

**U.S. Department of Commerce  
National Oceanic & Atmospheric Administration  
Coral Reef Conservation Program Survey  
OMB Control No. 0648-0646**

National Coral Reef Monitoring Program (NCRMP)  
Resident Coral Reef Survey

Survey administered in: **English**

[ONLINE SCRIPT] **Greetings! Welcome to the National Coral Reef Monitoring Program 2020 Hawaii Survey.**

[TELEPHONE SCRIPT] Hello, my name is \_\_\_\_\_ calling on behalf of the National Oceanic and Atmospheric Administration (NOAA). We are interested in obtaining your opinions on some important issues related to coral reefs and the environment in Hawai'i. Your household has been selected to participate, and should have received recent mailings from us on how to complete the survey.

[TELEPHONE LANDLINE SCRIPT] **– May I please speak to the adult over 18 in your household who had the most recent birthday**

- a. **Selected Person is individual on the phone CONTINUE**
- b. **Selected Person is not available SCHEDULE CALLBACK, WITH \_\_\_\_\_  
THANK CURRENT RESPONDENT, END CALL**
- c. **New individual comes on to the phone – RE-READ INTRODUCTION AND CONTINUE TO S1**

S1. [TELEPHONE AND ONLINE SCRIPT] Are you at least 18 years of age? **[S1 in 2014 SURVEY]**

- a. Yes
- b. No

IF "NO", [ONLINE SCRIPT] – **Please ask the person over 18 in your household who had the most recent birthday to complete this survey. Thank you.**

[TELEPHONE SCRIPT] – **Please ask the person over 18 in your household who had the most recent birthday to come to the phone. – RE-READ INTRODUCTION WITH NEW INDIVIDUAL OR SCHEDULE CALLBACK WITH THE SELECTED RESPONDENT**

**IF NO INDIVIDUAL OVER 18 IN THE HOUSEHOLD EXISTS, TERMINATE THE INTERVIEW**

S1A. [TELEPHONE CELLULAR SAMPLE SCRIPT] Are you driving a car or doing anything else that requires your focused attention? (IF RESPONDENT SAYS "YES", READ: Due to safety reasons we will need to call you back at a more convenient time. Thank you.)

- 1 **Yes (SCHEDULE CALL BACK)**
- 2 **No**

[TELEPHONE AND ONLINE SCRIPT] 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.

[TELEPHONE AND ONLINE SCRIPT] Public reporting burden for this collection of information is estimated to average 20 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 Erica Towle, National Oceanic and Atmospheric Agency, National Ocean Service, Coral Reef Conservation Program, 1305 East West Highway, Silver Spring, MD, 20910, USA.

S2. [TELEPHONE AND ONLINE SCRIPT] Do you live at least 3 months of the year in Hawai'i? [S2 in 2014 SURVEY]

- a. Yes
- b. No

IF "NO", TERMINATE INTERVIEW

S3. [TELEPHONE AND ONLINE SCRIPT] What is your island of residence? [New question needed for sample weighting]

- a. Hawai'i
- b. O'ahu
- c. Maui
- d. Kauai
- e. Other

IF "OTHER", TERMINATE INTERVIEW

### PARTICIPATION IN REEF ACTIVITIES

1. [ONLINE SCRIPT] How often do you participate in each of the following activities in Hawai'i? [Q1 in CORE MODULE; Q14 in Full Question Bank; Q1 in 2014 Survey]

	Never	Once a month or less	2-3 times a month	4 times a month or more
[TELEPHONE SCRIPT] First I'm going to ask you how often you participate in activities relating to fishing and gathering ocean resources -INTERVIEWER - REPEAT SCALE AS NEEDED				
[ONLINE VERSION] SUBCATEGORY HEADER OF "Activities related to fishing and gathering ocean resources"				
Fishing from boat or shore using a pole, line, or net				
Spearfishing (three-prong, spear gun)				
Gathering of marine resources (seaweed, opihi, sea urchins, etc.)				
[TELEPHONE SCRIPT] Now please state how often you participate in the following ocean-activities, not for fishing or gathering resources - INTERVIEWER - REPEAT SCALE AS NEEDED				
[ONLINE VERSION] SUBCATEGORY HEADER OF "Ocean activities not related to fishing and gathering ocean resources"				

	Never	Once a month or less	2-3 times a month	4 times a month or more
Swimming/wading				
Snorkeling				
Diving for recreation (SCUBA, free diving)				
Waterside/ Beach camping				
Beach recreation (beach sports, picnics)				
Boating (sail, motor)				
Canoeing/kayaking				
Wave riding (surfing, kite surfing stand up paddle boarding, body boarding, bodysurfing)				

**SKIP PATTERN—IF RESPONDENT ANSWERS ‘NEVER’ TO ALL ACTIVITIES RELATING TO FISHING AND GATHERING OF OCEAN RESOURCES, THEN SKIP TO #4.**

#### **CORAL REEF RELIANCE / CULTURAL IMPORTANCE OF REEFS**

- [TELEPHONE AND ONLINE SCRIPT] How often do you fish for, harvest, or catch marine resources for each of the following reasons in Hawai‘i? [TELEPHONE – INTERVIEWER REPEATS SCALE AS NEEDED] [Q2 in CORE MODULE; Q114 in Full Question Bank; Q2 in 2014 Survey]

	Never	Rarely	Sometimes	Frequently	Always
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					

- [TELEPHONE AND ONLINE SCRIPT] How often do you fish for, harvest, or catch the following in Hawai‘i? [TELEPHONE – INTERVIEWER REPEATS SCALE AS NEEDED] [Q3 in CORE MODULE]

	Never	Rarely	Sometimes	Frequently	Always
Surgeonfish (e.g., manini, palani, kala)					
Parrotfish (e.g., uhu)					
Jacks (e.g., papio, ulua)					
Octopus (tako)					
Limpets (opihi)					

4. [TELEPHONE AND ONLINE SCRIPT] How often do you or your family eat fish/seafood? Family is defined as all persons living under the same roof. [Q4 in CORE MODULE; Q122 in Full Question Bank; Q3 in 2014 Survey]
- Every day
  - A few times a week
  - About once a week
  - 1-3 times a month
  - Less than once a month
  - Never

**SKIP PATTERN – IF RESPONDENT ANSWERS ‘NEVER’, THEN SKIP TO #7**

5. [TELEPHONE AND ONLINE SCRIPT] How often do you or your family eat **locally-caught** fish/seafood that is harvested **from coral reefs**? (For example, things like *parrotfish*, *goatfish (kumu)*, *surgeonfish*, *octopus*, *crab* or *opihi* from nearby coral reefs)? [Q5 in CORE MODULE; Q123 in Full Question Bank; modified Q3 in 2014 Survey]
- Every day
  - A few times a week
  - About once a week
  - 1-3 times a month
  - Less than once a month
  - Never
  - Not sure
6. [TELEPHONE AND ONLINE SCRIPT] How often do you get your fish or seafood that your family eats from the following sources? [TELEPHONE – INTERVIEWER REPEATS SCALE AS NEEDED] [Modified Q6 in CORE MODULE, Q124 in Full Question Bank, Q4 in 2014 Survey, but with formatting from Q2 in 2014 Survey]

	Never	Rarely	Sometimes	Frequently	Always
Purchased by myself or someone in my household at a store or restaurant					
Purchased by myself or someone in my household at a market or roadside vendor					
Caught by myself or someone in my household					
Caught by extended family members					
Caught by friends or neighbors					

7. [TELEPHONE AND ONLINE SCRIPT] To what extent are coral reef environments unimportant or important to you and your family’s cultural beliefs and practices? [Q16 in CORE MODULE; modified Q78 in Full Question Bank]
- Very unimportant
  - Unimportant
  - Neither unimportant nor important
  - Important
  - Very important

**AWARENESS AND KNOWLEDGE OF CORAL REEFS – Threats including climate change**

8. [TELEPHONE AND ONLINE SCRIPT] Please state the extent to which you disagree or agree with each of the following statements. [TELEPHONE – INTERVIEWER REPEATS SCALE AS NEEDED] [Q10 in CORE MODULE; Q7 in Full Question Bank; Q8 in 2014 Survey]

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Not Sure
Coral reefs protect Hawai’i from erosion and natural disasters.						
Coral reefs are only important to fishermen, divers and snorkelers.						
Coral reefs in good condition attract tourists to Hawai’i.						
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 Hawai’i’s culture.						

9. [TELEPHONE AND ONLINE SCRIPT] How familiar are you with each of the following potential threats facing the coral reefs in Hawai'i? [TELEPHONE - INTERVIEWER REPEATS SCALE AS NEEDED] [Q11 in CORE MODULE; Q31 in Full Question Bank; Q9 in 2014 Survey; Scale modified]

	Not at All	Slightly	Somewhat	Moderately	Extremely
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					
<i>Damage to reefs from trampling, standing etc.</i>					
Ocean Acidification					
<i>Sunscreen and lotions with chemicals toxic to coral reefs</i>					

#### PERCEIVED RESOURCE CONDITION

10. [TELEPHONE AND ONLINE SCRIPT] In your opinion, how would you rate the current condition of each of the following marine resources in Hawai'i? Please tell me if you would rate each one as very bad, bad, neither bad nor good, good, or very good. [TELEPHONE - INTERVIEWER REPEATS SCALE AS NEEDED] [Q7 in CORE MODULE; Q49 in Full Question Bank; Q5 in 2014 Survey]

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

	Verv Bad	Bad	Neither Bad nor Good	Good	Very Good	Not Sure
<b>Variety of Fish</b>						
<b>Crowding of Beaches</b>						

11. [TELEPHONE AND ONLINE SCRIPT] How would you say the condition of each of those same marine resources has changed in the past 10 years in Hawai'i? Would you say the resource has gotten a lot worse, gotten somewhat worse, not changed, gotten somewhat better, or gotten a lot better? [TELEPHONE - INTERVIEWER REPEATS SCALE AS NEEDED] [Q8 in CORE MODULE; Q53 in Full Question Bank; Q6 in 2014 Survey]

	A lot Worse	Somewhat Worse	No Change	Somewhat Better	A lot Better	Not Sure
<b>Ocean Water Quality (clean and clear)</b>						
<b>Amount of Live Coral</b>						
<b>Number of Fish</b>						
<b>Variety of Fish</b>						
<b>Crowding of Beaches</b>						

12. [TELEPHONE AND ONLINE SCRIPT] In the next 10 years, do you think the condition of the marine resources overall in Hawai'i will get worse, stay the same or improve? [Q9 in CORE MODULE; Q54 in Full Question Bank; Q7 in 2014 Survey]

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

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

13. [TELEPHONE AND ONLINE SCRIPT] Have you heard about the State of Hawaii's effort to improve management of nearshore marine waters by 2030 (the "30 by 30 Initiative")? [Modified Q12 in CORE MODULE; Modified Q75 in Full Question Bank]

- Yes, I know about the effort
- I have heard about the effort, but I do not know much about it
- No, I have not heard about the effort

14. [TELEPHONE AND ONLINE SCRIPT] Would you oppose or support a statewide effort led by the Division of Aquatic Resources in consultation with local communities to effectively manage 30% of Hawai'i's nearshore waters by 2030 to build and maintain healthy and abundant reefs and fisheries for Hawai'i's people? [Modified Q15 in CORE MODULE; modified Q105 in Full Question Bank; modified Q12 in 2014 Survey; follow up to Q13 above]
- Strongly oppose
  - Oppose
  - Neither support nor oppose
  - Support
  - Strongly support
15. [TELEPHONE AND ONLINE SCRIPT] A Marine managed 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 Marine Life Conservation Districts and community based subsistence fishing areas in Hawai'i. How familiar are you with Marine managed areas? [Q13 in CORE MODULE; Q36 in Full Question Bank; Q11 in 2014 Survey; scale modified]
- Not at all
  - Slightly
  - Somewhat
  - Moderately
  - Extremely

**SKIP PATTERN—IF RESPONDENT ANSWERS 'NOT AT ALL', THEN SKIP TO #17.**

16. [TELEPHONE AND ONLINE SCRIPT] Please describe the extent to which you disagree or agree with each of the following statements. [TELEPHONE - INTERVIEWER REPEATS SCALE AS NEEDED] [Q14 in CORE MODULE; Q44 in Full Question Bank]

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Sure
Marine managed areas protect coral reefs in Hawai'i						
Marine managed areas increase the number of fish in Hawai'i						
There should be more marine managed areas in Hawai'i						
There has been economic benefit to Hawai'i from the establishment of marine managed areas						
Fishermen's livelihoods have been negatively impacted from the establishment of marine managed areas in Hawai'i						
Marine managed areas increase tourism in Hawai'i						



	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Sure
I generally support the establishment of marine managed areas in Hawai'i						

17. [TELEPHONE AND ONLINE SCRIPT] Next, please describe the extent to which you oppose or support each of the following strategies to improve the protection of coral reefs in Hawai'i. [TELEPHONE - INTERVIEWER REPEATS SCALE AS NEEDED] [Q15 in CORE MODULE; Q105 in Full Question Bank; Q12 in 2014 Survey]

	Strongly Oppose	Oppose	Neither Support nor Support	Support	Strongly Support	Don't Know
Limits per person for certain fish species (size and amount or by season)						
Stricter control of sources of pollution to preserve water quality						
Efforts to restore damaged coral reefs						
Incorporate traditional Hawaiian practices into coral reef management						
Improved law enforcement for existing rules/regulations						
Establishment of a non-commercial fishing license						
<i>Inspection of coolers for violations of fishing or poaching regulations</i>						

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

18. [TELEPHONE AND ONLINE SCRIPT] How often do you participate in the following activities to protect the environment in Hawai'i? [TELEPHONE - INTERVIEWER REPEATS SCALE AS NEEDED] [Q17 in CORE MODULE; Q89 in Full Question Bank; modified Q13 in 2014 Survey]

	Never	Once a year or Less	Several times a year	At least once a month	Several Times a month or more
Recycling					
Teaching responsible fishing behavior to the next generation					
Volunteering with environmental groups (e.g. beach clean-ups)					
Donating to environmental causes					
Using "reef-safe" forms of sun protection					

19. [INTERVIEWER READS or ONLINE INTERFACE DISPLAYS] Please carefully consider the following HYPOTHETICAL plan to protect coral reefs in Hawai'i:

There is a need to raise funds to improve management of coral reefs. IF the state government of Hawai'i was considering adding a "Reef Conservation Tax" to your income and property taxes 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, Hawai'i 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,<sup>1</sup> how would you vote? Please consider what decision you would make if you really had to spend the extra money, given your current budget.

(CHECK ONLY ONE ANSWER) [Q18 in CORE MODULE; Q90 in Full Question Bank]

YES

NO

**SKIP PATTERN-- If respondent answers "yes" to Q19, skip to #21.**

20. [Telephone and Online script] What are the main reasons you would vote "no" to the "Reef Conservation Tax"? (CHECK ALL THAT APPLY) [INTERVIEWER: READ LIST; RECORD ALL THAT APPLY] [modified Q19 in CORE MODULE; modified Q91 in Full Question Bank]

- 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

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<sup>1</sup> Bid range: \$10, \$25, \$50, \$100, \$250, \$500

21. [TELEPHONE AND ONLINE SCRIPT] 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 Hawai'i? [TELEPHONE - INTERVIEWER REPEATS SCALE AS NEEDED] [Q20 in CORE MODULE; Q111 in Full Question Bank; modified Q14 and Q15 in 2014 Survey]

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

## DEMOGRAPHICS

[TELEPHONE SCRIPT] 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.

[ONLINE SCRIPT] There are just a few more questions that will help us to interpret our results. As a reminder, the information you provide is completely confidential.

22. [TELEPHONE AND ONLINE SCRIPT] Are you male or female? [Q21 in CORE MODULE; Q127 in Full Question Bank; Q19 in 2014 Survey]

- a. Male
- b. Female

23. [TELEPHONE AND ONLINE SCRIPT] What is your year of birth? \_\_\_\_\_ [Q22 in CORE MODULE; Q126 in Full Question Bank; Q20 in 2014 Survey]

24. [TELEPHONE AND ONLINE SCRIPT] How long have you lived in Hawai'i? [Q23 in CORE MODULE; Q134 in Full Question Bank; Q21 in 2014 Survey]

- a. 1 year or less
- b. 2-5 years
- c. 6-10 years

- d. more than 10 years
- e. all my life

25. [TELEPHONE AND ONLINE SCRIPT] What is your ZIP code? \_\_\_\_\_ [Q24 in CORE MODULE; Q133 in Full Question Bank]

26. [TELEPHONE AND ONLINE SCRIPT] What race/ethnicity do you consider yourself? [Q25 in CORE MODULE; Q136 in Full Question Bank; Q23 in 2014 Survey]

- a. Native Hawaiian
- b. White/Caucasian
- c. Asian
- d. Chinese
- e. Filipino
- f. Japanese
- g. Korean
- h. American Indian or Alaskan Native
- i. Black or African American
- j. Micronesian (e.g., Carolinian, Chamorro, Chuukese, Palauan)
- k. Samoan
- l. Thai
- m. Tongan
- n. Vietnamese
- o. Hispanic or Latino
- p. More than one race/ethnicity
- q. Other
- r. No response

27. [TELEPHONE AND ONLINE SCRIPT] What is the highest level of education you have completed [Q26 in CORE MODULE; Q128 in Full Question Bank; Q24 in 2014 Survey]

- 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

28. [TELEPHONE AND ONLINE SCRIPT] What is your current employment status? [Q129 in Full Question Bank]

- a. Unemployed
- b. Student
- c. Employed full time
- d. Homemaker
- e. Employed part time
- f. Retired

g. No Response

29. [TELEPHONE AND ONLINE SCRIPT] Is your current or most recent occupation related to the marine environment/industry? [Modified Q27 in CORE MODULE; Q115 in Full Question Bank]
- a. Yes
  - b. No

**SKIP PATTERN—IF RESPONDENT ANSWERS ‘NO’, THEN SKIP TO #31.**

30. [TELEPHONE AND ONLINE SCRIPT] Please indicate the industry that best fits your current or most recent occupation. [Modified Q28 in CORE MODULE; Q116 in Full Question Bank]
- 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 \_\_\_\_\_

31. [TELEPHONE AND ONLINE SCRIPT] How many adults aged 18 years or older live in your household, including yourself? \_\_\_\_\_ [Modified Q125 in Full Question Bank]

32. [TELEPHONE AND ONLINE SCRIPT] Do you own a working cellphone, landline, or both? [New question; Needed for sample weighting]
- a. Cellphone
  - b. Landline
  - c. Both

33. [TELEPHONE AND ONLINE SCRIPT] What is your annual household income? [Q132 in Full Question Bank]
- 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

[TELEPHONE AND ONLINE SCRIPT] Thank you for taking the time to provide your responses for the NOAA National Coral Reef Monitoring Program 2020 Hawai'i survey.