Management Issue

Managers need to understand the socioeconomic importance of the resources of Gray’s Reef National Marine Sanctuary (GRNMS) in order to inform management decisions.

Description

GRNMS managers need better information on the socioeconomic trends in coastal area population growth, development and use in order to project how these changes might impact resource use in the sanctuary. This information will help inform management decisions as well as the impact these decisions have on the coastal community.

Questions and Information Needs

1) What is the value of fish caught in GRNMS?
2) What species are recreational fishermen targeting in the sanctuary?
3) What is the annual catch of targeted species in the sanctuary?
4) What is the size distribution of fish caught in the sanctuary (by species)?
5) What is the level of bycatch for recreational fishing in the sanctuary?
6) What is the average expenditure of a recreational fishing trip to the sanctuary?
7) What other recreational activities take place in the sanctuary (e.g. private-boat SCUBA diving) and what are the costs/user/day for such activities?
8) What is the non-use value of protecting the resources in the absence of extractable activities?
9) Are people fishing in the Research Area?
10) What is the status of the recreation-tourism ecosystem service and how is it changing?

Scientific Approach and Actions

- Conduct a socioeconomic use survey to identify, summarize and characterize existing uses (both extractive and non-extractive)
- Conduct on-water and telephone surveys to identify the level of effort and catch type and quantity (including catch and release)
- Investigate pelagic and bottom fishing effort

Key Partners and Information Sources

Georgia Department of Natural Resources; NOAA Office of Law Enforcement; Fishing clubs/diving clubs/associations; Office of National Marine Sanctuaries Chief Economist; Conservation groups/organizations, NOAA Fisheries, Marine Recreational Fishing Statistics Program

Results by county from a recent socioeconomic assessment depicting the impact of sales, income, and jobs related to recreational activity spending in GRNMS ranging from counties in GA with the most impact (GA Tier 1) to lowest impact (GA Tier 2) Map Credit: ONMS
Sanctuary Resources Available
- Two research vessels complete with captain and crew
- NOAA ship time
- Support staff for field operations and equipment deployment including science divers
- Baseline data on the knowledge, attitudes and perceptions of users and non-users of GRNMS

Resource Needs
- Financial support
- Partnerships for: grant application, project design, data collection and analysis, reporting, and monitoring

Management Support Products
- Scientific papers and reports
- Presentations for scientific meetings, workshops, symposia and conferences
- Education and outreach products to inform general public about research area issues

Planned Use of Products and Actions
- Project future trends in human uses of the Sanctuary
- Predict, plan and design appropriate management strategies for human uses of the Sanctuary that could have a significant impact on GRNMS, Georgia and adjacent coastal area resources
- Education and outreach products to inform general public about research area issues

Program References
GRNMS Management Plan,
- Objective SR5, Activity SR5B

2008 GRNMS Condition Report and 2012 Addendum
- Question 4: What are the levels of human activity that may influence water quality and how are they changing?
- Question 6: What is the condition of biologically structured habitats and how is it changing?
- Question 8: What are the levels of human activities that may influence habitat quality and how are they changing?
- Question 10: What is the status of environmentally sustainable fishing and how is it changing?
- Question 13: What is the condition or health of key species and how is it changing?
- Question 14: What are the levels of human activities that may influence living resource quality and how are they changing?

Graph indicating projected population growth along the three-tier Georgia coastal counties as compared to neighboring South Carolina and Florida study areas. Graph credit: ONMS.