

GUIDANCE FOR USE OF SOCIAL SCIENCE IN FISHERY MANAGEMENT

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Silver Spring, MD 20910

Council Members' Training

Silver Spring, MD

October 27-29, 2009

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...**

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**

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**

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 effected 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.**

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**

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 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**

Identification of Fishing Communities

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

Fishing Community

- ◆ **A fishing community is a geographic place;**
- ◆ **A fishing community 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 Fishing Communities under 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 gill-netters in general**

Environmental Justice and Ecosystem-based Management

- **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**

Improving Fishery SIA

- ◆ **NMFS continues to provide social impact assessment guidance to Councils ...**
 - ◆ **Eleven anthropologists/sociologists hired since 2001 & assigned to Regions & Science Centers**
- ◆ **Councils have social scientists on SSCs & advisory panels**
- ◆ **ACCSP will provide social and economic data to E. Coast fishery managers**
- ◆ **NMFS is using GIS and rapid assessment strategies**