



## Knowledge, Attitudes and Perceptions of Florida Keys National Marine Sanctuary PROCESSES

### 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 on the FKNMS processes to develop management strategies and regulations.

### FKNMS Processes

In both the baseline and 10-year replication, seven survey questions were used to assess the views of commercial fishers on FKNMS processes to develop management strategies and regulations. The questions focused on views on whether the processes were fair & just and whether NOAA/FKNMS listened to the concerns of individuals and local and state government or whether individuals were included or could have influence in the process of developing the management strategies and regulations. A five-point agreement scale was used where 1=strongly agree and 5=strongly disagree. A “Don’t Know” response was also allowed, but this was not included in statistical tests of changes in mean scores. Here A=Strongly to Moderately Agree and D=Strongly to Moderately Disagree. Statistical tests were done to test whether there were statistically significant changes in these views over the 10-year period. There were several significant changes in views among commercial fishers.

Processes Fair and Just. Three questions (statements) were asked in both the baseline and 10-year replication. In the baseline, a majority of commercial fishers did not think NOAA/FKNMS processes were fair and just. This moderated somewhat over the 10-year time period with statistically significant changes in mean scores for questions 2 & 3 as a higher proportion agreed with the statements. Much of the movement on views on these questions was a move from “Don’t Know” in the baseline to “Neutral” in the 10-year replication. Question 3 was the only question where a significant proportion moved to agreement (8.2% in the baseline to 39.9% in the 10-year replication) with a corresponding drop in disagreement (56.9% in the baseline to 30.4% in the 10-year replication).

Fair & Just Question (Statement)	1995-96	2004-05	Statistical Difference
1. The processes that NOAA has used to develop rules and regulations for the FKNMS was open and fair to all groups.	46.7% D (3.62)	51.0% D (3.55)	YES (NO)
2. The Processes used by NOAA to develop boundaries and regulations for the FKNMS zones was open and fair to all groups.	51.6% D (4.26)	51.4% D (3.53)	YES (NO)
3. The procedures that NOAA has established to deal with violations of FKNMS regulations have been fair and just.	56.9% D (4.38)	39.9% A (2.89)	YES (YES)

- mean scores and statistical significance of mean scores in parentheses.



NOAA Listened to Others. The overwhelming majority of commercial fishers had negative views of the FKNMS when answering all four questions in the baseline (agreement proportions, in order of question, were 67.6%, 64.9%, 75.6% and 77.2%). Although the majority of commercial fishers still had a negative view on these processes, there were statistically significant movements toward positive views for three of the four questions (questions 2-4) in the 10-year replication. Agreement with question 1 dropped from 67.6% to 62.8% with disagreement increasing from 18.2% to 24.9%, but the change in mean scores was not statistically significant. Many mentioned the *Tortugas 2000* process (the process used in developing the boundary alternative for the Tortugas Ecological Reserve) as a major factor in the change of views on FKNMS processes.

## General Support for FKNMS

NOAA Listened to Others – Question (Statement)	1995-96	2004-05	Statistical Difference
1. It has not mattered whether the average person participated in the workshops and meetings on the FKNMS because the average person could not influence the final decisions.	67.6% A (1.95)	62.8% A (2.19)	NO (NO)
2. NOAA has not addressed the concerns of local and state governments in developing rules and regulations for the FKNMS.	64.9% A (1.67)	37.3% A (2.76)	YES (YES)
3. NOAA has not addressed the concerns of individual citizens in developing rules and regulations for the FKNMS.	75.6% A (1.51)	58.1% A (2.25)	YES (YES)
4. Once that the FKNMS regulations have been in effect, there has been no way that the average person could voice his/her opinion on the usefulness of the regulations.	77.2% A (1.54)	63.1% A (2.12)	YES (YES)

- mean scores and statistical difference of mean scores in parentheses.

## 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:

Dr. Vernon R. (Bob) Leeworthy, Chief Economist  
 Office of National Marine Sanctuaries  
 1305 East West Highway, SSMC4, 11th floor  
 Silver Spring, MD 20910  
 Telephone: (301) 713-7261  
 Fax: (301) 713-0404  
 E-mail: [Bob.Leeworthy@noaa.gov](mailto:Bob.Leeworthy@noaa.gov)