

SOCIAL SCIENCE PROGRAM

Socioeconomic Survey: CORE Questions Template; Second Round of Monitoring

National Coral Reef Monitoring Program

April 2019

The National Oceanic and Atmospheric Administration (NOAA) Coral Reef Conservation Program (Coral Program) sponsors the National Coral Reef Monitoring Program (NCRMP) for biological, physical, and socioeconomic monitoring throughout the U.S. Pacific, Atlantic, and Caribbean coral reef areas. The overarching goal of this effort is to collect the information needed to gauge changing conditions of U.S Coral reef ecosystems over time. For more information: https://www.coris.noaa.gov/monitoring/

The main purpose of the Socioeconomic Component of NCRMP is to answer the following questions: What is the status of human knowledge, attitudes, and perceptions regarding coral reefs? And, how are human uses of, interactions with, and coral dependence on coral reefs changing over time?

To answer these questions a set of key socioeconomic indicators were developed through an iterative process by a team of social and biological scientists. Guided by these indicators, a bank of over 120 questions was then created and subsequently approved by the Office of Management and Budget (OMB) for use in data collection via individual and household surveys. For more information on the social science component of NCRMP visit: http://www.coris.noaa.gov/activities/projects/ncrmp_socio/.

This document contains a set of **core questions**, taken from the question bank and transformed into jurisdiction specific surveys for administration across all seven U.S. coral reef jurisdictions. They are repeated across all surveys for comparison with more jurisdiction specific questions added as needed. This core set of questions can however be incorporated into any other site/country specific survey efforts if appropriate. Individuals, organizations and institutions who may be interested in their own socioeconomic monitoring efforts as part of natural resource management of coral reef and other coastal ecosystems are encouraged to use these questions as part of their own survey development. It is hoped that if researchers are asking one or more identical questions across several locations, over time, there may be opportunities for useful comparisons of data. These questions are designed specifically for U.S coral reef Jurisdictions but may be applicable to any other (including non-US) tropical/coral reef jurisdiction.

Details and access to the full set of survey bank questions will be provided at a later date but researchers are encouraged to use the template provided on the following pages as a starting point for developing their questionnaires. For additional information and guidance on socioeconomic monitoring of coastal communities can be found at www.socmon.org.

For further details please contact: Peter Edwards (<u>peter.edwards@noaa.gov</u>) Economist and Social Science Coordinator, NOAA, Coral Reef Conservation Program

OMB SUBMISSION

NOAA Coral Reef Conservation Program
National Coral Reef Monitoring Program (NCRMP)
Resident Coral Reef Survey
OMB Control Number 0648-0646

CORE MODULE

Hello, My name is We are only interested in obtaining your opinions on some important issues related to coral reefs and the environment in
Your participation is voluntary and will be kept strictly confidential. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subjected to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.
Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other suggestions for reducing this burden to Peter Edwards, National Oceanic and Atmospheric Agency, National Ocean Service, Coral Reef Conservation Program, (1305 East West Highway, Silver Spring, MD, 20910, USA.
Please note: this survey can be administered using different modes, ie; in-person, telephone

interview, self administered paper (mail) or online versions. Researchers can adjust question order, skip patterns and interviewer prompts as required. The amount of questions and type of

answer format may affect overall time and burden on the respondent.

PARTICIPATION IN REEF ACTIVITIES

1. How often do you usually participate in each of the following activities in [jurisdiction]? [Q14]

	Never	Once a month or less	2-3 times a month	4 times a month or more
Swimming/wading				
Snorkeling				
Diving (SCUBA or free diving)				
Waterside/ beach camping				
Beach recreation (beach sports, picnics)				
Boating				
Fishing				
Gathering of marine resources (lobsters,				
conch, seaweed, examples)				
Jurisdiction Specific				
Jurisdiction Specific				

SKIP PATTERN-- If respondent answers 'never' to fishing and gathering of marine resources, then skip to #4:

CORAL REEF RELIANCE / CULTURAL IMPORTANCE OF REEFS

2. How often do you fish for, harvest, or catch marine resources for each of the following reasons in [jurisdiction]? [Q114]

	Never	Rarely	Sometimes	Frequently
To feed myself and my family/ household				
To sell				
To give to extended family members and/or				
friends				
For fun				

	Never	Rarely	Sometimes	Frequently
For special occasions and cultural events				

3. How often do you fish for, harvest, or catch the following types of fish/shellfish in [jurisdiction]?

	Never	Rarely	Sometimes	Frequently
Jurisdiction Specific				

- 4. How often do you or your family eat fish/seafood? Family is defined as all persons living under the same roof. [Q122]
 - a. Every day
 - b. A few times a week
 - c. About once a week
 - d. 1-3 times a month
 - e. Less than once a month
 - f. Never

SKIP PATTERN -- If respondent answers 'never' then skip to question #7

- 5. How often do you or your family eat **locally-caught** fish/seafood that is harvested **from coral reefs**? (For example parrotfish, humphead wrasse, unicorn fish, octopus or shells from nearby coral reefs)? [Q123]
 - a. Every day
 - b. A few times a week
 - c. About once a week
 - d. 1-3 times a month
 - e. Less than once a month
 - f. Never
 - g. Not sure

- 6. What are the top TWO sources of the fish or seafood your family eats? [Q124]
 - a. Purchased by myself or someone in my household at a store or restaurant
 - b. Purchased by myself or someone in my household at a market or roadside vendor
 - c. Caught by myself or someone in my household
 - d. Caught by extended family members
 - e. Caught by friends or neighbors

PERCEIVED RESOURCE CONDITION

7. In your opinion, how would you rate the current condition of each of the following marine resources in [jurisdiction]? Please tell me if you would rate each one as very bad, bad, neither bad nor good, good, or very good. [Q49]

	Very Bad	Bad	Neither Bad nor Good	Good	Very Good	Not Sure
Ocean Water Quality (clean and clear)						
Amount of Coral						
Number of Fish						
Jurisdiction Specific						
Jurisdiction Specific						

8. How would you say the condition of each of those same marine resources has changed in the past 10 years in [jurisdiction]? Would you say the resource has gotten a lot worse, gotten somewhat worse, not changed, gotten somewhat better, or gotten a lot better?

[Q53]

	A lot Worse	Somewhat Worse	No Change	Somewhat Better	A lot Better	Not Sure
Ocean Water Quality (clean and clear)						
Amount of Coral						
Number of Fish						
Jurisdiction Specific						
Jurisdiction Specific						

- 9. In the next 10 years, do you think the condition of the marine resources overall in [jurisdiction] will get worse, stay the same or improve? [Q54]
 - a. Get worse
 - b. Stay the same
 - c. Improve
 - d. Not sure

AWARENESS AND KNOWLEDGE OF CORAL REEFS – Threats including climate change

10. Please tell me the extent to which you disagree or agree with each of the following statements. [Q7]

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Not Sure
Coral reefs protect the [jurisdiction] from erosion and natural disasters.						
Coral reefs are only important to fishermen, divers and snorkelers.						
Healthy coral reefs attract tourists to [jurisdiction].						
Coral reefs in good condition provide food for coastal communities to eat						
Coral reefs provide economic opportunities to coastal communities						
Coral reefs are important to [jurisdiction] culture.						

11. How unfamiliar or familiar are you with each of the following potential threats facing the coral reefs in [jurisdiction]? [Q31]

	Very Unfamiliar	Unfamiliar	Neither Familiar nor Unfamiliar	Familiar	Very Familiar
Climate change					
Coral bleaching					

Hurricanes and other natural disasters			
Pollution (stormwater, wastewater, chemical runoff and trash/littering)			
Coastal/urban development			
Invasive species			
Too much fishing and gathering			
Damage from ships and boats			
Jurisdiction Specific			
Jurisdiction Specific			

ATTITUDES TOWARDS CORAL REEF MANAGEMENT STRATEGIES AND ENFORCEMENT

- 12. How familiar are you with rules and regulations associated with coral reefs in [your jurisdiction]? [Q75]
 - a. Very Unfamiliar
 - b. Unfamiliar
 - c. Neither Unfamiliar nor Familiar
 - d. Familiar
 - e. Very Familiar
- 13. A Marine Protected Area is an area of the ocean where human activity is typically restricted to protect living, non-living, cultural, and/or historic resources, such as conservation areas and sanctuaries in the [jurisdiction] area. How unfamiliar or familiar are you with Marine Protected Areas, also called MPAs? [Q36]
 - a. Very Unfamiliar
 - b. Unfamiliar
 - c. Neither Unfamiliar nor Familiar
 - d. Familiar
 - e. Very Familiar

SKIP PATTERN-- If respondent answers 'Very unfamiliar' or 'Unfamiliar', then skip to #15:

14. Please tell me the extent to which you disagree or agree with each of the following statements. [Q44]

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Sure
MPAs protect coral reefs in [jurisdiction]						
MPAs increase the number of fish in [jurisdiction]						
There should be more MPAs in [jurisdiction]						
There has been economic benefit to [jurisdiction] from the establishment of MPAs						
Fishermen's livelihoods have been negatively						
impacted from the establishment of MPAs in [jurisdiction]						
MPAs help increase tourism in [jurisdiction]						
I generally support the establishment of MPAs in [jurisdiction]						

15. Next, please tell me the extent to which you oppose or support each of the following strategies to improve the protection of coral reefs in [jurisdiction]. [Q105]

	Strongly Oppose	Oppose	Neither Support nor Oppose	Support	Strongly Support	Don't Know
Limits per person for certain fish species (size and amount)						
Stricter control of sources of pollution to preserve water quality						
Efforts to restore damaged coral reefs						
Incorporate traditional [jurisdictional: e.g. "Hawaiian"] practices into coral reef management						
Jurisdiction Specific (climate related)						
Jurisdiction Specific						

- 16. How unimportant or important are coral reef environments important to you and your family's cultural beliefs and practices? [Q78]
 - a. Very unimportant
 - b. Unimportant
 - c. Neither unimportant nor important
 - d. Important

e. Very important

PARTICIPATION IN BEHAVIORS THAT MAY IMPROVE CORAL HEALTH

17. How often do you participate in the following activities to protect the environment in [jurisdiction]? [Q89]

	Not At All	Once a year or Less	Several times a year	At least once a month	Several Times a Month or more
Recycling					
Coastal Cleanup (beach clean up)					
Volunteering with environmental groups					
Donating to environmental causes					
Other, please specify					

18. **[INTERVIEWER READS]** Please carefully consider the following HYPOTHETICAL plan to protect coral reefs in [jurisdiction]:

There is a need to raise funds to improve management of coral reefs. IF the state government of [jurisdiction] was considering adding a "Reef Conservation Tax" to your existing local sales tax to raise these funds, the funds generated from the "Reef Conservation Tax" would go directly to agencies involved in the conservation of coral reefs. The funds would pay for some of the management actions described in previous questions in this survey. These management activities would improve the amount of reef fish, reduce pollution from the land, and restore damaged coral reefs.

Suppose, in order to implement the new policy, [jurisdiction] had to call a statewide referendum where all residents over age 18 were asked to vote on the amount of the tax increase. If the majority of persons vote for the increase, then the tax would be implemented.

Please note, there is currently NO actual tax under consideration.

If the proposed hypothetical tax were to cause your household expenses to increase by \$XX per year, or in other words, \$Y extra per month, how would you vote? Please consider what decision you would make if you really had to spend the extra money, given your current budget.

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¹ Bid range: \$10, \$25, \$50, \$100, \$250, \$500

(CHECK ONLY ONE ANSWER) YES NO

SKIP PATTERN-- If respondent answers "yes" to Q18, skip to #20:

- 19. What are the main reasons you oppose the "Reef Conservation Tax"? (CHECK ALL THAT APPLY) [Q91]
 - a. This increased tax would be too expensive for me
 - b. I don't trust the government to give the money to the environmental agencies
 - c. I don't think the environmental agencies are effective
 - d. I prefer to donate directly to environmental organizations
 - e. I don't believe in raising taxes on principle
 - f. I think that current management is effective and doesn't require more economic resources
 - g. Other

[INTERVIEWER READS] Now we are going to ask you just a few more questions

20. How often do you use each of the following sources of information to provide you accurate information on coral reefs and coral reef related topics in [jurisdiction]? [Q111]

Sources	Never	Rarely	Sometimes	Frequently
Newspapers, other print publications				
Radio				
TV				
Online news sources/websites				
Social Media				
Friends and family				
Community leaders				
Government (jurisdictional)				
Federal government agencies (NOAA, EPA)				
Non-profit organizations				
Other, please specify				

DEMOGRAPHICS

I just have a few more questions that will help us to interpret our results. As a reminder, the information you provide is completely <u>confidential</u>.

21. Are you male a. Male b. Fema		
22. What is your	r year of birth?	[<mark>Q126</mark>]
23. How long ha	ve you lived in [jurisdiction	ո]? [<mark>Q134</mark>]
a. 1 yea	ar or less	
b. 2-5 y	ears	
c. 6-10	years	
d. more	than 10 years	
e. all m	y life	
24. What is your	zZIP code?	[<mark>Q133</mark>] (omit Q for AS and CNMI)

25. What race/ethnicity do you consider yourself? [Q136	25. Wł	nat race,	ethnicity/	y do y	you	consider	yourself?	Q136
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- a. American Indian or Alaskan Native
- b. Asian
- c. Black or African American
- d. Puerto Rican
- e. Carolinian
- f. Chamorro
- g. Chinese
- h. Cuban
- i. Filipino
- j. Japanese
- k. White
- I. Korean
- m. Mexican
- n. Native Hawaiian or other Pacific Islander
- o. Samoan
- p. Taino
- q. Thai
- r. Tongan
- s. Vietnamese
- t. Hispanic or Latino
- u. Other/Mixed
- v. No response
- 26. What is the highest level of education you have completed? [Q128]
 - a. 8th Grade or Less
 - b. Some high school
 - c. High School Graduate, GED
 - d. Some college, community college or AA
 - e. College Graduate
 - f. Graduate School, Law School, Medical School
 - g. No Response
- 27. Is your occupation affiliated with the marine environment/industry? [Q115]
 - a. Yes
 - b. No
- 28. **[If 'Yes' to #27]** Please indicate the industry that best fits your primary profession [Q116]
 - a. Commercial fishing
 - b. Charter fishing
 - c. Dive/snorkel operation
 - d. Marina/boat operation

- e. Other watersports
- f. Eco-tour operation
- g. Ecological research
- h. Ocean/coastal management
- i. Artisan
- j. Education
- k. Other, please specify _____
- 29. May I ask, what is your annual household income? [Q132]
 - a. Under \$10,000
 - b. \$10,000-19,999
 - c. \$20,000-29,999
 - d. \$30,000-39,999
 - e. \$40,000-49,999
 - f. \$50,000-59,999
 - g. \$60,000-74,999
 - h. \$75,000-99,999
 - i. \$100,000-149,999
 - j. \$150,000 or More
 - k. No Response