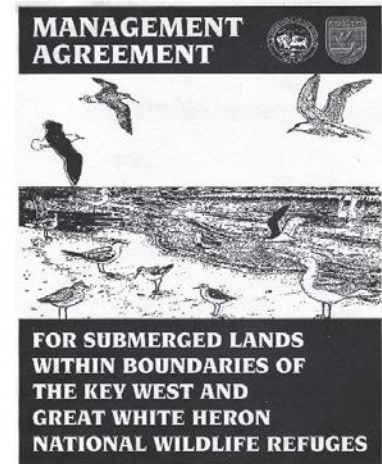
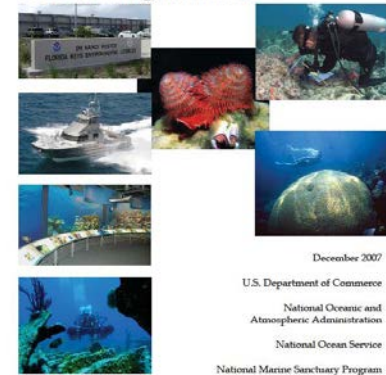


Why conduct the management plan review?



- Community interest!
- Periodic evaluation and public input is adaptive management
- Science shows we can make improvements in management
- Emerging threats – climate change, invasive species, new marine uses
- Requirements – National Marine Sanctuary Act and state resolutions, need to update action plans adopted in 2007

Florida Keys National Marine Sanctuary Revised Management Plan



2011 FKNMS Condition Report: Foundation for Regulatory and Zoning Changes

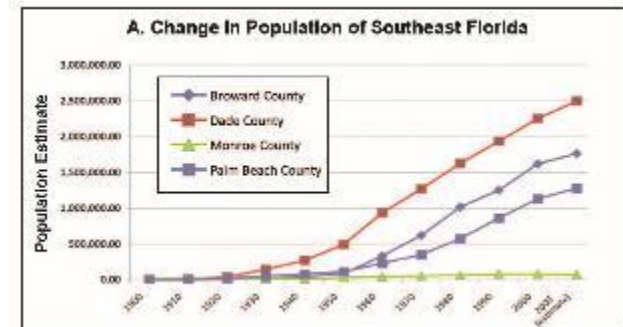


- History of discharges, coastal development, habitat loss, and over exploitation of large fish and keystone species
- Poaching, vessel groundings and discharging of marine debris
- Can be improved with long term management efforts, regulatory compliance and community involvement



Trends:

▲	Conditions appear to be improving.	?	Undetermined trend.
—	Conditions do not appear to be changing.	N/A	Question not applicable.
▼	Conditions appear to be declining.		



Sanctuary Advisory Council Leads Planning Efforts



Community-based advisory group providing advice to Florida Keys NMS Management.

- Boating Industry
 - Elected County Official
 - Citizens at Large (3)
 - Conservation (2)
 - Research
 - Education
 - Tourism (2)
 - Diving (2)
 - Charter Fishing (2)
 - Commercial Fishing (2)
 - Recreational Fishing
 - Cultural Resources
- 15 Non-Voting Local, State and Federal Agency Representatives



Sanctuary Advisory Council Goals for Management Plan Review



- To improve the diversity of natural biological communitiesandrestore and enhance natural habitats, populations and ecological processes overall;
- Reduce stresses from human activities by establishing areas that restrict access to sensitive wildlife populations and habitats;
- Protect large, contiguous, diverse and interconnected habitats that provide natural spawning, nursery, and permanent residence areas;
- Minimize conflicts among uses;
- Prevent heavy concentrations of use;
- Provide undisturbed monitoring sites for research; and
- Achieve a vibrant ecologically sustainable ecosystem and economy.

Sanctuary Advisory Council Work-Plan Priority Issues



- 3 Habitat, Zoning, & Issue Based Working Groups
- Adaptive Management & Permitting
- Artificial Habitats
- Boundary Modifications
- Personal Watercraft & Fishing Conflicts
- Water Quality
- Fishery Management



Sanctuary Advisory Council



- Provide advice to National Marine Sanctuary management
- Identified goals, objectives, and priority issues for review
- Established 3 community working groups to solicit additional input on marine zones in the sanctuary
- Hosted over 70 public meetings over two years to hear from the public



Sanctuary Advisory Council Community Working Group – Ecosystem Protection



Sanctuary Advisory Council Members:

- Conservation and Environment
- Commercial Fishing – Marine/Tropical
- Fishing Charter Flats Guide
- Citizen at Large – Upper Keys
- Tourism

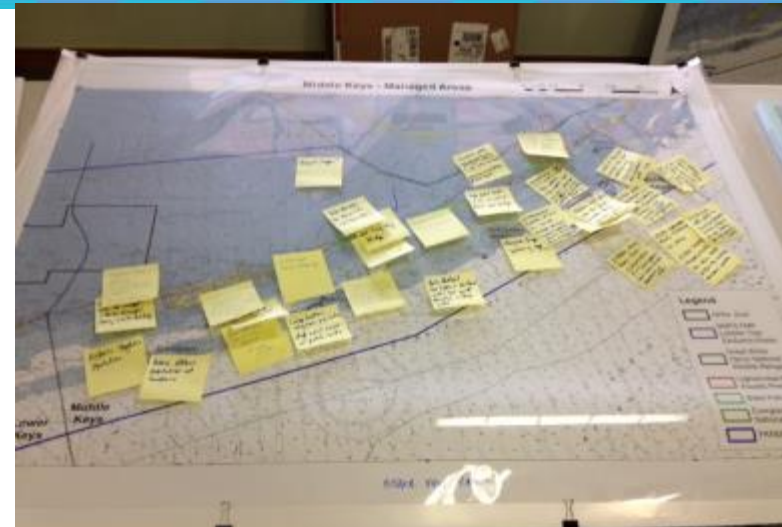
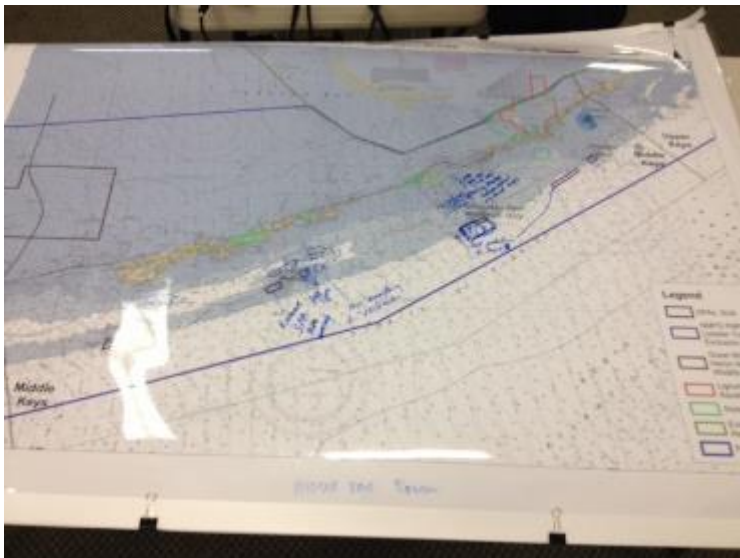
Public Members:

- Recreational Fisherman
- Florida Keys Fishing Guides Association
- Florida Keys Commercial Fishermen's Association (2)
- Academia, NOVA Southeastern University
- Diving, Sea Sampler
- SCUBA Diving Columnist/Underwater Photographer
- Captain Hooks Dive Center and Marina
- Local Business, Fury Water Adventures
- Non-Governmental Organization, Reef Relief



Community Working Group Process

- Share Information
- Provide Input
- Build Community
- Improve Communication
- Advance Thinking
- Make Recommendations



Shared Learning Process

- Hosted regional 2-day meetings
- Ensured data accessibility and opportunity for working group members and public to use and interact with data
- Fostered discussion through small group work
- Provided meaningful opportunity for the public to engage
- Implemented an iterative decision making process with opportunity for majority/minority report

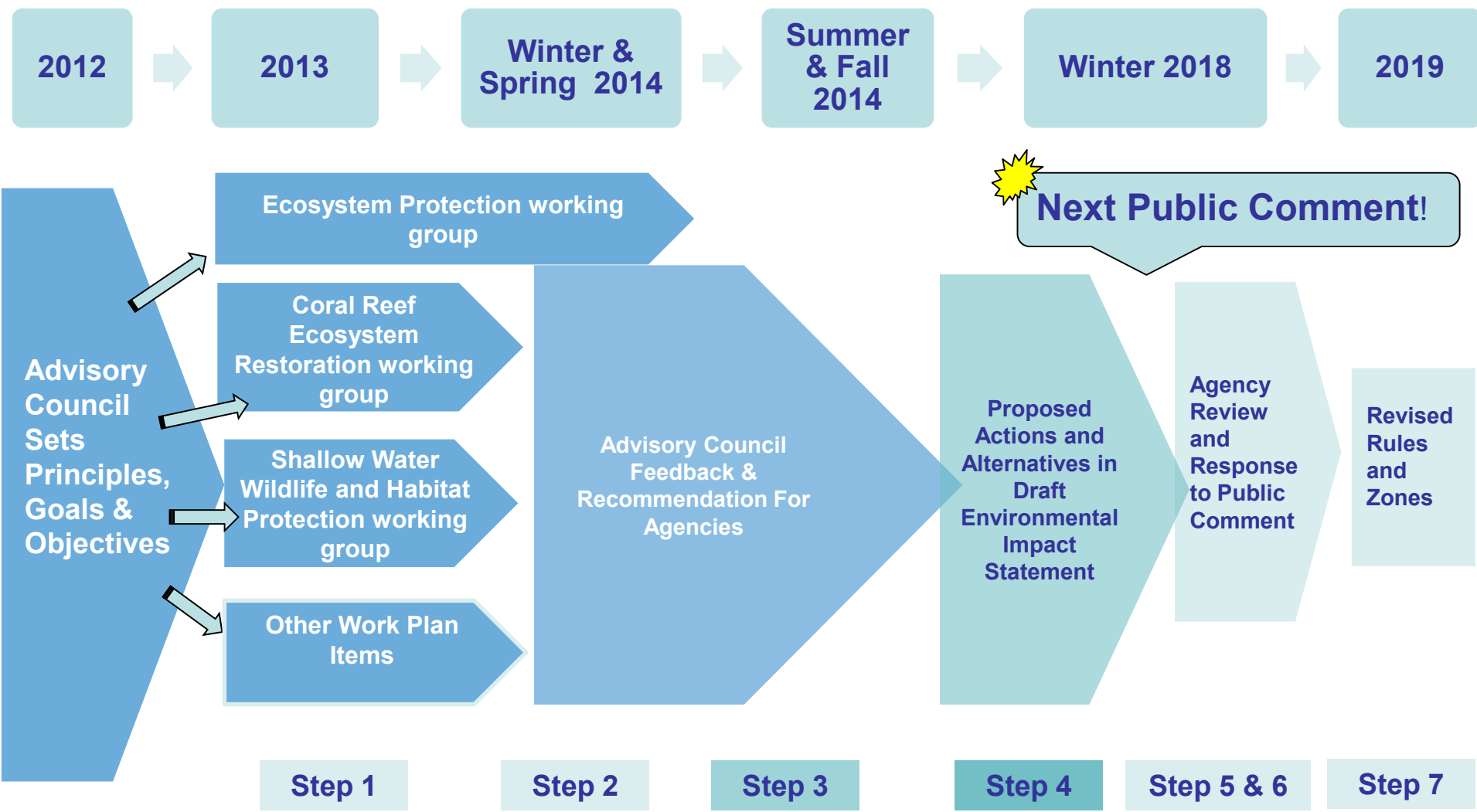


Science to Inform the Community Working Group Process



Metric Type	Resource Name	Metric Type	Resource Name	Metric Type	Resource Name
Coral Reefs	Endangered/proposed IUCN species distribution	Fish	Fish abundance distribution	Human	Density of Commercial Fishers
	Hard coral density distribution		Fish species richness distribution		Distribution of Commercial Fishing Landings
	Hard coral percent cover distribution		Grouper-snapper complex abundance distribution		Recreational Fishing Distribution
	Hard coral species richness distribution		Nassau-Goliath Group Abundance		Recreational Diving Distribution
	Soft coral density distribution		Barracuda abundance		Commercial Operator
	Resilient Reefs		Marine life ornamental abundance distribution		Recreational Diving Distribution
	Soft coral species richness distribution		Top 10 marine life ornamental species distribution		Marine Debris Density
Habitat	Areas of aggregated and unfragmented reefs from Florida unified tract map	Parrotfish abundance	Permit Abundance	Use	Vessel Grounding Numbers
	Areas of high structural complexity	Fish Aggregations	Queen Conch		Marine Related Facilities Locations
	Seagrass density distribution				

Timeline and Next Steps



Greatest Successes & Challenges



Successes:

- High level of community engagement including new, highly informed and vested partners
- Collaborative and strategic engagement with resource management partners
- Breadth and depth of available science to inform process and decisions

Challenges:

- Communicating complex science information
- Maintaining an appropriate level of engagement and participation
- Effective communication to ensure stakeholders know how and when to engage in the process
- Managing stakeholder expectations throughout the process
- Misinformation

Advisory Council Leads Planning Efforts From The Beginning for All Management Changes



Community Based Stakeholder Driven Process:

Public Input → Advisory Council → Public Input → Decision



"The Florida Keys National Marine Sanctuary is a fine example of a government program that works in its intended form... for the people, by the people, specific to its unique region. It is a group that listens, speaks, and acts on input from all the various stakeholders of that region."

Captain Steve Leopold,
Charter/Sports Fishing Seat

Lessons Learned Across the Florida Reef Tract



- Engage stakeholders despite the challenge
- Clarity about the role of stakeholders in the process
- Open and transparent communication
- Adaptive and inclusive process planning
- Ensure science and traditional local knowledge are incorporated
- People – a lot of time and staff – to do it well
- Professional facilitation
- Anticipate problems and questions and prepare information continually during the process
- Cultivate social networks
- Be prepared for it to take time... a lot of time...to do it well