

Science, Service, Stewardship



Guidance for the Use of Social Science in Fishery Management

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**NOAA
FISHERIES
SERVICE**



Why include Social Science if we are managing fish?

- **Fishery managers don't manage fish; they manage people's access to fish ...**
- **Allocation decisions involve and affect cultural, sociological and economic patterns in society ...**
- **Conflict management requires the use of social science information and analysis...**



What does social science cover?

- **The social sciences study the ways that people live and work: who we are, and how we got that way.**
- **The social sciences are broad: looking at everything from how people use scarce resources for competing needs, how they organize themselves, to their knowledge, values, and ways of viewing the world.**



Where in an EA/EIS do you find social impacts?

Kinds of social analyses

- Social Impact Assessment (SIA)**
- Affected Human Environment (AHE) descriptions**
- National Standard 8**
- Environmental Justice**
- Cumulative Impacts**

Levels of Analysis

- individual, household, firm, and community levels**
- variety of participants and affected groups**



SIA Defined

- **An SIA is a scientific method of gauging the social and cultural consequences of alternative fishery management actions or policies**
- **An SIA determines socio-cultural conditions in human populations likely to be affected by the action or policy; projects future socio-cultural effects of continuing the status quo, and then estimates the socio-cultural effects of policy or action alternatives relative to the status quo**



Social Impact Assessment

- **The Social Impact Assessment (SIA) is an essential part of the fishery management process**
- **Together with the Ecological and Economic Impact Assessments, the SIA describes the “Human Environment”**
- **Without an SIA, an FMP or amendment will not be considered complete**



Legal Authorities for SIA

- **NEPA [40 CFR 1508.14] “human environment”**
- **MSA [MSA 303(a)(9)] “fishery impact statement”**
- **MSA [MSA 301(a)(8)] “sustaining fishing communities”**
- **MSA [MSA 303(b)(6) and 303A] “limited access programs”**



NEPA's Human Environment

- **CEQ defined “human environment” to “include the natural and physical environment and the relationship of people with that environment”**
- **NEPA requires “the integrated use of natural and social sciences in planning and decision-making”**
- **NEPA requires consideration of “unquantified environmental amenities and values” on a par with quantifiable values.**



MSA's Fishery Impact Statement

- **An FMP must assess, specify and describe the likely effects of conservation and management measures upon participants in a fishery and upon affected fishing communities**
- **This requirement provides the basis for all socio-cultural assessments in the FMP**



MSA: Sustaining Fishing Communities

- **National Standard 8 requires that policies and regulations take into account the importance of fishery resources to fishing communities by utilizing economic and social data**
- **(A) to provide for sustained participation**
- **(B) to minimize adverse economic impacts as much as possible**



MSA: Limited Access Programs

- **Section 303(b)(6) is old, Section 303A is new and requires expanded analysis.**
- **FMPs must show in-depth consideration of socio-cultural factors, historical and present participation in and dependence on the fishery for participants and fishing communities.**
- **Access privileges must be fairly and equitably distributed among participants.**



Limited access programs include, e.g.:

- License limitation**
- Sector allocations**
- TURFs**
- IFQs**
- ITQs**
- Fishing allocations to cooperatives**
- Community quotas**
- Permit stacking programs**



Other MSA Mandates

- **Use of social factors in determining OY**
- **Consideration of impacts on commercial, charter and recreational fishing**
- **Fair and equitable allocation of fishery resources among user groups**
- **Consideration of impacts upon Treaty Tribes and indigenous peoples of the USA**



- **National Standard 2 requires that social science meets the best available science standards**
- **National Standard 2 requires that social science be used in formulating management decisions**
- **The MSA requires that Science and Statistic Committees be interdisciplinary and able to provide peer reviews of all scientific studies used by Councils**



Issues in Social Analysis

- **Social and cultural systems are sensitive to change**
- **Small changes can have large cumulative impacts on fishery participants**
- **Analysis is comparative (diachronic) to a baseline data set**



Categories of Social Factors

- **Size and demographic characteristics of fishery work force and community**
- **Cultural norms, beliefs and values of fishermen, other stakeholders and communities**
- **Social structures and organizations related to fisheries, families and communities**
- **Non-economic aspects of the proposed action**
- **Historical participation in and dependence on the fishery by stakeholders and communities**



Conducting a Social Impact Assessment

- **Focus on the social structures, groups, communities, and social issues identified in the scoping process and in Council alternatives**
- **Social variables should be sought in an analytic rather than encyclopedic manner**
- **Before collecting new data, all existing databases should be scrutinized and used if appropriate**



Level of Social Assessment

- **The fishery impact statement “winnows” the issues and factors**
- **Level of analysis selected must be appropriate to the action considered**
- **Fishery conflicts, limited access, and environmental justice issues will require a high level of analysis and data inputs**



Who is involved?

In a fishery SIA it is assumed that

- Fisherman = any commercial, recreational and/or subsistence fisherman**
- Vessel = any commercial, recreational, and/or for-hire vessel**
- Fishing industries and/or services = businesses primarily and directly associated with subsistence, commercial, and/or recreational fisheries**



Social and Cultural Entities Involved in a Fishery

- **Commercial, Recreational, and Subsistence Fishery Participants including Treaty Tribes**
 - **Fishing Vessel Owners**
 - **Operators (Skippers)**
 - **Crew**
 - **United States Fish Processors**
- **Fishing Communities**
- **Fishery-Dependent Service Industries**



Community Profiles

- **All Regions now have a set of community profiles:**
 - **See Abbott-Jamieson and Clay in your briefing books, footnote 41**
- **BUT all communities profiled are not MSA Fishing Communities**



Identification of Fishing Communities

- **Issue: What is a fishing community?**
- **Databases: What information is available to identify fishery engagement, and/or dependence, of a community?**



An MSA Fishing Community

- **Is a geographic place;**
- **Includes some or all of the participants/entities described above; and**
- **Is substantially dependent on fishery resources to meet community social and economic needs, and/or**
- **Is substantially engaged in the harvest and/or processing of fishery resources to meet community social and economic needs**
- **MSA 3(17) and 301(a)(8)**



Not MSA Fishing Communities – but still covered under the MSA

- **Communities not substantially engaged in or dependent on fishery resources to meet community social and economic needs**
- **An avocational group, such as sport fishermen in general**
- **An occupational or professional group, such as gillnetters or small-boat fishermen in general**



Environmental Justice

- **The issue not discussed...**
- **EO 12898 mandates all Federal agencies to address disproportionate and adverse effects of agency action on low-income and/or minority groups**
- **Assessment of environmental justice is required regardless of the significance of environmental impacts under NEPA**



- **Environmental Justice is an issue whenever a Council or NOAA action disproportionately impacts a sector of a fishery with a high proportion of poor people or a large minority population.**
- **The social impact assessment in Environmental Justice issues should be the same as the one prepared for an EIS**



Cumulative Impacts

Another topic not well dealt with...

- **NEPA requires an analysis of the proposal's cumulative impacts, including interactions with other fishery or non-fishery-related activities**
- **“the incremental impact of the action when added to *other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.*”**



Ecosystem-based Management

Spatial focus:

- **fits well with integration of communities of people as well as fish**
- **can pay attention to where people fish and not just how much they land**
- **connects to Coastal and Marine Spatial Planning initiatives, and thus to other land and sea-based human activities**



EBM will require changes

- **Integrated Ecosystem Assessments (IEAs)**
- **New methods of governance**
- **Transition from FMPs by species or species groups**
- **Greater coordination with other agencies**
- **Some Regions are further ahead in these changes than others**



Two Big Issues on the Horizon with Important Social Science Components

- **Limited Access Privilege Programs**
 - **Increasing controversy in many Regions**
- **Ecosystem-based Management**
 - **Level of implementation varies by Region**
- **In Regions where both are used, how will these two processes be integrated and evaluated?**
 - **NMFS-wide implementation of social and economic indicators**