

Community-based Subsistence Fishing Practitioner Survey

What is it?

The Community-based Subsistence Fishing Practitioner (CBSFP) survey is a voluntary social survey designed to help communities collect any necessary information to support the designation, evaluation, and adaptive management of CBSFAs. The CBSFP survey was developed as a tool to help subsistence fishing practitioners communicate their place-based knowledge about the conditions of resources and management needs without requiring them to divulge sensitive traditional observational methodologies and ways of knowing acquired through years of observation and experience. The CBSFP survey gathers qualitative information from “subsistence fishers and ocean gatherers with long time knowledge and experience gained through time spent fishing in an area”³, and communicates this place-based knowledge of marine resource conditions, uses, and management needs in a way for agency decision making and public outreach.

Why use it?

There is growing recognition amongst scientists and resource managers that for marine resource management initiatives to be more effective¹, human-wellbeing dimensions of management must be considered in addition to ecological aspects². Qualitative methods such as social surveys have great potential for informing resource management decisions because they facilitate collection of information related to resource status, and resource users’ perceived issues, challenges, and benefits related to resource management and use.

The legislative intent of HRS 188-22.6 was that CBSFA management be informed by local subsistence fishers’ place-based knowledge and experience gained from time spent fishing in the area³. In fact a social survey tool was used to collect qualitative information that ultimately informed the creation of the HRS 188-22.6 and the CBSFA pilot project on Molokai⁴, further supporting the utility and legitimacy of social surveys and qualitative information for informing CBSFA designation and adaptive management. Additionally, using CBSFP survey results to inform DLNR’s fisheries management decisions is supported by existing case law, which encourages state agencies to consider evidence of ancient tradition, custom, practice and usage provided by kama’āina witnesses with relevant longtime knowledge when making public trust management decisions⁵. Beyond Hawai’i, results of social surveys have been used by government agencies as well as local communities throughout the Pacific to effectively inform adaptive management.^{6,7,8}

¹ Wongbusarakum, S. et al. (2014). Strengthening the Social Impacts of Sustainable Landscapes Programs: A Guide for Practitioners. p. 107.

² The Nature Conservancy (2016). Conservation by Design 2.0 Guidance Document.

³ Hawai’i Legislature Standing Committee Report No. 2965 for H.B. 3446 H.D. 2. S.D.1 (1994)

⁴ McGregor, D. et al. (1994). Governor’s Molokai Subsistence Task Force Report.

⁵ See in re Ashford, 50 Haw. at 316, 440 P.2d at 77 (1968); Diamond and Blair v. Craig Dobbin and Wagner Engineering Services, Inc. and BLNR (2014)

⁶ SEM-Pasifika: Socioeconomic Monitoring Guidelines for Coastal Managers in Pacific Island Countries (2008)

⁷ National Oceanic and Atmospheric Administration (NOAA) National Coral Reef Monitoring Program (NCRMP) Socioeconomic Monitoring Program

The CBSFP survey tool represents the most comprehensive recommended CBSFA monitoring method as it addresses the largest number of CBSFA monitoring objectives and associated indicators as well as upholding the statutory intent of CBSFA designation which is “to promote marine resource management informed by subsistence fishers’ place-based knowledge, skills, and experience for the given area. The table below outlines the priority CBSFA monitoring objectives and indicators being addressed by the CBSFP survey.

Monitoring Objectives	Monitoring Indicators
Evaluate whether population health of important species is sustained, increasing, or decreasing	<ul style="list-style-type: none"> • Perceived abundance of target species (<i>Survey Questions: #8, #9, #10, #11</i>) • Perceived size of fish harvested (<i>Survey Questions: #8, #9</i>) • Perceived diversity of species (<i>Survey Questions: #8, #9</i>)
Evaluate habitat health to determine whether it is being sustained, improved, or declining	<ul style="list-style-type: none"> • Perceived health of coral (<i>Survey Questions: #8, #9</i>) • Perceived amount of appropriate habitat for target species (<i>Survey Questions: #8, #9</i>)
Understand potential threats to marine resources and habitat health	<ul style="list-style-type: none"> • Presence and/or severity of coral bleaching, disease, sedimentation, invasive species(<i>Survey Question: #17</i>) • Perceived severity of threats to marine resources and habitat health (<i>Survey Questions: #17, #18</i>)
Determine whether catch and effort is increasing or decreasing	<ul style="list-style-type: none"> • Perceived Amount of Catch (<i>Survey Questions: #8, #9</i>) • Perceived Amount of Fishing Effort (<i>Survey Question: #8, #9</i>)
Evaluate the extent and trends in use and reliance on marine resources for subsistence or cultural purposes	<ul style="list-style-type: none"> • Estimated amount of meals incl. local marine resources. (<i>Survey Question: #15</i>) • Traditional fishing/ gathering methods used (<i>Survey Question: #12</i>) • Number of fishers gathering for family consumption and sharing, or for cultural and religious use (<i>Survey Question: #13</i>) • Frequency of fishing/harvesting for subsistence, cultural, and religious purposes (<i>Survey Question: #13</i>) • Perceived extent of benefits from fishing/harvesting (e.g. social, cultural, health) (<i>Survey Question: #14</i>)
Understand the extent to which traditional fishing practices and customary codes of conduct are being practiced	<ul style="list-style-type: none"> • Number of traditional fishing practitioners (identified/interviewed (<i>Survey Questions: #1, #12</i>) • Perceived adherence to local codes of conduct (<i>Survey Question: #16</i>) • Perceived threat to traditional fishing practices posed by other ocean users (<i>Survey Questions: #17, #18</i>)
Evaluate perceived compliance with rules	<ul style="list-style-type: none"> • Perceived compliance with rules (<i>Survey Questions: #16, #17</i>)
Evaluate whether traditional values and fishing practices are being transmitted intergenerationally	<ul style="list-style-type: none"> • Number of traditional fishing practitioners who teach others (<i>Survey Question: #2</i>) • Age demographics of individuals taught by traditional fishing practitioners (<i>Survey Question: #4</i>)

⁸ Montambault, J.R. et al. (2015). Use of monitoring data to support conservation management and policy decisions in Micronesia. *Conservation Biology* 00(0): p. 1-11.

Benefits & challenges of use

Benefits of CBSFP Survey Method	Challenges of CBSFP Survey Method
<ul style="list-style-type: none"> • Most infrequent monitoring frequency of all of the community-based monitoring methods recommended in this guide (once every 4 years) • Survey is tailored to each community by the community • Collects knowledge and experience of subsistence fishing practitioners in a way that can be easily quantified and communicated. • Implementation is not physically rigorous • Easy to implement with minimal training and quality assurance • Community-led • Intergenerational participation • Enables documentation of long-term trends overtime from perspective of fishers who know the place. 	<ul style="list-style-type: none"> • Some coordination involved; enumerators need to tailor the survey to the community as well as identify and arrange a convenient time to meet with potential survey respondents. • Survey time may vary depending on the individual interviewee (45-90 min) • Enumerators must be trained to inspire participation, promote honest responses, and mitigate potential response and non-response bias • Participants need to be willing to spend time participating (1-1.5 hours per survey)

Recommended minimum resources & capacity needed

Personnel	<ul style="list-style-type: none"> • Survey Coordinator (may be one of the enumerators) • 1-2 Survey Enumerators/Interviewers • Additional data entry and analysis personnel as needed (partners may be sourced)
Skills	<p><u>For Data Collection</u></p> <ul style="list-style-type: none"> • Enumerators/Interviewers must be trained in social survey implementation using CBSFP Survey Implementation Training Module developed by DAR <p><u>For Data Entry and Analysis</u></p> <ul style="list-style-type: none"> • Enumerators/Interviewers can be trained in data entry and analysis as needed (partners may be sourced)
Equipment	<p><u>For Data Collection</u></p> <ul style="list-style-type: none"> • Printed copies of the free and prior informed consent forms and survey questionnaire • Pencil/pen • Tape recorder (optional) • Copy of master list of recommended survey respondents and associated respondent numbers <p><u>For Data Entry and Analysis</u></p> <ul style="list-style-type: none"> • Computer (for data entry) • Microsoft Excel (for data entry) • Statistical Software program (optional) <ul style="list-style-type: none"> - JASP: https://jasp-stats.org/

Design

While the foundation of the CBSFP survey was developed by DAR with specific input from communities, ultimately the tailoring and implementation of the survey is community led. A focus group of key stakeholders should be convened to identify the following information needed for tailoring CBSFP survey response choices to the local context:

- Fishing and ocean gathering methods and management practices traditionally and customarily carried out for the purpose of Native Hawaiian subsistence, culture, and religion
- Marine resources important to meeting the subsistence needs of the local community
- Perceived priority threats to marine resources important to the community's subsistence needs (see the recommended Marine Resource Management Prioritization Tool in Appendix B of the CBSFA Designation Guide)

Criteria for the selection of key stakeholders to participate in these initial focus group discussions include:

- Cultural fishing practitioners with extensive place-based knowledge of traditional and customary native Hawaiian fishing and management practices, and
- Individuals that fish or gather ocean resources within the area of interest for personal or family consumption or sharing, and are knowledgeable about the area's marine resources, ocean environment, and management issues.

Purposive sampling will be used to select appropriate survey participants for the particular area of interest. The CBSFP survey will aim to census all fishers and ocean gatherers of the marine waters within the area of interest who meet the following criteria for participation in the CBSFP survey:

- They are community residents, kama`āina⁹, cultural fishing practitioners, and/or connected to the area through ancestral/generational ties, AND
- Have longtime knowledge and skill fishing and gathering ocean resources within the area for personal family consumption or sharing¹⁰.

Kama`āina fishers from the community who continue to regularly fish and/or have longtime knowledge and experience fishing in the area should be asked to identify all subsistence fishers they believe meet the above criteria for CBSFP survey participation and provide contact information for those individuals if available. It is important that their participant recommendations be inclusive as possible of all fishers who meet the criteria above regardless of their level of support or opposition of the group's members or activities.

As the CBSFP survey is meant infrequently collect and communicate subsistence practitioners' collective observations and knowledge of trends related to marine resource health and overall management effectiveness over time, participating respondents will be repeatedly surveyed on a as needed basis. To inform designation, the CBSFP survey may be implemented during the community self-evaluation or pre-

⁹ See in re Boundaries of Pulehunui, 4 Haw. 239, 245 (1879), and Ashford, 50 Haw. at 316, 440 P.2d at 77 (1968):
Kama`āina is defined by the courts as persons who would describe themselves as being familiar from childhood with any locality

¹⁰ HRS 188-22.6 defines subsistence as the customary and traditional native Hawaiian uses of renewable ocean resources for direct personal or family consumption or sharing.

proposal stage of the CBSFA designation process (Stage 1 or 2 of the CBSFA Designation Procedures Guide respectively). To inform post-designation adaptive management of the CBSFA, it is recommended the survey be conducted as a baseline assessment in the first year of designation if either of the following conditions apply and re-administered every 4 years:

- A CBSFP survey has not already been administered to inform the community group's CBSFA proposal, or
- The initial CBSFP survey used to community group's proposal was administered several years prior to achieving designation.

Implementation

Two enumerators and a survey coordinator (may be one of the enumerators) should be identified from within the community to implement the CBSFP survey. To ensure that survey respondents feel comfortable participating and provide enumerators with honest responses, all selected enumerators should be individuals considered to be either of neutral or well-respected/non-contentious personalities amongst potential respondents. The selected survey enumerators must also be trained by DAR in CBSFP survey implementation prior to implementing any surveys to ensure quality collection of data.

Once trained, enumerators may begin contacting the list of recommended interviewees/respondents to schedule a time to administer the survey in person, at times most convenient to the respondent as to respect the participants' time and the potential for rushed or skipped responses. Enumerators must first read the free and prior informed consent (FPIC) form to each interviewee and have them sign the form acknowledging their free and prior informed consent to participate before administering any survey. The survey has been written in a way that enables trained interviewers to administer the questionnaire in a more natural and conversational style while still recording the respondent's answers using the structured questionnaire format designed to facilitate analysis and communication of survey results. That being said, survey completion times are likely to vary by respondent however should not take longer than 90 minutes.

Enumerators will be responsible for entering all survey data into a pre-developed Microsoft Excel CBSFP Survey Data Entry Worksheet as soon as possible (partners may be sourced as needed). The Microsoft Excel CBSFP Survey Data Entry Worksheet also includes a code book that provides information about each variable in the data set and it's associated code within the data entry worksheet, as well as tips for how to analyze each variable addressing the priority monitoring objectives. Data analysis may be performed by the community (or partners may be sourced as needed) using common statistical software (SPSS, JASP, MiniTab, R, etc.). Results from the baseline assessment may then be compared with results from subsequent survey assessments prior to 5-year management evaluation period as needed.

The following list of management questions is recommended to guide CBSFP survey data analyses to inform CBSFA management planning and adaptive management:

1. How many traditional and customary fishing practitioners depend on the area for native Hawaiian subsistence, culture or religious purposes, and what are their age demographics? Do the numbers of subsistence practitioners across different age groups change over time with CBSFA designation?

2. How reliant are traditional and customary fishing practitioners and other subsistence fishers on marine resources from the area, and how does this reliance change over time since CBSFA designation?
3. What fishing methods do traditional and customary fishing practitioners use and are these methods distinct from other non-commercial fishers who depend on the area?
4. Does the number of individuals reporting fishing/harvesting using traditional methods increase over time since CBSFA designation?
5. What species are important to non-commercial fishers and fishers who fish or harvest in the area for native Hawaiian subsistence, culture and religion? Do the species considered important by regular subsistence fishers of the area change over time with CBSFA designation?
6. What benefits do households of fishers who regularly use the area experience as a result of fishing and harvesting marine resources in the area? Are the benefits experienced by traditional fishing practitioners distinct from other non-commercial fishers who regularly use the area? Do the perceived benefits experienced as a result of fishing and harvesting change over time since CBSFA designation?
7. What is the total and average number of household members that benefit from respondents fishing and gathering activities, and does this number change over time?
8. Do individuals reporting lower economic security report higher household benefits from fishing and gathering?
9. What do fishers who regularly use the area for non-commercial use or for native Hawaiian subsistence or cultural use perceive as threats to marine resources in the area?
10. What ocean uses are perceived to be impeding traditional fishing practitioners fishing practices, and how severe are these impediments perceived to be? Do the human uses perceived to be impeding traditional fishing practices, or their associated severity, change over time with CBSFA designation?
11. How abundant do regular subsistence fishers of the area perceive marine resources to be within the area's ocean waters? How does the perceived condition of these resources change over time since CBSFA designation?
12. How healthy do regular subsistence fishers of the area perceive habitat to be within the ocean waters of the area? How does the perceived condition of habitat change over time since CBSFA designation?
13. What are subsistence fishers perceptions about their amount of catch and associated effort needed to obtain it, and is there a difference in perception between traditional fishing practitioners and other fishers? How does the amount of catch and effort required to obtain it perceived to change over time since CBSFA designation?
14. How many traditional fishing practitioners share their knowledge of traditional practices and what are their age demographics? Do the number and ages of traditional fishing practitioners who report sharing their knowledge with others change over time since CBSFA designation?
15. Why don't some individuals with knowledge of traditional practices share their knowledge? Are there differences in reasons for not sharing amongst different age groups?
16. Who do individuals with knowledge of traditional fishing practices teach these practices to?
17. Do increasing numbers of individuals from younger generations within the community self-identify as practitioners of customary fishing practices since CBSFA designation?
18. Is there an increased frequency of fishing for native Hawaiian subsistence, cultural, or religious purposes reported across different age groups over time since CBSFA designation?
19. Do traditional fishing practitioners perceive an increased number of youth practicing traditional Hawaiian cultural values and fishing practices? How does this perception change over time since CBSFA designation?
20. How knowledgeable of the fishing regulations are survey respondents?
21. To what extent do respondents knowledgeable of rules believe people are complying with rules? Does the perception of compliance change over time since CBSFA designation?

22. What are respondents' suggestions for improving marine resource management, and do recommendations differ amongst traditional fishing practitioners?
23. To what extent are ocean users perceived to be adhering to customary codes of conduct by traditional fishing practitioners? Is ocean users' adherence to customary codes of conduct perceived to increase over time since CBSFA designation?
24. To what extent do traditional fishing practitioners think people are fishing and harvesting in accordance with spawning and moon cycles? How does this perception change over time with CBSFA designation?

Subsistence Fishing Practitioner Survey Free & Prior Informed Consent (FPIC) Form

Aloha kāua! My name is _____ [Interviewer name] and I am part of _____ [Organization/Affiliation] as a _____ [position/title]. I am helping to collect information using a questionnaire to better understand the importance of marine resources in the ocean waters of _____ [Site Name] to fishers and ocean gatherers who depend on the area for subsistence, as well as their perceptions of the condition of marine resources and habitat, and effectiveness of marine resource management in the area. As you were identified by your peers as a subsistence fisher or ocean gatherer who is knowledgeable about the marine resources and ocean environment area of _____ [Site Name] and/or traditional fishing and management practices of the area, I would like to invite you to participate in this survey.

Specifically, the survey seeks to gather the following information from:

- Long time fishers and gather's perceptions of the health of marine resources and habitat.
- Fishing and ocean gathering practices within the [Site Name] area and perceived benefits.
- Marine management issues affecting fishing and ocean gathering within the ocean waters of [Site Name], and
- Traditional fishing and management practices within _____ [Site Name].

Survey results will help inform and improve the marine resource management initiatives of parties interested in better managing marine resources for long-term continued use, including, but not limited to DLNR, non-governmental organizations, and community groups. Responses will not be identified with any individual personally. If results of this study are published or presented, individual names and other personally identifiable information will not be used. In addition, to further maintain respondent confidentiality, respondent names will not be included in _____ [Community Organization] survey data files.

PARTICIPATION IN THIS SURVEY IS COMPLETELY VOLUNTARY. You are free to withdraw from participation at any time during the survey and you do not have to answer any questions you do not want to answer. If you agree to participate, please answer the questions on the questionnaire as best you can. It should take no longer than 1 - 1.5 hours to complete.

Do you have any questions before we proceed? If you have any additional questions about this project, you may also feel free to contact _____ [Interviewer contact information].

- I agree to take part in this survey. (Please check box)
 Yes No
- Do you consent to audio taping during the survey? (Please check box)
 Yes No
- Do you consent to photographs during the survey? (Please check box)
 Yes No
- I understand that other researchers may request access to this data from _____ [Community Group conducting the survey] and may be granted access at the discretion of the said Community Group upon the condition that they similarly agree to preserve the confidentiality of all information as specified in this form.
 Yes No

Name: _____ **Respondent #:** _____

Signature: _____

Community-based Subsistence Fishing Practitioner Survey Questionnaire

INTERVIEWER: _____ Date: ____/____/____ Respondent #: _____

(INTERVIEWER: WRITE RESPONDENT NUMBER FROM MASTER PARTICIPANT LIST AND CHECK RELEVANT BOX NEXT TO THEIR NAME TO KEEP TRACK OF WHO HAS BEEN SURVEYED)

INSTRUCTIONS FOR INTERVIEWER:

- *Prior to initiating the survey, read the potential survey participant the Free and Prior Informed Consent (FPIC) form explaining survey objectives and how results will be used, and have respondent sign the FPIC form agreeing to participate in the survey.*
- *Provide all respondents with Map on the last page of this survey, to orient them with area of interest to the survey located between _____ [**Specify Name of Boundary Point 1**] and _____ [**Specify Name of Boundary Point 2**], explaining the locally known reference points specified on the map.*
- *Clarify to respondents that this survey pertains to their observations, knowledge and experiences with fishing and gathering solely within the ocean areas indicated on the map, and instruct them to answer based on their own observations, knowledge and experiences, unless otherwise instructed.*

Respondent Gender: Male Female Other

RELATIONSHIP TO AREA

I'd like to start by understanding your connection to the _____ [**Site Name**] area and it's ocean waters between _____ [**Specify Name of Boundary Point 1**] and [**Specify Name of Boundary Point 2**] _____

(INTERVIEWER: REFER TO MAP ON LAST PAGE OF SURVEY).

1. What is your relationship or connection to [Site Name**]?**

(INTERVIEWER: ALLOW RESPONDENTS TO RESPOND FIRST, AND CHECK ALL BOXES THEY SELF-IDENTIFY WITH, THEN ASK PROMPTING QUESTIONS FOR THE REMAINING OPTIONS AND CHECK ALL THAT APPLY)

- | | |
|--|--|
| <input type="checkbox"/> I was raised in and am familiar with the area since childhood (kama'āina). | <input type="checkbox"/> I am a resident of [Site Name] |
| <input type="checkbox"/> My lineal ancestors are from [Site] | <input type="checkbox"/> I work in [Community Name]. |
| <input type="checkbox"/> I am connected to [Site Name] as a practitioner of Hawaiian traditional and customary fishing/ocean gathering. | <input type="checkbox"/> I'm a regular visitor to [Site Name]. |
| <input type="checkbox"/> I regularly fish and gather from [Site Name]'s ocean waters. | <input type="checkbox"/> I actively care for the ocean areas of [Site Name] |
| | <input type="checkbox"/> Other (PLEASE SPECIFY) |
| | _____ |
| | _____ |

(INTERVIEWER: SKIP TO QUESTION #6 IF RESPONDENT DID NOT INDICATE THEY ARE A TRADITIONAL AND CUSTOMARY FISHING PRACTITIONER)

INTERGENERATIONAL LEARNING OF PONO FISHING PRACTICES

You mentioned you are a practitioner of Hawaiian fishing and ocean gathering practices...

2. Do you share your knowledge of these traditional Hawaiian fishing practices and associated cultural values with others? Yes No

(INTERVIEWER: IF RESPONDENT ANSWERS YES, SKIP TO QUESTION #4)

3. Why don't you teach/share your knowledge of traditional values and practices with others? *(INTERVIEWER: ALLOW RESPONDENT TO ANSWER ON THEIR OWN, AND CHECK ALL BOXES THAT BEST REFLECT THE RESPONDENT'S RESPONSE)*

- | | |
|---|--|
| <input type="checkbox"/> No time | <input type="checkbox"/> Wait for someone to ask |
| <input type="checkbox"/> Others aren't too interested in learning | <input type="checkbox"/> Others are doing it |
| <input type="checkbox"/> Too old | <input type="checkbox"/> Resources too depleted |
| <input type="checkbox"/> Disabled | <input type="checkbox"/> Other <i>(PLEASE SPECIFY)</i> |
| <input type="checkbox"/> Don't like to share/teach | _____ |

4. What age groups do you teach to? *(INTERVIEWER: CHECK ALL THAT APPLY, PROMPT AS NEEDED)*

- | | | |
|---------------------------------------|---------------------------------|---------------------------------|
| <input type="checkbox"/> Keiki | <input type="checkbox"/> Adults | <input type="checkbox"/> Unsure |
| <input type="checkbox"/> Young Adults | <input type="checkbox"/> Kūpuna | |

5. Who do you teach to? *(INTERVIEWER: ALLOW RESPONDENT TO ANSWER ON THEIR OWN, AND CHECK ALL BOXES THAT BEST REFLECT THE RESPONDENT'S RESPONSE)*

- | | |
|---|--|
| <input type="checkbox"/> Friends | <input type="checkbox"/> Researchers |
| <input type="checkbox"/> Cultural groups/organizations | <input type="checkbox"/> Visitors to the area |
| <input type="checkbox"/> School groups | <input type="checkbox"/> Other <i>(PLEASE SPECIFY)</i> |
| <input type="checkbox"/> Members of my immediate family | _____ |

- Other Relatives/Extended family

RELATIONSHIP TO AREA (continued)

6. How many generations has your family been fishing or gathering ocean resources from the [Site Name] area? *(INTERVIEWER: ALLOW RESPONDENT TO ANSWER, AND CHECK BOX NEXT TO RESPONSE THAT BEST REFLECTS RESPONDENTS ANSWER. PROMPT AS NEEDED)*

- Your generation is the first
- Since your parents' generation
- Since your grandparents generation
- Since your great grandparents generation
- Since beyond your great grandparents generation

7. How many years have you been fishing or ocean gathering in [Site Name]’s ocean waters?
(INTERVIEWER: REFER TO MAP) _____

PERCEIVED CONDITION OF MARINE RESOURCES AND CORAL REEFS

The next couple of questions are related to your perceptions about the health of marine resources and ocean environment within the ocean waters of [Site Name]. Please answer to the best of your ability based on your personal observations, knowledge and experience.

(INTERVIEWER: SKIP TO QUESTION #9 IF RESPONDENT ANSWERS LESS THAN 20 YEARS, OR IF THIS IS NOT THE FIRST TIME THE SURVEY HAS BEEN CONDUCTED AT THIS SITE AND THIS QUESTION HAS ALREADY BEEN ASKED FOR). REMEMBER IF RESPONDENT ANSWERS MORE THAN 20 YEARS FOR QUESTION # 11A)

8. Given you have been fishing and gathering within the ocean waters of [Site Name] for so many years, how well were the following attributes were doing in this area back in the 90’s (20 years ago), using a scale of 1 – 5 where:

1 = Very Bad 2 = Bad 3 = Neither bad nor good 4 = Good 5 = Very good

Feel free to let me know if you are not sure or don’t know (CIRCLE “N/A”).

(INTERVIEWER: READ EACH ATTRIBUTE IN TABLE 1 BELOW AND ASK RESPONDENT TO RANK THE HEALTH OF EACH ATTRIBUTE USING THE SCALE OF 1 to 5. CIRCLE ONE RESPONSE PER ROW)

Table 1. Perceived Condition of Attributes of Marine Resource Health 20 Years Ago

Attributes of Marine Resource Health	1 = Very Bad	2 = Bad	3 = Neither Bad nor Good	4 = Good	5 = Very Good	N/A = Unsure/ Don’t know
Target species population numbers	1	2	3	4	5	N/A
Variety of different species of fish	1	2	3	4	5	N/A
Size of fish caught	1	2	3	4	5	N/A
Health of habitat important to sustaining target species	1	2	3	4	5	N/A
Sufficiency of catch size desired to feed and share with your family.	1	2	3	4	5	N/A
The amount of effort/time it takes you to fish/gather from [Site Name]’s ocean areas to	1	2	3	4	5	N/A

feed and share with your family as desired.	
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9. How well would you say the following attributes are currently doing in [Site Name]’s ocean areas, using the using a scale of 1 – 5 where:
 1 = Very Bad 2 = Bad 3 = Neither bad nor good 4 = Good 5 = Very good

Feel free to let me know if you are not sure or don’t know (CIRCLE “N/A”).

(INTERVIEWER: READ EACH ATTRIBUTE IN TABLE 2 BELOW AND ASK RESPONDENT RANK THE HEALTH OF EACH ATTRIBUTE USING THE SCALE OF 1 to 5. CIRCLE ONE RESPONSE PER ROW)

Table 2. Perceived Current Condition of Attributes Related to Marine Resource Health

Attributes of Marine Resource Health	1 = Very Bad	2 = Bad	3 = Neither Bad nor Good	4 = Good	5 = Very Good	N/A = Unsure/ Don’t know
Target species population numbers	1	2	3	4	5	N/A
Variety of different species of fish	1	2	3	4	5	N/A
Size of fish	1	2	3	4	5	N/A
Health of habitat important to sustaining target species	1	2	3	4	5	N/A
Sufficiency of catch size for feeding and sharing with your family.	1	2	3	4	5	N/A
The amount of effort/time it takes you to fish/gather from [Site Name]’s ocean areas to feed and share with your family as desired.	1	2	3	4	5	N/A

10. Within the ocean area of [Site Name], what marine resources are important to your fishing, gathering, or cultural or religious practices?] ***(INTERVIEWER: SHOW MAP)***
(INTERVIEWER: ALLOW RESPONDENT TO ANSWER WITHOUT PROMPTING/READING OPTIONS. CHECK THE BOXES IN TABLE 4 BELOW FOR EACH SPECIES INDICATED BY THE RESPONDENT)

(INTERVIEWER: SKIP 11A IF THE RESPONDENT DID NOT PREVIOUSLY INDICATE THEY HAVE BEEN FISHING IN THE AREA FOR MORE THAN 20 YEARS (Q#7) AND LEAVE THE “20 YRS AGO” COLUMN BLANK)

11. Now I'm going to read back each species you just mentioned, and I'd like you to tell me your perception of

a) How abundant you observed each of these species to be back in the 90's (20 years ago) within the ocean area of [Site Name], AND....

b) How abundant you observe each of these species to be currently within the ocean area of [Site Name] using a scale of 1-5, where;

- 1 = None/very bad
- 2 = Low abundance/bad
- 3 = Moderate abundance/neither good nor bad
- 4 = High abundance/good
- 5 = Very High abundance/very good

Feel free to let me know if you are not sure or don't know (CIRCLE "N/A").

(INTERVIEWER: WRITE THE RESPONDENT'S PERCEIVED ABUNDANCE (1-5) IN THE BLANK SPACES NEXT TO THE CHECKED SPECIES IN TABLE 3 BELOW, OR WRITE "N/A" FOR UNSURE/DON'T KNOW RESPONSES)

Table 3: Target Species and Their Perceived Abundance

	<u>Today</u>	<u>20 yrs ago</u>		<u>Today</u>	<u>20 yrs ago</u>
<input type="checkbox"/> pā'ā'ā			<input type="checkbox"/> kawakawa		
<input type="checkbox"/> halalū/hahalalū			<input type="checkbox"/> kūmū		
<input type="checkbox"/> akule			<input type="checkbox"/> moi		
<input type="checkbox"/> āholehole			<input type="checkbox"/> moano		
<input type="checkbox"/> āhole			<input type="checkbox"/> kamanu		
<input type="checkbox"/> 'ahi			<input type="checkbox"/> mu		
<input type="checkbox"/> kīna'u/'āhua			<input type="checkbox"/> 'ō'io		
<input type="checkbox"/> aku			<input type="checkbox"/> ono		
<input type="checkbox"/> 'alalauā/'alauwā			<input type="checkbox"/> 'ōpelu		
<input type="checkbox"/> 'āweoweo			<input type="checkbox"/> mahimahi		
<input type="checkbox"/> puawa			<input type="checkbox"/> mamo		
<input type="checkbox"/> awa			<input type="checkbox"/> manini		
<input type="checkbox"/> pua'ama			<input type="checkbox"/> nehu		
<input type="checkbox"/> 'ama'ama			<input type="checkbox"/> 'oama		

<input type="checkbox"/> 'anae			<input type="checkbox"/> weke		
<input type="checkbox"/> nenuē			<input type="checkbox"/> u'u		
<input type="checkbox"/> kole			<input type="checkbox"/> 'ōpakapaka		
<input type="checkbox"/> pāpio			<input type="checkbox"/> 'ōpelu kala		
<input type="checkbox"/> pā'ūū			<input type="checkbox"/> a'u		
<input type="checkbox"/> ulua			<input type="checkbox"/> uhu		
<input type="checkbox"/> 'ōmilu			<input type="checkbox"/> uouoa		
<input type="checkbox"/> 'ōhua			<input type="checkbox"/> wana		
<input type="checkbox"/> manini			<input type="checkbox"/> hā'uke'uke		
<input type="checkbox"/> uhu			<input type="checkbox"/> kūpipi		
<input type="checkbox"/> hinālea			<input type="checkbox"/> kūpe'e		
<input type="checkbox"/> halahala			<input type="checkbox"/> leho		
<input type="checkbox"/> kāhala			<input type="checkbox"/> ula		
<input type="checkbox"/> kaku			<input type="checkbox"/> 'a'ama		
<input type="checkbox"/> ta'ape			<input type="checkbox"/> he'e		
<input type="checkbox"/> to'au			<input type="checkbox"/> loli		
<input type="checkbox"/> lai			<input type="checkbox"/> 'ōpae		
<input type="checkbox"/> uku			<input type="checkbox"/> pa'a kai		
<input type="checkbox"/> ene nui			<input type="checkbox"/> limu		
<input type="checkbox"/> hage			<input type="checkbox"/> hinaleā		
<input type="checkbox"/> palani			<input type="checkbox"/> kala		
<input type="checkbox"/> onaga			<input type="checkbox"/> kīna'u		

FISHING AND OCEAN GATHERING PRACTICES

I'd like to understand more about how you fish and/or gather ocean resources from the [Site Name] area, and how important these activities are to you and your household.

12. What methods/gears do you typically use these days when fishing or ocean harvesting within the [Site Name] area?

(INTERVIEWER: CHECK THE BOX NEXT TO EACH METHOD INDICATED BY RESPONDENT. ASK CLARIFYING QUESTIONS AS NEEDED TO CATEGORIZE RESPONSE WITHIN CATEGORIES PROVIDED AS BEST POSSIBLE)

Primary Methods of Fishing and Ocean Gathering

(ADD ANY ADDITIONAL SITE SPECIFIC METHODS AS NEEDED)

- | | | |
|--|--|---|
| <input type="checkbox"/> Gather by hand | <input type="checkbox"/> Hook and Line (shore): Pole (`Ulua) 1 line/ 2 hooks max | <input type="checkbox"/> Net: Scoop net/hand net |
| <input type="checkbox"/> Spear: 3-prong / Hawaiian sling | <input type="checkbox"/> Hook and line (shore): whipping/fly | <input type="checkbox"/> Net: Surround (Ho`opuni) |
| <input type="checkbox"/> Spear gun/arbulet | <input type="checkbox"/> Hook and Line (boat): Trolling | <input type="checkbox"/> Net: Bag/purse |
| <input type="checkbox"/> Spear w/ SCUBA | <input type="checkbox"/> Net: Throw (Ho`olei) | <input type="checkbox"/> Net: Lay (Moemoe) |
| <input type="checkbox"/> Hook and Line: Hand line | <input type="checkbox"/> Net: Hukilau | <input type="checkbox"/> Trap |
| <input type="checkbox"/> Hook and Line (shore): slide bait | <input type="checkbox"/> Net: Bang-bang (Pa`ipa`i) | <input type="checkbox"/> Other (PLEASE SPECIFY)

_____ |

FOR THE NEXT QUESTION, PLEASE RESPOND IN TERMS OF YOUR PERSONAL OBSERVATION AND EXPERIENCE WITHIN YOUR EXTENDED OHANA – MEANING FAMILY RELATIVES INCLUDING OR BEYOND YOUR IMMEDIATE HOUSEHOLD

13. a) I am going to read you a list of reasons for fishing and gathering within the [Site Name] area, and I'd like you tell me the how often you participate in these activities within the past 5 years, using a scale from 1-5 where:

- 1 = never,
- 2 = less than a couple times a year,
- 3 = more than a couple times a year and less than once a month,
- 4 = at least once a month (on average) but less than once per week, and
- 5 = at least once per week (on average)

Feel free to let me know if you are not sure or don't know.

(INTERVIEWER: READ EACH PURPOSE LISTED IN TABLE 4 BELOW AND PROMPT RESPONDENT TO ANSWER USING THE 1-5 SCALE. CIRCLE ONE RESPONSE PER CHECKED ROW)

Table 4. Frequency of Fishing and Ocean Gathering Activities

Reasons for Fishing and Ocean Gathering	1 = Never	2 = < A couple times a year	3 = Couple times a year, < once a month	4 = At least once a month, < once a week	5 = At least once per week	N/A = Unsure/ Don't know
Feed yourself/your family	1	2	3	4	5	N/A
Share with other individuals and families (not special events)	1	2	3	4	5	N/A

Generate income/to sell	1	2	3	4	5	N/A
Provide food for special social events and gatherings (pa`ina, luau for birthdays, graduations, funerals etc.)	1	2	3	4	5	N/A
Provide food for other Hawaiian cultural or religious ceremonial events (e.g. hula)	1	2	3	4	5	N/A
For enjoyment	1	2	3	4	5	N/A

b) Are there any other reasons?

(INTERVIEWER: WRITE IN ANY "OTHER" REASONS IN THE SPACE PROVIDED, AND ASK RESPONDENT TO INDICATE HOW OFTEN THEY TYPICALLY FISH OR GATHER FOR THAT REASON USING THE 1 to 5 SCALE PROVIDED)

1 st Other Reason <i>(PLEASE SPECIFY)</i> _____	1	2	3	4	5	N/A
2 nd Other Reason <i>(PLEASE SPECIFY)</i> _____	1	2	3	4	5	N/A

14. a) Now I'm going to read you some potential benefits your 'ohana may experience as a result of fishing and gathering within the ocean area of [Site Name], and I'd like you to tell me the extent to which your 'ohana experiences this using a scale from 1-4 where:

- 1 = No benefit experienced
- 2 = Little benefit experienced
- 3 = Some/moderate benefit experienced
- 4 = A lot of benefit experienced

Feel free to let me know if you are not sure or don't know.

(INTERVIEWER: READ EACH PURPOSE LISTED IN TABLE 5 BELOW AND PROMPT RESPONDENT TO ANSWER USING THE 1-4 SCALE. CIRCLE ONE RESPONSE PER CHECKED ROW)

Table 5. Perceived Household Benefits of Fishing and Ocean Gathering

Potential Benefits of Fishing and Ocean Gathering	1 = No benefit	2 = Little benefit	3 = Some benefit	4 = A lot of benefit	N/A = Don't know/ Unsure
Provide healthy food/diet	1	2	3	4	N/A
Save money on buying food	1	2	3	4	N/A
Promotes family togetherness	1	2	3	4	N/A

Physical fitness/exercise	1	2	3	4	N/A
Source of Recreation/Fun	1	2	3	4	N/A
Promotes and perpetuates cultural knowledge, identity and values	1	2	3	4	N/A
Māhele maintains/strengthens social networks	1	2	3	4	N/A
Education and/or Learning	1	2	3	4	N/A
Supports spiritual well-being/religious practices	1	2	3	4	N/A
Provides a source of income	1	2	3	4	N/A

b) Are there any other benefits that you experience which were not mentioned?

(INTERVIEWER: WRITE IN ANY "OTHER" BENEFITS IN THE SPACE PROVIDED, AND PROMPT RESPONDENT TO ANSWER USING THE 1-4 SCALE. CIRCLE ONE RESPONSE PER CHECKED ROW)

1 st Other Reason <i>(PLEASE SPECIFY)</i> _____	1	2	3	4	5	N/A
2 nd Other Reason <i>(PLEASE SPECIFY)</i> _____	1	2	3	4	5	N/A

FOR THIS NEXT QUESTION, PLEASE RESPOND IN TERMS OF YOUR FAMILY HOUSEHOLD – MEANING FAMILY MEMBERS LIVING UNDER THE SAME ROOF

15. How often do you and your family eat meals that include fish or other marine resources harvested from [Site Name]’s ocean waters indicated on the map? *(INTERVIEWER: REFER TO MAP)*

- | | |
|--|----------------------------------|
| <input type="checkbox"/> Never | <input type="checkbox"/> Monthly |
| <input type="checkbox"/> Once a year or less | <input type="checkbox"/> Weekly |
| <input type="checkbox"/> Few times a year | <input type="checkbox"/> Daily |

16. Next, I'm going to read you some statements, and based on your knowledge, experience, and personal observations, I'd like you tell me the extent to which you agree or disagree with each statement using a scale of 1 - 5, where:

1 = Strongly Disagree 2 = Disagree 3 = Neither agree nor disagree 4 = Agree 5 = Strongly Agree

Feel free to let me know if you are not sure or don't know.

Table 6. Perceptions of Fishing and Ocean Gathering Practices

Statements [Tailor Statements to place-based Traditional Management Practices, EXCEPT Statements with "DO NOT REMOVE"]	<i>(CIRCLE ONE RESPONSE PER ROW)</i>					
	1 = Strongly Disagree	2 = Disagree	3 = Neither agree nor disagree	4 = Agree	5 = Strongly Agree	N/A = Don't know/ Unsure
I frequently see ocean users taking care of (mālama) the ocean areas within [Site Name]	1	2	3	4	5	N/A
Traditional fishing and management practices are not followed by most fishers and gathers within the ocean areas of [Site Name] (DO NOT REMOVE)	1	2	3	4	5	N/A
Increasing numbers of youth from [Site Name] are practicing traditional Hawaiian cultural values and fishing practices. (DO NOT REMOVE)	1	2	3	4	5	N/A

PERCEPTIONS OF MANAGEMENT

The next couple of questions are related to your perceptions about potential management needs or issues. Please answer to the best of your ability based on your own knowledge and experiences.

17. In your opinion, what are the threats to the health of marine resources and habitat in the ocean areas of [Site Name], and how much of threat to they pose using a scale of 1-3 where:

1 = Not Much of a Problem 2 = Somewhat of a Problem 3 = Serious Problem

Feel free to let me know if you are not sure or don't know how much of a problem it is.

(INTERVIEWER: DO NOT READ THREATS LISTED IN TABLE AND ALLOW RESPONDENT TO ANSWER WITHOUT PROMPTING. CHECK YES/NO IN THE FIRST COLUMN OF TABLE 7 BELOW FOR EACH THREAT LISTED TO INDICATE WHETHER THEY WERE IDENTIFIED BY THE RESPONDENT AS A THREAT. WRITE IN "OTHER" THREATS MENTIONED BY RESPONDENTS NEEDED. CIRCLE ONE RESPONSE PER CHECKED ROW)

Table 7. Perceptions of Potential Management Issues

Identified as a Threat by Respondent	Perceived Threats (Modify Choices to Reflect Site Specific Management Concerns)	CIRCLE ONE RESPONSE PER CHECKED ROW			
		1 = Not Much of a Problem	2 = Somewhat of a Problem	3 = Serious Problem	N/A = Unsure/ Don't Know
<input type="checkbox"/> YES <input type="checkbox"/> NO	Sedimentation	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Water quality (chemicals and nutrients)	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Coral bleaching/ocean warming	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Commercial fishing	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Sunscreen Impacts on Coral Reefs	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Boat noise	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Walking on the reef	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Lack of enforcement	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Overfishing	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Lack of compliance with rules	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Changing value systems	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Weak penalties for fishing regulation violations	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Scuba spear fishing	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Other (PLEASE SPECIFY) _____	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Other (PLEASE SPECIFY) _____	1	2	3	N/A

18. What activities or ocean uses interfere with your ability to fish, gather or access the ocean area of [Site Name], and how much of problem does their interference pose using a scale of 1-3 where:

- 1 = Not Much of a Problem/Rarely Interferes
- 2 = Somewhat of a Problem/Sometimes Prevents or Disrupts My Use
- 3 = Serious Problem/ Regularly Prevents or Disrupts My Use

Feel free to let me know if you are not sure or don't know how much of a problem it is.

(INTERVIEWER: ALLOW RESPONDENT TO ANSWER WITHOUT PROMPTING, DO NOT READ THE ACTIVITIES LISTED IN TABLE 8. CHECK YES/NO IN THE FIRST COLUMN OF THE TABLE BELOW FOR EACH ACTIVITY LISTED TO INDICATE WHETHER THE RESPONDENT IDENTIFIED THE ACTIVITY AS INTERFERING WITH FISHING ACTIVITIES. WRITE IN "OTHER" ACTIVITIES MENTIONED BY RESPONDENTS NEEDED. CIRCLE ONE RESPONSE PER CHECKED ROW)

Table 8. Perceived Interference of Ocean Activities with Fishing and Ocean Gathering

Interference Identified by Respondent	Activity/Use [Tailor to Site Specific Activities]	1 = Not Much of a Problem/Rarely Interferes	2 = Somewhat of a Problem/ Sometimes Prevents or Disrupts My Use	3 = Serious Problem/ Regularly Prevents or Disrupts My Use	N/A = Unsure/ Don't Know
<input type="checkbox"/> YES <input type="checkbox"/> NO	Swimming/Snorkeling	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Scuba diving	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Surfing/kite surfing/windsurfing	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Body-surfing/body-boarding	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Kayaking	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Wa'a/Canoe paddling	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Boating	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Commercial charter tours	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Non-commercial fishing	1	2	3	N/A

<input type="checkbox"/> YES <input type="checkbox"/> NO	Commercial fishing	1	2	3	N/A
<input type="checkbox"/> YES <input type="checkbox"/> NO	Other <i>(PLEASE SPECIFY)</i> _____	1	2	3	N/A

19. In the past year, to what extent do fishers and gathers follow the regulations within the ocean waters of [Site Name]? (INTERVIEWER: PROMPT RESPONDENT WITH ANSWER CHOICES BELOW, AND CHECK ONE RESPONSE)

- | | |
|--|--|
| <input type="checkbox"/> 1 = None follow the rules | <input type="checkbox"/> 4 = Most follow the rules |
| <input type="checkbox"/> 2 = Few follow the rules | <input type="checkbox"/> 5 = All follow the rules |
| <input type="checkbox"/> 3 = Some follow the rules | <input type="checkbox"/> N/A = Unsure/don't know |

20. The following questions are related to fishing regulations within the ocean area of the [Site Name] (tailor to existing state regulations pre-designation, and to CBSFA regulations post designation)

Can you please tell me:

- a) How many [species name 1] are you allowed to take in a day? _____
- b) How many [species name 2] are you allowed to take in a day? _____
- c) Which gears/methods are illegal to use within the area?

(INTERVIEWER: ALLOW RESPONDENT TO ANSWER WITHOUT PROMPTING/READING OPTIONS. CHECK ALL INDICATED BY RESPONDENT. YOU DO NOT NEED TO RECORD OPTIONS MENTIONED BY RESPONDENT WHICH ARE NOT LISTED HERE)

- Lay net Spear gun More than 2 poles By hand

Identify two things related to marine resource management within the ocean area of [Site Name] that you think could be improved.

1)

2)

RESPONDENT DEMOGRAPHICS

We are almost done, just a few more questions.

21. May I ask your age? _____

22. Including yourself, how many people are in your/your family’s household (living under the same roof)? _____

23. Please indicate the ethnic groups you most identify with (*INTERVIEWER: CHECK ALL THAT APPLY, OR IF RESPONDENT DOES NOT WANT TO INDICATE, CHECK “NO RESPONSE”*)

- | | | |
|-------------------------------------|--|---|
| <input type="checkbox"/> Caucasian | <input type="checkbox"/> Portuguese | <input type="checkbox"/> Hispanic or Latino |
| <input type="checkbox"/> Chinese | <input type="checkbox"/> Samoan | <input type="checkbox"/> African American |
| <input type="checkbox"/> Japanese | <input type="checkbox"/> Tongan | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Filipino | <input type="checkbox"/> Micronesian | <input type="checkbox"/> No Response |
| <input type="checkbox"/> Korean | <input type="checkbox"/> Native Hawaiian
(full or part) | |
| <input type="checkbox"/> Vietnamese | | |

24. (**OPTIONAL QUESTION**) Would you describe your household’s income as (*INTERVIEWER: READ RESPONSE OPTIONS AND CHECK THE RESPONSE INDICATED*)

- | | |
|--|---|
| <input type="checkbox"/> Got plenty, lots of extra disposable income | <input type="checkbox"/> Just covers expenses |
| <input type="checkbox"/> Got a little savings | <input type="checkbox"/> Not enough to cover expenses |

25. Can you recommend any other individuals who are knowledgeable about fishing or gathering marine resources within the ocean waters we’ve been discussing today, that you think should be included in this interview?

1. Name _____
How best to contact/Contact Info (if shareable)

2. Name _____
How best to contact/Contact Info (if shareable)

3. Name _____
How best to contact/Contact Info (if shareable)

4. Name _____
How best to contact/Contact Info (if shareable)

5. Name _____
How best to contact/Contact Info (if shareable)

26. Finally, do have anything else to add about the topic of the survey that is important or that I forgot to ask?

Mahalo nui loa for your participation in this survey! We really appreciate your time. Once completed, we will write up the survey results and will send any interested participants the results.

Would you be interested in receiving updates on the results of this survey? Yes No

(INTERVIEWER: ON A SEPARATE SHEET OF PAPER, HAVE INTERESTED PARTICIPANTS PROVIDE THEIR CONTACT DETAILS AND SIGNATURE IF THEY WANT TO RECEIVE A COPY OF SURVEY RESULTS.

REFERENCE MAP OF OCEAN WATERS OF [Site Name]

Create and include map of ocean areas of interest and include many locally known reference points on the map and ensure surveyors are able to clearly explain these reference points to help orient people to the map.