



New England Fishery Management Council

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MEMORANDUM

DATE: April 9, 2013
TO: Groundfish Oversight Committee (Committee)
FROM: Groundfish Plan Development Team (PDT)
SUBJECT: Analysis related to Amendment 18

During the March 6, 2013 joint meeting of the Groundfish Oversight Committee and Advisory Panel, several topics were brainstormed related to fleet diversity and accumulation limits where further analysis could inform the development of Amendment 18 to the Northeast Multispecies Fishery Management Plan. The PDT discussed this list at its March 13 meeting. Analytical work on some of these topics is already underway, and will likely be in presentable form by May or June. For other topics, analytical work is feasible, but some would require considerable devotion of staff resources. The PDT loosely grouped the data analysis topics into three categories: past and current fishery performance, legal considerations, and hypothetical measures. Feedback is summarized below.

The PDT recommends that the Committee first see the results of current data analysis before proceeding with decisions about revising Amendment 18 objectives and goals, prioritizing additional data analysis, and developing measures.

Fishery Performance

- 1. Refine/Update/Further detail the diversity and market concentration of the multispecies fishery.*

Examination of fleet diversity and market concentration in a fishery includes a number of factors, such as permit and vessel ownership, access to and use of PSC and ACE at the ownership group and sector levels, vessel activity and employment. Caution should be used in drawing conclusions about changes to fleet diversity and market concentration based on any single measure. The Northeast Fisheries Science Center (NEFSC) and Northeast Regional Office (NERO) have been collecting data relative to this analysis for some time, and there has been much recent effort to synchronize data streams to improve analysis. Some of this analysis is presented in the FY10 and FY11 groundfish performance reports by the NEFSC Social Sciences Branch (SSB) (Kitts et al. 2011; Murphy et al. 2012) and the Regulatory Flexibility Act (RFA) analysis in Framework 48 (NEFMC 2013). As described below, additional analysis is underway.

- a. *Specify whether consolidation has occurred in terms of ownership, harvesting, or operations.*
 - i. *Compare industry structure before, during and post-DAS management.*
 - ii. *Describe the changes in permit ownership that have occurred post A16.*
 - iii. *Identify PSC share by business entities for FY11, FY12, and FY13 and compare with FY10.*

Ownership: The PDT assumes “ownership” to refer to permit and vessel ownership, as well as the PSC share by business entities. The SSB FY10 and FY11 groundfish performance reports use a liberal definition of ownership. If people were very loosely affiliated, they were considered to be an ownership group. The FW48 RFA analysis used a more conservative definition of ownership, exact matches of personnel, to best comply with the RFA requirement to describe potential impacts to small businesses. Going forward, it would be illustrative to present results using both approaches. The SSB recently created an ownership database for the years 1994-2009 for the groundfish and scallop fisheries, which is being synchronized with the data for 2010 forward. The goal is to have a consistent time series and to report trends using both definitions of ownership. The SSB should be ready to present this work by May or June.

Harvesting: The PDT assumes “harvesting” to refer to landings at the ownership group and vessel levels and the difference between PSC and the distribution of landings post-leasing. Analysis of harvesting is underway. The SSB should be ready to present this work by May or June.

Operations: The PDT assumes “operations” to refer to employment and participation in the fishery. In addition to how the performance reports describe employment, using VTR data, input-output models could be used to look at employment changes at the county level and in the maritime trades. In addition to the typical metrics of fleet diversity, the SSB is working on an index that combines the vessel size, gear type and landing port to examine how persistent unique “species” of fishermen are from 1994-today. The SSB should be ready to present this work by May or June.

- b. *What are the net revenues in the fishery, accounting for ACE leasing and other transaction costs?*

It has been difficult to capture the new costs associated with the sector program (e.g. ACE leasing). There is some variable cost data in the observer database, and the new SSB surveys are collecting more data on fixed costs. The SSB is preparing a supplemental analysis to the annual performance reports that include vessel-level profitability and new costs associated with the sector program. The SSB should be ready to present this work by May or June.

- c. *How many C permits and small permits exist in the fishery? How does new entrant opportunity compare across fisheries?*

Trends in the number of each permit category may be identified using the permit spreadsheets posted to the NERO website (NMFS 2013). Between FY2004 and today, there have been roughly 8-14 Category C permits issued annually. Analysis could include evidence of vessel sale, the number and type of active permits, and current opportunities for new entrants.

2. *Review the performance of permit banks to determine if they are fostering fleet diversity.*

Where is the permit bank ACE going? Are the banks benefiting the industry as designed?

It may not be possible to measure the full impact of permit banks on fleet diversity, with its typical metrics (e.g. gear type, vessel size, port of landing, ownership). The two state-operated permit banks, in Maine and New Hampshire, will be submitting performance reports for FY2012

to NERO on June 1. These reports will be publically available and will likely answer the Committee's questions. The private permit banks are not subsidized by public money or part of the regulatory process. Their objectives are set by their directors, and do not necessarily include "fostering fleet diversity." Private permit banks are not required to submit annual reports to NMFS, apart from information that sectors must provide in their confidential reports. Upon request, the private permit banks may be willing to provide information to inform the Committee. The degree to which permit banks will ensure fleet diversity, in lieu of FMP measures, may be unknowable.

3. *Define/describe evidence in current system of the occurrence of "extraction of disproportionate economic rents from other permits holders" (see A18 goal #4).*

It may be difficult to conduct this analysis, without more data available on the transaction markets for PSC and ACE. The PDT would be able to address this topic, but perhaps not to the satisfaction of the Committee.

4. *Do a break even analysis of FY13 with the quota as allocated. How much additional quota would have to be needed to break even?*

NOAA and Massachusetts collaborated on a break-even analysis, finalized in November 2011 (Georgianna et al. 2011). There are no plans as yet to repeat the analysis, which would require significant time and dedicated resources. The SSB should be ready to present a vessel-level profitability analysis by May or June.

5. *Describe the use of inshore and offshore fishing grounds and the effect A16 had on utilization of fish stocks. Has there been a tendency towards pulse fishing on inshore grounds? Would an inshore/offshore differentiation of effort be feasible?*

The conventional wisdom is that after Amendment 5, the trip boats were encouraged to fish inshore, so they would use fewer DAS (1995-1998), but the years when there were trip limits (1999-2009) effectively moved those boats offshore again. The SSB is currently analyzing the use of inshore and offshore grounds, 1994-present, by "species" of fishermen. Some preliminary work examining fishing on Stellwagen Bank in FY2010 and FY2011 identified some trip boats that were not present during the years with trip limits. The SSB should be ready to present this work by May or June.

The PDT also discussed evidence that spawning stock aggregations may be more susceptible to pulse fishing than having smaller amounts removed over longer time frames. An analysis could measure the amount of fish taken from a given area over a given timeframe, and how this catch per unit time changed before and after sector implementation. The PDT is currently considering how to best approach this topic.

Legal considerations

1. *Determine whether or not the Multispecies FMP currently complies with National Standard 4. If not, what steps would be necessary to ensure compliance.*

The 2006 reauthorization of the Magnuson-Stevens Act included a provision that Limited Access Privilege Programs (LAPP) must include measures to establish a "maximum share" that a "holder is permitted hold, acquire or use." Although the Northeast multispecies sector program is not be a LAPP (e.g. USCA 2012), National Standard 4 still applies, that "no particular individual, corporation, or other entity acquires an excessive share of such privileges" (MSFCMA 2007). There is no widely-accepted, standard definition or measure of "excessive shares" in fisheries, but it is generally considered include issues of market power and equitable opportunity to participate in a fishery.

There are standard economic metrics and models to determine where market power exists, but it would require a fairly substantial and deliberative effort to do this analysis. It would involve identifying whether the sectors (and umbrellas of sectors) are considered “entities” relative to NS4, as well as the degree to which the price of ACE leases, fish etc. can be controlled by entities.

2. *Identify how current anti-trust laws address excessive share issues and whether they provide sufficient controls in lieu of FMP measures.*

Some work has been done on this within the SSB, particularly related to the Mid-Atlantic surf clam-ocean quahog fishery (e.g. Walden 2011), and the SSB should be able to build off that work. Generally, the Department of Justice defers to the Department of Commerce on fisheries anti-trust issues, because of NOAA’s authority under the Magnuson-Stevens Act and because dollar values are small relative to other industries where anti-trust issues are commonly investigated. The PDT recommends that the Council take action if it wants to, because it is unlikely that the Department of Justice would become involved in fisheries, without high-level negotiations between the two agencies.

3. *Determine if setting price controls on quota leasing would violate anti-trust laws.*

The PDT is not sure if price controls in this context would violate any current laws, but the issue could be investigated further. Government-imposed price ceilings in a market lead to decreased supply and producer surplus, while the consumer surplus does not necessarily increase. Whenever the Council wants to make a market less efficient, it should provide a clear reason for doing so.

Hypothetical Measures

1. *Define the thresholds where an entity might gain market power in the fishery, including the leasing market.*

The PDT is not aware of such analysis for this fishery, but there are standard economic models that could be used. The PDT discussed how the right unit of analysis needs to be identified. Analysis at the business entity level seems intuitive, but since ACE is allocated to sectors, a sector-level analysis may be more appropriate. At the business entity level, it is likely that this fishery would not be considered “concentrated” according to federal guidelines on market concentration (USDOJ and FTC 2010). However, an analysis of PSC and sector ACE holdings through time (ongoing) and the ability to influence price would help address this topic.

2. *Describe pros and cons of limitations on trades between vessel classes.*
3. *Describe how accumulation caps on PSC or ACE can be accomplished under current plan and permit rules (e.g. this is not an ITQ, and there are restrictions on permit splitting).*
4. *Describe pros and cons of limiting PSC or ACE on sector financial viability, e.g. cost sharing.*
5. *Describe pros and cons of limiting ACE usage by individual vessels.*
6. *Describe pros and cons of forced divestiture.*

The PDT discussed how it is difficult to propose analyses on some of these items without a well-defined problem statement. For example, limiting ACE use or trading decreases the overall efficiency of the fishery, but the “pros and cons” depend on the goals of the amendment and the problem that such a measure would solve. The potential distribution of impacts would depend on measure specifics.

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