

# National Coral Reef Monitoring Plan (NCRMP) Socioeconomic Monitoring Component

**Coral Reefs are among the most valuable ecosystems on Earth providing us with goods and services including food, protection from storms, and recreational opportunities. These assets are also tied to economic benefits including tourism, fishing, ornamental resources and bio-medical products. When coral reefs are threatened by issues such as climate change, unsustainable consumption, and land-based pollution then the nearby human communities are threatened as well.**

NOAA's Coral Reef Conservation Program (CRCP) is adding a human component to the National Coral Reef Monitoring Plan (NCRMP). As part of this effort, CRCP will gather and monitor a collection of socioeconomic variables, including demographics in coral reef areas, human use of coral reef resources, as well as knowledge, attitudes, and perceptions of coral reefs and coral reef management. The overall goal of the socioeconomic monitoring component is to track relevant information regarding each jurisdiction's population, social and economic structure, the impacts of society on coral reefs, and the impacts of coral management on communities.

CRCP will use the information for research and to improve the results of programs designed to protect coral reefs. CRCP staff, along with educators and managers in the jurisdictions will use this information to monitor changes in coral reef dependent communities and jurisdictions and ensure education programs are designed to achieve their goals. The information will also provide a baseline for future program evaluation efforts.

## Monitoring

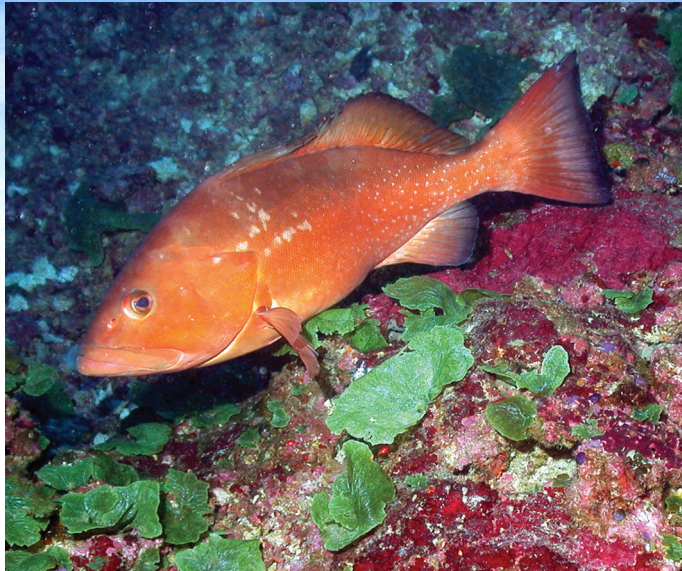
As part of the NCRMP, CRCP scientists, in consultation with partners and stakeholders, developed a set of core social and economic indicators that will be regularly measured over time in the inhabited regions of each of the coral reef jurisdictions<sup>1</sup>. (see Table overleaf).



## NCRMP Social & Economic Indicators

1. Participation in reef activities
2. Perceived resource condition
3. Attitudes towards coral reef management strategies and enforcement
4. Awareness and knowledge of coral reefs
5. Human population changes near coral reefs
6. Economic impact of coral reef fishing to jurisdiction
7. Economic impact of dive/snorkel tourism to jurisdiction
8. Community well-being
9. Cultural importance of reefs
10. Participation in behaviors that may improve coral reef health
11. Physical infrastructure
12. Awareness of coral reef rules and regulations
13. Governance

<sup>1</sup> *Developing Social Science and Economic Indicators for Monitoring the US Coral Reef Jurisdictions 2012*



To assist in collecting information regarding these indicators, resident surveys will take place in each jurisdiction every 4 years. The survey will have one set of questions that is the same for all locations, as well as a few select questions that are specific to the local management needs in each jurisdiction. In addition, existing socioeconomic data will be compiled for each jurisdiction from secondary data sources like the US Census Bureau and local government agencies.

## Results

For the NCRMP, socioeconomic indicators will be reported alongside biological indicators to provide each jurisdiction with a comprehensive assessment of their reef-related status. Monitoring over time will also allow managers to evaluate trends and improve conservation planning to protect coral reef resources and the services they provide for nearby residents and visitors alike.

**Table - Social and Economic Monitoring Geographies and Years**

Jurisdiction	Inhabited Islands/Counties in direct proximity to coral reefs	Proposed Year
American Samoa	Islands of Tutuila, Ta'u, Olosega, Ofu, and Aunu'u	2013-14
Florida	Martin, Palm Beach, Broward, Miami-Dade, and Monroe Counties	2013-14
Hawai'i	Islands of Kauai, Maui, Moloka'i, O'ahu, Hawai'i, and Lana'i	2014-15
Puerto Rico	Islands of Puerto Rico, Vieques, and Culebra	2014-15
USVI	Islands of St. Croix, St. Thomas, and St. John	2014-15
CNMI	Islands of Saipan, Tinian and Rota only	2015-16
Guam	Entire island of Guam	2015-16

