

NCRMP Resident Coral Reef Survey for Guam  
OMB Control Number 0648-0646

Survey conducted in (circle one): *English Chamorro Carolinian Tagalog*

Introduction: *[greeting specific to jurisdiction]*

Hello, my name is [interviewer name]. I'm calling from [CONTRACT COMPANY] on behalf of the National Oceanic and Atmospheric Administration (NOAA) and the National Coral Reef Monitoring Program. We are interested in obtaining your opinions on important issues related to coral reefs in Guam. You were selected because you live in a coastal area near coral reefs.

This survey is being conducted in accordance with the Privacy Act of 1974 and the Paperwork Reduction Act. Your participation is voluntary, your answers are confidential and you can stop the interview at any time. The interview is expected to take less than 20 minutes. If you have questions or would like to know more about the survey I will provide you with contact information.

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. The OMB Control number for this survey is 0648-0646

The 25 minute estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Please 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).

1. Are you at least 18 years of age?  
IF "YES" CONTINUE TO SCREENING QUESTION 2. IF "NO", END SURVEY.

Now that we have established that you are qualified, we will continue with the survey. Remember that you can stop at any time.

## PARTICIPATION IN REEF ACTIVITIES

1. How often do you usually participate in each of the following activities?

	Never	Once a month or less	2-3 times a month	4 times a month or more	No Response
Swimming/wading					
Snorkeling					
Diving (SCUBA or free diving)					
Boarding (surfing, kitesurfing, SUP, body-surfing, body-boarding)					
Beach recreation (beach sports, picnics)					
Fishing from shore (spear, cast net, gill net, drag net)					
Fishing or harvesting from a boat or kayak (rod and reel, trolling, free diving, scuba spear)					
Gathering of animals for gleaning (trochus/ailingling, clams, sea cucumbers, octopus, urchins)					
Paddling/kayaking					
Jet skiing					

**SKIP PATTERN--** If respondent answers 'never' to BOTH fishing AND gathering of marine resources, then skip to #3:

## CORAL REEF RELIANCE / CULTURAL IMPORTANCE OF REEFS

2. How often do you fish or harvest marine resources for each of the following reasons?

	Frequently	Sometimes	Rarely	Never	No Response
To feed myself and my family/ household					
To sell					
To give to extended family members and/or friends					
For fun					
For special occasions and cultural events					

3. How often does your family eat fish/seafood?
  - 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
  
4. What are the two main sources of the fish and seafood that you and your family eats? [INTERVIEWER: CODE THE ANSWERS ACCORDING TO THE RESPONSE CATEGORIES PROVIDED. PROMPT WITH EXAMPLES IF NECESSARY.]
  - 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
  - f. Other, please specify \_\_\_\_\_
  - g. Not Sure
  - h. Refused

[INTERVIEWER: Now we know that we have asked you a similar question before. But now we are specifically interested in seafood harvested from coral reefs.]

5. How often does your family eat fish/seafood that is harvested from coral reefs? (For example parrotfish, humphead wrasse, unicorn fish, octopus or shells)?
  - 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

**PERCEIVED RESOURCE CONDITION**

6. In your opinion, how are Guam’s marine resources currently doing? Please rank from very bad to very good.

	Very Bad	Bad	Neither Bad nor Good	Good	Very Good	Not sure
Ocean Water Quality (clean and clear)						
Amount of Coral						

	Very Bad	Bad	Neither Bad nor Good	Good	Very Good	Not sure
Number of Fish						
Number of turtles						
Beach quality (clean, no litter)						

7. How would you say the condition of each of the following has changed over the last 10 years: from 1=it has gotten a lot worse to 5=it has gotten a lot better.

	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						
Number of turtles						
Beach quality (clean, no litter)						

8. In the next 10 years, do you think the condition of the marine resources in Guam will get worse, stay the same or improve?

- Get worse
- Stay the same
- Improve
- Not sure

### AWARENESS AND KNOWLEDGE OF CORAL REEFS

9. Please say whether you disagree or agree with each of the following statements.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Not Sure
Coral reefs protect Guam from coastal/shoreline erosion and natural disasters like typhoons and tsunamis.						
Coral reefs are only important to fishermen, divers and snorkelers.						
Healthy coral reefs attract tourists to Guam.						
Coral reefs are important to Guam's culture.						

10. How familiar are you with each of the following potential threats facing the coral reefs in Guam?

	Very Unfamiliar	Unfamiliar	Neither Familiar nor Unfamiliar	Familiar	Very Familiar	Not sure
Climate change						
Coral bleaching						
Typhoons, storms, and other natural disasters						
Pollution from stormwater, sewage, fertilizer and other chemical runoff						
Trash/littering						
Increased coastal/urban development						
Invasive species						
Too much fishing and gathering						
Damage from ships and boats						
Sediment runoff into the ocean from fires						
Damage from small watercraft (windsurfing, kiteboarding, kayaking, paddling, jet skiing)						

11. Do you believe that the threats to coral reefs in Guam are:

- a. Extreme
- b. Large
- c. Moderate
- d. Minimal
- e. None
- f. Not sure

#### **ATTITUDES TOWARDS CORAL REEF MANAGEMENT STRATEGIES AND ENFORCEMENT**

12. A marine preserve is an area of the ocean where “measures must be taken to preserve local traditions and to protect the natural resource, which is so valuable to both the community and the economy.” How familiar are you with marine preserves?

- a. Very Unfamiliar
- b. Unfamiliar
- c. Neither Unfamiliar nor Familiar
- d. Familiar
- e. Very Familiar
- f. Not sure

**SKIP PATTERN-- If respondent answers 'Very unfamiliar' or 'Unfamiliar', then skip to #12:**

13. Please indicate how much you disagree or agree with each of the following statements.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Sure
Marine preserves protect coral reefs						
Marine preserves increase the number of fish						
There should be fewer marine preserves in Guam						
There should be more marine preserves in Guam						
There has been economic benefit to Guam from the establishment of marine preserves						
Fishermen's livelihoods have been negatively impacted from the establishment of marine preserves in Guam						
Marine preserves help increase tourism in Guam						
The establishment of marine preserves increases the likelihood that people will vacation in Guam						
I would support adding new marine preserves in Guam if there is evidence that the ones we have are improving Guam's marine resources						
I generally support the establishment of marine preserves						

14. The following are rules and regulations that can be used to manage the marine environment. We are interested in your opinion about the use of these rules and regulations for the protection of coral reefs. Please indicate how much you disagree or agree with each of the following:

Rules/Regulations	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Sure
Restrictions on SCUBA spear fishing						
Size limits for certain fish species						
Lower the number of sea cucumbers allowed per person						
Limits on tourism operators and activity within marine preserves						
Permit and certification requirements for water sports tour operators						

**PARTICIPATION IN BEHAVIORS THAT MAY IMPROVE CORAL HEALTH**

15. How often do you participate in any activity to protect the environment (for example, beach clean ups, volunteering with an environmental group, recycling)?

- a. Not At All
- b. Once a year or Less
- c. Several times a year
- d. At least once a month
- e. Several Times a Month or more
- f. Not Sure

16. Which of the following would you consider to be your top 3 sources of information about coral reefs and the environment in Guam?

***Interviewer checks the top 3 sources of information in box below.***

17. To what degree do you trust each of your top rated sources of information to provide you the most accurate information on coral reefs and coral reef related topics in Guam?

***Respondent rates only the top 3 sources of information in box below.***

Top 3 Sources	Very untrustworthy	Untrustworthy	Neither Trustworthy nor Untrustworthy	Trustworthy	Very Trustworthy	Not sure
Newspapers, other print publications						
Radio						
TV						

<b>Top 3</b>	<b>Sources</b>	<b>Very untrustworthy</b>	<b>Untrustworthy</b>	<b>Neither Trustworthy nor Untrustworthy</b>	<b>Trustworthy</b>	<b>Very Trustworthy</b>	<b>Not sure</b>
	<b>Internet</b>						
	<b>Social Media</b>						
	<b>Friends and family</b>						
	<b>Community leaders</b>						
	<b>Jurisdictional government agencies (BSP, EXAMPLES)</b>						
	<b>Federal government agencies (NOAA, EPA)</b>						
	<b>Non-profit organizations</b>						
	<b>Other</b>						

18. How involved is the local community in protecting and managing coral reefs?

- a. Not at all involved
- b. Somewhat involved
- c. Moderately involved
- d. Involved
- e. Very involved
- f. Not sure

19. How involved are you in making decisions related to the management of coral reefs in Guam?

- a. Not at all involved
- b. Slightly involved
- c. Moderately involved
- d. Involved
- e. Very involved
- f. Not sure

## 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 confidential.**

20. Are you male or female?

- a. Male
- b. Female

21. What is your year of birth? \_\_\_\_\_

22. How long have you lived in Guam?

- a. 1 year or less
- b. 2-5 years
- c. 6-10 years
- d. more than 10 years, but less than all my life
- e. all my life

23. Including your primary language, please name each language you speak. [*interviewer should not read options below, but should allow respondent to answer*]

- |               |                           |
|---------------|---------------------------|
| 1. English    | 13. Hawaiian              |
| 2. Spanish    | 14. Hawaii Pidgin English |
| 3. French     | 15. Sāmoan                |
| 4. German     | 16. Chamorro              |
| 5. Italian    | 17. Carolinian            |
| 6. Portuguese | 18. Creole                |
| 7. Arabic     | 19. Crucian               |
| 8. Chinese    | 20. Tongan                |
| 9. Japanese   | 21. Other: Please list    |
| 10. Korean    | _____                     |
| 11. Tagalog   | 22. No Response           |
| 12. Hindi     |                           |

24. What race/ethnicity do you consider yourself? [*interviewer should not read options below, but should allow respondent to answer*]

- |                                      |                                               |
|--------------------------------------|-----------------------------------------------|
| 1. American Indian or Alaskan Native | 13. Yapese                                    |
| 2. Asian                             | 14. Native Hawaiian or other Pacific Islander |
| 3. Black or African American         | 15. Samoan                                    |
| 4. Palauan                           | 16. Chuukese                                  |
| 5. Carolinian                        | 17. Pohnpeian                                 |
| 6. Chamorro                          | 18. Kosraean                                  |
| 7. Chinese                           | 19. Vietnamese                                |
| 8. Marshallese                       | 21. Other/Mixed                               |
| 9. Filipino                          | 22. Hispanic or Latino                        |
| 10. Japanese                         | 23. No response                               |
| 11. White                            |                                               |
| 12. Korean                           |                                               |

25. What is the highest level of education you have completed?

- 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

26. What is your current employment status?

- a. Unemployed
- b. Student
- c. Employed full-time
- d. Homemaker
- e. Employed part-time
- f. Retired
- g. None of the above: Please specify \_\_\_\_\_
- h. No Response

27. What is your occupation? [*open ended*] \_\_\_\_\_

28. May I ask, what is your annual household income?

- 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