New England Fishery Management Council
50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116
E.F. "Terry" Stockwell III, *Chairman* | Thomas A. Nies, *Executive Director*

MEMORANDUM

DATE: October 15, 2015

TO: Skate Committee

FROM: Skate Plan Development Team

SUBJECT: **FMP Restructuring**

Problem Statement

Skates are caught in numerous fisheries, but these fisheries have different levels of reliance on skate landings and revenues (Table 1). Adding to these complexities, there is variation in which species of skates occur in the various fisheries depending on gear and area fished. For example, winter skate wings are landed by Northeast Multispecies and Monkfish vessels in Georges Bank and southern New England, but these skates are discarded by Scallop vessels fishing in the same areas. Little skates are targeted by a small fleet of bottom trawl vessels in southern New England for lobster bait, but discarded by most other fisheries. Skates are targeted on some trips, while only landed incidental to other species on other trips. Thorny, smooth, and barndoor skates are prohibited species that are discarded when caught. Clearnose and rosette skates occur in Mid-Atlantic waters and are rarely landed. These complexities present a variety of challenges to fisheries managers.

Under the current Skate FMP, there is a single open access permit and single Annual Catch Limit (ACL) for the stock complex of seven skate species. Total Allowable Landings (TALs) are divided between the skate wing (food) fishery and bait fishery, reflecting the two dominant product forms (Table 2). Under this relatively simple construct, there are a number of tradeoffs in utilization that implicitly occur. For example, vessels that target and heavily rely upon skate wings may be disadvantaged by an in season closure largely driven by landings from incidental skate trips. TALs affecting southern New England vessels may have to be reduced to balance out high discards in other fisheries on Georges Bank or in the Gulf of Maine. It is possible that if the competing needs of different fisheries for skates were more explicitly addressed, it could improve efficiency and optimize the yield from skate resources.

In response to these concerns, the Skate Committee passed the following motion:

"Task the PDT with examining the pros and cons of reallocating skate species based on geographical distribution and co-occurrence in other FMP fisheries and providing a recommendation to the oversight committee. As a starting point, examine:

1) Moving winter and barndoor skate to the Monkfish FMP,
2) Moving thorny and smooth skate to the Groundfish FMP,
3) Moving clearnose and rosette skate to the MAFMC, and
4) Retaining Little Skate as a standalone FMP."

Pros of Reallocation

The restructuring of the Northeast Skate Complex FMP could allow for more stability in any fishery that utilizes skate for additional revenue and/or whose fishing activity would be curtailed if skate quota became limited. Industry has raised concerns with the potential for fishing on targeted species, e.g. monkfish, could be restricted if the level of skate incidentally encountered results in a skate overage. Reallocating and/or restructuring multiple FMPs would allow stocks that are frequently caught together to be harvested in a way that could help maximize landings for all stocks.

Species specific management is an improvement over the stock complex approach (Hogan et al. 2013). Progress toward species specific management should continue to be a long-term goal of the Skate FMP, and reallocation could be a step in that direction by explicitly accounting for the various distributions and fisheries associated with individual skate species. However, adding species to various other FMPs, as suggested by the Committee, requires further consideration for its potential benefits to individual species.

Reallocation could promote a reduction in skate discards and more full utilization of the TAL. In recent years, dead discards of skates have been estimated to represent approximately 43% of the total catch across the complex. By structuring skate management such that the risk of in season closures is reduced, the occurrence of regulatory discards should decline. It could also introduce incentives for vessels across multiple fisheries to reduce market discards (i.e., retain more of the skates they catch). Skate wing landings have frequently been below the TAL in recent years, partly due to "one-size-fits-all" possession limits that apply across fisheries. By allocating skate wing landings differently, and implementing possession limits appropriate to the fishery (e.g., higher trip limits for vessels that target/rely on skate wings, lower trip limits for vessels that land skates incidentally), more of the TAL could be landed and balanced to the fisheries based on their reliance on skate revenues. In general, it could improve efficiency in the fisheries and promote more optimal utilization of the available resource.

Reallocation could also improve accountability. Accountability measures (AMs) implemented for quota or ACL overages would be more closely tied to the fisheries responsible for those overages. Currently, if AMs are implemented in the skate wing fishery, vessels with a high reliance on skate revenues bear a disproportionate cost compared to vessels that land skates incidentally.

Finally, by decoupling little skates from the rest of the complex, it could allow more focus on improving management of the bait fishery.

Cons of Reallocation

Currently, species- or fishery-specific ACLs for skates have not been calculated. Specifications are set based on an aggregate Acceptable Biological Catch (ABC), i.e. it includes all seven skate species. Skate status determination criteria are based on changes in the Northeast Fisheries Science Center Bottom Trawl Survey and are not directly related to fishing effort. Transitioning to species- or fishery-specific ACLs could be time-consuming and challenging due to the data poor status of skates, and the challenges that remain with skate stock assessments.

Landings are dominated by winter and little skate because of market preferences and regulations. If some species are removed from the complex, the available quota could be reduced depending on the amount they contribute to the aggregate. Further analysis would be required to determine whether the specification formula should be applied in its current state at the species level if the complex is broken up. Of particular concern would be how the ACL would be calculated for prohibited species when not included in the skate complex.

The Committee motion would require the Mid-Atlantic Fishery Management Council (MAFMC) to establish a new FMP for clearnose and rosette skates. Clearnose and rosette skates are not targeted

species with the majority of catch being discarded (Table 3 and Table 4). The MAFMC would have to be consulted to determine if it would be willing (and had the resources) to develop and manage these 2 species. Given that these species have negligible economic value, this could be challenging.

As already noted, skates are encountered in multiple fisheries. The movement of winter skate into the Monkfish FMP may have further implications that need to be addressed, e.g., would a winter skate sub-ACL be required for non-monkfish permitted vessels?

It is unclear how rebuilding of thorny and smooth skates would be improved by adding it to the Groundfish FMP (Table 5). Both are prohibited species, primarily distributed in the Gulf of Maine. Adding these species to the Groundfish FMP could introduce additional burdens on Gulf of Maine groundfish vessels, and additional complexity to the Groundfish FMP. Moving these skate species to the Groundfish FMP could also result in marginalization of their management needs, due to the multitude of other priorities in the groundfish fishery.

In summary, the restructuring approach proposed in the Committee motion appears to favor the monkfish and skate bait fisheries, without providing any notable benefits to the groundfish fishery, MAFMC, or rebuilding skate species. While it could improve efficiency in the harvest of economically-valuable skate species (winter and little), the approach could marginalize the species of less value including three species currently in rebuilding programs (thorny, barndoor, smooth, clearnose, and rosette).

Alternative strategies

It may be possible to address many of the identified management problems in the skate fisheries without restructuring multiple FMPs as proposed in the Committee motion. Some alternative approaches are summarized below.

One approach would be to allocate catch differently under the existing aggregate skate complex ABC. Based upon criteria that would have to be developed by the Council, catch (landings + discards) or landings-only could be allocated to different vessels or trip types through sub-ACLs or sub-TALs, respectively. Currently, projected dead discards are subtracted off the top from the skate Annual Catch Target (75% of ACL), with the remaining representing the cumulative TAL (see Table 2). The TAL is divided between the wing fishery (66.5%) and the bait fishery (33.5%), but the skate wing TAL, for example, could be further subdivided between a 'Monkfish fishery skate TAL' and a 'Groundfish fishery skate TAL.' Each TAL could be assigned appropriate possession limits and in season measures. The allocation could alternately be divided up spatially (e.g., 'Gulf of Maine skate TAL' and 'Georges Bank/Southern New England skate TAL'). Additionally, bycatch caps could be considered for prohibited species.

The Council could also prioritize limited access skate fisheries, which could create different permits for "directed" skate vessels vs. "incidental" skate vessels. This approach could address some of the inequities between fisheries and their reliance on skate landings. A follow-on to limited access could be catch shares or Individual Transferable Quotas (ITQs) for skates. Qualifying vessels could buy or sell their allocated skate quotas based upon their reliance on skate landings.

The PDT could also analyze whether clearnose and rosette skates could be considered "ecosystem component species" which do not require ACLs under the Magnuson-Stevens Act and National Standard 1 Guidelines.

Conclusions

The Skate PDT agrees that much could be done to address inequities and improve efficiency in skate fisheries management, particularly within the skate wing fishery. In addition to the approach suggested in

the Committee motion, there are a variety of alternative management strategies to be further considered and evaluated. The Council's current 2015 priorities, however, do not include initiation of an action to address these issues. The Skate PDT can further explore these options at a time when the Council prioritizes such an action, but for the remainder of 2015, the PDT has been directed to focus on new rebuilding measures for thorny skate and development of 2016-2017 specifications.

Table 1- Total skate landings (lbs live weight) by DAS program, FY 2012 (updated table not yet available)

VMS Declaration	Bait	% of Total Landings	Wing	% of Total Landings
Mults Sector	1,702,725	15.8%	1,903,586	8.5%
Mults Common	1,358,315	12.6%	6,943,323	31.1%
Monkfish	53,780	0.5%	8,580,391	38.5%
Scallop	15,375	0.1%	41,991	0.2
Unmatched/No Declaration	4,961,386	46%	4,044,169	18.1%
DOF	2,697,450	25%	781,750	3.5%
Total	10,789,031		22,295,210	

Table 2 - Skate catch and landings (mt) in FY 2013 and 2014

	2013		2014	
Management Specification	Specification Amount	Catch/Landings (mt)	Specification Amount	Catch/Landings
ABC/ACL	50,435	27,922	35,479	28,032
ACT	37,826	27,992	26,609	28,032
Assumed Discards + State Landings	16,265	13,253	10,224	11,781
TAL Bait	7,223	5,596	5,489	4,499
TAL Wings	14,338	7,981	10,896	10,605

Table 3 - Clearnose skate discard and landings (in lbs) from trawl gear based on observer data

Calendar Year	Discards (in lbs)	Kept (in lbs)
2008	27213	7269
2009	78631	3357
2010	62269	6737
2011	114259	3795
2012	30106	786
2013	92829	3967
2014	84534	502

Table 4 - Rosette skate discards and landings (in lbs) from trawl gear based on observer data

Calendar Year	Discards (in lbs)	Kept (in lbs)
2008	671	
2009	2007	189
2010	8189	
2011	5777	
2012	5547	
2013	1208	
2014	7,040	

Table 5 - Thorny skate discards from trawl gear based on observer data

Calendar Year	Discards (in lbs)
2008	86,904
2009	90,670
2010	65,537
2011	54,575
2012	57,868
2013	40,147
2014	41,313