

NEFSC Socioeconomic Performance Measures

Matthew McPherson Social Sciences Branch Northeast Fisheries Science Center

East Coast Forum

Duke University Marine Lab

May 8 – 11, 2012





Goals of NEFSC/SSB Performance Measures Program

- Proactive socio-economic data analysis: Economic & socio-cultural
 economic information on fisheries performance provided to managers
 and stakeholders on an ongoing basis not only as a reaction to a
 proposed regulatory action.
- **Communication**: Fisheries performance information that serves as common ground for discussion and the "go-to" source for inquiries about what's going on in the fisheries.
- **Assessment:** Are we meeting management plan objectives? What are the issues, successes, and failures?
- Comparison of Performance under Different Regulatory Mechanisms: E.g. Catch Share & Non-Catch Share Fisheries



Context: Need & Opportunity for Developing Performance Measures

Opportunity: Funds available to invest in new social science data collection tools

Framework for investments in socioeconomic research moving forward

Implementation of sector program: paradigm shift in management in NE

Management plan goals lacked formal process for review/evaluation of socio economic outcomes

Linking Knowledge to Action: Necessary for adaptive management

Concern: over socioeconomic outcomes



Sources of Knowledge and Feedback

- Council documents (plan goals and objectives)
- Past initiatives
- Legal Mandates
- Academic & Grey Literature
- Press

Literature Review

Outreach

Expert Input

- Workshop w/Academics
- One on one meetings with Industry representatives and leaders

- Council presentations
- Regional NOAA offices
- Presentations in the field
- Press
- Crew outreach contract with GMRI
- Website not so great....

Alignment w/ NMFS Efforts

- Periodic review/input from SSB science staff
- Participation in National NMFS Social Indicator workshop



Objectives: MSA

MSA National Standards

- Allocation fair and equitable (NS 4)
- Promote efficiency (NS 5)
- Minimize costs (NS 7)
- Minimize impacts to fishing communities (NS 8)
- Minimize bycatch (NS 9)
- Promote **Safety** (NS 10)

Limited Access Privilege Programs - MSA

- Section 303A, Part (c)
- LAPP must reduce capacity if overcapacity exists
- LAPP must promote safety and social and economic benefits
- Section 303A, Part (d)(5)
- Promote the sustained participation of small owner-operated fishing vessels and fishing communities
- Address excessive consolidation
- Quota set-asides for entry-level and small vessel owner-operators, captains, crew, and fishing communities
- No excessive shares



Objectives: FMPs

FMP Goals and Objectives

- Groundfish Amendment 16
- Control capacity to achieve economic efficiency
- Encourage diversity of the fishing fleet
- Minimize adverse impacts on fishing communities and shoreside infrastructure
- Promote stewardship
- Minimize bycatch
- Scallop Amendment 11
- Control capacity and mortality
- Tilefish Amendment 1
- Prevent overcapitalization and limit new entrants to achieve OY
- Surf clam/ocean quahog Amendment 8
- Economic efficiency
- Control capacity
- Simplifying management
- Allow for regulatory flexibility and adaptation.



NEFSC/SSB Performance Measures





Performance Measures Defined

financial viability

 Financial condition of fishing vessel owners and crew, fishing households, service businesses, businesses in the marketing chain.

distributional outcomes

- Distribution of benefits and costs of a fishery management program are distributed among individuals, groups, and communities.
- Access/exclusion to quota and fishing opportunities, concentration of quota, and employment opportunities.



Performance Measures Defined, cont

stewardship

- The degree to which participants use the resource in a careful and responsible way.
- The degree to which participants have a sense of stewardship of natural and marine resources.

governance

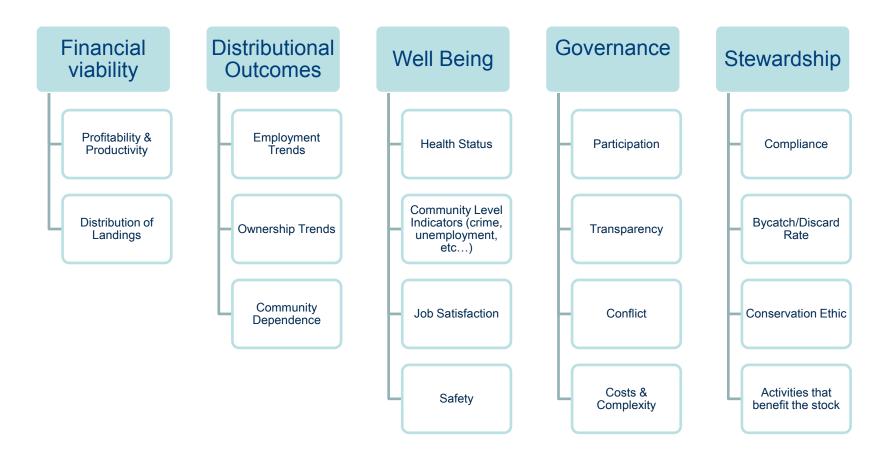
- Levels of participation in governance process.
- Perceived and objective transparency/legitimacy of decisions
- Effectiveness and complexity of regulations
- Cost to government/participants of management program.

well-being

• The degree to which an individual, family, or larger social grouping (e.g., firm, community) can be characterized as being healthy (sound and functional), happy, and prosperous (Pollnac et al. 2006[2008]).



Socio Economic Performance Measures for the NE





Existing Data

- Fishing vessel activity
 - Seafood dealer data: pounds and value by species
 - Fishermen's logbook: areas fished, time at sea, catch by species, port landed, gear used
- Vessel owner information
 - Homeport, principal port, address, permits held
- Operating costs
 - Sample obtained by observers trip costs (fuel, oil, water, bait, supplies, damage/loss)
 - Survey of fixed costs (insurance, maintenance....)



Known Data Gaps

- Crew Information, including basic demographic info
- Vessel Annual Fixed Costs
- Safety Data (e..g. vessel accidents, personal injuries) by fishery. Do different regulatory schemes affect safety measures?
- Data about lease price, the price paid for temporary use of a CS quota or ACE – does price reflect the marginal return from using ACE or something else?
- Vessel Ownership Data
- Processing Sector Information (e.g. no information about input costs, quantities)



New Initiatives: Data Collection

Vessel Annual Cost

- 1600 Vessel Owners in Northeast
- Stratified by Vessel Size and Gear Type
- Mail Survey –may return via mail or complete on web

Vessel Owner and Crew

- 1330 Crew Members and 800 Owners in NE & Mid-Atlantic
- Stratified by Fishery
- Crew members interviewed on the docks on tablets, owners received a mail survey



Other Projects

- Performance Reports: Groundfish & Monkfish
- National Catch Share Indicators
- Performance Measures Indices
 - Economic Health Index
 - Community Resilience and Vulnerability Indices
- Groundfish Social Capital Survey
- Studies of safety and management cost data.
- Vessel ownership data analysis



Applications with Councils

- Operationalize socio-economic objectives in FMPs
- Contribute to NE Council Performance Management System
- Support MAFMC SSC's Council Advisory Panel SE data for data poor stock assessments(?)
- Strengthen Impacts Assessments and especially SIAs