# NCRMP Resident Coral Reef Survey for CNMI OMB control Number 0648-0646 DRAFT – For Review Only

<u>Brief Background on the Survey</u>: The jurisdiction surveys will have one common set of questions for all locations (the core module), as well as a few questions specific to local management needs. The target respondent is an adult in the jurisdiction. The survey delivery mode is either telephone or face-to-face. The survey script will be adjusted for the delivery mode.

Survey conducted in (circle one): [languages specific to jurisdiction]

Introduction: [greeting specific to jurisdiction]

[SAMPLE TEXT WILL BE REPLACED WITH AN INTRODUCTION COMPLIANT WITH OMB REQUIREMENTS] My name is \_\_\_\_\_\_. We are only interested in obtaining your opinions on some important issues related to coral reefs and the environment in CNMI. You were selected because you live in a coastal area near coral reefs. Your participation is voluntary and will be kept strictly confidential.

## **PARTICIPATION IN REEF ACTIVITIES**

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

1. How often do you askany participate in e	Never	Once a month or less	2-3 times a month	4 times a month or more	No Response
Swimming/wading					
Snorkeling					
Recreational Diving (SCUBA)					
Waterside/ beach camping					
Beach recreation (beach sports, picnics)					
Motorized Boating					
Non-motorized Boating					
Fishing from shore – casting (rod & reel), cast netting/talaza					
Fishing from a boat, canoe or paddle board – rod and reel, trolling, spear gun, free diving, scuba					
Gathering of marine resources (seaweed, trochus, sea cucumber, octopus, clams, mollusks)					
Wave riding (SUP, wakeboarding, surfing, windsurfing)					

SKIP PATTERN-- If respondent answers 'never' to fishing or 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					

	Frequently	Sometimes	Rarely	Never	No Response
For fun					
For special occasions, religious and cultural events					

- 3. How often does your family eat fish/seafood? [INTERVIEWER: Family is defined as FILL IN]
  - 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 the marine resources currently doing on the island of your residence? Please rank from very bad to very good.

	Very Bad	Bad	Neither Bad nor החהל	Good	Very Good	Not sure
Ocean Water Quality (clean and clear)						
Amount of Coral						
Number of Fish						
Number of trochus (aliling)						
Number of sea cucumber (balati)						

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 trochus (aliling)						
Number of sea cucumber (balati)						

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

## AWARENESS AND KNOWLEDGE OF CORAL REEFS

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

	Strongly Disantee	Disagree	Neither	Agree	Strongly Anree	Not Sure
Coral reefs protect the CNMI from coastal erosion and natural disasters.						
Coral reefs are only important to fishermen, divers and snorkelers.						
Healthy coral reefs attract tourists to CNMI.						
Coral reefs in good condition provide food for island communities to eat						
Coral reefs are important to my island's culture.						

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

	Very Unfamiliar	Unfamiliar	Neither Familiar nor Unfamiliar	Familiar	Very Familiar	Not sure
Climate change						
Coral bleaching						
Typhoons and other natural disasters						
Pollution (stormwater, wastewater outfall, terrestrial runoff and trash/littering)						
Increased coastal/urban development						
Invasive species						
Over harvesting of resources						
Damage from ships and boats (groundings or anchoring)						
Erosion/sedimentation, sediment runoff						
Open dumping/littering						

11. Do you believe that the threats to coral reefs in CNMI 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 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. How familiar are you with Marine Protected Areas (MPAs)?
  - 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 #14:

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

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Aaree	Not Sure
MPAs protect coral reefs						
MPAs increase the number of fish						
There should be fewer locally-managed MPAs in CNMI						
There should be more locally-managed MPAs in CNMI						
There has been economic benefit to CNMI from the establishment of locally-managed MPAs						
Fishermen's livelihoods have been negatively impacted from the establishment of locallymanaged MPAs in CNMI						
Locally managed MPAs help increase tourism in CNMI						
The establishment of locally-managed MPAs						

	Strongly Disaaree	Disagree	Neither Agree nor Disagree	Agree	Strongly Aaree	Not Sure
increases the likelihood that people will vacation in CNMI						
I would support adding new locally managed MPAs in CNMI if there is evidence that the ones we have are improving CNMI's marine resources						
I generally support the establishment of locally-managed MPAs						
I generally support the establishment of the federally managed Marina Trench Marine National Monument)						

### **AWARENESS OF CORAL RULES AND REGULATIONS**

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	Oppose	Neither Support nor Oppose	Support	Strongly Support	Don't Know
Size limits for certain fish species						
Impose a small fee (\$1 to \$5) for non- residents visiting a locally managed MPA to fund conservation						
Increased enforcement of wastewater and stormwater regulations to preserve water quality						
Limits on the number of tourism boat operators able to conduct business within locally managed MPAs						
More restrictions on construction practices to prevent sediment going to sea						

#### PARTICIPATION IN BEHAVIORS THAT MAY IMPROVE CORAL CONDITION

- 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 CNMI?

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 CNMI? 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						
	Internet						
	Social Media						
	Friends and family						
	Community leaders						
	Jurisdictional government agencies (BECQ, DFW)						
	Federal government agencies (NOAA, EPA, US Fish and Wildlife)						
	Non-profit environmental organizations (MINA/PMRI, TNC,						

Тор 3	Sources	Very untrustworthy	Untrustworthy	Neither Trustworthy nor Untrustworthy	Trustworthy	Very Trustworthy	Not sure
	APASEEM)						
	Other						

- 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 CNMI?
  - 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 <u>confidential</u>.

20. Are you male or female?	
a. Male	
b. Female	
21. What is your year of birth?	

- 22. How long have you lived in CNMI?
  - 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
  - 2. Spanish
  - 3. Mandarin
  - 4. Japanese
  - 5. Korean
  - 6. Tagalog

- 7. Chamorro
- 8. Carolinian
- 9. Other: Please list

10. No Response

- 24. What race/ethnicity do you consider yourself? [interviewer should not read options below, but should allow respondent to answer]
  - 1. Asian
  - 2. Carolinian
  - 3. Chamorro
  - 4. Chinese
  - 5. Filipino
  - 6. Japanese
  - 7. White
  - 8. Korean
  - 9. Native Hawaiian or other Pacific Islander
  - 10. Taino
  - 11. Thai
  - 12. Vietnamese
  - 13. Other/Mixed
  - 14. No response
- 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

### THANK YOU FOR YOUR TIME

If you would like a copy of the results, please provide us with your mailing address or email address (write on separate contact sheet that is not linked to survey answers).