



# Monroe County Resident Importance-Satisfaction Ratings: A Five-year Comparison



**Background.** Results presented here are part of the Recreation and Tourism component of the Socioeconomic Research and Monitoring Program for the Florida Keys National Marine Sanctuary (FKNMS). The Socioeconomic Research and Monitoring Program was designed in a workshop held in Islamorada, Florida in January 1998, which was attended by 50 social scientists and community stakeholders. Baseline measurements for Recreation and Tourism were obtained in a 1995-96 study entitled "Linking the Economy and Environment of the Florida Keys/Florida Bay." At the 1998 workshop, participants recommended that the Importance-Satisfaction ratings on 25 natural resource attributes, facilities, and services obtained in the 1995-96 study be replicated every three to five years.

We were not able to replicate the Importance-Satisfaction ratings for all residents and visitors of Monroe County as was done in 1995-96, instead we were able to take advantage of a multiple agency partnership to conduct the "Socioeconomic Study of Reefs in Southeast Florida, 2000-2001". This was a study of the artificial and natural reefs off Palm Beach, Broward, Miami-Dade and Monroe Counties. Through the Socioeconomic Research and Monitoring Program for the FKNMS, we were able to add on several extra modules of questions to address issues in the FKNMS. The scope was limited to residents and visitors that engaged in boating activities and used either an artificial or natural reef. We were able to go back to the 1995-96 baseline databases and select those residents and visitors that engaged in boating activities so we could make five-year comparisons of mean importance and satisfaction scores. Future plans call for a more complete replication of the 1995-96 study. This is tentatively planned for 2005-06.

Another important issue to note is that the same samples of the resident and visitor populations are not being surveyed in each iteration of the survey. In other words, the

respondents to the 1995-96 survey are not the same respondents to the 2000-01 survey. The implications of this include the potential for other factors, besides changes in the condition of the attributes, explaining the changes in ratings between time periods. These include changes in the demographic makeup and varying preferences of the 2000-01 sample not being the same as the 1995-96 sample. We account for this by also segmenting our samples by level of experience. Experienced users are defined as those with five or more years of experience.

## Key Findings

### Importance

- 2000-01 boating residents had significantly lower importance scores than the 1995-96 sample for 19 out of 25 attributes and a significantly higher importance score for one attribute.
- More experienced residents have lower importance scores than less experienced residents for 6 out of 25 attributes.

### Satisfaction

- 2000-01 boating residents had significantly lower satisfaction scores than 1995-96 boating visitors for 24 out of 25 attributes.
- More experienced residents have lower satisfaction scores than less experienced residents for 3 of 25 attributes.



Florida Keys National Marine Sanctuary Coral Reefs  
Photo: FKNMS

## Importance-Satisfaction Analysis

- In the static 2000-01 analysis, six attributes fell into the "concentrate here" category.

## Key Areas of Concern: 2000-01

### Natural Resources

- \* • Clear water (high visibility)
- Amount of living coral on the reefs
- \* • Many different kinds of fish and sea life to view
- \* • Many different kinds of fish and sea life to catch
- Opportunity to view large wildlife: manatees, whales, dolphins, sea turtles
- Large numbers of fish
- Quality of beaches

### Natural Resource Facilities

- \* • Mooring buoys near coral reefs

### Other Facilities

- \* • Uncrowded conditions

### Services

- \* • Service and friendliness of people
- Value for the Price

\* - Was not a key area of concern in 1995-96

## Priority Areas of Concern 2000-01

### Natural Resources

- Amount of living coral on the reefs
- Large numbers of fish
- Quality of the beaches

### Other Facilities

- Cleanliness of streets and sidewalks
- Uncrowded conditions

### Services

- Value for the Price

## Interpretations and Conclusions

Comparisons of 1995-96 baseline importance and satisfactions scores found statistically significant decreases in importance for many items, while at the same time statistically significant decreases in satisfaction for 24 of the 25 items. This negative downward trend is compounded in that more experienced visitors had even lower satisfaction scores than less experienced visitors for three (3) of the 25 items.

Importance-Satisfaction analysis found that 11 of the 25 items were relatively high on the importance scale and relatively low on the satisfaction scale making them key areas of concern. In 1995-96, only six (6) of these items were included in the area of concern. Thus, five (5) additional items moved into the area of concern in 2000-01. This movement to areas of concern is a combination of significant increases in importance and/or significant declines in satisfaction.

The importance-satisfaction analysis using the 2000-01 ratings was used to establish priority areas of concern. Six (6) items were identified as items of highest priority i.e., they were relatively higher on the importance scale and relatively lower on the satisfaction scale.

Interpretation of the results in this

study requires a conceptual model. Such a model was provided in Leeworthy and Bowker (1997). The "Conceptual Model Linking the Economy and Environment" shows how both market and nonmarket economic values are linked to both "actual conditions" of the natural environment and the quantity and quality of facilities and services; and people's "perceptions" of these conditions.

Although there is a direct connection between actual and perceptions of conditions, and market and nonmarket economic values, there may be lags (delays in time) between people's perceptions of conditions and changes in their behavior and/or preferences, which lead to changes in demand and market and nonmarket economic values. Also, there may be differences in changes in actual conditions (as measured by ecological monitoring) and perceived conditions (as measured by socioeconomic monitoring).

Time delays in people's responses (lags) to changed conditions (actual or perceived) present opportunities. If actual or perceived conditions are in decline, there may be time to either correct actual conditions (i.e., make the necessary investments to improve conditions) or if there is a difference in actual and perceived conditions (ecological and socioeconomic monitoring results are not in agreement), then opportunities exist to apply education and outreach efforts to correct misperceptions. In both cases, the objective is to avoid negative economic outcomes.

Our results show that many key natural resources attributes, facilities, and services have increased in importance to people, while satisfaction with these natural resource attributes, facilities, and services have declined. Plugging these results into our conceptual model linking the economy and environment leads to potentially dire predictions of the future natural resource-based economy, if actions are not taken to reverse these trends. If residents of Monroe County decide to undertake their

recreation activities outside Monroe County, this will result in losses in local business in Monroe County.

### For Further Information:

For the full report on Importance-Satisfaction go to our web site: <http://marineeconomics.noaa.gov/SocmonFK/publications/>

For the report containing the Conceptual Model Linking the Economy and Environment go to: <http://marineeconomics.noaa.gov/SocmonFK/publications/97-30.pdf>

For fact sheets addressing the following topics:

- Comparative Socioeconomic Profiles of SPA & ER Users and Non Users
- SPA and ER Use
- Comparative Importance-Satisfaction Ratings of SPA & ER Users and Non Users
- Economic User Value of the SPAs and ERs
- Monroe County Reef Using Residents' Opinions on "No Take" Zones
- Linking Ecological Monitoring with Socioeconomic Monitoring Results Go to: <http://marineeconomics.noaa.gov/SocmonFK/rectour.html>

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