

FIELD NOTES

The Role of Oral Histories in the Conduct of Fisheries Social Impact Assessments in Northeast US



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THE CONTEXT FOR SOCIAL IMPACT ASSESSMENT

In the US and elsewhere, a social impact assessment is required when the government implements regulations affecting the human environment. Because there is no standardized approach for conducting social impact assessments, an array of methods and data types are used. While greater validity is currently given to quantitative data and methods, we argue that the use of focused oral histories provides more timely and in-depth information on current conditions and potential impacts than is otherwise available in the limited time frame in which social impact assessments are often conducted. Further, oral histories provide a contextual framework for understanding quantitative results. Here we discuss the process by which oral histories contribute to the conduct of social impact assessments.

As a government agency, the National Marine Fisheries Service (NMFS) is responsible for the development of biological, economic, and social impact assessments of each proposed fishery regulation as required under the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. § 4321 et seq.) and the Magnuson-Stevens Fishery Conservation and Management Act of 1976 (MSA; 16 U.S.C. § 1801

et seq.). We will concentrate on social impact assessment, although we reference economic analyses. Social analysis looks at well-being, resilience, and vulnerability at the levels of individual, household, community and other social groups such as crews and networks. Economic analysis looks at financial viability at the levels of firm, industry, county, state and region, and net benefit at the level of the nation. These assessments discuss impacts of a proposed regulation by comparing social and economic institutions and processes to: a) where they would likely be under the proposed management regime, versus b) where they would likely be if no new regulations were implemented. Within the Magnuson-Stevens Fishery Conservation and Management Act is the additional requirement under National Standard 8 to sustain participation in fishing communities and to minimize adverse economic impacts (16 U.S.C. §1851(2)(8)).

OUR ORAL HISTORY PROGRAM

At the Northeast Fisheries Science Center (NEFSC) of the National Marine Fisheries Service,

historically there have been very few consistent time series data streams available for social impact assessment, apart from economic data that we repurposed to our interests.¹ We are now establishing surveys to provide quantitative data² and are also creating more qualitative sources, including a database of ongoing oral histories. Oral histories are a traditional anthropological method, but one that has been little used for social impact assessment. Some social impact assessments have included representative quotes from interviews, but not the systematic work we describe here. We also discuss the broader contribution of oral histories to our current management and research programs, and plans for further work.

We have a regular program of collecting oral histories – especially from women, a group we have found to be underrepresented in fisheries research in the Northeast US. One use of oral histories is to better understand well-being in relation to fishery management regulations for purposes of social impact assessment (Abbott-Jamieson 2007). We use oral histories in conjunction with other methods to increase the breadth of information available and to pinpoint, in a timely fashion, impacts which would otherwise go unnoticed. The impetus was our concern that, in practice, a social impact assessment was and still is heavily reliant on economic data (e.g., landed value) and that there has been no regular stream of sociocultural data. These oral histories, based on a standardized protocol, are our first attempt. The surveys noted above are the next step.

We have now established a large enough database to begin assessing general impacts on a broad scale. So far, we have conducted, transcribed, and coded 57 oral histories in Maine, Massachusetts, Rhode Island, New York, and New Jersey between 2004 and 2011. Of these, 55 have undergone at least preliminary analysis. Interviews are being sought in the remaining Northeast states³. Our oral histories have captured fishery management related changes in individuals, households, and communities.

While in the beginning our goal was to capture broad trends, as we move forward we are beginning to assess the social impacts of specific management measures – starting with the introduction of catch shares (a form of property) in the Northeast US Multispecies (groundfish) fishery. This has been a highly controversial measure and all stakeholders are urgently seeking data. A project is underway to conduct targeted, rapid turnaround collection and analysis of 40 oral histories of Rhode Island groundfish fishermen, some in catch shares groups (called sectors) and some not. Our protocol is streamlined and adapted to pinpoint the effects of this specific management measure. This is our first effort at this scale and level of specificity, for use directly in a particular impact evaluation.

INFORMATION PERTINENT TO SOCIAL IMPACT ASSESSMENTS

In commercial fisheries, daily routines, safety, occupational opportunities, business plans and community infrastructure can all be affected by changes in management measures. The changes can be multiple and interactive. The timing is also important; frequent changes in management measures can make long-term household and business planning difficult. Further, the cost of required changes in gear or operating procedures may be a burden for some vessel owners, leading them to operate with fewer crew or to fish further from shore, which are potential safety risks (Tuler et al. 2008) or delay retirement and household investments (e.g., children's education or house repairs). These impacts often vary by gear type, vessel size, community size, and location and other factors (Clay and Olson 2008; Olson 2011b).

Management measures that further reduce fishing options may have profound social and economic impacts on the future viability of commercial fishing as we know it today, potentially severely impacting small family-owned enterprises and transforming fishing into a more purely industrial or corporate occupation (see discussion in Kitts et al. 2011 of concentration of Northeast US groundfish earnings in fewer, larger

vessels). The fact that management changes occur in a broader biological, social and economic context of course makes it difficult to cleanly identify causation (see Georgianna and Schrader 2008), especially given current general economic downturns.

At the same time, the current state of the economy makes finding alternative employment difficult. The growing challenge to maintaining diverse as well as economically viable fishing operations has resulted in an increasing number of fishermen leaving the fishing industry, perhaps especially crew (on the Northeast US groundfish fishery, see Kitts et al. 2011, and Mendelson and Joyce 2011). Meanwhile, the tight fit between the unique characteristics of commercial fishing and the personality profile of fishermen has meant that many fishermen transitioning out of the industry have not found similar job satisfaction in other careers, resulting in personal and familial stress (Pollnac and Poggie 1988, 2006; Pollnac et al. 2001; Sievanen et al. 2005).

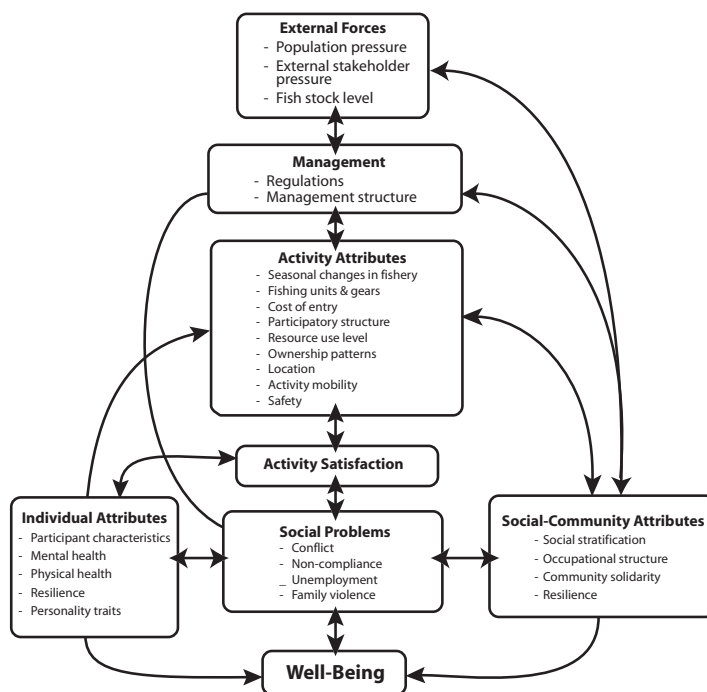
Changes in management measures can affect communities (Olson 2011a) in terms of fishing families, community demographics, social structure and infrastructure. Port infrastructure may be affected by the gradual loss of shore-based services essential to a strong working waterfront (Clay and Olson 2007, 2008; Robinson et al. 2003). Social networks may be fragmented and towns may lose population – impacting everything from taxes to local power structures such as town government. Our preliminary results, for instance, have identified a synergistic relationship between gentrifications trends, reduced capacity to fish, and community identity with fishing in Northeast US (Colburn 2007, 2008; Colburn and Clay 2009; Colburn and Jepson 2012).

A SYSTEMATIC MULTI-METHOD APPROACH

Oral histories are part of a multi-method research design geared to provide relevant quantitative and qualitative information for social impact assessments. In addition to an oral history database, we use fishing community profiles (Clay et al. 2008), a taxonomy of fishing communities developed using multivariate analysis (Smith et al. 2011), a contracted job satisfaction/well-being survey for 2010-2011, and a database of community level social indicators – and are adding two regular National Marine Fisheries Service surveys in 2012. This approach allows each method to serve as a crosscheck to the validity of the others.

To guide and systematize our social impact assessment research program, National Marine Fisheries Service and academic social scientists have created a conceptual model for organizing and understanding fisheries social impact assessments (Pollnac et al. 2006[2008]; see Figure 1). The goal for this model is to identify a dependent measure

FIGURE 1. Fisheries SIA model.



From: Pollnac, R. B., C. Smith, M. L. Miller, S. Abbott-Jamieson, P. M. Clay, and B. Oles. 2006 [2008] A model for fisheries social impact assessment. *Marine Fisheries Review* 68(1-4):1-18.

(well-being) for fisheries social impact assessment similar in structure to those found in economic impact analysis (i.e., maximum economic yield) or biological impact analysis (i.e., maximum sustainable yield), because fisheries managers report they find descriptive qualitative information difficult to use (Pollnac et al. 2006[2008]; Sharp and Lach 2003). At the Northeast Fisheries Science Center we have begun using this conceptual model, along with a set of Social and Economic Performance Measures for Fisheries (Clay et al. 2010), as a structural framework for organizing our overall social impact assessment work and related research.

The thematic foci of our oral histories, for example, are found in all levels of the social impact assessment conceptual model though primarily in the lower strata, i.e., individual attributes, social problems, and social community attributes. Interviewees transect and depict the many roles and perspectives of people involved in some aspect of fishing, including: women and men who fish; wives, husbands, grandmothers, grandfathers, mothers, fathers, sons and daughters of fishermen; multigenerational and recent entrants in the fishery; captains, owners, crew, and shore support (e.g., net makers and marine suppliers, and family members of individuals in these groups); and former fishermen. Frequently one person may embody more than one of these roles. Those interviewed also represent a range of perspectives on the effectiveness of management regulations, the accuracy of the science that drives management decisions, and the current condition of the fish stocks.

METHODS

The oral history is the focus of the methodology. If the goal is maximum sound quality, a quiet space to do the interview is important and the recorder must be set for high resolution recording to produce archival quality clarity. However, to maximize the opportunity for a great oral history this may need to be sacrificed. A post interview debrief sheet will capture immediate key impressions of the interview and can be added

to the final transcript. A release form is critical to maximize the breadth of use of the oral history. If at all possible, this should be signed before the interview begins. Our analysis and presentation of results are focused on understanding the broad array of perspectives, so in the write ups we do not use identifying information beyond the quotation and contextual information e.g., gender, occupation, location, etc. Sometimes only one of these variables is included, where identity might otherwise be deduced. Once the oral history is transcribed, a copy of the release form and the transcript are mailed to the interviewee, and then added to the database for analysis.

Beyond the interview, important methodological steps include creating an interview guide of topics to discuss, use of a digital recorder for carrying out interviews, and transcription of the recorded interviews—preferably by the interviewer⁴. Text analysis software such as Atlas ti™ (<http://www.atlasti.com/>) is used to systematically code and analyze the oral histories.

Initially, interviews were coded for broad meta-themes (Table 1). The meta-themes align with, though do not exactly match, the variables in Figure 1. A second round of coding focused on themes within meta-themes. New themes, meta-themes

TABLE 1. Meta-Themes.

Meta-Themes
• Demographic
• History in fishing
• Job satisfaction
• Perceptions of the future
• Management
• Work or income
• Social networks
• Perceptions of the future
• Well-being.
• External forces

and sub-themes emerged over multiple interviews and required adding codes to already transcribed interviews. This approach enables a more nuanced sense of what is important and, at the same time, depth and breadth. Coding consistency, i.e., interrater reliability, is achieved through interviews being coded by two people. Once analyses are complete, interviews are uploaded (where permission has been granted) to Voices from the Fisheries, a national National Marine Fisheries Service oral history archive (National Marine Fisheries Services 2012). In the interim, they are maintained in an internal Northeast Fisheries Science Center database.

IN SUMMARY

Oral histories, as part of a triangulated research methodology based on the Fisheries social impact assessment conceptual model and the Social and Economic Performance Measures for fisheries from the Northeast Fisheries Science Center: 1) provide in-depth information that can serve as the basis for designing complex variables of use in social impact assessments, 2) aid our understanding of the regional significance of variables in the fisheries social impact assessment conceptual model that are not easily quantifiable on a large scale, 3) ground-truth Northeast US community profiles, 4) elucidate in a timely manner the day-to-day impacts of management measures – as needed in a social impact assessment, and 5) are a timely qualitative means of providing time-depth data for use in cumulative impacts analysis as required under the National Environmental Policy Act and the Magnuson-Stevens Fishery Conservation and Management Act.

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NOTES

1. Economic impacts can have concomitant social impacts, and vice versa, thus these two assessments are best conducted in coordination.
2. Two biennial surveys are due to be fielded in late 2011, one for crew and the other for vessel owners, and are designed to provide as yet unavailable social and economic data to support newly developed Social and Economic Performance Measures for Fisheries developed by the Northeast Fisheries Science Center (Clay et al. 2010).
3. The states in Northeast Region of the National Marine Fisheries Service are: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, and Virginia.
4. This last is less critical when using text analysis software such as Atlas ti™ which makes it possible to insert comments and develop hypotheses related to each oral history while reading the transcript.

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