13.1. Appendix A: Survey

SURVEY TO UNDERSTAND COMMUNITY PERCEPTION OF NO-TAKE MARINE RESERVES

This research is being conducted by TURFeffect, a group of master's students at the Bren School of Environmental Science & Management at the University of California, Santa Barbara, located in the United States of America.

The group is working with Comunidad y Biodiversidad A.C. (COBI) to create a framework for evaluating the success of no-take marine reserves in Mexico. The purpose of this survey is to fill information gaps about the communities that COBI has been working with the past 15 years. This information will be used to perform sample analyses on selected indicators that measure changes in the environment, economy and social structures after the implementation of no-take zones.

The participation at this survey is voluntary and the interviewee may decline to participate or withdraw from participating at any time, without any penalization.

Interviewer: _____ **Date:** _____

Name of the community: _____

SECTION 1

The following questions are for demographics purposes only.

Interviewee: _____ **Gender:** _____ **Age:** ____

Occupation: _____

How long have you lived in this community? _____

Level of education   **Diver**

__No formal education   __Yes
__Primary school   __No
__Secondary school
__Professional school
__College (Bachelor's degree)
__Other:_____

How long have you had that job? _____

How often do you work? _____

If the interviewee is a leader of the fishing community, proceed with the survey in Section 2; if the interviewee is a regular fisher/diver, jump to Section 3

SECTION 2

The following questions should be answered only by leaders of fishing community.

1. Are the fishers of this community organized? If so, how? How many of each type of organization?

__ Cooperative

__ Association

__ Union

__ Other. Please specify:

2. Could you give us the following information about the no-take zones in this area?

Name of the area	Year of implementation	Reasoning for location

3. Who initiated the process of creating the no-take zones? Select all that apply and highlight the top 3 actors.

__ Community

__ Cooperative

__ Non-Governmental Organizations: _____

__ Academics

__ Government Agencies: _____

__ Other. Please specify: _____

4. Who is involved in the management, monitoring and enforcement of the no-take zone? Select all that apply.

	Management	Monitoring	Enforcement
Community			
Fishing Community			
Cooperative			
Non-Governmental Organizations:			
Contracted companies:			
Academics			
Government Agencies			
Other. Please specify:			
Who else should participate in these processes?			

5. Are the no-take zones legally recognized by the government?
__ Yes
__ No

 5.1. If they are not recognized, has the community already started the process to get its no-take zones recognized?

 5.2. If the no-take zone is not recognized and the community did not start the process yet, are they willing to do it?

6. Is there a document or guide that explicitly presents the information about the management of the non-fishing zone?
__ Yes
__ No
__ I don't know

7. How are the local fisheries managed? Select all that apply.

__ TURF: _____

__ Permits: _____

__ Quotas (whole fishery): _____

__ Individual Quota: _____

__ Open Access: _____

__ Other. Please specify: _____

8. How is the enforcement done? Select all that apply

__ Sighting from land

__ Patrol boats

__ VMS (Vessel Monitoring System)

__ Other: Please specify.

9. Does your organization have rules about when, how or where to fish, that does not comes from CONAPESCA or other government agencies?

__ Yes

__ No

__ I don't know

	Before/at the implementation	Nowadays	Reason
10. Number of fishers in the community			

11. Would you say that an unusual natural event of "great proportions", such as a hurricane, El Niño, hypoxia or related events, occurred in the area of the reserve since the last monitoring event? If yes, what was the event?

SECTION 3

> *If the interviewee is just a Fisher or other person involved with fisheries (e.g. fish buyer or seller), then the survey should start here.*

12. Who participates on the decisions for the no-take zones? Select all that apply.

__ Community

__ Fishing Community

__ Cooperative

__ Non-Governmental Organizations: _____

__ Academics

__ Government Agencies.: _____

__ Others. Please, specify: _____

      12.1 Do you thinks someone else should be involved in the decision making process? Who else should participate in these processes?

13. How well do you think the vigilance and enforcement works in this community?

    __ Very good

    __ Good

    __ Moderate

    __ Bad

    __ Very Bad

14. From 0 to 5, how would you rate the illegal fishing (by illegal gear, effort, area) inside your fishing area? 0=low, 5=high

	By people from the community	By people from outside the community
Inside the NTZs		
Outside the NTZs		

15. After the implementation of the reserve, has government enforcement:

__ Increased

__ Stayed the same

__ Decreased

16. Enforcement works better when the government participates.

__ Strongly agree

__ Agree

__ Not sure

__ Disagree

__ Strongly disagree

17. Enforcement works better when the fishing group participates.
__ Strongly agree
__ Agree
__ Not sure
__ Disagree
__ Strongly disagree

	Before/at the implementation	Nowadays	Reason
18. How would you rate the level of alternative economic opportunities?	__ Very High __ High __ Moderate __ Restricted __ Low __ Null	__ Very High __ High __ Moderate __ Restricted __ Low __ Null	
19. What is the level of illegal fishing in the region?	__ Very High __ High __ Moderate __ Restricted __ Low __ Null	__ Very High __ High __ Moderate __ Restricted __ Low __ Null	

20. How would you answer the following questions?

I fish inside the NTZs	__Never __Sometimes __Always
Other fishers from the community fish inside the NTZs	__Never __Sometimes __Always
Fishers from nearby communities fish inside the NTZs	__Never __Sometimes __Always

21. What do you think about the implementation of the no-take reserve with respect to:

    21.1. The environment

Indicator	Improved	Stable	Worsened	Reason for change
Species richness				
Fish length				
Density				
Biomass				
Abundance of predators				

    21.2. The communities' economy

Indicator	Improved	Stable	Worsened	Reason for change
Total landings				
Managed species landings				
Fisheries revenue				
Alternative economic activities				

    21.3. Local governance and management
        __ Improved
        __ Stayed the same
        __ Worsened

22. What is the general impact of the reserves in the community?
__ Positive
__ None
__ Negative

23. Do you think the no-take zone is effective?
__ Yes
__ No
__ I don't know

24. Do you think reserves should be eliminated, modified or stay the same?

Zone	Action	Why	How
	__ Eliminate __ Keep the same __ Modify		
	__ Eliminate __ Keep the same __ Modify		
	__ Eliminate __ Keep the same __ Modify		
	__ Eliminate __ Keep the same __ Modify		
	__ Eliminate __ Keep the same __ Modify		

25. Would like to add any comment?