



Knowledge, Attitudes and Perceptions on Resource Conditions in FKNMS

COMMERCIAL FISHERS, DIVE OPERATORS AND ENVIRONMENTAL GROUP MEMBERS

Introduction

The information presented here is from a larger study of three user groups: commercial fishers, dive operators and environmental group members on their knowledge, attitudes and perceptions of management strategies and regulations in the Florida Keys National Marine Sanctuary (FKNMS). The study profiles these user groups and provides information on user group knowledge, attitudes and perceptions of FKNMS management strategies and regulations in the baseline 1995-96 period and how things have changed over a 10-year time period. Some new baselines are also established on new management strategies and regulations.

This fact sheet focuses on information obtained from commercial fishers, dive operators and environmental group members on their views on the resource conditions of the FKNMS.

Views on Resource Conditions

In the 10-year replication, all three user groups were asked to provide their views on how eight resource conditions have changed in the Florida Keys since establishment of the FKNMS. Since dive operators are also allowed to operate in the zones, they were asked for their views on how conditions have changed inside the zones. A 1 to 5 point scale was used where 1= better to 5=worse with allowance for a “Don’t Know” response. A mean score below 3.00 indicates conditions have improved, 3-3.99 no change and 4-5 conditions got worse.

Resource	Commercial Fishers	Dive Operators	Environmental Group Members
1. Water quality	3.69	3.22	3.02
2. Land-based pollution/sewage	3.58	3.31	3.15
3. Sea-based pollution/marine debris	3.23	3.04	2.90
4. Coral reefs	3.49	3.37	3.17
5. Sea grasses	3.21	2.70	2.75
6. Fisheries	3.30	2.82	2.72
7. Mooring buoys	2.19	1.82	1.97
8. Vessel groundings	2.83	2.68	2.41

Across all three user groups’ only two items were rated as having improved (Mooring buoys and Vessel groundings). The avoidance of vessel groundings was one of the main impetuses of creating the FKNMS. Dive operators and environmental group members rated improved conditions for “Sea grasses” and “Fisheries”. Environmental group members also rated “Sea-based pollution/marine debris” as having improved. There were no resource conditions rated as having gotten worse by any of the three user groups. Most items received scores in the neutral or no change status.



Dive Operators Views on Conditions inside the FKNMS Zones. Dive operators were asked to rate six items for each of the three types of zones using the same five-point scale as above.

Resource	Changes in ERs	Changes in SPAs	Changes in WMAs
1. Water quality	3.00	3.05	3.19
2. Number of fish	2.42	2.28	2.65
3. Types of fish	2.81	2.71	3.05
4. Amount of living coral	3.29	3.48	3.51
5. Other marine life	2.71	2.62	2.83
6. Crowding	3.17	3.76	3.51

Dive operators rated only two of the six items as having improved across all three zone types since establishment of the FKNMS (“Number of fish” and “Other marine life”). The lowest mean score (highest rating for improvement) was for “Number of fish” in the SPAs followed by “Number of fish” in the ERs. Another key item rated as improved was “Type of fish” both in the SPAs and ERs. The lowest ratings were for “Amount of living coral” and “Crowding”, but the mean scores were still in the neutral or no change range. Dive operator perceptions of resource conditions appear to be consistent with the bio-physical monitoring for “numbers and types of fish”, “Other marine life” and “water quality” within the zones, but not consistent with the 38% decline noted in the bio-physical monitoring between 1996 and 2006 on the “amount of living coral”. The low rating on “Crowding” in the SPAs is a potential future concern as it is approaching the worse condition rating. Future monitoring of this element may be important.

Access to Full Report

The full report can be cited as follows:

Shivlani, M., Leeworthy V.R., Murray, T.J., Suman, D.O., and Tonioli, F. 2008. Knowledge, Attitudes and Perceptions of Management Strategies and Regulations of the Florida Keys National Marine Sanctuaries by Commercial Fishers, Dive Operators, and Environmental Group Members: A Baseline Characterization and 10-year Comparison. Marine Sanctuaries Conservation Series ONMS-08-06. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 170pp.

Available at: <http://sanctuaries.noaa.gov/science/conservation/pdfs/kap2.pdf>

Full Report and Executive Summary are also available in portable document format (pdf) from:

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