Key Informant Interview 4

Date: 9/21/2016

Stakeholder Group: Academia/Research

Years of Experience in Occupation/Field: 35 years

Community/Area/Location: Mayaguez

Speaker 1. Describe your involvement with Puerto Rican fisheries.

Speaker 2. I conduct research on coral reefs/fisheries. I am also a member of [scientific advisory groups].

Speaker 1. In general, how would you rate Puerto Rico coastal communities’ dependency on fisheries for their livelihood? Describe (e.g. In what ways? Why do you think that is?).

Speaker 2. Their dependency on fisheries is based on how you gauge it. Landings and value are not great; in fact, a vast majority of fish are imported. Fisheries are recreationally important to the economy and supports the tourism culture. This is important to the communities who depend on tourism. Restaurants serve imported fish but the perception among tourists is that they are eating locally. This perception helps the tourism industry but not the fishers. It often drives the tourism industry and benefits rentals, boats, etc.

Speaker 1. In general, how would you rate Puerto Rico coastal communities’ dependency on coral reefs for their livelihood?

Speaker 2. Very Dependent

Speaker 1. Describe (e.g. In what ways? Why do you think that is?).

Speaker 2. Communities involved in tourism around coral reefs are very dependent on the reefs for their livelihoods.

Speaker 1. What would you say is(are) the major problem(s) facing fishing communities in Puerto Rico? (If more than one please rank them in order of importance).

Speaker 2. The east coast is better than the rest of the island. Overall, the system is quite degraded from various threats. Major problems facing fishing communities: 1. Lack of fish due to overfishing 2. Habitats degraded (need habitat restoration so fish populations can get back to higher numbers). There is also a 3. disconnect between the agencies, scientists, and managers and the fishing communities 4. Need better control of effort.

Speaker 1. Have you observed any changes to the fishery, environment, or other natural resources in Puerto Rico that you think can be attributed to climate change? Describe.

Speaker 2. 1) Large scale die-off of corals due to bleaching; 2) Distribution of fish. Changes in where you can find fish (fishermen have told this to scientists); 3) Spawning changes. Depends on colder water temperatures in winter, so as water temperatures increase, the optimum temperature range for spawning will change. Spawning season was November to December, we are now seeing a shift for some species of fish to January-March spawning. Not a lot of work has been done in Puerto Rico on the impacts of climate change. Some local work on temperature as a stressor. For example, in the 1980s, sponge populations started to decline. Sponges are not commercially harvested, most likely because of water temperature increasing.

Speaker 1. In your opinion, are Puerto Rican fishers concerned about climate change? Why or why not?

Speaker 2. The greater community is not aware of climate change, but more awareness on the individual level. Some fishers will state climate is the reason others believe terrestrial impacts are a greater concern (sedimentation, pollution).

Speaker 1. In your opinion, are Puerto Rico fishery manager/decision-makers/researchers concerned about climate change? Why or why not?

Speaker 2. Excluding legislators, yes these individuals are well aware of the impacts and are working to make their efforts on this issue heard. However, how this translates into policy is another story. Coastal communities are concerned about hurricanes and health issues (Zika) but they may not be aware of the connections to climate change.

Speaker 1. Do you think people in this community can work together to solve community problems? Why or why not?

Speaker 2. Yes – there needs be to some legwork done on prepping the stage for this. At the community level, the mayors’ offices seem to focus on getting as many tourists to come as possible. The tourism industry seems to have first priority even at the expense of environmental impacts. If the community decided to cut back on tourist development, I believe they would hit some roadblocks.

Speaker 1. Do you think fishers could work together to solve problems in the fishery? Why or why not?

Speaker 2. Fishers are willing to do this. They see the impacts that are affecting their lives and fishing operations. Fishermen believe that all the problems are blamed on overfishing and yet they believe there are other factors involved too (not just removing too many fish). They are vocal are what should be done but they are not trusting of the government. A third party is needed to facilitate, otherwise nothing will happen – it is very frustrating.

Speaker 1. Can you think of any examples of this kind of community action occurring now in Puerto Rican fisheries? Describe.

Speaker 2. I can not think of an example where the fishermen have taken the lead. However, they have worked with scientists to discuss inconsistency with fishery closings for spawning seasons. I think the fishermen need better resources, money, and consistency in order to be able to work together

Speaker 1. Do you think the government and fishers could work together to solve problems in the fishery? Why or why not?

Speaker 2. Yes, they can. At the Council level, there is a lot of cooperation. The advisory committee can express what should be done and can work to convince the government to address certain issues.

Speaker 1. Can you think of any examples of this kind of participatory action occurring now in Puerto Rican fisheries? Describe.

Speaker 2. The fishers are now allowed to bring conch back to dock without shells. The allowable catch was lowered, but this was something the fishers worked hard to accomplish. Sea Grant assisted with helping to make this change.

Speaker 1. Do you feel that fishery management in Puerto Rico is fair in the decisions they make? Why or why not? Be specific.

Speaker 2. The Fishery Council and the DNER work very differently. DNER has a top down approach, fishers are not involved. Regulations come from a mysterious committee. One person from DNER is the avenue for dialogue and the information is passed up the chain, often to a new director. There are no hearing processes before final decisions are made so no one knows what the final rules will look like. There is a lot not considered. This does not mean that regulations are not sensible but the process is not the right way to go about creating regulations. The Fishery Management Council is transparent, have regular meetings, lots of discussion over and over before things are put into writing. Heads of advisory council and fishers debate. I am not saying that the fishers like the scientists but it is a more open forum. However, some fishers can pressure management despite the science since management happens in the public realm and at times decisions are made regardless of scientific effort. The process needs to be more fair for all – fishers, scientists, managers.

Speaker 1. Do you think most fishers understand how managers make decisions? Why or why not?

Speaker 2. Whether they do or not, I think they would say they do not. Those engaged in the process are more likely to understand. Many who are not engaged do not know. There are lots of fishers who are not aware of the process.

Speaker 1. In general, how would you describe the relationship between fishers and fishery managers/decision-makers?

Speaker 2. It depends who you are talking about. The actions taken by the Council advisory committee with fishers involved are often understood at the local level by the fishers.

Speaker 1. If they exist, how are conflicts between fishers and between fishers and managers/decision-makers resolved?

Speaker 2. When forums are held, they are usually not resolved or are only resolved because the press gets a hold of it. It depends on the degree of the problem and the attention the agency gives it. If channel through the fishery advisory committee, best chance of change. Getting press coverage by fishers works, but not sure changes that are based on this type of attention are the best resolution since the focus of the problem does not change.