

The Collection and Use of Sociocultural Information in New England Fishery Management Council Processes



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OUTLINE

INTRODUCTION

- What are sociocultural impacts?
- Why consider sociocultural impacts?
- What is a Social Impact Assessment?

METHODS

RESULTS

- Conducting Social Impact Assessments
- Sociocultural expertise
- Incorporating sociocultural impacts
- Fishery performance reporting
- Internet resources
- National perspectives

CONCLUSIONS



WHAT IS A SOCIOCULTURAL IMPACT?

SOCIOCULTURAL IMPACTS

Demographics, fishery dependence, safety, stakeholder involvement, equity, cultural values, and the well-being of persons, families, and fishing communities. → **“Who?”**

ECONOMIC IMPACTS

The return of benefits to society for the investment of capital and labor; typically expressed monetarily (e.g. revenue, costs). → **“How much?”**

“social science” = economics, anthropology, geography, etc.
“social” vs. “sociocultural”

This review focuses on “sociocultural” aspects of fisheries.



WHY CONSIDER SOCIOCULTURAL IMPACTS?

NATIONAL ENVIRONMENTAL POLICY ACT (1970) requires use of social science in federal planning and decision-making.

REGULATORY FLEXIBILITY ACT (1980) requires minimizing adverse burdens on small businesses and other entities.

EXECUTIVE ORDER 12866 (1993) requires cost/benefit analyses to ensure regulations are efficient and cost-effective.

EXECUTIVE ORDER 12866 (1994) requires mitigation for adverse impacts to minority and low-income populations.

MAGNUSON-STEVENSON FISHERY CONSERVATION & MANAGEMENT ACT (1996 SFA) National Standards 4, 5, 8, and 10 are provisions relating to equity, efficiency, the sustained participation of fishing communities, and using economic and social data.



WHY CONSIDER SOCIOCULTURAL IMPACTS?

BEYOND “IT’S THE LAW” ...

Marine ecosystems include the people and communities who study, manage, and use marine resources.

Managers are continually thinking about who will be impacted by their decisions and how.

Reliance on perception and intuition, rather than systematically collected data can be problematic and lead to regulations with unintended consequences.

“...fisheries management is ... 90% people management...”
-Fulton and Adleman (2003)



WHAT IS A SOCIAL IMPACT ASSESSMENT (SIA)?

NEPA and MSA require biologic, economic and social impact assessments (SIA) of fishery management plans in the EA/EIS.

SIA PURPOSE

1. Outline the areas or populations (i.e. fishing communities) potentially affected by a federal action, and
2. Project future impacts (i.e. sociocultural) under the status quo and alternative measures being considered.



NMFS GUIDANCE ON SIAs (2007)

1. Create regional and community profiles, updated every 3-5 years.
2. Conduct a social factor analysis of the status quo and alternatives.
 - a. Fishery-related workforce size and demographics.
 - b. Attitudes, beliefs, and values of stakeholders.
 - c. Social structure and organization of the fishery.
 - d. Lifestyle, health, safety, non-consumptive uses.
 - e. Historical dependence on the fishery.
3. Create a Social Impact Assessment, comparing the status quo and alternatives, projected throughout the action's timeframe or to 3 years after the rebuilding deadline.



OVERARCHING QUESTIONS

PARTICIPATION

Who has been involved with collecting, analyzing and using sociocultural information in fisheries management?

CONTENT

What information and analytical techniques have been used in the consideration of sociocultural impacts?

PROCESS

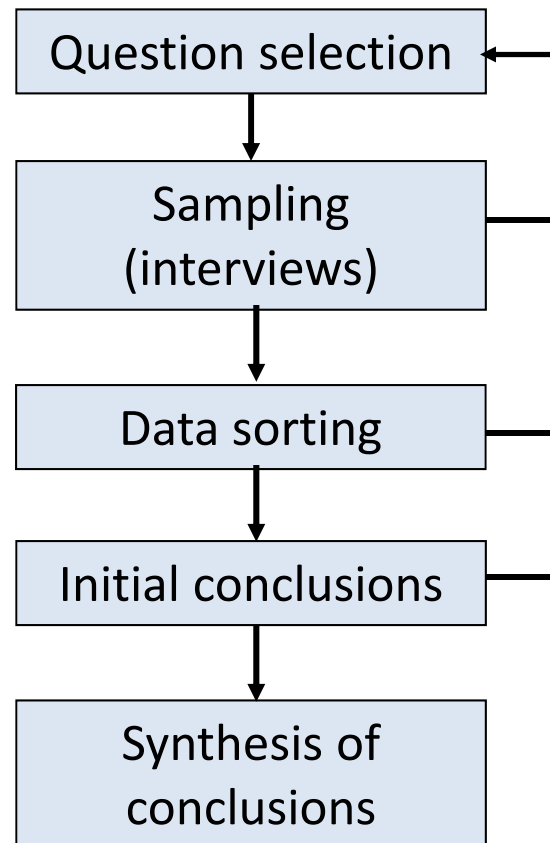
How has fisheries sociocultural information been incorporated into various stages of fisheries management?

COMMUNICATION

How can information about sociocultural impacts be better organized and communicated for increased utility?



METHODS – AN ITERATIVE PROCESS

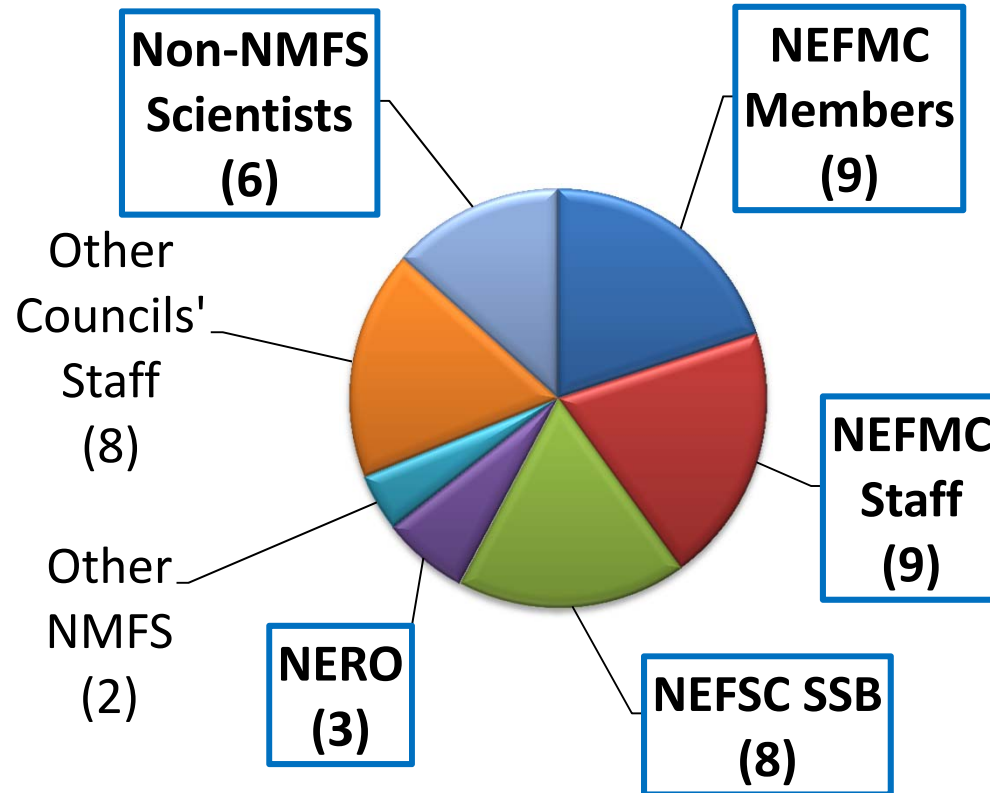


METHODS – PRIMARY INFORMANTS

TOTAL = 45

Northeast = 34

National = 11



METHODS – SECONDARY SOURCES

- Secondary informants (n=10) from NERO, NEFMC staff, and SERO.
- Fisheries Leadership and Sustainability Forum: “Socioeconomic Considerations and Human Dimensions of Fishery Management” (May 2012).
- NEFMC and the Northeast Regional Coordinating Council meeting minutes.
- NOAA policy and FMP documents.



DISCLAIMER

Results are a collation of informant input and should neither be considered a consensus nor official statements of their employers or of the NEFMC.



OVERARCHING CONCLUSIONS

IMPROVEMENT OVER TIME

Participation in and processes involved with collecting and incorporating sociocultural data have improved over time.

PROGRESS STILL NECESSARY

Managers still need to better understand how fishermen and their communities might be impacted by management decisions.

CONSIDERATION OF SOCIOCULTURAL ISSUES HAMPERED

- Lack of sustained, region-wide sociocultural data collection.
- Spotty participation of social scientists in FMP processes.
- Uncertainty about how to weigh potential impacts of decisions.



CONDUCTING SOCIAL IMPACT ASSESSMENTS

NMFS SIA GUIDANCE

- Achieving the ideal SIA has not been realistic.
- Guidance not been well distributed among SIA writers.
- “Best practices manual” under development.

DATA USED

NMFS data, stakeholder interviews, U.S. Census, public comment, content of economic analyses, published literature, websites.

DATA GAPS

Employment (crew), fishery dependence, consistent baselines/profiles, projections of future impacts, impacts on families, cumulative impacts over time and across fisheries.



EMERGING DATA SOURCES

SOCIAL INDICATORS DATABASE (SSB/SERO)

3,000 communities, ME to TX. On-line by fall 2012.

FISHERY PERFORMANCE INDICATORS (NMFS national)

Nationally standardized data collection. Starting with the catch share fisheries, but will expand.

ANNUAL COST SURVEY (SSB)

1,600 New England commercial vessel owners.

SOCIOECONOMIC SURVEY OF CREW & OWNERS (SSB)

1,000 New England owners and 1,500 crew.

SOCIAL CAPITAL & ATTITUDES IN THE GROUND FISH FISHERY (SSB)

Original survey in 2010. Planning follow-up.



DATA ANALYSIS CHALLENGES

PROJECTIONS

It is difficult to know what choices fishermen will make in the midst of future realities (requires deep familiarity with the fishery and the case study literature).

DATA CONFIDENTIALITY

- The “Rule of Three” – Hampers description of small ports.
- Data Averaging - Examining ends of the spectrum is missed.
- Sectors as “Persons” - NMFS (currently) considers each sector to be a “person” for purposes of data confidentiality.



SOCIOCULTURAL EXPERTISE

SPREAD THIN

- The SSB provides sociocultural (and economic) analyses for the NEFMC and MAFMC, but there is not enough staff to cover all the PDTs.
- NEFMC has contracted out SIA work.
- NERO or NEFMC staff without sociocultural expertise has been tasked with SIA work.

CURRENT PDT ASSIGNMENTS

- Academic – EBFM
- Academic – Herring
- SSB staff – Habitat & Monkfish
- SSB contractor – Groundfish & Scallops
- None assigned – Red Crab, Skates & Whiting



SOCIOCULTURAL EXPERTISE

SOCIAL SCIENCES ADVISORY COMMITTEE (1998-2007)

- Aimed to assist NEFMC review FMP documents.
- Internal debate about role lead to missed opportunities.

SCIENCE AND STATISTICAL COMMITTEE (2007-present)

- Includes 4 social scientists (1 SSB, 1 NMFS HQ, 2 academic).
- Setting buffers to catch limits involves trade-offs.
- Have reviewed some socioeconomic models and analyses.



INCORPORATING SOCIOCULTURAL IMPACTS

“ARE SOCIOCULTURAL IMPACTS CONSIDERED BY THE NEFMC?”

- 35% Towards the end of the process (as final decisions are made).
- 26% Ad hoc throughout the process (ubiquitous, infused).
- 24% No, not really considered (poor data, don't know how to).
- 9% Depends on the PDT (whether an active expert is assigned).
- 6% Unsure (not close enough to the process to know).



INCORPORATING SOCIOCULTURAL IMPACTS

PUBLIC COMMENT

- Helps gauge stakeholder views and identify potential impacts to investigate.
- Public input is better used by PDTs when analyzed thematically.
- Public comment has influence at Council meetings.
- Public attendance is fairly low, particularly at hearings and committee meetings.
- Input of the “usual suspects” is fairly well known.

USING SIAs

- NEFMC members tend to not read SIAs, but rely on personal knowledge or public testimony.
- SIA usually gets inserted very late in drafting.
- Overall document length is too long (law suit fear/no time for concision).



INCORPORATING SOCIOCULTURAL IMPACTS

“WHEN WAS THERE INSUFFICIENT SOCIOCULTURAL ANALYSIS?”

EXAMPLE: MULTISPECIES FMP AMENDMENT 16 (2009)

- No sociocultural expertise on the PDT 2006-2011.
- Deadlines for implementing catch limits and rebuilding stocks precluded sufficient analysis of sector implementation and “changing the currency” from Days-at-Sea to catch history.
- It was unknown how many fishermen would join sectors, so projections were difficult.
- SIA written after the final vote by NEFMC staff who was unaware that NMFS SIA guidance existed.



INCORPORATING SOCIOCULTURAL IMPACTS

“WHEN WAS THERE SUFFICIENT SOCIOCULTURAL ANALYSIS?”

EXAMPLE: SCALLOP FMP AMENDMENT 15 (2010)

- Same expert on PDT since 2000 (SSB anthropologist).
- Ownership data helped identify potential impacts of permit stacking and leasing.
- A literature review was conducted to search for the implications of similar measures in other fisheries.
- Review provided to the PDT and Council early in the process.
- By the final vote, NEFMC members were well versed in the sociocultural issues at stake.



FISHERY PERFORMANCE REPORTING

Informed management requires regular, coordinated reporting on biological, economic, and sociocultural aspects of fisheries.

- **NEFMC** - “Stock Assessment and Fishery Evaluation” reports.
- **NMFS HQ** - National performance measures for catch shares (2009).
- **NEFSC SSB** – Annual reports for groundfish (FY10, FY11), monkfish and scallop next (pending).
- **NERO** - Auto-generated reports.
- **NEFMC** - Recommended that regular performance evaluations be conducted. Agreed to standard performance measures (2012).
- **NRCC** - Agreed to form a work group to eliminate redundancy and provide consolidated information for the public (2012).



INTERNET USE

NEFMC WEBSITE

- Could explain NEFMC processes better.
- Could post/link information about fishing communities and resource status and utilization.
- Would use of social media be helpful?

SSB WEBSITE

- Summer 2012 overhaul.
- Making community-level data more accessible.

NERO WEBSITE

- Posting more landings and revenue data (e.g. subset of groundfish performance measures posted semi-annually).
- Could post status updates more consistently for all fisheries.



NATIONAL PERSPECTIVES

- Lack of sociocultural data and analysis in FMP documents.
- The “ideal” SIA has been unfeasible.
- Councils rely on public testimony and personal knowledge.
- Use of expertise varies.
- Growing national dialogue among social scientists.



CONCLUSIONS – IMPROVEMENT UNDERWAY

- NEFSC SSB is conducting systematic data collection and providing tools for the public to access and understand the data.
- Social scientists on the SSC are fostering consideration of the sociocultural and economic impacts of setting catch levels and buffers.
- Sociocultural experts are being used more frequently and engaged earlier in FMP development.
- NMFS is clarifying expectations for SIAs.
- Dialogue among SIA providers is elevating the quality and consistency of products.



INFORMANT RECOMMENDATIONS (SELECTED)

- Utilize sociocultural experts early and often in FMP issues. (incl. SSC).
- Improve FMP document consistency and concision.
- Resolve questions regarding the confidentiality of data. (e.g. sector performance).
- Unify approach to fishery performance reporting. (among NMFS, NEFMC, MAFMC).
- Consider website revisions and use of social media. (Council processes, status of fisheries).

