

APPENDIX II

NEFMC White Paper on FMP Performance Evaluation

**Fishery Management Plan / Fishery Performance Evaluation White Paper
for consideration by the New England Fishery Management Council**

The *Review of the New England Fishery Management Process* (Touchstone or Pate report April 2011) recommended consideration of the following ideas with respect to fishery management plan (FMP) performance evaluation:

- Design a cost-effective performance management system to track the progress of decisions and capture lessons learned and best practices
- Defining clear, objective criteria for determining the success of management decisions
 - little or no performance management evaluation or feedback mechanisms to track past decisions
 - without performance evaluation, decisions are changed before results of past actions occur

Although the Touchstone report recommends tracking the progress of decisions, this white paper focuses on FMPs and the associated fishery because FMPs and fisheries are what the Council is known for.

Following up on these recommendations and comments, Council staff discussed what elements to use in establishing a performance evaluation system for NEMFC FMPs. The list developed by staff includes the following attributes:

- Cost effectiveness
- Timeliness
- Consistent use of indicators across FMPs
- Cooperation with NERO, NEFSC
- Use existing data sources
- Present in easily accessible format

There has been work done on fishery or catch share performance measures, though it is my understanding that performance measures have not been incorporated in US FMP evaluation to date. NMFS social scientists have compiled a list of performance variables that could be used for FMP tracking (Appendix 1, adapted from Clay, et al. 2010). NMFS plans to advance a nationwide set of fishery performance measures, as compared to FMP performance measures, beginning in 2012. This will begin with catch share fisheries using readily available data and will be expanded to include other fisheries and data in the future; different parts of the evaluation will be lead by different components of NMFS. In addition, MRAG Americas has developed a proposal for catch share system performance evaluation (MRAG Americas 2011).

VARIABLES TO MEASURE

Potential performance evaluation variables that could be used in all FMPs are listed below. The list balances the number of variables tracked with the time that is needed to compile

and present the information recognizing the need for cost effectiveness and minimizing workload impacts.

1. Biological
 - a. Fishing mortality rate / target fishing mortality rate
 - b. Biomass / Biomass target

2. Economic
 - a. Catch as a percentage of ACL
 - b. Discards
 - i. Target species – use rate from NMFS NERO for ACL calculation
 - ii. Protected Resources – no estimate by FMP
 - c. Revenue from fishery
 - d. Revenue per active permit holder
 - e. Percentage of gross revenue taken by top 20% of permit
 - f. Net revenue per permit (if available, only available for few fisheries)
 - g. Number of active vessels
 - h. Number of inactive vessels
 - i. Average age of active vessels

3. Fleet Diversity
 - a. Number of vessels in fishery
 - i. Under 30 feet
 - ii. 30-50 feet
 - iii. 50-75 feet
 - iv. Over 75 feet
 - b. Landings revenue by port
 - c. Landing in weight by port
 - d. Number of ports in which FMP species are landed
 - e. Number of days fished by port

4. Safety
 - a. Fishing Vessel Casualty Rate
 - i. Per 100,000 hours fished (groundfish, scallop) – time intensive
 - ii. Per 1,000 days fished ?
 - iii. Working with USCG on best indicator

5. Governance
 - a. Ratio of actual vs. planned time for amendment or framework
 - b. Time needed to incorporate new assessment data into FMP
 - c. Time needed to respond to new conditions, e.g. changes in the fishery or requests from stakeholders
 - d. Number of advisory panel meetings

- e. Public input metric to gauge how stakeholders feel their input is being heard and used.
 - i. Use web based survey tool, e.g. Survey Monkey, and note cards to allow people to comment in an anonymous, non-intimidating way.
 - ii. Questions to be developed

Although broader than evaluation by FMP is to consider a survey of stakeholders about how the Council is doing overall through surveys and post cards. Other information on council performance could include:

- i. Web broadcast use
- ii. Web site use
- iii. Meeting attendance
- iv. Number of speakers at meetings

BASELINE YEARS

Baseline years for these variables would need to be chosen to allow performance measurement. Using the previous five years information, when available, is recommended and is consistent with the socioeconomic information from reports by NEFSC Social Scientists.

PRESENTATION IN ACCESSIBLE FORMAT

Presentation of FMP performance indicator data will be on the NEFMC webpage, with a separate heading for FMP performance, and a pull down page for each FMP. This format will become more useful in time as it will allow people to look at trends in the variables in a fishery and among fisheries.

REVIEW OF FMP OBJECTIVES

An issue to consider regarding FMP performance evaluation is whether to re-examine FMP goals and objectives to ensure that they are specific and achievable, and whether there are management measures that address the FMP objectives.

The Touchstone Report states “many expressed frustration that the success or failures of past decisions are rarely evaluated, and that little or no performance management or feedback mechanisms exist to track and review the performance of past decisions. As a result, many feel NMFS and the Council may not apply lessons from past success or failures. There is also concern that without a performance management process, decisions are changed before anything meaningful has a chance to happen”.

An examination of NEFMC FMP goals and objectives (Appendix 2) illustrates a wide array of goals and objectives and it is not easy to link FMP management measures with specific objectives. From the stakeholder perspectives, a FMP objective implies that the management

system is taking action to address that objective, creating an expectation of management follow through or a disappointment if the objective is not addressed.

To address this situation, the Council could consider examining the goals and objectives of FMPs consider the following actions:

1. Objectives with associated management measures
 - a. Examine each objective to make sure that it is specific and measurable
 - b. Identify management actions that address specific objectives
 - c. Prioritize objectives in terms of importance or hierarchy
2. Objectives without associated management measures
 - a. Eliminate objectives without specific management measures from the FMP
 - b. Change objectives to guiding principles that do not imply management action or raise stakeholder expectations. This would retain the sentiment of the statement but in an action neutral way.
3. Objectives that are in conflict with another objective
 - a. Example – One objective to promote efficiency and another objective to promote fleet diversity, small vessels, and geographic diversity in the fleet.
 - b. Delete one of the conflicting objectives or specify how the management system will address both objectives.

LITERATURE CITED

Clay, P.M, P. Pinto da Silva, and A. Kitts. 2010. Defining social and economic performance measures for catch share systems in the northeast U.S. presented at IIFET 2010 Montpelier Proceedings.

MRAG Americas. 2011. <http://www.mragamericas.com/2011/01/developing-a-methodology-and-indicators-for-evaluating-catch-share-programs/>