

# 7.B.2(1)

155th SSC

## 7.B.2 SSC Historical Perspective: Social Science

### The mandate and need for Social Sciences in the Fishery Management Council Advisory Process: WP Council. SSC, SSPC Craig Severance 3/11/2025

**Fisheries Social Science: Why is it mandated under MSA? How can it help bring the “Human Dimension” into effective and equitable management”?**

**“The genius of Magnuson lies in its’ flexibility to accommodate regional differences and give fishermen a voice”! “The hope of Magnuson is to regulate people in hopes of helping fish stocks by considering what motivates and constrains people in fishing communities” P C 2025**

The focus of the social and behavioral sciences is on the human dimension of how people think and behave both individually and collectively, as members of cultures and communities. It includes how people may be influenced by information and setting, and how they may respond to control and regulation. The human dimension includes their economies, technologies, social structures and power relations as well as cultural assumptions and belief systems.

The most important MSA sections on social science, data and interpretation for policy advice to be considered by the SSC are section 302g and NS 8 including the draft guidance.

Section 302g: “Each SSC shall provide its Council ongoing scientific advice for fishery management decisions, including.....social and economic impacts of management measures and sustainability of fishing practices”.

Section 301, N S 8 “Conservation and management measures shall, consistent with the conservation requirements of this act (including the prevention of overfishing and rebuilding of overfished stocks) take into account the importance of fishery resources to fishing communities by utilizing economic and social data to meet the requirements of paragraph (2), in order to A. provide for the sustained participation of such communities, and (B) to the extent practicable, minimize economic impact on such communities”. Note Par. 2 = BSIA.

Note that the current NS 8 guidance makes minimizing adverse economic impacts secondary to the conservation requirements of NS 1. “All things being equal where 2 alternatives achieve similar conservation goals, the alternative that provides the greater potential for sustained participation and minimizes the adverse economic impacts on such communities would be the preferred alternative”.

The current guidance is under review,<sup>1</sup> and has had public, SSC, and Council input. The Council’s comments on the NS8 guidance revisions<sup>2</sup> suggested a shift in the definition of “fishing

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<sup>1</sup> <https://www.fisheries.noaa.gov/action/advanced-notice-proposed-rulemaking-revisions-guidelines-national-standards-4-8-and-9>

<sup>2</sup> <https://www.fisherycouncils.org/s/WPRFMC-Comments-on-NS-4-8-9-Ltr-9-12-23-Final.pdf>

community” from being substantially dependent or substantially engaged to simply substantially engaged in harvesting or processing to meet social and economic needs. NS 4 on Allocation may need to be balanced against NS 8, and that requires consideration of demographic, economic and social data.

In general, the concept of “community” as used in the social sciences implies a sense of shared social interaction, experience, knowledge. And even a degree of identity. It may include a sense of place but doesn’t have to. It’s a fuzzy concept that given enough flexibility can be used in a variety of contexts. It’s useful to give a “community” an operating definition for particular contexts i.e. Here we mean community to include.....! It is also useful to give a clear sense of time frame and scale, particularly if community members need to demonstrate historical participation in the fishery or are dispersed or concentrated since demographic and economic data is important for assessing equity. Hence the operating definition of an affected community may be different for different actions even in the same region or archipelago. The Western Pacific “Fishing Community” definitions may need refinement.

Increasingly, people with interdisciplinary degree training and experience with social science methods, data analysis and interpretation are becoming involved in fishery science. The WP Region incorporates a variety of languages, cultures, levels of affluence and political structures as well as significant shared cultural viewpoints and beliefs. It is important that fisheries social scientists, especially on the SSC, develop some knowledge, understanding of the cultures, empathy for research and cultural protocols, especially for getting research access both informal and formal.

The methods used for both baseline and issue and crisis focused research can include participant observation where possible, i.e. spending time on the water with fishermen and learning to do what they do while observing and listening and trying to understand how local fishermen perceive their world, including their regulatory agencies and context. This requires respect and a degree of cultural sensitivity. In general, folks in small communities, especially in the Pacific Islands are adept at recognizing ethnocentrism, and unconscious disdain through body language and action or inaction by outsiders. Humility, respect and sensitivity to cultural differences and even protocols can go a long way to make social science more useful in the SSC process. In this context, it may be useful to think of institutional cultures as sharing lingo, values and assumptions i.e. the silos within NOAA.

While each discipline may have specific preferred methods, there are common methods to all. These generally include informal interviewing which should precede and inform more formal interviewing, focus groups, and various forms of social surveys, which are especially difficult in cross cultural and cross language situations. Specialized tools like cognitive mapping and photo-interviewing can be helpful. Ability to review and synthesize documents is critical. There is an often-untapped resource in various government documents like census materials, import statistics, consumer price information etc.

There are always issues with sample size, sampling frame and representativeness. There are cumbersome restrictions on formal surveys under RPA and OMB regulations, and clearance can take too long when critical issues arise. This is why it is so important to have periodic cost-

earnings surveys and fishing community profiles, and these should be updated regularly. Knowing the social and cultural literature on the region is important. For social researchers, developing and maintaining contacts in regional communities is useful.

Methods skills should include using a developmental sequence moving from the qualitative to the quantitative, that grounds the quantitative, when appropriate, to local cultural and social meanings and expectations. Hence informal; “talk story” flexible interviews and even focus group results should be considered for their representativeness and should always precede and inform the development of any survey instruments used in an attempt to quantify results for a more representative sample. Hence it is appropriate to use expert panels to develop initial but useful information. It is also generally effective to use knowledgeable members of local communities as part of a research team. These can be key informants and colleagues who are respected local fishermen and experts. Note, however, that local community members who gravitate to or volunteer with outsider research teams often have their own agendas, and may not be respected by other members of the insider community.

The WP Council region has very few social scientists with interest and expertise in fisheries. Disciplinary training matters less than an ability to use methods and theory from the social sciences to describe and interpret past and anticipated human behavior in the fisheries and resource management context. This is especially useful if one can assess the probable impact of proposed fishery regulatory alternatives in a NEPA like context or in fishery impact statements. (Clay and Colburn, 2020; Severance, 2021)

Social research takes time and is expensive. Having social scientists with solid backgrounds in methods and theory, and familiarity with the cultures and fishery systems of the region or a willingness to gain it can contribute significantly to providing effective advice to the Council. Many times, a quick review of existing documents with an understanding of community values is all that can be accomplished on short notice. Ideally, critical issues can make allowance for short and focused research trips that obtain current needed information. Some of this can be done virtually, and this is where the APs can be helpful

When the SSC is commenting on a suite of alternatives for a proposed FEP amendment, or regulatory action, it is easy to assume that that action is more appropriate for Council decision, and some SSCs (NPC?) may take that position on allocations. Yet the MSA mandates the use of social science generated information for advice to the council in multiple sections, and the use of social science advice is noted in the Council’s own SOPP.

I argue that the SSC social scientists should weigh in on the quality of research products, the quality of EIS, SIA documents and fishery Impact statements, the need for further research, and even on the possible reactions and resistances to proposed regulations, plan amendments, and data gathering procedures by fishermen and their families. This is a fine line and does not mean the SSC is telling the Council what to do. I suggest it means the SSC should be providing informed advice, especially on alternatives, and clarifying when the data is inadequate, and when reconsideration or further expedient research is needed. That is: give the Council cogent advice to help socially and economically inform their decisions and the potential impacts.

Projects, reports and other social and economic information include various Council documents, fishing community profiles, cultural value descriptions and periodic economic surveys. There are the 1989 Native Rights contract reports for all 4 parts of the region, the fishery Ecosystem workshop report and other tradition focused monographs (i.e. Glazier 2011, 2019), various fishing community profiles, specialized reports relating to key issues, periodic economic surveys of different fisheries and fleets etc. These are available on the council website, and through the PIFSC library. The Human Dimensions or SEES group at PIFSC produces many of these and they are quite useful for both general understanding and for assessing and responding to critical issues. There is also a scattering of independent academic publications that touch on aspects of the various cultures in the region's fishing communities. Some may be more general background pieces, and some may be more focused on issues and may be cited in FEP, and related amendment documents.

Traditional ecological knowledge (TEK, LEK) is important in our region, and recognition of the proprietary nature of some of this information is important. The new cultural protocols<sup>3</sup> just published by the council for the 2 territories and the commonwealth should guide all researchers in the region.

Key aspects of our region's fisheries include the fact that we have true subsistence fisheries, yet "subsistence" fishing isn't recognized in the MSA. That has led many researchers and fishers to prefer the term "non-commercial fishing" since, with the exception of the Hawaii Charter fleet that practices catch and release for marlin, we don't generally "play with our food"! A number of our fisheries can be considered data poor, and data on the catch and effort in the non-commercial sector is lacking or controversial. The small boat troll, handline, nearshore and deep bottom fisheries are culturally important and help provide food security for their communities. The Hawaii-based longline fleet has 3 different ethnic and cultural sectors, and translation has been used in regulations and training programs.

Sharing fish whole and in pieces even by "commercial" fishermen is culturally important, and is sometimes labeled or analyzed as "fish flow", a form of post-harvest distribution through social and friendship networks that arguably promotes social connections. Could there be a way to quantify an extended social value of such sharing, or even multiplier effects? When there are gifts of fish without an immediate and negotiated (i.e. barter) expectation of an equivalent return gift, the term "customary exchange" has been utilized to describe the cultural value of being generous and sharing in a non-commercial event or setting (Severance et.al. 2013). This concept has been used to argue for a limited non-profit sale of fish to partially reimburse costs to fishermen who are accessing Marine National Monuments for cultural purposes.

In sum, there is a clear mandate in the MSA and various NOAA fisheries guidance documents, especially those related to the MSA national standards, for including the social sciences in the SSC process. SSC social science folks on the SSC should be encouraged to conduct their own research in the region, to familiarize themselves with the literature on our fishing communities and have an appropriate voice in the SSC process.

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<sup>3</sup> <https://www.wpcouncil.org/protocols-and-tips-for-visiting-and-working-in-the-territories/>

The tension and fine line between seeing ourselves or being seen as directing or telling the Council what to do versus providing “scientific advice” to help inform Council decisions and encourage Council members to understand the complexities of policy alternatives, and the potential social economic and cultural impacts may be inherent in our task and mission.

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