

Northeast Skate Complex Fishery Management Plan Framework Adjustment 9 Discussion Document



**DRAFT as of November 9, 2021
for November 16, 2021
Skate AP and Committee meetings**

Prepared by the
New England Fishery Management Council
In consultation with the
National Marine Fisheries Service



Document history

Initial Framework Meeting: September 20, 2021
Final Framework Meeting: Month ##, 20##
Preliminary Submission: Month ##, 20##
Final Submission: Month ##, 20##

Cover image

Compilation of NOAA images.



**FRAMEWORK ADJUSTMENT 9 TO THE NORTHEAST SKATE COMPLEX FISHERY
MANAGEMENT PLAN**

Proposed Action: Propose a ??? [to be written after the Council takes final action].

Responsible Agencies: New England Fishery Management Council
50 Water Street, Mill #2
Newburyport, MA 01950

National Marine Fisheries Service
National Oceanic and Atmospheric Administration
U.S. Department of Commerce
Washington, D.C. 20235

For Further Information: Thomas A. Nies, Executive Director
New England Fishery Management Council
50 Water Street, Mill #2
Newburyport, Massachusetts 01950
Phone: (978) 465-0492
Fax: (978) 465-3116

Abstract: The New England Fishery Management Council, in consultation with NOAA’s National Marine Fisheries Service, has prepared Framework Adjustment 9 to the Northeast Skate Complex Fishery Management Plan, which presents the range of alternatives to achieve the goals and objectives of the action. The proposed action focuses on ...??? [to be written after the Council takes final action]. The document addresses the requirements of the Magnuson Stevens Fishery Conservation and Management Act, the Regulatory Flexibility Act, and other applicable laws.

1.0 EXECUTIVE SUMMARY

[to be written]

2.0 TABLE OF CONTENTS

| | | |
|-----|---|----|
| 1.0 | EXECUTIVE SUMMARY..... | 4 |
| 2.0 | TABLE OF CONTENTS..... | 4 |
| 2.1 | Tables..... | 4 |
| 2.2 | Figures..... | 5 |
| 2.3 | Maps..... | 5 |
| 2.4 | Acronyms..... | 6 |
| 3.0 | INTRODUCTION | 7 |
| 4.0 | GOAL AND OBJECTIVES OF NORTHEAST SKATE COMPLEX FMP..... | 9 |
| 4.1 | Existing FMP Goal and Objectives..... | 9 |
| 4.2 | Updates to FMP Objectives | 10 |
| 5.0 | ALTERNATIVES UNDER CONSIDERATION..... | 11 |
| 5.1 | Alternative 1 – No Action..... | 11 |
| 5.2 | Alternative 2 – Year-round Federal Skate Permit..... | 11 |
| 5.3 | Alternative 3 – Retain Federal Skate Permit for Remainder of Fishing Year Once Obtained.... | 12 |
| 6.0 | PRELIMINARY ANALYSIS OF ALTERNATIVES..... | 12 |
| 6.1 | No Action..... | 13 |
| 6.2 | Alternative 2..... | 13 |
| 6.3 | Alternative 3..... | 19 |
| 6.4 | State Regulations | 21 |
| 7.0 | REFERENCES | 23 |

2.1 TABLES

| | | |
|----------|--|----|
| Table 1. | Vessels with federal skate permits issued, FY 2016-2021..... | 14 |
| Table 2. | Unique vessels with a federal skate permit issued and cancelled. | 14 |
| Table 3. | Federal permit cancellation codes, including those used in analysis (highlighted). | 14 |
| Table 4. | Massachusetts, Rhode Island, Connecticut, New York, and New Jersey skate state regulations. | 22 |

2.2 FIGURES

| | |
|--|----|
| Figure 1. Number of federal skate permits issued by different time periods relative to the start of the fishing year, FY 2016-2021..... | 15 |
| Figure 2. Percent of federal skate permits issued by different time periods relative to the start of the fishing year, FY 2016-2021..... | 15 |
| Figure 3. Number of skate permits issued by month and calendar year, 2016-2021..... | 16 |
| Figure 4. Percent of total annual skate permits issued by month and calendar year, 2016-2021. | 16 |
| Figure 5. Percent of permits starting in the same or different month relative to month permit was issued, 2018-2021..... | 17 |
| Figure 6. Number of skate permit cancellations by calendar month and year, 2016-2021..... | 20 |
| Figure 7. Percent of total annual skate cancellations by month and year, 2016-2021. | 20 |

2.3 MAPS

[insert table of maps]

2.4 ACRONYMS

| | | | |
|------------------|--|--------|---|
| ABC | Acceptable Biological Catch | NEFOP | Northeast Fisheries Observer Program |
| ACL | Annual Catch Limit | NEFSC | Northeast Fisheries Science Center |
| AM | Accountability Measure | NEPA | National Environmental Policy Act |
| AP | Advisory Panel | NMFS | National Marine Fisheries Service |
| ASMFC | Atlantic States Marine Fisheries Commission | NOAA | National Oceanic and Atmospheric Administration |
| B _{MSY} | Biomass that would allow for catches equal to Maximum Sustainable Yield when fished at the overfishing threshold (F _{MSY}) | OBDBS | Observer database system |
| CPUE | Catch per unit of effort | OFL | Overfishing Limit |
| DAS | Day(s)-at-sea | OY | Optimum yield |
| DMF | Division of Marine Fisheries (Massachusetts) | PDT | Plan Development Team |
| DMR | Department of Marine Resources (Maine) | SA | Statistical Area |
| EA | Environmental Assessment | SAFE | Stock Assessment and Fishery Evaluation |
| EEZ | Exclusive economic zone | SNE | Southern New England |
| EFH | Essential fish habitat | SNE/MA | Southern New England-Mid-Atlantic |
| EIS | Environmental Impact Statement | SSB | Spawning stock biomass |
| F | Fishing mortality rate | SSC | Scientific and Statistical Committee |
| FEIS | Final Environmental Impact Statement | TAL | Total allowable landings |
| FMP | Fishery management plan | TMS | Ten-minute square |
| FW | Framework | USCG | United States Coast Guard |
| FY | Fishing year | VMS | Vessel monitoring system |
| GARFO | Greater Atlantic Regional Fisheries Office | VEC | Valued ecosystem component |
| GB | Georges Bank | VTR | Vessel trip report |
| GOM | Gulf of Maine | WGOM | Western Gulf of Maine |
| IFQ | Individual fishing quota | YPR | Yield per recruit |
| ITQ | Individual transferable quota | | |
| LOA | Letter of authorization | | |
| MAFMC | Mid-Atlantic Fishery Management Council | | |
| MMPA | Marine Mammal Protection Act | | |
| MRIP | Marine Recreational Information Program | | |
| MSA | Magnuson-Stevens Fishery Conservation and Management Act | | |
| MSY | Maximum Sustainable Yield | | |
| NEFMC | New England Fishery Management Council | | |

3.0 INTRODUCTION

The Northeast Skate Complex Fishery Management Plan (FMP) contains the management measures for seven skate species (barndoor, clearnose, little, rosette, smooth, thorny, and winter skates) off the New England and Mid-Atlantic coasts. The FMP has been updated through a series of amendments, framework adjustments, and specification packages.

This framework adjustment to the Northeast Skate Complex Fishery Management Plan stems from the development of Amendment 5, through which the Council considered revising FMP objectives and developing a limited access skate permit and other measures that may prevent the triggering of incidental possession limits, improve catch reporting, and more clearly define participants in federal skate fishery. In September 2021, the Council decided to stop work on Amendment 5 and initiate a framework adjustment to further consider a sub-set of the issues developed through Amendment 5: updating the FMP objectives and revising the conditions of the open-access federal skate fishing permit.

AP and Committee:

In September 2020, the Council approved a problem statement, goals, and types of measures to consider for Amendment 5. In September 2021, the Council agreed to 1) discontinue work on Amendment 5 and 2) initiate Framework Adjustment 9 (FW9).

Because FW9 is a follow-on action regarding a subset of issues, the Amendment 5 problem statement and goals are likely not all relevant for FW9 (see text in purple below). What revisions to these statements do the AP and Committee recommend?

As Framework 9 includes updates to the Skate FMP goal and objectives, it would be helpful to include language in the Framework 9 problem statement/goals to that end. What about this suggestion?

Problem Statement: The goal and objectives of the Northeast Skate Complex Fishery Management Plan are unchanged since the original FMP was adopted in 2003, and a few aspects of the objectives are out of date.

Goal: To update the FMP objectives to reflect current stock status and rebuilding progress and to reflect how the Council identifies research priorities.

Amendment 5 Problem Statement:

There are two modes of the skate fishery, directed and non-directed fisheries. An incidental limit has been triggered five times since first implemented in July 2010, and when it gets triggered, there are negative impacts on the directed skate fishery and on the other fisheries that incidentally harvest skate.

There is a need to improve the reliability and accountability of catch reporting in the skate fishery (and other fisheries that catch skate) to ensure there is precise and accurate representation of catch (landings and discards). Accurate catch data are necessary to ensure that catch limits are set at levels that prevent overfishing and to determine when catch limits are exceeded.

Current and potential access to the skate resource make it difficult to achieve long term sustainable management in the skate fishery. It is more difficult to prevent overfishing and predict outcomes of management when participants in a fishery cannot be defined.

Amendment 5 Goals:

1. Avoid tripping the skate incidental possession limit.
2. Improve skate data, leading to improved assessments (e.g., no longer be considered data-poor) and more precise and accurate understanding of the landings and discards in different segments of the fishery.
3. Minimize discards.
4. Better characterize the directed and non-directed fisheries.
5. Better understand the true potential for vessels to enter the fishery.
6. Minimize the impact on any other fisheries that have interactions with skates.
7. Preserve, to the extent possible, ongoing participation in the fishery consistent with how past utilization has occurred.

4.0 GOAL AND OBJECTIVES OF NORTHEAST SKATE COMPLEX FMP

The goal and objectives of the Northeast Skate Complex Fishery Management Plan are unchanged since the original FMP was adopted in 2003. However, an update to Objectives 2 and 5 are being contemplated in this action (Section 4.2).

4.1 EXISTING FMP GOAL AND OBJECTIVES

Goal: Consistent with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act and other applicable laws, to develop a Fishery Management Plan to research and manage the Northeast Skate Complex at long-term sustainable levels.

Objective 1: Collect information critical for substantially improving knowledge of skate fisheries by species and for monitoring: (a) the status of skate fisheries, resources, and related markets and (b) the effectiveness of skate management approaches.

Objective 2: Implement measures to: protect the two currently overfished species of skates (barndoor and thorny) and increase their biomass to target levels, reduce fishing mortality on winter skate, and prevent overfishing of the other species in the Northeast skate complex – this may be accomplished through management measures in other FMPs (groundfish, monkfish, scallops), skate-specific management measures, or a combination of both as necessary.

Objective 3: Develop a skate permit system, coordinate data collection with appropriate state agencies for vessels fishing for skates or catching skates as bycatch only in state waters, and work with the fishing industry to establish a catch reporting system consistent with industry capabilities, including the use of study fleets.

Objective 4: Minimize the bycatch and discard mortality rates for skates caught in both directed and non-directed fisheries through the promotion and encouragement of experimentation, conservation engineering, and gear development.

Objective 5: Promote and encourage research for critical biological, ecological, and fishery information based on the research needs identified in the Skate SAFE Report and scoping document, including the development and dissemination of a skate species identification guide.

Objective 6: Minimize, to the extent possible, the impacts of skate management approaches on fisheries for other species on which New England and Mid-Atlantic fishermen depend (for example, groundfish, monkfish, scallops, and fluke), recognizing the interconnected nature of skate and other fisheries in the Northeast Region.

Objective 7: To the extent possible, manage clearnose and rosette skates separately from the other five species in the skate complex, recognizing that these two species are distributed primarily in the Mid-Atlantic and South Atlantic regions.

4.2 UPDATES TO FMP OBJECTIVES

Objective 2 - UPDATE: Implement measures to: protect any overfished species of skates and increase their biomass to target levels and prevent overfishing of the species in the Northeast skate complex – this may be accomplished through management measures in other FMPs (groundfish, monkfish, scallops), skate-specific management measures, or a combination, as necessary.

Rationale for Update: Objective 2 should be generalized to apply to any skate species. Barndoor skate was declared rebuilt in 2016, so the language is out of date. The skate stock assessment in 1999 (SAW 30) concluded that barndoor, thorny, smooth, and winter were overfished and overfishing was occurring on winter skate. After the fall 2001 survey, only barndoor and thorny skates were considered overfished. Likely, the degree of uncertainty about the condition of winter skate motivated the Council to include reducing fishing mortality on this stock as an FMP objective. Today, winter skate is one of the most abundant in the complex, according to the survey index. It is a target species for the fishery, particularly in the wing fishery. There is no longer a need to single out winter skate in Objective 2.

Objective 5 - UPDATE: Promote and encourage research for critical biological, ecological, and fishery information based on the research needs identified and updated by the Council.

Rationale for Update: Objective 5 should be consistent with how the Council currently sets research priorities. The scoping document referred to is the one for the original scoping for the FMP, now long out of date. Rather than list the research priorities in separate documents for each FMP (e.g., SAFE reports), the Council now maintains [one list of priorities](#). Also, a species identification guide was created and disseminated to fishermen a few years ago and information is available on [GARFO's website](#).

5.0 ALTERNATIVES UNDER CONSIDERATION

5.1 ALTERNATIVE 1 – NO ACTION

Under No Action, anyone with a valid vessel operator permit can obtain and subsequently drop a federal skate permit at any point in the fishing year.

5.2 ALTERNATIVE 2 – YEAR-ROUND FEDERAL SKATE PERMIT

Under Alternative 2, an application for a federal skate permit must be submitted 30 days prior to the start of each fishing year and must be retained with the vessel for the entire year.

Rationale: This would prevent vessels from entering and leaving the federal skate fishery mid-year and more landings would be monitored in-season against the bait and wing TALs. If vessels had to commit to either state or federal fishing on an annual basis, the total number of potential federal vessels would be known at the beginning of the fishing year. This would also make state and federal fishing more distinct. Requiring a 30-day application deadline would be consistent with the deadline for submitting a permit renewal application for the limited access Northeast multispecies permits, which has the same fishing year start date (May 1) and a substantial portion of skate landings are on groundfish trips.¹

AP and Committee:

The Alternative 2 rationale indicates that more landings would be included in TAL monitoring. This would be the case if vessels that currently add and/or drop the federal skate permit choose to have a year-round federal permit and meet the application deadline. Conversely, participation in the federal fishery could be reduced if vessels choose to remain in a state fishery or miss the deadline. The PDT is still developing an analysis that clarifies the types of vessels that currently add and drop the federal skate permit (Section 6.0), which may clarify the likelihood of various outcomes. Note that skate landings are excluded from TAL monitoring if the vessel does not have any federal fishing permits on the day of landing. If the vessel has dropped the federal skate permit but retains other federal fishing permits, subsequent skate landings would be monitored against the TAL.

Knowing the potential federal vessels at the beginning of the fishing year and making state and federal fishing more distinct are indeed potential outcomes. It would help if the rationale identified the potential benefit or goal of the potential outcomes. Should there be any clarifications to the rationale?

Further, if Alternative 2 is implemented, there would need to be a substantial communication effort to industry, so vessels have a reasonable opportunity to meet this deadline if they so choose.

¹ The scallop fishery also has a 30-day application deadline prior to the April 1 start of its fishing year, and the monkfish fishery has no specific restriction on the timing of permit applications/renewals, just if it is received before the start of the fishing year, May 1.

5.3 ALTERNATIVE 3 – RETAIN FEDERAL SKATE PERMIT FOR REMAINDER OF FISHING YEAR ONCE OBTAINED

Under Alternative 3, the federal skate permit may be obtained at any point in the fishing year and must be retained for the remainder of the fishing year.

Rationale: This alternative would allow for improved tracking of participation and allow for flexibility for entering the federal fishery. Switching from federal to state fishing, especially when a federal incidental limit is in place, would not be permitted.

AP and Committee:

As with Alternative 2, it would help to have more rationale identifying the potential benefits or goals the alternative would achieve. Should there be any clarifications to the rationale?

6.0 PRELIMINARY ANALYSIS OF ALTERNATIVES

AP and Committee:

After reviewing this section, what other information could the PDT provide that could clarify the impacts of the alternatives and help in making a final recommendation for preferred alternatives?

This preliminary analysis of alternatives investigates the trends in the issuing and cancelling of federal skate permits over time, the permit trends in response to the triggering of federal incidental possession limits specifically for the reason of fishing in state fisheries, and state skate regulations. While the action alternatives propose no changes to what is considered state vs federal fishing or how state and federal skate quotas are set and monitored, the following may be helpful context.

State fishing. When fishing in state waters, a vessel must abide by the more restrictive regulations, state or federal, for the permits associated with that vessel. A reason to drop the federal skate permit is if the regulations for a state are less restrictive. If the vessel also has other federal fishing permits that are year-round (e.g., limited access groundfish and monkfish) it could not drop those permits. In that case, the vessel would need to follow the federal requirements for the federal fishing permits it has and sell its landings to a federal dealer. Regulations vary by state. For states examined thus far, there are either no state skate possession limits or they are similar or higher than the federal possession limits (Section 6.4). Note that the federal Skate FMP cannot impinge on state regulations or control skate fishing in state waters when a vessel does not have a federal fishing permit.

Quota monitoring and accounting. The skate landings that are monitored in-season against the federal wing and bait TALs (and thus contribute towards triggering federal incidental possession limits) are those made by vessels with a federal fishing permit on the day of landing. If a vessel drops the federal skate permit, but retains other federal fishing permits, its skate landings are monitored against the TAL. The “state landings” in year-end ACL accounting and the deduction in the specifications flow chart are only landings from vessels with a permit number of 000000. If a vessel has no federal permit on day of landing but has a 6-digit permit number due to having a federal permit at some point in the past, its skate landings are not monitored in-season against the federal TAL (i.e., not counted towards triggering incidental limits) and are not “state landings” in year-end accounting or in specifications (they are in “commercial landings” in ACL accounting) even though they could be landings from a state fishery.

6.1 NO ACTION

Under No Action, anyone with a valid vessel operator permit can obtain and subsequently drop a federal skate permit at any point in the fishing year. As with other open-access permits, the federal skate permit may be added and dropped as often as desired throughout the fishing year, but the vessel must be enrolled for a minimum period of 7 days and there is processing time within the GARFO permit office which limits flexibility somewhat.

6.2 ALTERNATIVE 2

Under Alternative 2, an application for a federal skate permit must be submitted 30 days prior to the start of each fishing year and must be retained with the vessel for the entire year. This would require vessels to commit to holding a federal skate permit year-round. Vessels with the federal skate permit could fish in state waters but would be subject to federal regulations unless state regulations are more restrictive.

Potential impacts to quota monitoring. Skate landings are monitored against the Federal TAL if there is a federal fishing permit (skate or other) on the vessel on the day of landing. For vessels with a year-round federal skate permit, all skate landings are monitored in-season against the TAL. If vessels that currently add or drop the federal skate permit choose to have a year-round federal skate permit and meet the application deadline, this may increase the landings fishery-wide that are monitored against the TAL, if those vessels previously did not have any federal fishing permits on the day of landing. It is very hard to predict this business decision. Conversely, if vessels choose to remain in a state fishery or miss the deadline and have no other federal fishing permits, the amount of landings monitored in-season against the TAL may be reduced.

Identifying the vessels that may be impacted. Examining permit issuance data can clarify how many and the type of vessels that already regularly meet this 30-day permit application deadline and those which may need to adjust their business planning and fishing operations. From FY 2016-2021, there were 1,817 – 2,075 unique vessels that were issued a federal skate permit for that fishing year at some point in the year (Table 1). Of those vessels, 28-39% were issued their permit on or after April 1, so under Alternative 2 would need to alter their business practices.

Federal skate permits can be cancelled for a variety of reasons (Table 3). The PDT examined permit cancellations to identify those who may be canceling their permit for the purpose of fishing in a state fishery to highlight the impacts of requiring a federal skate permit be retained year-round (Alternative 2) or for the remainder of the fishing year once obtained (Alternative 3). Each year, there are about 110-160 unique vessels that cancel a skate permit at some point in the year, which would not be able to do so under either alternative (Table 2).

Permit issuance data by month from FY 2016-2021 were examined (Figure 1 to Figure 5). On average, more than half of the federal skate permits issued (63%) are issued more than 30 days prior to the start of the fishing year. On average, 14% of permits are issued within 30 days of the start of the fishing year, 6% are issued in May of the fishing year, and 17% are issued after May and within the fishing year. More federal skate permits are issued in February, March, and April relative to other months, some of which can be fished in May (i.e., the start of the coming Fishing Year; Figure 5). For the most part, permits issued during the rest of the year can be fished during the same month as issuance.

Note that the number of permits issued is based on the “date issued” variable within the Permit database, such that a vessel could add and drop a permit multiple times within a year and each instance would be counted towards the total number/percent of permits issued.

Table 1. Vessels with federal skate permits issued, FY 2016-2021.

| FY | Total unique vessels ^a | Issued on or after April 1 ^b |
|------|-----------------------------------|---|
| 2016 | 2,075 | 816 (39%) |
| 2017 | 2,049 | 714 (35%) |
| 2018 | 2,033 | 756 (37%) |
| 2019 | 2,032 | 727 (36%) |
| 2020 | 1,997 | 754 (38%) |
| 2021 | 1,817 | 507 (28%) |

^a number of unique vessels with a federal skate permit starting (able to be fished) in each fishing year.

^b Number of unique vessels which had at least one federal skate permit application within 30 days or during the FY (on or after April 1).

Table 2. Unique vessels with a federal skate permit issued and cancelled.

| Year | Calendar year | | Fishing year | |
|------|--|--|---|--|
| | Number of unique vessels issued a federal skate permit | Number of unique vessels that cancelled a federal skate permit | Number of unique vessels issued a federal skate permit ¹ | Number of unique vessels that cancelled a federal skate permit |
| 2016 | 2,003 | 161 (8%) | 1,909 | 157 (8%) |
| 2017 | 1,997 | 141 (7%) | 1,860 | 137 (7%) |
| 2018 | 1,978 | 111 (6%) | 1,862 | 111 (6%) |
| 2019 | 1,966 | 123 (6%) | 1,815 | 120 (7%) |
| 2020 | 1,943 | 130 (7%) | 1,806 | 125 (7%) |
| 2021 | 1,847 | 91 (5%) | 247 | 44 (18%) |

¹ Includes vessels that are issued a permit in FYx but start in FYz. Thus, these numbers are not equivalent to those in Table 1.

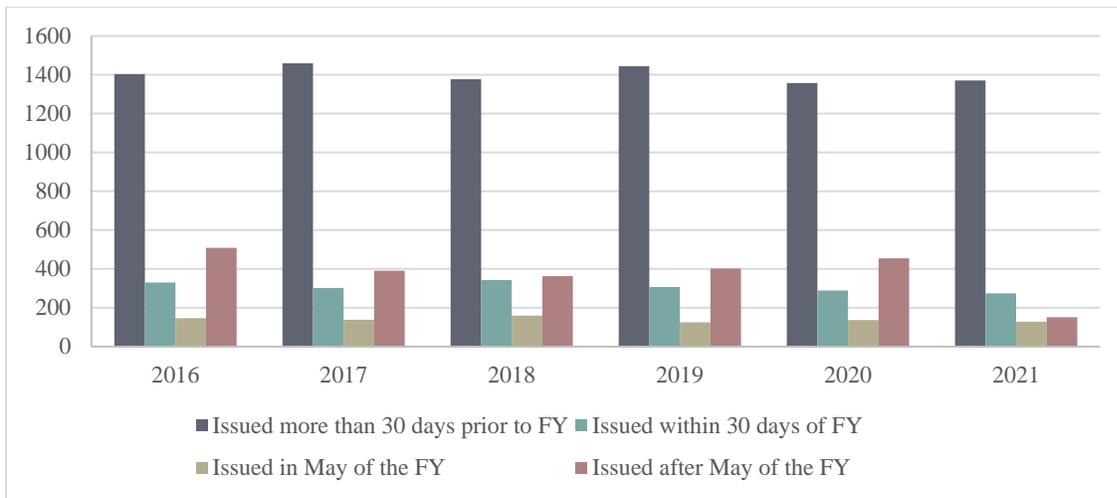
Table 3. Federal permit cancellation codes, including those used in analysis (highlighted).

| Code | Cancellation Description | Code | Cancellation Description | Code | Cancellation Description |
|------|--------------------------------|------|----------------------------------|------|--------------------------------|
| 1 | Permit Sanction | 8 | Permitted Fisheries Changed | 15 | Bad Check |
| 2 | Vessel Sunk | 9 | Documentation Number Issued | 16 | HMS 3-year Permit Renewal |
| 3 | Vessel Destroyed | 10 | State Registration Number Issued | 17 | Renewal with Compliance Issues |
| 4 | Cancelled by Owner or NMFS | 11 | Annual Permit Renewal | 19 | Black Sea Bass Cancelled |
| 5 | Vessel Characteristics Changed | 12 | Duplicate Hull Number | 20 | Transfer |
| 6 | Vessel Name Changed | 13 | Change in Address | | |
| 7 | Vessel Owner Changed | 14 | Permit Expired | | |

Note: There is no cancellation code specific to cancelling the federal skate permit with the intent of entering a state fishery. Those codes highlighted here may be related to this purpose and were included in this analysis.

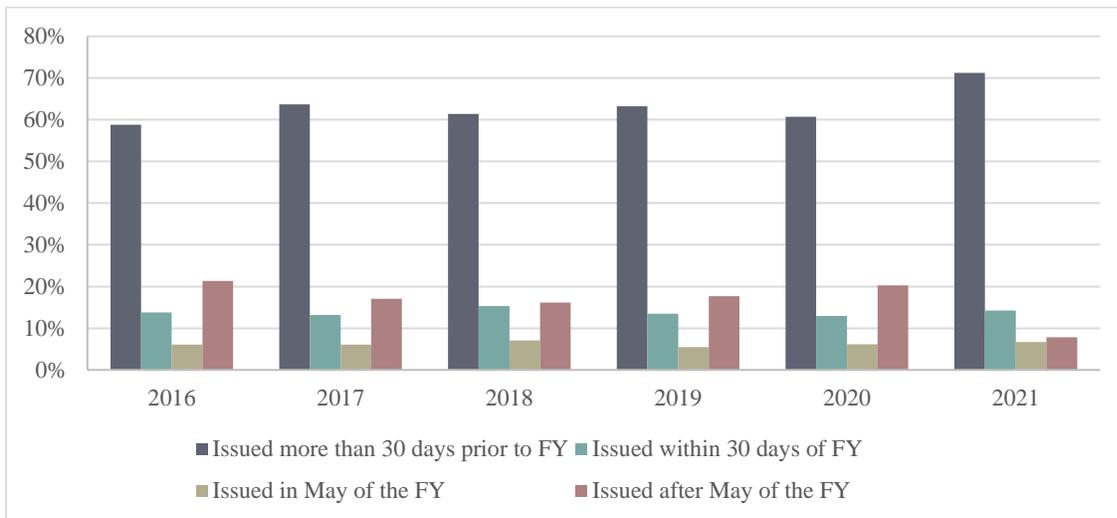
An average of 1,402 federal skate permits each year (over FY 2016-2021) were issued more than 30 days prior to May 1, the start of the fishing year, which is over half (63%) of skate permits issued (Figure 1, Figure 2). An average of 308 federal skate permits were issued within 30 days of May 1, 139 were issued in May, and 379 were issued after May of the fishing year. The skate permits issued before May 1 could be impacted by the requirement to submit a skate permit application at least 30 days prior, while the remaining 518 (23% of total) permits would certainly be impacted by the proposed 30-day requirement. The trend in permit issuance is consistent from FY 2016-2021. The PDT would need to do more analysis to understand the number and trends of specific vessels that are applying for a permit after April 30 over time, to determine the type of vessels and degree of consistency year by year.

Figure 1. Number of federal skate permits issued by different time periods relative to the start of the fishing year, FY 2016-2021.



Source: Federal skate permit data (PERMIT.VPS_VESSEL), originally queried for any plan code indicating “SKT” in April 2021 and re-queried for additional years in October 2021.

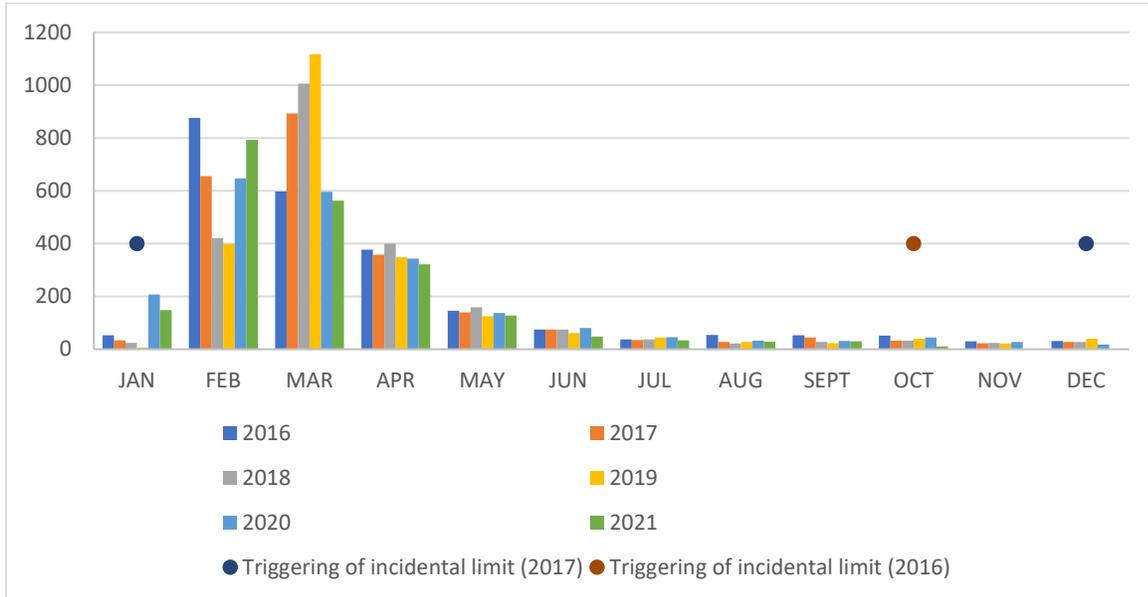
Figure 2. Percent of federal skate permits issued by different time periods relative to the start of the fishing year, FY 2016-2021.



Source: Federal skate permit data (PERMIT.VPS_VESSEL), originally queried for any plan code indicating “SKT” in April 2021 and re-queried for additional years in October 2021.

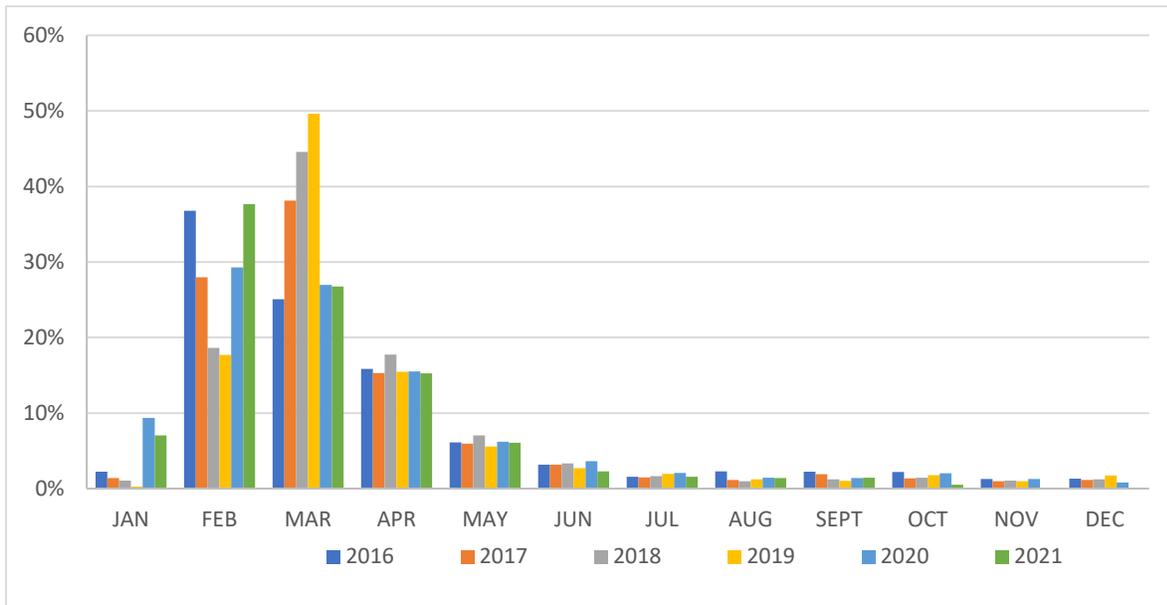
Federal skate permits are most often issued in February, March, and April (Figure 3, Figure 4). Very few of the permits issued in these months start being fished on that month; most start being fished on in May of that year (Figure 5). The permits issued after May 1 are, for the most part, first fished on during the same month. While there is some fluctuation in when permits are issued annually from 2016-2021, most permits are issued from February through May.

Figure 3. Number of skate permits issued by month and calendar year, 2016-2021.



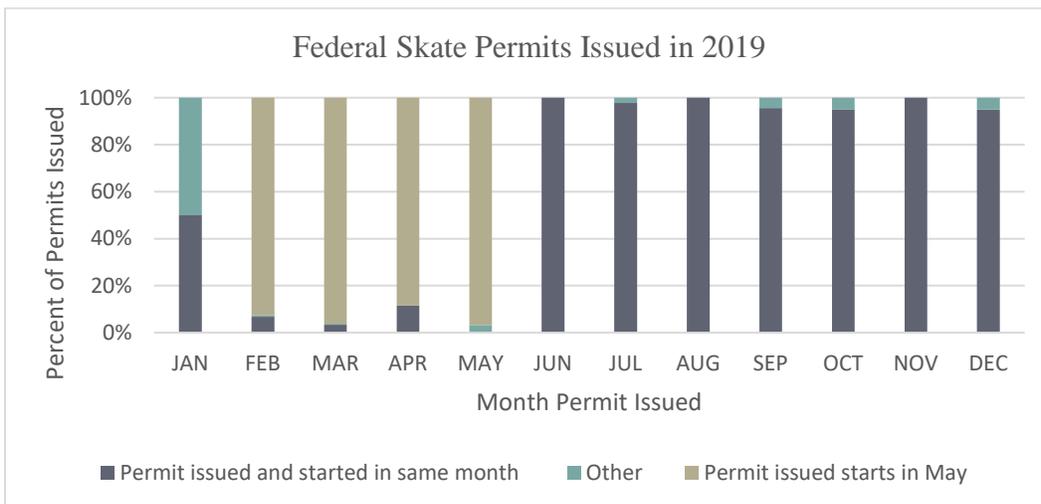
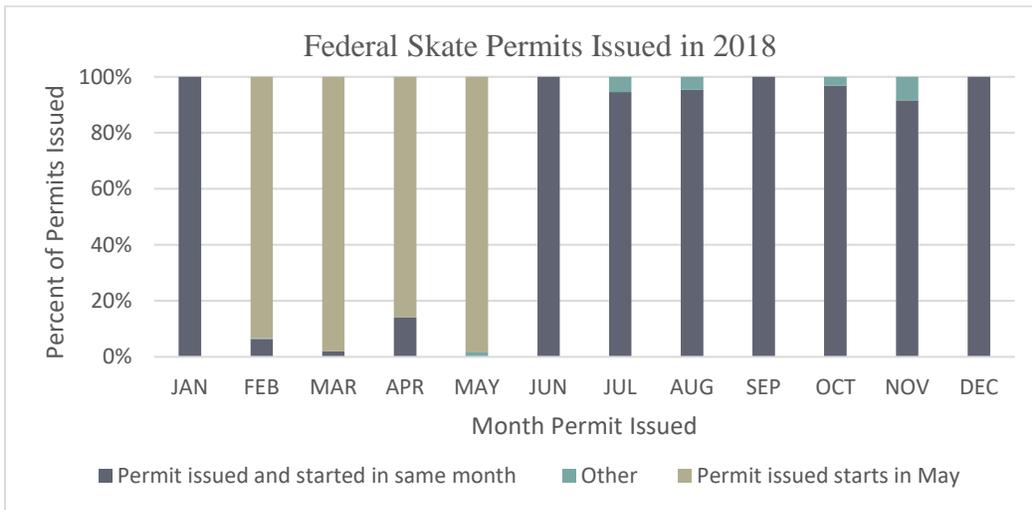
Source: Federal skate permit data (PERMIT.VPS_VESSEL), originally queried for any plan code indicating “SKT” in April 2021 and re-queried for additional years in October 2021.

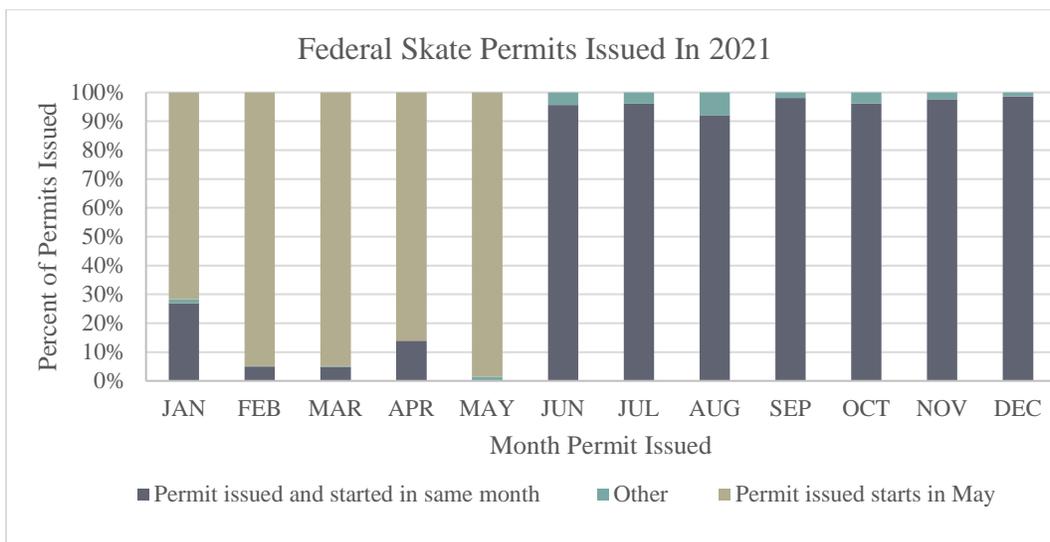
Figure 4. Percent of total annual skate permits issued by month and calendar year, 2016-2021.



Source: Federal skate permit data (PERMIT.VPS_VESSEL), originally queried for any plan code indicating “SKT” in April 2021 and re-queried for additional years in October 2021.

Figure 5. Percent of permits starting in the same or different month relative to month permit was issued, 2018-2021.





Source: Federal skate permit data (PERMIT.VPS_VESSEL), originally queried for any plan code indicating “SKT” in April 2021 and re-queried for additional years in October 2021.

Notes: A permit’s start month is the month the permit holder is authorized to start federal skate fishing, whereas the month issued is when the permit application was processed and approved. Trends in federal skate permits issued from 2015-2017 were similar to 2018-2021.

6.3 ALTERNATIVE 3

Under Alternative 3, the federal skate permit may be obtained at any point in the fishing year and must be retained for the remainder of the fishing year. One implication of this alternative is that vessels would no longer be able to drop the federal skate permit to participate in a state fishery later in the year.

Potential impacts to quota monitoring. With a federal fishing permit, skate landings are monitored in-season against the TAL. It is hard to predict if under Alternative 3, more vessels would choose to obtain a federal skate permit or not. This may or may not increase the landings fishery-wide that are monitored against the TAL. It is very hard to predict this business decision.

Identifying the vessels that may be impacted. Examining the permit cancellation data by month and year illustrates the number and type of vessels that may need to adjust their business planning and fishing operations. The number of federal skate permit cancellations is based on the cancellation date of individual permit applications. To isolate possible add/drop behavior related to fishing in state fisheries, only the cancellation reasons highlighted in Table 3 are included in the count of permit cancellations.

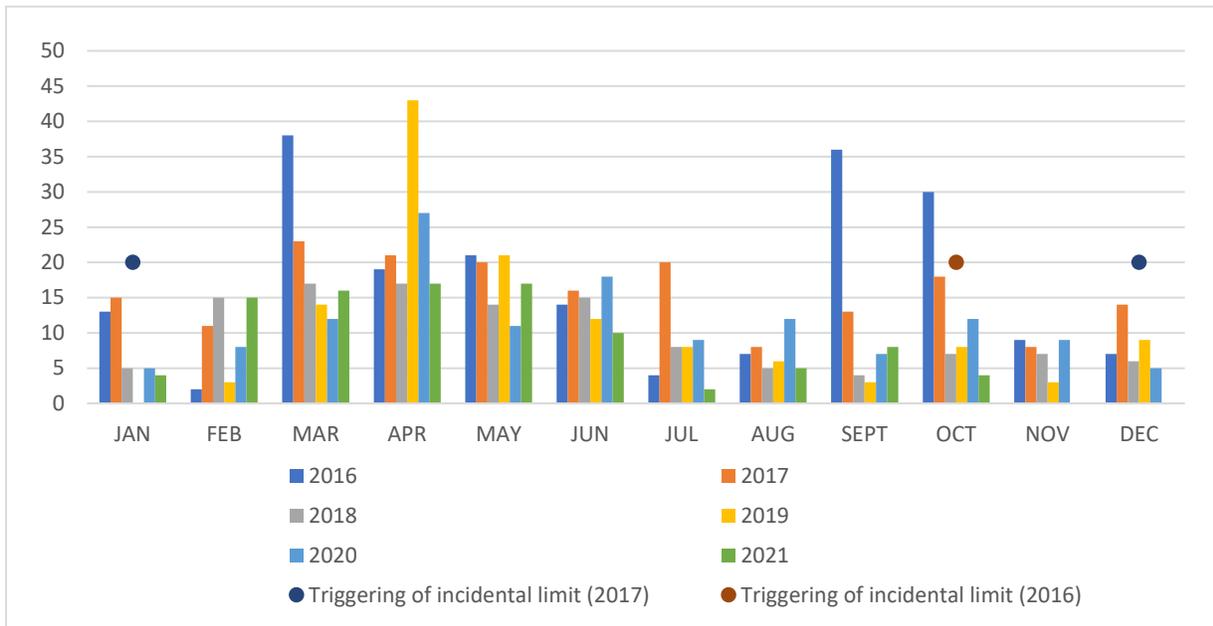
- Federal skate permits are cancelled throughout the year with no clear trend from 2016-2021, however, the spring months tend to have higher cancellations on average, though there are years with notable exceptions.
- It is difficult to determine the degree to which cancellation tendencies are impacted by the anticipation and result of triggering of the federal incidental possession limits or other factors such as vessels following the skate resource, market factors, etc.

Federal permit cancellations around the time that federal incidental limits have been triggered were examined to determine the degree to which vessels may have exited the federal fishery to continue fishing in state fisheries. Note that there is no cancellation code specific to cancelling the federal skate permit with the intent of entering a state fishery. The codes included in this analysis are those that may be related to this purpose such that the results shown here are likely to be an upper bound on permit cancellations for the purpose of fishing in state waters.

There were over 13,500 federal skate permit applications submitted from 2016 through 2021 and, of these, there are only 870 plausible state-fishing related cancellations (6% of total skate permit applications). There were federal skate permit cancellations in each month of every calendar year from 2016-2021. While there is no clear trend in permit cancellations over the course of the year and between years, the spring months trend towards more cancellations, though there are exceptions for years in which permit cancellations were highest in September and October.

There are three instances where the incidental possession limits were triggered in this analysis: October 2016 (bait only), January-March 2017 (wing and bait), and December-April 2017 (wing only; the Affected Environment document, Section 1.5.1.3). Changes in permits before and after incidental limit triggers might be somewhat masked if only one fishery segment is operating under full possession limits, while the other fishery is operating under the incidental limit. It is difficult to discern if cancellations increased with the triggering of incidental limits. Specifically, there is no notable uptick in permit cancellations just prior to or after the January (bait and wing) and December 2017 (wing only) events when triggering of the incidental limit occurred, however, there is a relatively high number of cancellations in September and October of 2017 which might be attributed to the triggering which occurs in the coming months (Figure 6 and Figure 7). The incidental limit was also triggered briefly in October 2016 (bait only) and there are large numbers/percentages of cancellations in September and October of 2016, however, there are relatively few cancellations in July and August which would suggest that there are inconsistencies in cancellation behavior leading up to trigger events. From this analysis, it is difficult to determine if cancellation tendencies are impacted by the anticipation of triggering events or other factors such as vessels following the skate resource, market factors, etc.

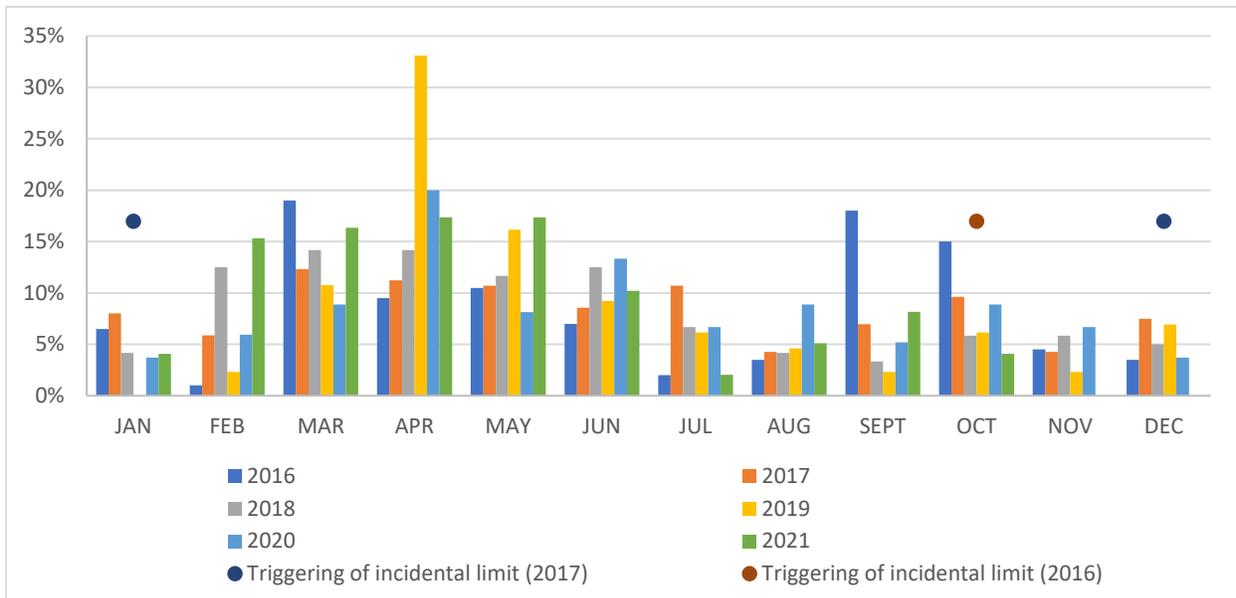
Figure 6. Number of skate permit cancellations by calendar month and year, 2016-2021.



Source: Federal skate permit data (PERMIT.VPS_VESSEL), originally queried for any plan code indicating “SKT” in April 2021 and re-queried for additional years in October 2021.

Note: Incidental limit was triggered October 18, 2016, and possession limit was lowered until October 31 of that same year.

Figure 7. Percent of total annual skate cancellations by month and year, 2016-2021.



Source: Federal skate permit data (PERMIT.VPS_VESSEL), originally queried for any plan code indicating “SKT” in April 2021 and re-queried for additional years in October 2021.

Note: Incidental limit was triggered October 18, 2016, for the bait fishery, and the bait possession limit was lowered until October 31 of that same year.

6.4 STATE REGULATIONS

The PDT researched regulations for skate fishing within state fisheries. Federal regulations require vessels to adhere to the most stringent regulations, state or federal, of the permits on the vessel. Vessels may drop their federal fishing permit and fish in the state skate fishery with potentially higher possession limits. Massachusetts, Rhode Island, and Connecticut skate state fishing regulations were compiled given these three states have the highest skate landings in recent years; skate regulations for New York and New Jersey were also included as skates are harvested in these states as well, though to a lesser extent (Table 3). Under Alternative 2, a year-round federal skate permit would force vessels to fish under federal or state regulations exclusively that year, which could result in an increase in state landings if there is a shift from federal to state fishing. Under Alternative 3 (retaining federal skate permit for the fishing year once obtained), impacts would be similar to Alternative 2, but reduced by the proportion of the fishing year in which these vessels catch skates in a state fishery before they obtain a federal skate permit.

Rhode Island. In Rhode Island, the possession limit is 35,000 lb per week, which on a weekly basis, is like the federal daily wing limit of 5,000 landed pounds, if the vessel fishes seven days a week (Table 4). This does not prohibit a vessel from landing 35,000 pounds in one day, but that is logistically unlikely. When a federal skate incidental limit is imposed, Rhode Island does not reduce its weekly possession limit to match the lower federal limit (to 3,500 landed pounds of skates per week). Fishermen may drop their federal skate fishing permit and, rather than catch 500 lb in the federal fishery, land 35,000 lb per week in the Rhode Island fishery. Winter skate are available in RI state waters for a short period of time, and RI assesses state-water landings at the end of the year to assure they do not undermine the federal plan.

Massachusetts. Massachusetts has large areas of state waters (e.g., Cape Cod Bay) and no possession limit for skates. Vessels that choose to fish in the MA state fishery have no limit on skate landings per trip, if they do not have a federal skate permit and have a MA limited access endorsement for their gear (Table 4). That is, if a vessel is fishing in state waters and does not hold a federal permit, then it is allowed unlimited retention and landing of skates. These potentially large landings of skate could be limited by spawning and groundfish closures if they occur in places and at times when skates are caught in MA state waters.

Connecticut. Connecticut manages the northern part of Long Island Sound, which is split with New York. With no skate possession limit, CT vessels could land large quantities of skate per trip, if they do not have a federal skate permit and have a CT limited access license for otter trawl or gillnet gears (Table 4).

New York. New York manages the southern part of Long Island Sound. New York has no skate possession limit; these vessels could land large quantities of skate per trip if they do not have a federal skate permit and have a NY limited access license for Food Fish (Table 4).

New Jersey. New Jersey state waters include many bays and sounds, which have specific mesh size, gear length, vessel length, and gear tending regulations, some by season. All these rules may restrict skate fishing by otter trawls and gillnets, however, there is no possession limit for skates (Table 4).

Table 4. Massachusetts, Rhode Island, Connecticut, New York, and New Jersey skate state regulations.

| State | Possession limit | State permit | State requirements |
|--|-----------------------------------|--|---|
| MA | None | Need a state permit plus limited access endorsements for trawls, dredges, gillnets | Indirect skate management through spawning, quota, and groundfish closures (may affect skates as bycatch) |
| RI | 35,000 lb/week (weekly aggregate) | RI Commercial Fishing License, and there must be no active federal skate fishing permit that day, no day at sea declaration | Yes, but RI unable to confirm that fishing occurred in state waters |
| CT | None | <i>Commercial Fishing Vessel Permit</i> (requirement for all vessels, apply by March 1) and 1) Otter trawl license (limited access) or 2) Gillnet license (limited access) or 3) Commercial Landing Vessel Operator (from non-state waters) | Yes, a Commercial Fishing Vessel Permit, minimum |
| NY | None | Limited entry, Food Fishing license | Rules on gear types |
| NJ | None | Limited entry license for otter trawl (<165 ') and gillnets Scallop dredge and longline prohibited No licenses issued, sales, or seasonal restrictions for hook and line | Gillnet: seasonal mesh size & length rules, etc. Fixed gillnets must be attended during summer |
| <i>Source: Various state staff, queried by PDT members, November 2021.</i> | | | |

7.0 REFERENCES

- Carr HA & Milliken HO. (1998). Conservation engineering: options to minimize fishing's impacts to the sea floor. In: *Effects of Fishing Gear on the Sea Floor of New England*. Boston, MA: MIT Sea Grant. p. 100-103.
- Deroba JJ, Gaichas SK, Lee M-Y, Feeney RG, Boelke DV & Irwin BJ. (2019). The dream and the reality: meeting decision-making time frames while incorporating ecosystem and economic models into management strategy evaluation. *Canadian Journal of Fisheries and Aquatic Sciences*. 76(7): 1112-1133.
- EDF. Environmental Defense Fund Catch Share Design Center: Environmental Defense Fund; <http://catchshares.edf.org>.
- Field J. (2003). *Social Capital*. London and New York: Routledge p.
- Lovgren, J. et al. vs. Locke, G. et al. (2012). United States Court of Appeals for the First Circuit. 11-1952.
- McCay BJ. (2003). Sea Changes in Marine Fisheries Policy: Contributions from Anthropology. Paper presented at: Proceedings of the Third World Fisheries Congress: Feeding the World with Fish in the Next Millennium – The Balance Between Production and Environment, Beijing, 2000.
- NEFMC. (2016). Final Omnibus Essential Fish Habitat Amendment 2. Vol. 1-6 plus appendices. Newburyport, MA: New England Fishery Management Council. 490 p. <https://www.nefmc.org/library/omnibus-habitat-amendment-2>.
- NEFMC. (2018). Framework Adjustment 57 to the Northeast Multispecies Fishery Management Plan. Newburyport, MA: New England Fishery Management Council in consultation with the National Marine Fisheries Service. 381 p.
- Sherman K, Jaworski NA & Smayda TJ eds. (1996). *The Northeastern Shelf Ecosystem - Assessment, Sustainability, and Management*. Cambridge, MA: Blackwell Science. 564 p.
- Stevenson D, Chiarella L, Stephan D, Reid RN, Wilhelm K, McCarthy J & Pentony M. (2004). Characterization of the Fishing Practices and Marine Benthic Ecosystems of the Northeast U.S. Shelf, and an Evaluation of the Potential Effects of Fishing on Essential Fish Habitat. Woods Hole, MA: U.S. Dept. of Commerce. NEFSC Technical Memo NMFS-NE-181. 179 p.
- Thunberg EM & Correia SJ. From Fishing Capacity to Diversity: Changing Fishery Management Priorities in the New England Groundfish Fishery. Proceedings of the 17th Biennial Conference of the International Institute of Fisheries Economics and Trade; 2014; Brisbane, Australia.