

National Marine Sanctuaries
National Oceanic and Atmospheric Administration



NATIONAL MARINE
SANCTUARIES



Using Socioeconomics to Inform Place-Based Management and Conservation Science in Florida Keys National Marine Sanctuary

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NOAA's Office of National Marine Sanctuaries

National Marine Sanctuary Foundation

June 18, 2019

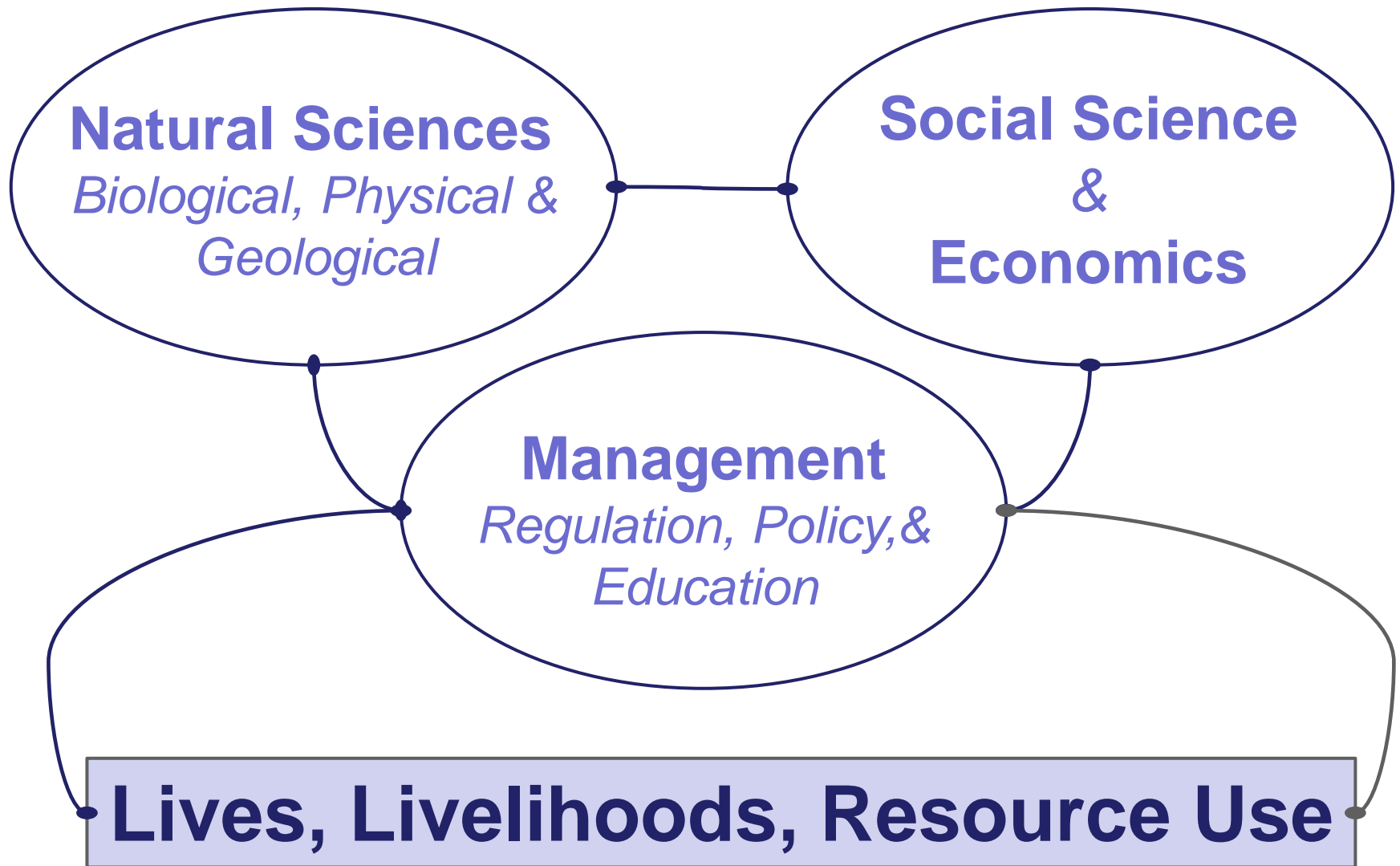
What We're Going to Talk About

- ❑ Socioeconomic Program for ONMS
- ❑ Past Work in FKNMS
- ❑ Current work in FKNMS
- ❑ Planned/Proposed work in FKNMS
- ❑ Questions and Discussion

ONMS Socioeconomic Program



Conservation Science in Our View



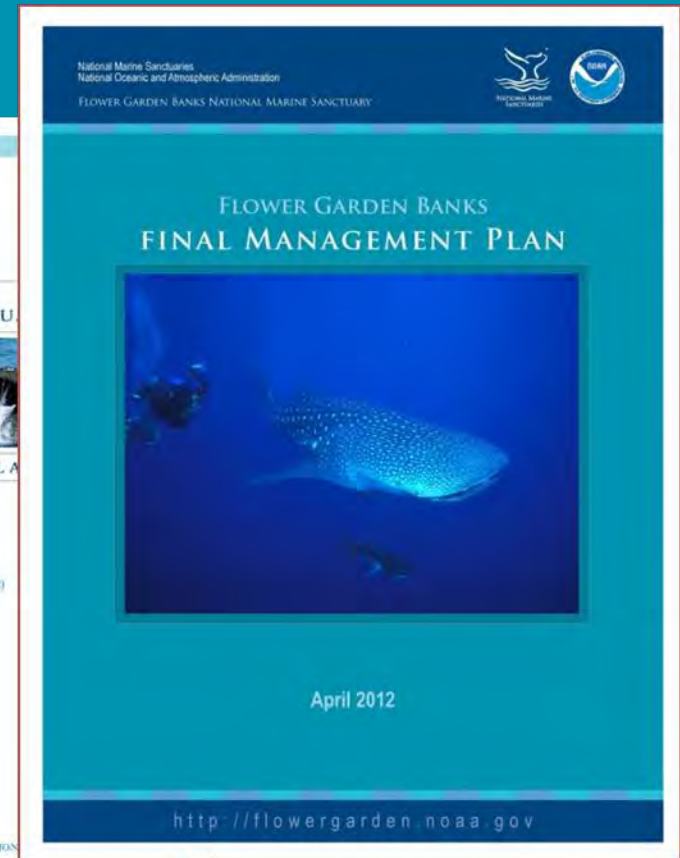
Types of Work We Do

Condition Reports



Types of Work We Do

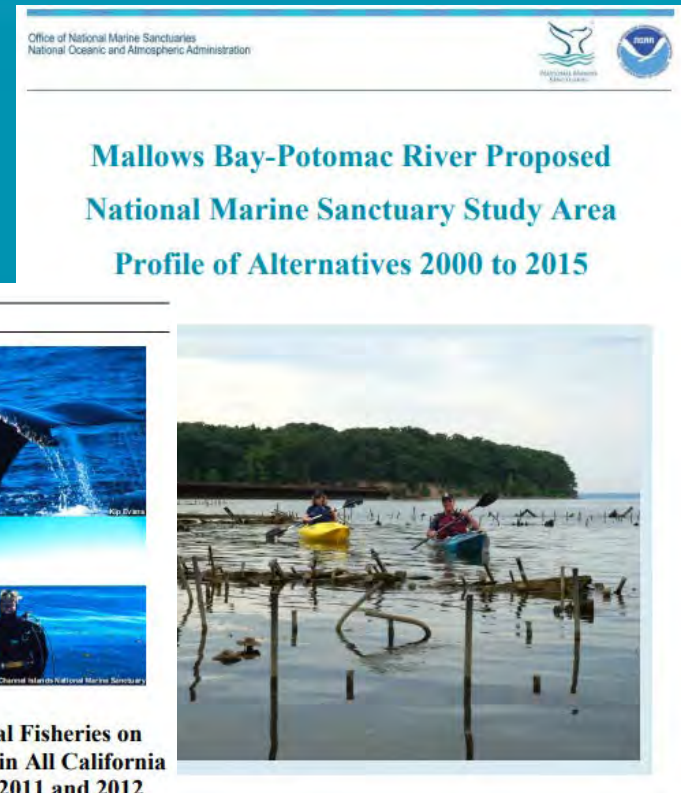
Management Plans



Types of Work We Do

Understanding Local Economies

- Study Area Profiles
- Expenditures
- Jobs, Income, GDP
- Valuations



Types of Work We Do

Understanding Human Use



**Great Lakes Maritime
Heritage Center**

[Map of our location](#)

[Visitor Center Hours](#)

Socioeconomic Research & Monitoring Program for the
Florida Keys National Marine Sanctuary

The Economic Impact of the
USS Vandenberg on the Monroe County Economy

July 2011

Vernon R. Leeworthy



**Stellwagen Bank National
Marine Sanctuary Named Best
Place to See Aquatic Life!**

Types of Work We Do

Attitudes and Perceptions

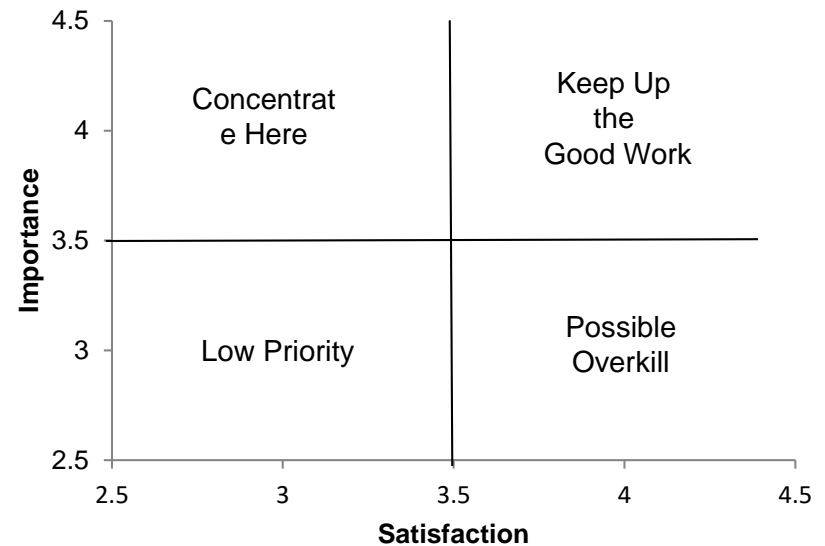
Socioeconomic Research and Monitoring for the Florida Keys National Marine Sanctuary

Importance-Satisfaction Ratings Five-year Comparison,
SPA & ER Use, and Socioeconomic and Ecological Monitoring
Comparison of Results 1995-96 to 2000-01

February 2004

Vernon R. Leeworthy
Peter C. Wiley
and
Justin D. Hospital

Special Projects Division
Office of Management and Budget
National Ocean Service
National Oceanic and Atmospheric Administration
U.S. Department of Commerce



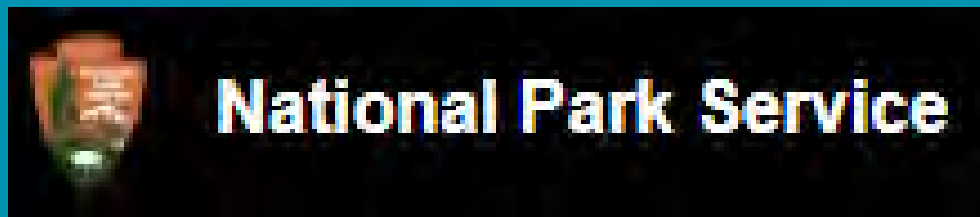
Types of Work We Do

Value of Improvement to Resources



How We Do Our Work

A National Program Supported by ONMS HQ



Past Work in FKNMS

- ✓ **10-Year Comprehensive Study**
 - *Importance/Satisfaction*
 - *Expenditures*
 - *Jobs, GDP, Income*
 - *Use and Activity Profiles*
- ✓ **Knowledge, Attitudes, Perceptions**
- ✓ **User Studies**
 - *Artificial Reefs*
 - *Spiny Lobster*

Current Work



Restoration Blueprint

- Analysis of EIS
- Demographic Profiles



VISITOR PROFILES:

FLORIDA KEYS/KEY WEST 2007-08

June 2010

Vernon R. Leeworthy
David K. Loomis
and
Shona K. Paterson

Office of National Marine Sanctuaries
National Ocean Service
National Oceanic and Atmospheric Administration
U.S. Department of Commerce



UMASS
AMHERST



Testing of Methods

- New sampling design for 10-year replication
- Expenditure estimates by region

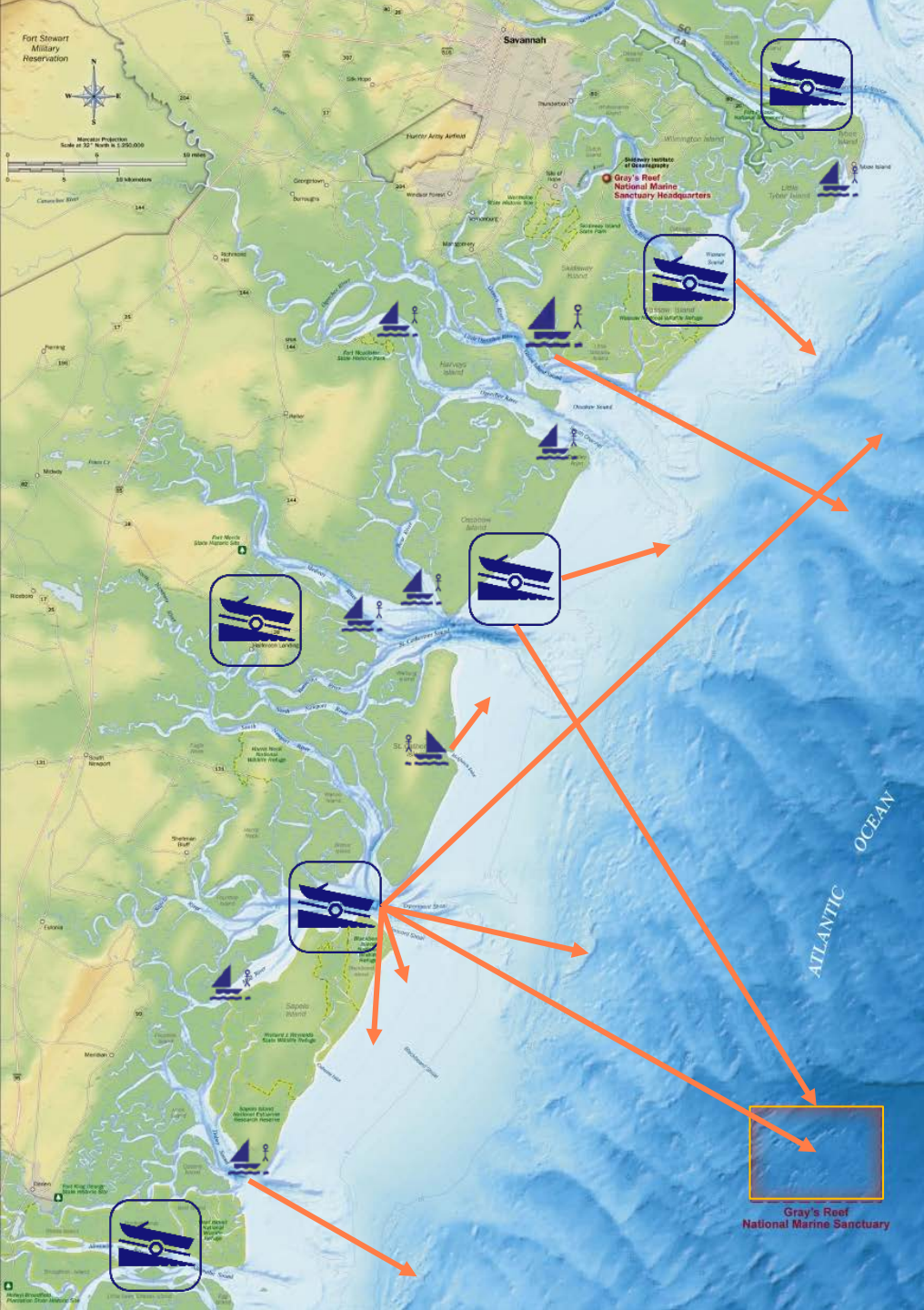


Value of Tourism

- How does tourism to FKNMS support the economy of Monroe County and Florida

Visitation Estimation

- No gates or roads
- Diversity of entry mechanisms
- Temporal variability
- Sampling design
- Cost

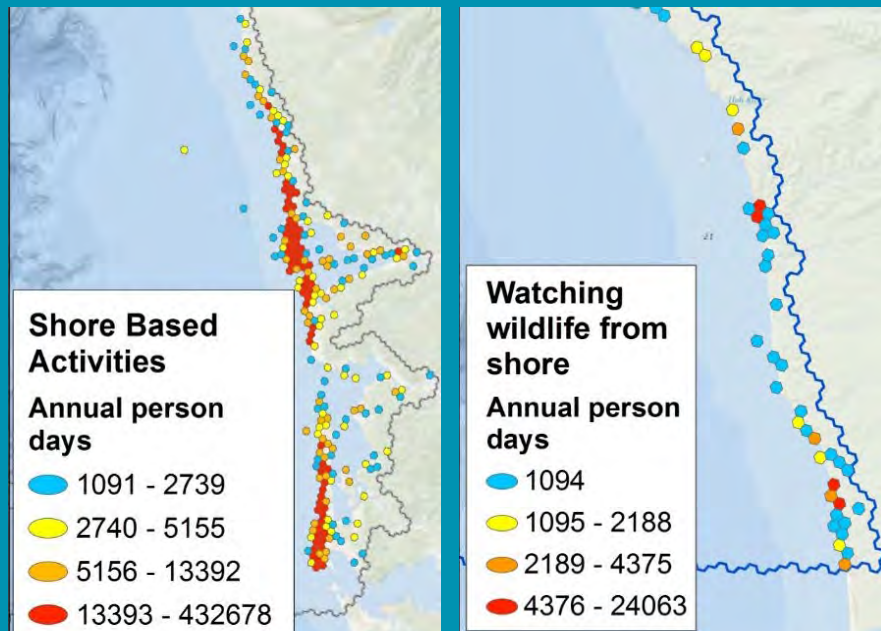


Potential Future Work



Potential Future Work

Spatial Use Characterization



Willingness to Pay



Potential Future Work

Condition Reports (DPSEER)

Category	Service
Cultural <i>Non-material benefits</i>	Sense of Place
	Non-consumptive Recreation
	Consumptive Recreation
	Science
	Education
	Heritage
Provisioning <i>Products and Supplies</i>	Biotechnology
	Ornamentals
	Food Supply
	Water (Drinking)
	Energy (Renewable)
	Coastal Protection
Regulatory <i>Buffers to Change</i>	

Valuation and Impact (Blue Star, Citizen Science)



Report the following unusual events:



Coral Bleaching



Discolored Water



Diseased Fish & Fish Kills



Mammal Strandings



Sick or Injured Sea Turtles



Pollution & Marine Debris



Invasive Species



Wildlife Violations



Algal Blooms



Vessel Groundings

Discussion

- ☐ Questions about current efforts
- ☐ Ideas regarding planned/proposed efforts
- ☐ What Else??????

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