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Testimony on
"Catch Shares: The Past, The Present, and The Future(?)"

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The catch-share system has been in place for 17 months. NOAA promised that the catch-share system would: "1)…end the race to fish; 2) rebuild fisheries and sustain fishermen, communities, and vibrant working waterfronts; 3) increase conservation of species; 4) reduce the management costs; and 5) produce more and better data."

None of these promises have been fulfilled. In fact, the system has resulted in losses of landings, revenue, and jobs; a controversial reallocation of wealth; and a failure to eliminate chronic costly overfishing or underfishing.

The problems associated with the catch-share system have been reviewed many times. This hearing provides an opportunity to review the problems and fashion a better way forward. In my testimony this morning, I would like to consider what it takes to move ahead. First, I look at past performance and show that disregard of the intent of Congress is associated with limiting fisheries-management performance. Second, I discuss solutions which relate to both substance and implementation.

It is axiomatic that fishery management must follow the intent of Congress as spelled out in the Magnuson-Stevens Act (MSA) and supported by the National Environmental Policy Act (NEPA) and other legislation. If the fisheries do not follow the intent of Congress, then one would expect poor performance metrics. If we were from Mars and visited Earth and observed the fishery management system in New England, we would have to conclude that Congress intended to

1) create a management system in the northeast that wastes 100,000 tons of fish per year worth hundreds of millions of dollars, while failing to create hundreds of jobs;
2) disregard the economic and social impact of fisheries management;
3) unfairly allocate fish to some sectors to the disadvantage of other sectors; and

4) ignore valid scientific findings, and suppress discussion regarding the magnitude of fish stocks.

Of course, Congress never intended to generate a fisheries management system that wastes huge quantities of fish, disregards fishing communities, is inherently unfair, and ignores science.

If in fact the intent of Congress were followed, we would have a considerable improvement in performance metrics for fisheries management. The fact that management performance needs to be improved is reflected in management-performance statistics. These include 1) magnitude of overfishing and underfishing, 2) quality of information necessary for overfishing determination, 3) costs of the overfishing buffer, 4) landings and revenues, and 5) vessels and jobs.

For example, a large number of stocks are subject to overfishing or are overfished. In addition, there is gross underfishing. Of the 70KT that could be caught each year, only 31KT are actually caught owing to restrictive regulations. This shortfall costs industry and society nearly $100M at the dock, or $400M by the time the fish leaves the economy. There might be as many as 1000 jobs that could be created by terminating underfishing.

The quality of information on crucial overfishing indices is questionable inasmuch as the average date of stock assessments is 2008. In other words, stocks at a high level in 2008 could be at a low level now, or vice versa.

Additional costs are induced by an overfishing buffer. The idea of an overfishing buffer is to set the actual catch less than the overfishing level so that there is a low probability of overfishing. This is a measure of performance since if the catch level was scientifically certain, then the buffer would be zero. But in fact the level of scientific certainty is so low that the difference between the overfishing level and the annual catch limit (ACL) is about 70KT, which has a value of about $105M. The uncertainty is twice the level of the catch and results in forgone yield worth of $105M. Is it worth paying $105M to prevent overfishing which isn't being prevented anyhow?

Important indicators of performance are landings and revenues. Groundfish landings have declined by 12MT under the catch-share system, while revenue has declined by $2M. However, the economic reports are inadequate because economic performance needs to be judged on the basis of revenues less costs. Cost data are not generally available and, so contrary to National Standard 8, even at this point in time, economic costs are not being monitored.

The numbers of vessels and crew have been declining for years. The decline continues, and perhaps increases, under catch shares. The problem is that we cannot look at only the fishing or producing sector. Declining vessels and crew have a big impact on shore side businesses and welfare.

In sum, we can say that the promises made by the agency have not been fulfilled; fisheries management is not consistent with the intent of Congress; and performance metrics are

depressing. On top of this, trust has broken down. What can we do to move forward? There are substantive issues and implementation issues that need to be taken into account.

A major problem with the implementation of the catch-share system is that its implementation was in many ways rushed and careless. A striking example is that any elementary economics course would tell us that the catch-share system, if left on its own, would result in hyper consolidation. Now, 17 months later, the council is dealing with caps to prevent hyper consolidation.

The lesson learned is that we cannot afford to move into the future in an ad hoc piecemeal fashion. We need a master plan to improve communications, revise data collection, conduct cooperative research, and achieve optimum yield. Anything less than a master plan will lead to addressing the wrong questions. These observations are consistent with the Touchstone-Pate Report (TPR).

There are critical issues that need to be addressed in the master plan. These relate to the measures of performance outlined above. How can we use the shortfalls in scientifically permissible landings to create jobs and economically improve our fishery output? Examples of critical issues include:

1) Reevaluate Closed Areas—Thirty percent (30%) of Georges Bank is closed to fishing. The benefits of these closures are not clear. Enormous costs are involved in keeping the areas closed. An analysis of the efficacy of the closed areas along with alternatives is needed.
2) Data—The entire data information system needs to be upgraded as specified in the TPR. An analysis of the data information system, along with costs and timing, is necessary.
3) The Bycatch Problem and Mixed Species Problems—Bycatch issues constrain almost all fisheries from taking optimum yield. The yellowtail flounder-scallop interaction is a critical example.
4) Reevaluate Scallop Management—Scallops are our most important fishery. Yet, concerns are voiced regarding whether optimal yield is being taken and whether the closed area's stocks are being effectively managed.
5) 2010 Year Class of Haddock—There is a rumor that the 2010 year class of haddock is very large. A plan needs to be tabled for efficient utilization of the 2010 year class, particularly taking into account the fact that poor utilization of the 2003 year class resulted in losses of hundreds of millions of dollars.
6) Stock Assessments—The stock assessment settings have become much more complicated owing to ACLs. In addition, councils have a difficult task in evaluating recommendations because they do not have a fully transparent analysis that demonstrates all of the assumptions, assertions, and choices made. This crucial topic needs extensive review for incorporation into the master plan.
7) Flexibility—Many regulations are unnecessarily rigid. An analysis needs to be undertaken to evaluate areas where flexibility can be helpful.
8) Ocean Environment—It is becoming clear that environmental variables are critical to increasing and decreasing stocks. A white paper needs to be developed to incorporate a

national program on the relation of the ocean environment to stock dynamics into the master plan.

It is not enough to just produce a master plan. Management and communication skills are required to implement it. There are clearly shortfalls in management and communication skills. In fact, these were identified in the TPR. We basically agree with the TPR. However, two additional observations are necessary. First, TPR deals with interactions among the council, the center, and the regional office. It is striking that the industry is not explicitly included in this mix. Second, the response to the TPR, as reported to the council, did not fully cover the TPR's recommendations, particularly omitting a time-phased action plan.

One of the big difficulties in working with NOAA is its lack of responsiveness. Not only is NOAA not responsive to the people with whom it must work, it is also not responsive to Congress.

For example, Congressman Frank met with Administrator Lubchenco and others in early October 2009 to discuss critical issues facing the fishing industry. Some have been overtaken by events, but others have not really been dealt with. Congressman Frank, in communicating with NOAA, stated that, "…despite the importance of NOAA's fisheries mission, it seems fraught with a lack of responsiveness and a management process that is slow to react." Two years later, outstanding requests for crucial information on the closed areas, ten year rebuilding schedules, and economic data have gone unanswered. In his letter, Congressman Frank said, "…the biggest fear I have is the real threat of significant consolidation." Only now, 17 months after the initiation of the process, fishery managers are beginning to worry about consolidation caps.

So now let us bring this together. It appears that fisheries management is being prosecuted at a great cost to the Nation in terms of jobs, food security, and welfare. There have been many suggestions of ways to get the system back on track. But these suggestions have never seen the light of day. We conclude that the agency, when it does respond, reiterates the problems rather than provides solutions; it does not provide a time-phased response with a date of completion and a concrete deliverable such as a report or master plan. It is for this reason that Congress has to strengthen its oversight by establishing an ad hoc commission or other entity that can work on a Northeast master plan, outline the actions that need to be undertaken, establish priorities, and review the deliverables. It is crucial that this entity is populated with stakeholders, particularly the fishing industry. While we all recognize that the agency would be opposed to such a commission, we have to ask what the agency proposes as an alternative. After all, there is much at stake and we are squandering time, our resources, and opportunity at a time of National economic stress!

Supporting Material

Trends in the New England's Fisheries

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I. Stock Status

According the 2010 Report, "The Status of U.S. Fisheries Report to Congress", ten stocks in the New England region are subject to overfishing, and sixteen stocks are overfished (*see Table 1*). These status determinations are based on the most recent assessment of each stock, or stock complex. It should be noted that for the stocks managed under the New England Fishery Management Council (independently or jointly with the Mid-Atlantic) the average year of the most recent assessment is 2008 (utilizing data through 2007). The most recent assessment occurred in 2010 utilizing data through 2009 and the oldest assessment in use is from 2003 (which utilized data from 2002).

Table 1, Overfished Stocks and Stocks Subject to Overfishing

Council	FMP	Stock	Overfishing condition	Overfished Condition	
				Overfished	Approaching
New England	Atlantic salmon	Atlantic salmon*		x	
	Northeast Multispecies	cod - Georges Bank	x	x	
		cod - Gulf of Maine	x		
		Atlantic halibut		x	
		Atlantic wolffish		x	
		ocean pout		x	
		white hake	x	x	
		windowpane - GOM/GB	x	x	
		windowpane - SNE/MA	x		
		winter flounder - GB	x	x	
		winter flounder - SNE/MA	x	x	
		witch flounder	x	x	
		yellowtail flounder - Cape Cod/GOM	x	x	
		yellowtail flounder - Georges Bank		x	
		yellowtail flounder - SNE/MA	x	x	
	Northeast Skate	thorny skate - Gulf of Maine		x	
		smooth skate - Gulf of Maine		x	
Mid-Atlantic	Atlantic Mackerel, Squid, and Butterfish	butterfish		x	

*No fishing is allowed in this fishery, or incidental harvest is limited to levels necessary to meet Endangered Species Act (ESA) requirements. A Final Recovery Plan for the Gulf of Maine Distinct Population Segment of Atlantic Salmon has been developed under the ESA.

Table 1 *(above)* depicts fish stocks in the Northeast Region that are subject to overfishing, are overfished, or are approaching an overfished condition. This table was obtained from the 2010 report; The Status of U.S. Fisheries Report to Congress.

II. Catch Limits – "A Costly Insurance Policy"

In the United States requirements stipulated in the 2006 reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (MSRA) have made the development of annual catch limits a priority. The MSRA strengthened the objectives of National Standard 1, specifically the obligation to prevent overfishing, and rebuild overfished stocks. Regional Councils are now required to establish a mechanism for determining annual catch limits (ACLs) and accountability measures (AMs) for all federally managed fisheries (DOC, pp. 68). Table 2 depicts the catch limits associated with the stocks managed under the Northeast Multispecies Fishery Management Plan.

The Overfishing Limit (OFL) is the level of catch that corresponds to Maximum Sustainable Yield (MSY), from this reference point the Council is required to set an Acceptable Biological Catch Limit (ABC) and Annual Catch Limit (ACL). Between each of these levels are buffers to account for scientific and management uncertainty – an "insurance policy" against overfishing. In New England, for most stocks, the buffers were not based on any analysis of uncertainty or risk.

The cost of precaution is significant. The annual catch limit, for groundfish, is 51% of the overfishing limit. The difference, based on the average price of groundfish in 2010, is worth approximately 220 million dollars. The actual realized catch is even less (about one third of the OFL).

Table 2, Catch Limits

Stock	OFL (MT)	U.S. ABC (MT)	Total ACL (MT)	Groundfish Sub-ACL (MT)	2010 Groundfish Catch (MT)
GB COD	6,272	3,800	3,620	3,430	2829.7
GOM COD	11,089	8,530	8,088	4,567	3843.1
GB HADDOCK	80,007	44,903	42,768	40,440	8340.2
GOM HADDOCK	1,617	1,265	1,197	825	377.7
GB YELLOWTAIL	5,148	1,200	1,169	999	757.6
SNE/MA YELLOWTAIL	1,553	493	468	332	171.9
CC/GOM YELLOWTAIL	1,124	863	822	779	596.7
PLAICE	4,110	3,156	3,006	2,848	1536.4
WITCH	1,239	944	899	852	725.3
GB WINTER	2,660	2,052	1,955	1,852	1391.2
GOM WINTER	441	238	230	158	106.1
SNE/MA WINTER	1,568	644	605	520	
REDISH	9,899	7,586	7,228	6,846	2151.2
WHITE HAKE	4,130	2,832	2,697	2,556	2259.8
POLLOCK	5,085	3,293	3,148	2,748	5601.1
N. WINDOWPANE	225	169	161	110	
S. WINDOWPANE	317	237	225	154	
OCEAN POUT	361	271	253	239	
HALIBUT	119	71	69	30	
WOLFFISH	92	83	77	73	
TOTAL	137,056	82,630	78,685	70,358	30,688
% of OFL	100	60	57	51	37
VALUE (USD, $)	435,105,731	262,321,873	249,797,852	223,362,487	97,423,861
LOSS: OFL - X (USD, $)	0	172,783,859	185,307,879	211,743,244	337,681,870

Table 2 (*above*) depicts that Overfishing Limit (OFL), U.S. Acceptable Biological Catch (ABC), total Annual Catch Limit (ACL), the groundfish sub-component of the ACL, and the known groundfish catch. All weights are in units of metric tons (denoted by MT). Blanks in the under groundfish catch are stocks for which catch data is not yet publically available. The value of each category was

calculated utilizing the average price of groundfish in 2010 ($1.44). Loss is calculated as the difference between the OFL.

III. Landings and Revenue (Outputs)

Tables 3 and 4 depict the groundfish landings and revenue from 2007 to 2010.

Table 3, Groundfish Landings 2007 - 2010

Year	Groundfish Landings (MT)
2007	64,003,776
2008	72,162,445
2009	70,568,091
2010	58,492,204

Table 4, Groundfish Revenue 2007 – 2010

Year	Groundfish Gross Revenue
2007	$89,055,085
2008	$90,131,938
2009	$85,088,241
2010	$83,293,667

Prices increased significantly for all species, including groundfish. The following excerpt is from the 2010 Sector Year-end report. “Nominal yearly average prices of combined groundfish species declined from $1.43/lb in 2007 to $1.23/lb in 2009 (Figure 8). In 2010, the combined groundfish average price increased to $1.44/lb. The yearly average price for combined non-groundfish species also increased in 2010 to $1.20/lb from $1.11/lb in 2007 and $1.00/lb in 2009” (NMFS, 2011).

IV. Industry Indicators