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## National Coral Reef Monitoring Program Socioeconomic Monitoring

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

The National Coral Reef Monitoring Program (NCRMP) is part of NOAA's Coral Reef Conservation Program, and focuses on monitoring four components of coral reef ecosystem condition: biological (benthic composition and reef fish), climate, and socioeconomic. By consistently collecting monitoring data on these four components throughout the 10 U.S. coral reef areas, NCRMP can provide a holistic understanding of the status of U.S. coral reefs. To learn more about NCRMP, visit <https://www.coris.noaa.gov/monitoring/>.

### Socioeconomic Monitoring

As part of the NCRMP, NOAA scientists, in consultation with partners and stakeholders, developed a set of core social and economic indicators that will be regularly measured over time in each of the seven inhabited US coral reef jurisdictions: Florida, the US Virgin Islands (USVI), Puerto Rico, Hawai'i, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI)<sup>1</sup>.

The overall goal of socioeconomic monitoring is to track relevant information regarding each jurisdiction's population, social and economic structure, the benefits of coral reefs and related habitats, the impacts of society on coral reefs, and the impacts of coral management on communities.

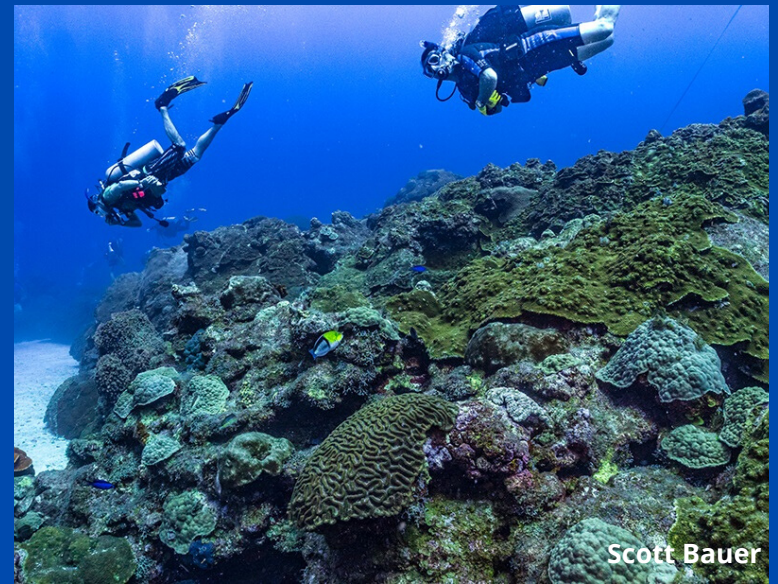
To download NCRMP Socioeconomic data, please visit <https://www.coris.noaa.gov/monitoring/socioeconomic.html>.



### NCRMP Social and Economic Indicators

- Participation in reef activities
- Perceived condition of coral reef resources
- Attitudes towards coral reef management strategies and enforcement
- Awareness and knowledge of coral reefs
- Economic impact of coral reef fishing to the jurisdiction
- Economic impact of diving and snorkeling tourism to the jurisdiction
- Community well-being
- Cultural importance of reefs
- Participation in behaviors that may improve coral reef health
- Physical infrastructure
- Awareness of coral reef rules and regulations
- Governance

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



### Socioeconomic Monitoring

Two data sources are integrated to inform the indicators for each jurisdiction. Residents in each coral jurisdiction are surveyed every five to seven years. The monitoring survey has one set of questions that is consistent across all jurisdictions and a few select questions that address the local management needs in each jurisdiction. Additional socioeconomic data are compiled using secondary sources, such as the U.S. Census Bureau and local government agencies. Jurisdictional findings are then able to support national metrics.

### Results

NCRMP reports socioeconomic indicators alongside biological and climatic indicators to provide each jurisdiction with a comprehensive assessment of their reef-related status. Final products include summary reports, infographics, indicator status reports, and other communications materials. Monitoring over time also allows managers to evaluate trends and improve conservation planning to protect coral reef resources and the services they provide for nearby residents and visitors alike.

### Social and Economic Monitoring Geographies and Years

Jurisdiction	Inhabited Islands/Counties	First Monitoring Cycle	Second Monitoring Cycle
American Samoa	Tutuila, Ta'u, Olosega, Ofu, Aunu'u	2014	2021
Florida	Martin, Palm Beach, Broward, Miami Dade, and Monroe Counties	2014	2019
Hawai'i	Kauai, Maui, Moloka'i, O'ahu, Hawai'i, Lana'i	2014	2020
Puerto Rico	Puerto Rico, Vieques, Culebra	2014 2015	2022
Guam	Entire island of Guam	2016	2023
CNMI	Saipan, Tinian, Rota	2016 2017	2024
US Virgin Islands	St. Croix, St. Thomas, St. John	2017	2025



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