Council Meeting Webinar

Thursday, July 16, 2020

The Mid-Atlantic Fishery Management Council will hold an interim Council meeting via webinar on Thursday, July 16, 2020. The purpose of this meeting is to take final action on the Mackerel, Squid, Butterfish FMP Goals/Objectives and *Illex* Permits Amendment. Briefing materials and webinar connection information will be posted on the Council's website at http://www.mafmc.org/briefing/july-2020.

Agenda

Thursday, July 16th

9:00 a.m.	**Council Convenes**
9:00 a.m. – 12:00 p.m.	**Mackerel, Squid, Butterfish FMP Goals/Objectives and *Illex* Permits Amendment** – Review alternatives and associated analyses – Review committee recommendations – Council discussion
12:00 p.m. – 1:00 p.m.	**Lunch**
1:00 p.m. – 4:00 p.m.	**Mackerel, Squid, Butterfish FMP Goals/Objectives and *Illex* Permits Amendment (Continued)** – Continue Council discussion and take final action
4:00 p.m.	**Council Adjourns**

Note: Public questions will be taken after presentations, and public comments will be taken before voting on motions.

The above agenda items may not be taken in the order in which they appear and are subject to change as necessary. Other items may be added, but the Council cannot take action on such items even if the item requires emergency action without additional public notice. Non-emergency matters not contained in this agenda may come before the Council and / or its Committees for discussion, but these matters may not be the subject of formal Council or Committee action during this meeting. Council and Committee actions will be restricted to the issues specifically listed in this agenda. Any issues requiring emergency action under section 305(c) of the Magnuson-Stevens Act that arise after publication of the Federal Register Notice for this meeting may be acted upon provided that the public has been notified of the Council's intent to take final action to address the emergency. The meeting may be closed to discuss employment or other internal administrative matters.

Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201, Dover, DE 19901
Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Michael P. Luisi, Chairman | G. Warren Elliott, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: July 8, 2020

To: Council

From: J. Didden, staff

Subject: July Council Meeting Briefing Materials

The Council will meet via webinar on Thursday, July 16, 2020 to consider final action on the Mackerel, Squid, Butterfish FMP Goals/Objectives and *Illex* Permits Amendment. The following briefing materials are available for review regarding this amendment:

1. Decision Document with wrap-up analyses
2. June 2020 MSB Committee Meeting Summary and Recommendations
3. Comments received before briefing book deadline
4. NMFS GARFO Letter Regarding Amendment
5. Summary of April 29, 2020 MSB Committee Meeting with follow-up analyses
6. The Amendment's Public Hearing Document
7. Public Hearing Comments and associated Written Comments are available at the page for the April 29, 2020 MSB Committee Meeting.
8. 2020/2021 *Illex* Quota Documents
9. June 2020 Council Meeting Report with decisions on 2020/2021 *Illex* Quotas

These materials are available at the links above or on the July 16, 2020 Meeting Page: https://www.mafmc.org/briefing/july-2020.

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Michael P. Luisi, Chairman | G. Warren Elliott, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: July 8, 2020

To: Council

From: J. Didden, staff

Subject: Decision Memo and wrap-up analyses.

This memo highlights the decisions before the Council, staff's understanding of the rationale behind the Committee recommendations to take action, as well as some wrap-up analyses resulting from the June 2020 Committee meeting and subsequent FMAT discussions. If staff is missing any rationale or has misinterpreted any rationale, then the Council can advise us during the July 2020 Council Meeting. This document supplements the April and June 2020 Committee meeting summaries, as well as other briefing materials for the July 2020 Council Meeting.

1. Potential Modifications for *Illex* Limited Access

The Council previously approved the alternatives in the Public Hearing Document, and the Committee recommended a simplified set of five alternatives for final consideration. As described in the summary of the April 2020 MSB Committee Meeting, and then with #4 modified and identified as recommended by the MSB Committee at its June 2020 meeting, the simplified set of alternatives would be:

#1. No action. (75 Permits)

#2. 51 requalifiers: 1997-2019 @ 50 K pounds[1] (no Tiering)

#3. 13 requalifiers: 1997-2013[2] **plus** 2014-2019 w/1,000,000 pounds **each** (no Tiering)

#4. 35 requalifiers: Tier 1 - 1997-2013 @ 500 K pounds
13 requalifiers: Tier 2 - 1997-2018 @ 100 K pounds (62,000-pound trip limit)
02 requalifiers: Tier 3 - 1997-2018 @ 50 K pounds (20,000-pound trip limit)
25 of 75 permits would not requalify for any Tier

[1] All qualification criteria would be based on live pounds, which only slightly altered the number of estimated qualifying vessels from the Public Hearing Document.

[2] In addition to communications previously discussed regarding the control date, GARFO staff noted that from 2014-2019 the 2013 control date was highlighted in annual permit application packages

A vessel is also eligible for a Tier 1 permit under #4 if it purchased and can document a refrigerated seawater system, plate freezing system or blast freezer and had it installed between January 1, 2012 through the control date of August 2, 2013, AND the vessel landed a minimum of 200,000 lbs of *Illex* in the 2013 fishing year, ending December 31, 2013.[3]

#5. 42 requalifiers: Tier 1 - 1997-2013 @ 500 K pounds **OR** 2014-2019 @ 1 M pounds
07 requalifiers: Tier 2 - 1997-2019 @ 100 K pounds (90K trip limit)
02 requalifiers: Tier 3 - 1997-2019 @ 50 K pounds (47K trip limit)
24 of 75 permits would not requalify for any Tier

The FMAT (primarily John Walden, NEFSC) conducted several follow-up analyses to further quantify capacity for the above alternatives. The analyses support that the fishery has substantial excess capacity, and that most of the alternatives will retain substantial excess capacity compared to the current quota. Since information on the vessels that would not qualify for alternative #2 is more uncertain, the capacity analyses were only conducted for the action alternatives. Those vessels, if activated, would increase the capacity estimates further.

Table 1. Capacity from Action Alternatives

Alternative	*Illex* Capacity (MT) based on a Static Number of Trips
#2	58,526
#3	29,574
#4	56,128
#5	57,803

The total capacity estimates shown in the table above, were based on a static number of trips (i.e. the number of trips each vessel took was held equal to 2019 levels), and a physical definition of capacity. For vessels that were not active in 2019, their capacity scores are taken from the average per vessel trip capacity for their vessel type in 2019 vessels, and the average number of trips that those vessel types took in 2019. The physical capacity estimates are based on the fixed vessel attributes, which in this case are length, horsepower, tonnage and hold capacity. The model used for this estimate has been used worldwide by the FAO, and also NMFS, to estimate vessel capacity. If trips increased, so would the capacity estimates. In 2019, the time period from May 15 until closure August 21 was 14 weeks. If the fishery had run another 4 weeks for a total of 18 weeks, that would have expanded the season by approximately 29%. If trips had expanded likewise had the quota not shut the fishery down, the capacity estimates would increase similarly.

[3] It is not possible to predict which permits may ultimately qualify under this provision, so it can not be used to assign predicted qualification status, but it is expected to potentially apply to only a few permits.

The FMAT also used observer data on costs to estimate a cost based per-trip capacity to compare against the trip limits being considered for Tier 2 in alternatives #4 and #5. The cost based estimates show the landings per trip needed to minimize a vessel's average total cost. This is termed the "optimal scale", or the point of minimum average total cost. Reported costs from sea sampled data were the basis of trip costs used in the “low cost estimates” scenario. “High cost” estimates doubled those costs since the observer data is likely missing some costs. Also included are depreciation and the opportunity cost of capital based on a previous study J. Walden published in Marine Policy, which did not change between scenarios. Physical per-trip capacity used to estimate total capacity above is also shown as for comparison purposes.

Table 2. Trip Capacities

	Physical Capacity (lbs per trip)	High Cost Capacity (lbs per trip)	Low Cost Capacity (lbs per trip)
Alternative 4			
Tier 1 Vessels	233,426	202,054	217,883
Tier 2 Vessels	91,620	89,812	102,980
Alternative 5			
Tier 1 Vessels	217,201	188,095	204,571
Tier 2 Vessels	76,677	85,040	91,972

For alternatives 4 and 5, Tier 2 vessels would not be allowed to land at their minimum cost point, meaning they are being made more inefficient. In order to meet the proposed quotas, it is likely that all vessels would need to be made less efficient. The physical definition of capacity for Tier 2 vessels is also higher than the proposed trip limits, again underscoring the finding that Tier 2 vessels will be made less efficient under this proposal. Under alternatives 4 and 5, given the capacity of the Tier 1 vessels without trip limits, the race to fish will remain.

These results are consistent with the public hearing document that this action will not completely solve the issue of excess capital/capacity and racing to fish in the *Illex* fishery. However, they do confirm that there is excess capacity in the *Illex* fishery and that from a biological perspective, OY should be attainable by the fleets. The TAC for the fishery will cap overall output, and therefore fleet capacity is capped. It is unlikely that the remaining vessels will have the opportunity to land their potential capacity, since that would exceed the quota. Furthermore, tier 2 vessels under alternatives 4 and 5 are explicitly made less efficient through the proposed trip limits, while Tier 1 vessels are not constrained.

It is staff’s understanding that the Committee’s recommendation is designed as at least one step to freeze the fishery’s “footprint” and avoid the existing excess capacity problem from getting even worse. Issues identified in the Public Hearing Document (with references) or by the Committee as problems from not taking action, and reasons to take action include:

- Worsening of the race to fish beyond the inherent incentives for a seasonal fishery.

- With racing to fish, fishery participants typically use more and more capital and/or effort in an increasingly rushed attempt to catch a limited quota before closure, increasing costs until profits are dissipated, creating a loss of efficiency.

- Safety at sea: Racing to fish may lead to taking more risks related to weather, maintenance, and/or overloading.

- Monitoring difficulties: Higher weekly landings make it more difficult to close the fishery near the quota. The quota was exceeded by about 5% in 2018 and 10% in 2019. Projection method modifications, monitoring changes, and a slightly lower trigger for closing the fishery should lessen the risk of future overages (all of these measures are planned for either 2020 or 2021 implementation). These measures will increase reporting burden and reduce the percent of quota available before the directed fishery closes. Additional overages may lead to more restrictive measures to compensate.

- Yield reduction: Catching the quota earlier may mean that smaller squid are harvested, which means that more individuals are harvested per metric ton, which may reduce yield per recruit and total yield given the fast-growing nature of *Illex*.

- Increased entry/participation risks gear conflicts, as raised in public comments, both from commercial and recreational perspectives.

- Negative effects may accrue to historically dependent and invested communities from early closures, shortened seasons, and/or rapid changes in the distribution of landings among ports. Analyses highlight the dependence of N. Kingston and Cape May, and National Standard 8 guidance requires taking into account the importance of fisheries to fishing communities, and favors alternatives that, all else being equal, provide for the more sustainable participation of, and avoids adverse impacts on, such communities. It is not possible to fully quantify the benefits of reducing dependent community disruption, but it is staff's understanding that this a key component of the Committee's concern.

- Overcrowding in the relatively small fishery area (between coral protection areas and other restricted gear areas inshore).

- Inshore displacement of the historical fleet, which has commented that they (including large vessels) will be forced inshore into the summer longfin squid fishery from continued early *Illex* closures.

- Historical participants have less operational flexibility to engage in other fisheries and are generally more dependent on Illex. Staff compared the reduction in revenues for the 51 days before versus after the 2019 closure (on August 21) for the Tier 1 and Tier 2 vessels in the Committee-recommended alternative #4. Combined Tier 1 revenues fell 76% after the closure, while combined Tier 2 revenues fell 32%.

Public comments have stated that this action may conflict with the new Goals and Objectives also recommended by the Committee. Staff's understanding is that the Committee has attempted to balance some of the trade-offs that are inherent and in fact anticipated in the Goals and Objectives,

especially the Objectives within Goal 2; Objective 2.1 highlights freedom, flexibility, and minimizing additional restrictions, "consistent with attainment of the other objectives of this FMP." Objective 2.3 is "Consider and strive to balance the social and economic needs of various sectors of the MSB fisheries (commercial including shoreside infrastructure and recreational) as well as other fisheries or concerns that may be ecologically linked to MSB fisheries." Staff's understanding is that the Committee is attempting to balance such social and economic needs, and this may be a case where the "other objectives" do necessitate additional restrictions. The "operational flexibility" noted in Objective 2.2 has different meaning for different participants, and the Committee recommendation appears to attempt to balance the flexibility for some participants to diversify their revenue sources with the existing lack of flexibility for other participants to engage in other fisheries besides *Illex*, at least at some times of the year.

One of the key tradeoffs involved in this action is that there will be some economic costs to vessels that do not requalify relative to recent performance. The costs relative to the simplified Committee Alternatives #2 (minimal) and #3 (highest) are described in the public hearing documents. Staff developed additional analyses to support the Committee regarding the simplified Committee alternatives #4 and #5, and the FMAT provided additional feedback about those analyses, primarily so that the range of impacts on individual vessels can be better understood. The analyses focus on Tier 2, because the Tier 3 vessels were not active 2017-2019. The completely non-qualifying vessels are also examined for alternative #4, since there may be some vessels with substantial landings in 2019 that will not qualify for any Tier since alternative #4 does not utilize 2019 landings for any qualification. These analyses allow the Council to account for that present/recent participation.

Tier 2 Vessels - 2015-2019

Overall for alternative #4 (13 vessels), if 2015-2019 trips over the proposed 62,000-pound trip limit were limited to 62,000 pounds, the revenue loss represented 1.6% of total combined revenues for these 13 vessels over these five years ($1.1 million).[4] Revenues were reduced on a per-trip basis for each vessel's relevant trips and then summed and compared to each vessel's total annual revenues. 2015-2016 revenue losses would have been zero. 2017 revenue losses would have been 0.8% of total combined revenues, with a loss range of 0% to 15.0%. 2018 revenue losses would have been 1.5% of total combined revenues, with a loss range of 0% to 3.6%. 2019 revenue losses would have been 4.7% of total combined revenues, with a loss range of 0% to 14.8%.

Overall for alternative #5 (7 vessels), if 2015-2019 trips over the proposed 90,000-pound trip limit were limited to 90,000 pounds, the revenue loss represented a negligible portion of total combined revenues for these vessels. One vessel would have had losses in one year (2018) that amounted to less than 1% of their total 2018 revenues. If 2015-2019 trips over a 62,000-pound trip limit were limited to 62,000 pounds, the revenue loss represented 0.5% of total combined revenues for these vessels. 2015-2016 revenue losses would have been zero. 2017-2019 revenue losses would have been 0.7% of total combined revenues ($0.2 million), with 4 vessels losing between 0.2% and 3.6% in 1-3 years each.

[4] Staff confirmed that there are not substantial other species landings revenues on trips that have more than 20% of *Illex* revenues on a trip being affected.

Non-Qualifying Vessels

For alternative #5, no vessels would appear to be impacted – all trips would be below the 10,000-pound incidental trip limit. For alternative #4, there is one vessel that would have a majority of their 2019 revenues impacted. This level of granularity is generally confidential, but the permit owner has stated this in public comments already.

Other Analyses

In a similar fashion as the public hearing document, figures for Committee alternatives #4 and #5 were created to describe dependence on *Illex*, other revenue sources, and permit distribution. Those figures are provided below.

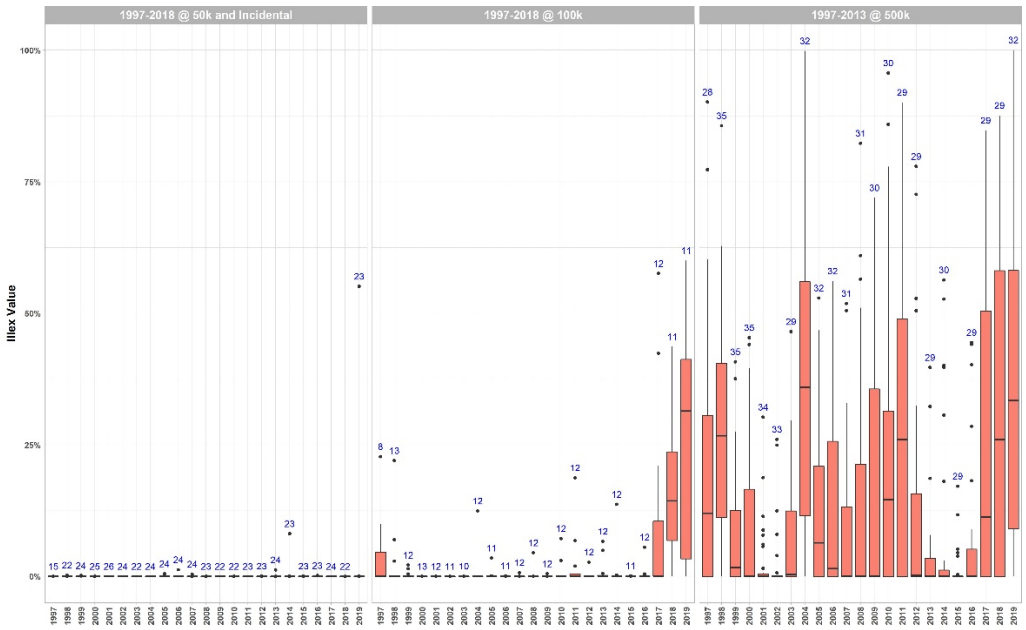
In terms of dependence on *Illex* (see Figures 1 and 2), both alternatives #4 and #5 show similar patterns in terms of vessels in higher Tiers generally having greater *Illex* dependence. The primary differences include the 2019 outlier in the lowest group for alternative #4, and that there are more vessels with somewhat higher dependence in alternative #4's Tier 2 versus alternative #5s Tier 2 in the most recent years.

In terms of revenue sources, *Illex* is only a substantial and consistent source of revenue for Tier 1 vessels in both alternatives, but the recent (2017-2019) activity by vessels in the alternative #4 Tier 2 is visible (see Figures 3 and 4).

In terms of other permits held (Figures 5 and 6), the black bar illustrates permits for Tier 1, the medium gray bar for Tier 2, and the light gray bar for Tier 3/Incidental.

Figure 1. MRI *Illex* Revenue Dependencies For Committee Tier #4 Alternative.

Tier 3/Incidental Tier 2 Tier 1



(Bar is the interquartile (middle) range (IQR); black horizontal line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots; numbers are count of vessels with some revenues)

Figure 2. MRI *Illex* Revenue Dependencies For Committee Tier #5 Alternative.

Tier 3/Incidental Tier 2 Tier 1

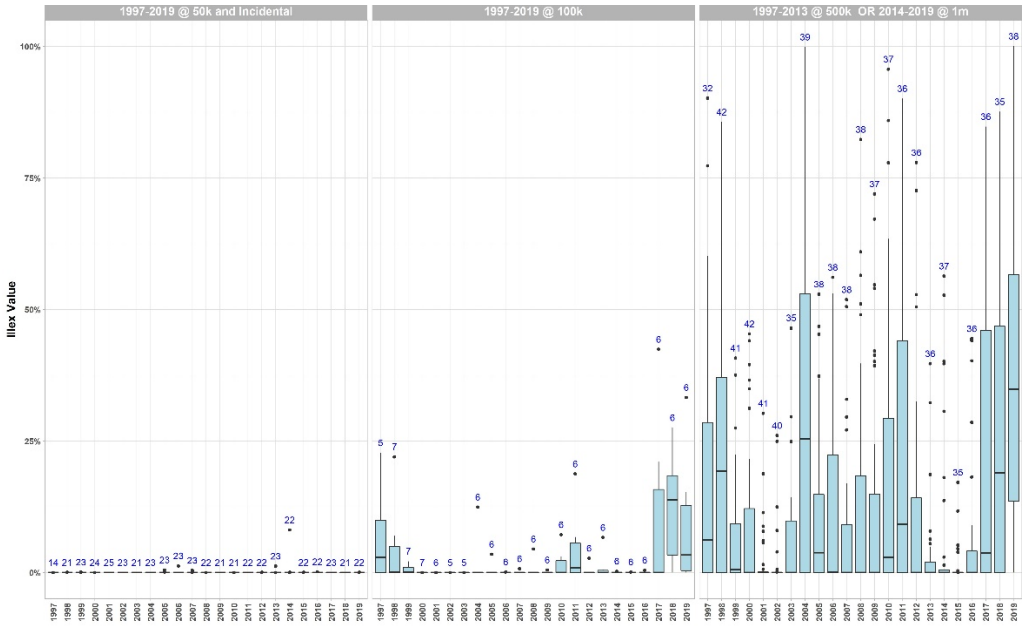


Figure 3. Species revenues, by year, for the #4 Alternative. Species in the top 10 for any year are included.

Tier 3/Incidental Tier 2 Tier 1

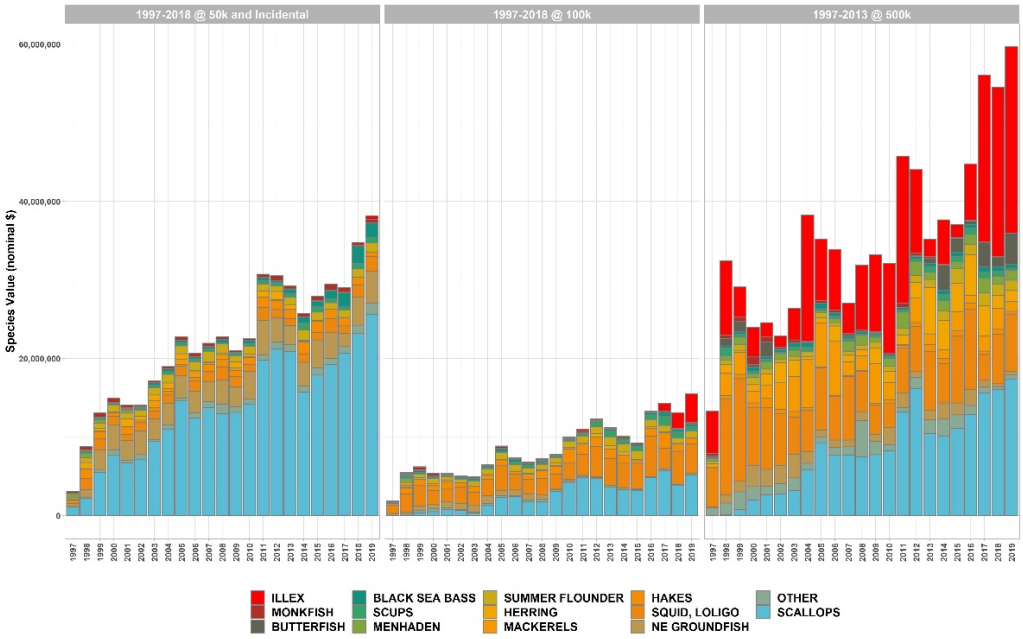


Figure 4. Species revenues, by year, for the #5 Alternative. Species in the top 10 for any year are included.

Tier 3/Incidental Tier 2 Tier 1

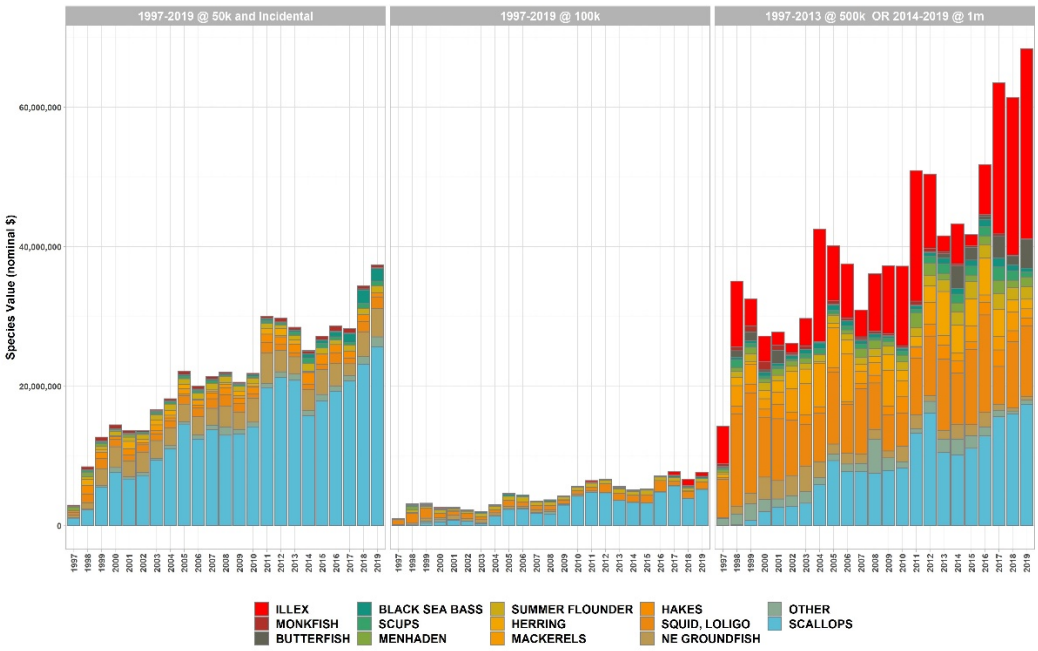


Figure 5. Permit Distribution, #4 Alternative

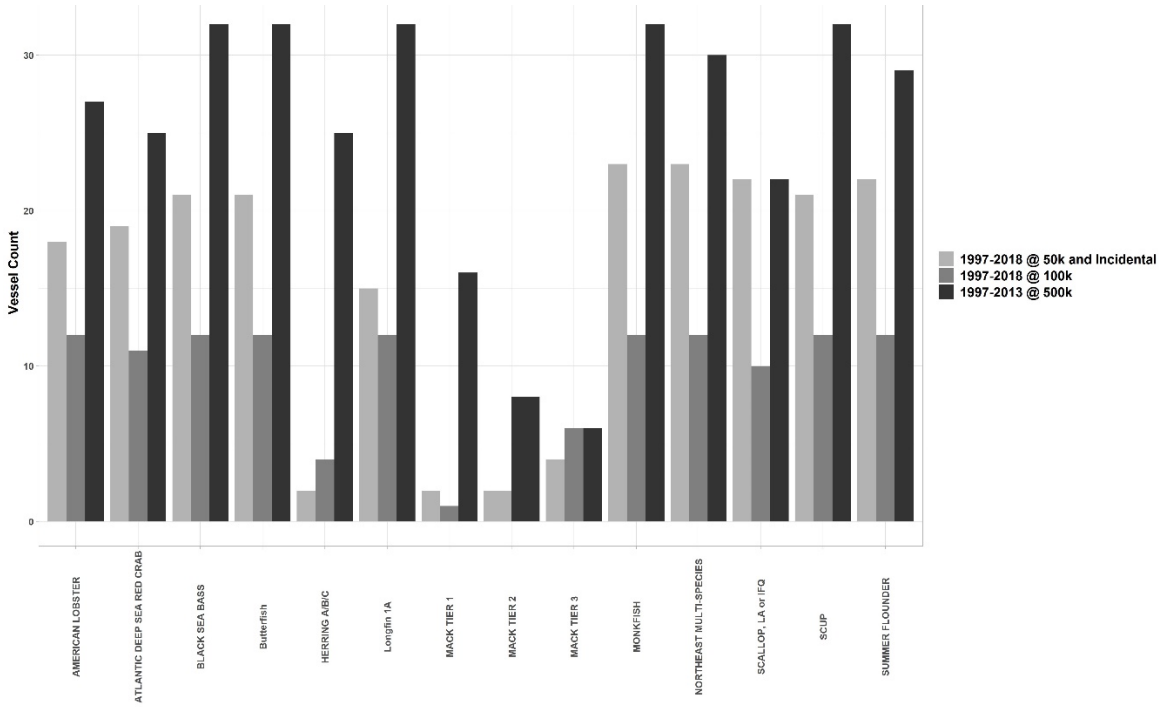
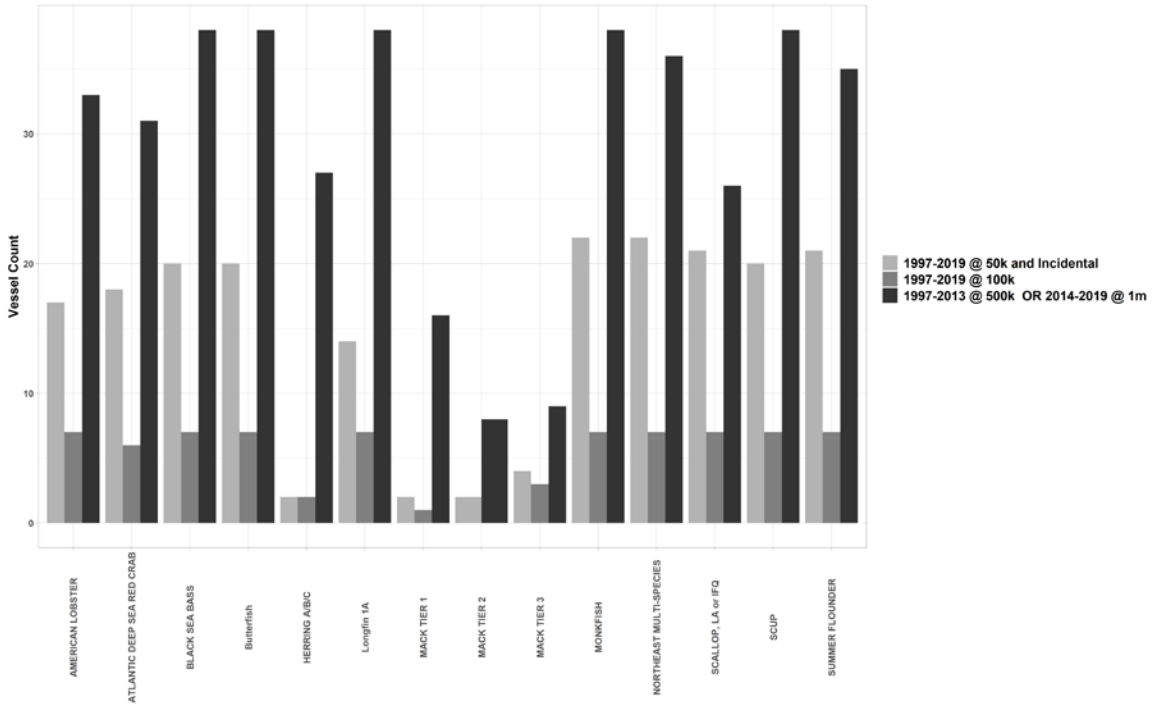


Figure 6. Permit Distribution, #5 Alternative



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2. Goals and Objectives

The motion from the Committee is:

I move that the Committee recommend that the Council adopt the goals and objectives as presented today and in the public hearing document.

3. Requiring daily *Illex* VMS reporting.

The motion from the Committee is:

I move that the Committee Recommend that the Council approve requiring daily catch VMS reporting for limited access *Illex* vessels.

4. Vessel hold measurements and baselines.

As discussed in the public hearing document, the fish hold measurement and upgrade restriction would mirror that of the mackerel fishery, and vessels that already have such a baseline for their mackerel permit would simply carry over the same baseline to their Tier 1 *Illex* permit. This alternative, like with mackerel, is designed to help freeze the footprint of the fishery and avoid additional over-capitalization. The Committee passed a motion (see below) for Tier 1 and considered a similar recommendation for potential Tier 2 re-qualifiers, but postponed voting for Tier 2 pending additional input from staff regarding whether having a hold measurement and baseline could be useful for future scientific endeavors and/or real-time management.

Based on discussions with Lisa Hendrickson and Paul Rago, hold measurements could potentially be useful as a way to standardize among vessels for evaluating the productivity of vessels/the fishery, and Paul Rago used a shorthand capacity measurement (maximum catch) in some of his workgroup efforts. However, the baseline and upgrade restriction component of this measure would not be needed in this regard – it's the measurement that is useful for science rather than upgrade restriction. If the Council adopts baseline and upgrade restrictions it should be based on freezing the footprint and limiting capacity increases. However, doing so also comes at a cost in terms of limiting changes that may make a vessel more efficient, and the Council should weigh and discuss the potential benefits related to avoiding additional excess capacity versus the loss of flexibility created by a vessel hold baseline and upgrade restriction.

The motion from the Committee is:

I move that the Committee recommend that the Council require a maximum volumetric fish hold measurement for Tier 1 limited access *Illex* MRIs. The fish hold volume could be increased by up to 10 percent of the MRI's baseline hold measurement, whether through refitting or vessel replacement. The baseline would be that of the vessel initially qualifying for the permit at the time of the final rule's effective date.

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Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: July 7, 2020

To: Council

From: J. Didden

Subject: June 8, 2020 MSB Committee Meeting Summary

The Mackerel, Squid, and Butterfish (MSB) Committee met to make recommendations regarding the MSB FMP Goals/Objectives and *Illex* Permits Amendment. A complete list of attendees is available by contacting Council staff.

The following "boxed" motions were passed at the June Committee meeting, and staff has added some background that may be useful.

I move that the Committee recommend that the Council adopt Alternative 4 as a preferred alternative:

Tier 1 - 1997-2013 @ 500 K pounds

Tier 2 - 1997-2018 @ 100 K pounds (62,000 pound trip limit)

Tier 3 - 1997-2018 @ 50 K pounds (20,000 pound trip limit)

(all based on live pounds)

A vessel is eligible for a Tier 1 permit if it purchased and can document a refrigerated seawater system, plate freezing system or blast freezer and had it installed between January 1, 2012 through the control date of August 2, 2013, AND landed a minimum of 200,000 lbs of *Illex* in the 2013 fishing year, ending December 31, 2013.

In April 2020, the MSB Committee recommended the streamlining of alternatives for final consideration (estimated requalifiers based on live[1] pounds). The alternative above recommended by the Committee in June 2020 increased the Tier 2 trip limit for #4 from what the Committee originally proposed based on additional analyses that indicated 62,000 pounds was the approximate median trip size for the vessels in that tier over 2017-2019 when only considering their trips over 10,000 pounds (trips under 10,000 represent a small percent of the relevant landings and would skew the median lower).

#1. No action. (75 Permits)

#2. 51 requalifiers: 1997-2019 @ 50 K pounds (no Tiering)

#3. 13 requalifiers: 1997-2013 **plus** 2014-2019 w/1,000,000 pounds **each** (no Tiering)

#4. 35 requalifiers: Tier 1 - 1997-2013 @ 500 K pounds
13 requalifiers: Tier 2 - 1997-2018 @ 100 K pounds (48K trip limit)
02 requalifiers: Tier 3 - 1997-2018 @ 50 K pounds (20K trip limit)
25 of 75 permits would not requalify for any Tier

#5. 42 requalifiers: Tier 1 - 1997-2013 @ 500 K pounds **OR** 2014-2019 @ 1 M pounds
07 requalifiers: Tier 2 - 1997-2019 @ 100 K pounds (90K trip limit)
02 requalifiers: Tier 3 - 1997-2019 @ 50 K pounds (47K trip limit)
24 of 75 permits would not requalify for any Tier

The public hearing document stated that from the range of alternatives in the public hearing document, final consideration could involve narrowed alternatives and that, "the Council could also create an alternative that combines several options to create a tiered permit system. For example, the Council could select more restrictive requalification criteria that requalify fewer MRIs for a tier that operates as current (no trip limit), and then create a second tier managed with trip limits for the MRIs that don't requalify under the more restrictive criteria…" The above five alternatives are the Committee's recommendations for the narrowed alternatives, and do consider some tiered alternatives. #1, #2 and #3 retain the full range of alternatives considered in the public hearing document as no action (#1), the alternative that would requalify most permits besides no action (#2), and the alternative that would requalify the least permits (#3). #4 and #5 are tiered systems as contemplated in the public hearing document, and are in between #2 and #3 in terms of numbers of permits that could requalify (and thus also impacts).

The public hearing document also contemplated that tiered and/or non-requalifying vessels might be subject to trip limits ranging from 10,000 pounds to 124,000 pounds, which encompasses the range of trip limits in the Committee's narrowed list above. The Committee also recommended a provision that considers investments made in the *Illex* fishery just before the control date, and the modification would allow accounting for those investments. It is expected that only a few vessels may fall into this situation.

[1] The change from landed pounds to live pounds had a minimal effect on the numbers of predicted requalifiers. The public hearing document noted that all re-qualifier estimates are preliminary, and continue to be preliminary.

I move that the Committee recommend that the Council adopt the goals and objectives as presented today and in the public hearing document.

I move that the Committee recommend that the Council require a maximum volumetric fish hold measurement for Tier 1 limited access *Illex* MRIs. The fish hold volume could be increased by up to 10 percent of the MRI's baseline hold measurement, whether through refitting or vessel replacement. The baseline would be that of the vessel initially qualifying for the permit at the time of the final rule's effective date.

As discussed in the public hearing document, the fish hold measurement and upgrade restriction would mirror that of the mackerel fishery, and vessels that already have such a baseline for their mackerel permit would simply carry over the same baseline to their Tier 1 *Illex* permit. This alternative, like with mackerel, is designed to help freeze the footprint of the fishery and avoid additional over-capitalization. The Committee considered a similar recommendation for potential Tier 2 re-qualifiers, but postponed voting pending additional input from staff regarding whether having a hold measurement and baseline could be useful for future scientific endeavors and/or real-time management (see decision memo).

I move that the Committee Recommend that the Council approve requiring daily catch VMS reporting for limited access *Illex* vessels.

Reid/Nolan

The regulations are somewhat ambiguous whether just VMS notification or also daily VMS catch reporting for *Illex* is/are required. This would clarify that daily VMS catch reporting for *Illex* is required.

The Committee also discussed a request from Mark Phillips to have his original non-qualification for an *Illex* permit reconsidered, or have some other consideration regarding this issue. No action was taken.

Dear Council members,

My name is Phil Merris and I am the captain of the FV Excalibur out of Point Judith. My boat would qualify for a Tier2 permit under the Committee recommendation, even though we caught over 1,000,000 lbs in 2019 and I have made significant investments to my vessel. We just came out of the shipyard with a $350,000 haul out to update and modernize my vessel.

After listening to my local public hearing webinar and discussing the progression of this amendment with others, I understand that the committee approved an alternative that does not consider 2019 in either Tier 1 or Tier 2, even after hearing that the committee and council overwhelmingly approved an increase in quota for Illex, this does not make sense.

I hope that the council will realize that removing or reducing access to this fishery and imposing a trip limit of 62,000 lbs is going to hurt captains, crews and fishing communities A LOT MORE than it will benefit the few winners of this amendment that will be able to fish just a few days longer in the season.

Such a low trip limit would make fishing practices extremely inefficient. I would have to bring in much lower weight than the trip limit to make sure that I am not in violation with enforcement. The process of loading Illex onto a vessel is extremely fast. To make up for the loss in what I can normally put on my boat I would have to make more trips, spend more money on resources and increase my fuel consumption to make up for the low trip limit and I'm not sure it's worth it. The Committee was aware of all these issues when they chose this low trip limit. <u>The trip limit needs to be at least 85,000-90,000 lbs for Tier2 to be remotely viable for me.</u>

After reading though some of the public hearing document and listening to the comments on the calls this amendment does not

even match its own goals and objectives, but really seeks to create an economic allocation as the current committee action will reallocate quota to a select few while significantly harming the rest of the fleet.

We should be ensuring that the fishing industry has flexibility, not reducing it, especially with a stock that seems healthy, is large and has so few participants to begin with.

Currently, EVERYONE is winning with the increased markets and prices. We are all making money.

This amendment is meant to benefit a few big players while cutting out the rest so they may have more of the quota for themselves. This is a small enough fishery to begin with, we can all coexist so we can all survive.

Due the results of the SSC meeting and hearing the results from the Illex working group I am supporting “no action”. There is no biological reason for moving forward with this amendment after hearing the good news that was attributed to this stock. This is strictly about giving unrestricted quota to certain vessels in this fishery while hindering the productivity of the rest of us.

Sincerely,

Phil Merris

FV Excalibur

Point Judith, RI

Dear Council,

My name is Steve Follett and I am the owner/captain of the FV Heather Lynn. I have been fishing for over 30 years. My boat would be classified as a Tier2 vessel under the Committee recommendation, and limit me to a 62,000lb trip limit. I have been an active participant over the last several years and Illex is now very important to my fishing year. I support the position of the Illex Coalition.

This would essentially put me out of the fishery as this trip limit is far too low. I would have to bring in much lower weight than the trip limit anyway, to make sure that I am not in violation of this limit when I hit the dock with National Marine Fisheries enforcement. I put illex down quickly on my boat and we do not have a chance to estimate the weight, we are plus or minus 10,000 lbs. This committee recommended trip limit is a way to put the Tier2 boats like mine out of the fishery. The trip limit needs to be at least 85,000lbs for Tier2 to be remotely viable for me. Putting me into a Tier2 will also have an unknown but significant negative financial impact on my fishing permit valuation. Also, fish hold capacity limitation for Tier2 vessels is redundant if the council is implementing trip limits.

After listening to the public hearings and being informed on the on goings of the Committee and SSC's decision to increase the quota I still fail to see any reason, other than economic, as to why we are trying to remove people from a fishery that have already qualified. Each of these reasons for moving forward as listed in the public hearing document have debunked by those in the fishery. However, it does not seem that we are being listened to on the Committee level. I was shocked to hear that after all the public hearing calls, written comments, and communications with members that the industry has carried out, that the Committee did not even consider full recent participation in the alternative they chose, and they chose to exclude 2019 fishing year data.

It is very discouraging to see that the Council is continuing to move down this road knowing that the real reason for the initiation of this Amendment is solely an economic ploy to reduce competition and to allocate quota to specific people in the fishery, which shows in the alternative that the Committee is choosing to support.

There is no biological reasoning behind the initiation of this Amendment. In fact, I heard that the SSC provided us with GOOD news regarding this stock. Because of the recent SSC's information, the increase in quota, and the failure for this amendment to meet its own goals and objectives, I am supporting "No Action". With the best available science recently presented, the Council should be supporting fishermen keeping current access to a fishery they've previously qualified and invested in.

Sincerely,

Steve Follett

F/V Heather Lynn

Fishing Vessel Enterprises, Inc.

985 OCEAN DRIVE
CAPE MAY, NEW JERSEY, USA 08204
TEL: (609) 884-3000 / FAX: (609) 884-3261

Mr. Michael Luisi, Chairman
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901

Re: MSB Ilex Fishery Amendment

Dear Council Members,

Fishing Vessel Enterprises owns and operates 7 commercial trawling vessels that have access to the Illex fishery. Within the preferred alternatives that have been chosen by the committee, four of these will lose access to this fishery.

I am a fourth-generation fisherman that has worked in the Mid-Atlantic my entire life. I grew up on the deck of my father and grandfather's vessels until I owned and operated my own fishing trawler. Now, I am Chief Operating Officer of a vertically integrated fishing company that owns and operates 25 vessels, 5 shoreside facilities and 2 processing plants while sustaining almost 500 jobs.

This company was built through sustainability measures that we have had to develop, institute, and maintain. These measures were the pains that we had to go through to save the fisheries themselves. Pains financially and emotional endured by fishing families and communities in order to save the fisheries. Those that saw the bigger picture and looked long term, became a part of the solution by accepting regulatory changes and assisting the fisheries in their road to recovery. Sadly, some fisheries and communities in other regions have not been able to re-build in spite of painful patience. The MAMFC and processes have been extraordinarily successful in rebuilding fisheries that in turn re-built or at least sustained the communities involved in them.

This Illex amendment will have zero positive impacts on the Illex fishery. It does not sustain a fishery.Rather, it's aim is to sustain or to make a certain participant base more profitable than they have been.

The Illex fishery is scientifically known to be extraordinarily strong. The quota has recently been increased. Scientific data shows that the quota could be increased exponentially as more science-based advice is attained. All the scientific data to support this statement is within your grasp and should be reviewed to show how robust the fishery is.

This Illex amendment does not increase the opportunities of the fishing communities. It reduces them by taking away permits and/or dramatically reducing their harvest.. The ultimate gain from this reduction in capacity does not enhance the fishery, its communities or it's biomass. It only allows for some fisherman to have more of the ever-increasing quota than others. In short they are saying, "we would like to fish longer in the season, so we want you, the MAMFC, to exit

and/or reduce some other fisherman so we can have more". This has nothing to do with sustaining the fishery. This has to do with bias against a group of fishermen that has fished in the more recent past than others. This group of fishermen have not pushed others out nor have they have threatened the biomass of the fishery or created negative impacts on the fishery. One thing they may be guilty of is helping to bring the fishery to consistent optimum yield. Historically, participants have never been able to achieve that consistency. Another thing that the recent participants may be guilty of is building value in the fishery by creating domestic markets that are ready, willing, and able to purchase Illex. This value has also brought consistent opportunities for all permit holders.

Unfortunately, you as council members have been put in a position to make decisions that are difficult and tough. You can be described as being as fair and equitable as you could be, developing your support for your state constituents while following the mandates set before you in the Magnuson Stevens Act and the Goals and Objectives set forth in any regulatory process. However, ask yourselves what you have been listening to.

Have you been listening to the advice of historical participants that say that the fishery will be safer by exiting some out and reducing the "race to fish" and enhance safety at sea? There will be no change in the race to fish by eliminating or reducing several participants. The remaining will race just as fast to get the most they can of the yearly quota available. This lie is put forth to hide the truth because without a trip limit for every vessel, a race to fish will take place. 'So, let's promote this story so we can make others think we need this to reduce participation and improve safety at sea. Some want more fish than others, so let's get regulators to create a law so that a few get the lion's share of the profits. Let's frame it in such a way that the uninformed will based their decision on emotion rather than fact or science.' Ask yourselves what other misdirection have I been told by those that would like to reduce capacity so they can get more?

This fishery has already been qualified with 76 permits decades ago based on a quota similar to what we have now. So, if that qualification existed then and the number are about the same, ask yourselves what the different is now versus then so that we need to reduce capacity? Is it because the fishery has value far greater than it did in the past? If that is the case, the arguments presented to you by those participants have the singular purpose of increasing their profits to the detriment of others. They are attempting to get you to buy into their misrepresentation of the issues in order to make you think that they cannot survive without it. When the truth is really that they have been seeing record profits despite having to start fishing for another species earlier than they normally would. This storyline is crafted to keep you thinking that the quota is closing earlier than it normally would. The quota closes when the TAC is caught, not earlier. It's only perception that it is early to those that want to have caught more than they did. If the value of the fishery is the highest it has ever been, optimum yield is met, and the TAC is caught, then this is a win for every participant. Because everyone's profits have increased based on the abundancy of the fishery.

Many fisheries have short harvest seasons. One scallop permit harvest about 60 days a year. Approximately the same time frame as Illex yet grossing more revenue. Should we reduce the amount of scallop permits from 365 down to 76 or less? The answer is no because it is sustainable and so are the communities. How many days a year do vessels with a summer flounder permit or black sea bass permit fish? Much less than 60. Should we look at a capacity amendment to reduce participation? No, for the same reasons.

Never in the history of fisheries in this country has capacity been reduced for the sole reason of making others more profitable. This has nothing to do with the sustainability of the fishery, but has only to do with getting rid of some so a few can have more.

We have the guidance from the Magnuson Stevens Act with National Standards that prevents decisions like this from being made. They are put in place to prevent taking from one to give to others as the sole purpose of an action. They guide decisions that sustain the fisheries and fishing communities during biological and climatic changes. They give you a basis to make a decision that keeps regulatory power in check. They give you the ability to promote opportunity for the whole and not just a few. They keep bias from creeping into the process, promoting equality for all. They give you the power to make a decision that will negatively impact a community only when it saves a fishery and promotes its sustainability.

Much hard work has gone into this amendment and some would say that we must make a decision. Remember, a decision for NO ACTION, is a decision. And if it is based upon the facts, it will not be a hard one to make. It will however be the one that you can say was based upon the guiding principles that you have built your careers on.

“No action” is the right decision because it is one that you can defend. In these times that are upon us we are rattled with uncertainty. We have all been trying to adjust to what the future will hold, but uncertainties continue to pile on. Think of what will promote and build confidence, not take it away. Create jobs, not take them away. Create opportunities, not diminish them.

If you dig down deep and look at the real basis for this amendment and check that against the principles that build sustainability and create opportunities, you will see that you should vote for NO ACTION with this amendment.

With deep respect,

Sam Martin
Fishing Vessel Enterprises Inc
Chief Operating Officer

July 6, 2020

Dear Mid-Atlantic Fishery Management Council:

We write to you today as a unified coalition of active Illex permit holders and processors, and we consist of both Historical Participants and Recent Participants in a formed "**Illex Coalition**". We support the written and verbal comments regarding Illex permit requalification submitted to the Mid Atlantic Council from the entities below.

As a Coalition, and after much discussion and research, we have agreed on only three positions that we will be able to support regarding the current *Illex Amendment* heading into final action:

1) **Preferred**: (Option #1) No action; requalification of all 76 permits.
2) **Preferred Alternative:** (Option #2) Minimal action; full requalification of 51 active permits.
3) **Acceptable Alternative:** (Option #5) Tiering option to include high level recent participants into Tier 1.

Regarding the *MSB Committee* Recommended Option, we disagree with the MSB Committee recommendation of selecting Option #4 with a 62,000 trip limit for Tier2 vessels with the following rationale:

- Under this scenario, we have analyzed over 130 actual trips from 2019 for proposed Tier2 vessels and have found this to be an overall 26% negative impact on this group's revenue when applying a 62,000 lb trip limit, with a range of 5% to 55% negative reduction in revenue per vessel. This assumes these vessels would even continue to fish on Illex with this low trip limit, which some certainly would/could not for financial reasons.
- The negative revenue impact to these vessels in 2019 would be a minimum of $1.1 million dollars in just that year alone.
- Overall negative impact to existing shoreside processors and unloaders would be approximately $4,000,000 to $5,000,000.
- Overall **gain** to the 35 Tier 1 boats is a net gain of 2.3 million more pounds for that group to harvest, assuming similar effort and catch rates. This may equate to 2 or 3 days of extra fishing time for the fleet based upon 2019 catch rates. Also, spread amongst the 35 tier 1 boats, that's an extra 65,714 pounds per vessel, or extra revenue of $26,285 per boat, per year.
- A 62,000 lb trip limit is too low and will force Tier2 boats out of the fishery, increasing economic harm on this group.
- A 62,000 lb trip limit will force boats to come in with far less product, due to the difficult nature to estimate catch. Crews cannot afford to estimate weight in this fishery with a species that spoils quickly on deck during the summer months.

Summary Findings:

- The economic benefit to Tier 1 boats is minuscule compared to the economic pain inflicted on Tier2 boats and corresponding shoreside processors.
- 2 or 3 days of extra fishing for the overall fleet does not outweigh the economic pain inflicted on Tier2 boats and the processors.

- The large Tier1 RSW/Frozen at Sea boats are catching in excess of 3,000,000 lbs of illex per season. A gain of 65,000lbs is a paltry 2% gain to their overall revenue.
- These measures per the RA's letter do not "help achieve OY, minimize economic impacts, maximize benefits to the fishery" and the "total benefits outweigh hardships for affected fishery participants"
- This action does not address "race to fish", nor has the purpose/goal of this amendment been clearly defined as what it is trying to accomplish.
- This action does not extend the fishing season by any meaningful level.
- This action will result in a pure economic allocation from one group to the other, based upon a 7 year old control date, which is against the FMP objectives.
- Per the RA's letter, "the action must demonstrate that doing so is consistent with the goals and objectives of the action and the FMP and that the associated benefits to the illex fishery at large outweigh the potential costs to recent participants whose fishing opportunities would be constrained." This action does not do so.
- Tiers do nothing to increase efficiency
- Should this fishery go to ITQ in the future, Tier2 vessels would most likely be at an economic disadvantage compared to Tier1 participants.

<u>Fishing Year 2019 data is available and should be included to fully represent "recent participation":</u>

- 4 out of 5 options presented to the MSB Committee included 2019. The Committee chose to recommend the only option that excludes 2019 landings.
- Omitting 2019 data would essentially eliminate one (1) active vessel from the fishery. That vessel's revenue from Illex accounted for 54% of the total revenue of the vessel. The vessel harvested 1,185,000 lbs of illex in 2019. Should this action move forward with the Committee recommended option, this permit would be classified as an "incidental permit" and its landings/ability to catch illex in 2021 would effectively go to zero. The economic impact to that Fishing Vessel and her crew would be a negative $474,000, and negative impact the permit value of approximately $400,000. There would also be a negative impact to the corresponding shoreside processing infrastructure in excess of $1,000,000. This would be compounded year after year going forward as this boat is removed permanently from the fishery. The incidental limit is certainly not worth fishing on for Illex.
- Spreading the 1,185,000 lbs of illex over the rest of the entire illex fleet equates to approximately 1 extra day of fishing, and to the 51 active permits, 23,235 lbs in total extra potential catch per boat. A typical large RSW historical boat catches 3,000,000 lbs per year. That would increase their catch by .0076 (.8%) for the year.
- This is contrary to the Goals and Objectives, ignores this vessel as a recent participant in the fishery, and provides little upside for the overall participant group compared to the economic pain inflicted on the vessel and her crew.
- This action would be against the National Standards. Per the RA's letter, "the action must demonstrate that doing so is consistent with the goals and objectives of the action and the FMP and that the associated benefits to the illex fishery at large outweigh the potential costs to

recent participants whose fishing opportunities would be constrained." Constricting one active recent participant does not benefit the illex fishery at large.

Vessel Hold Capacity: The coalition is against any new vessel hold capacity limitations due to the following analysis:

- Should the council select a Tier 2 trip limit, a vessel hold capacity is redundant and unnecessary.
- Most of the large-capacity vessels/permits already have a hold-capacity designation from the mackerel fishery (estimated 30 out of 35 Tier1 vessels already have it done)
- The group pushing for this action have already increased their vessels in recent years, and now want to put limitations on the remaining participants after they have taken advantage of this situation.
- The remaining group would be unfairly constrained across their other fisheries with a capacity limitation (Scallopers, longfin squid boats, etc)
- The remaining group consists of mostly smaller vessels with low horsepower that already have NMFS rules to limit their ability to expand.
- The remaining group would be at a significant disadvantage when upgrading their vessels to newer boats with a new hold capacity amendment due to the limited amount of vessels remaining to purchase on the east coast.

In closing, this is an economically driven amendment that relies on a 7 year old control date and pits fishermen against fishermen.

- Gear conflicts, should they even exist in the illex fishery, are not adequate grounds to eliminate participants. They exist in almost every fishery.
- The problem statement and Committee recommended action still does not align with the Goals and Objectives or National Standards.
- Cape May and North Kingstown stand to remain strong ports for Illex landings regardless of any action taken or not.
- Should the Committee recommendation stand, it is not defensible.

Sincerely,

The stakeholders, owners, employees, captains, and crews of the following active Illex participants:

The Town Dock
Point Judith, RI

Fishing Vessel Enterprises, Inc.
Cape May, NJ

NORPEL
New Bedford, MA

Waterfront Cold Storage
New Bedford, MA

KSJ Seafood, Inc.
Point Judith, RI

Gabby G Fisheries
Montauk, NY

Crystal Ice Co. New Bedford, MA

JimMazing Fishing LLC Point Pleasant, NJ



The following twenty Federally Permitted Illex Vessels are in support of the Illex Coalition. We total approximately forty percent (40%) of the Active Illex Permits underneath the above *Preferred Alternative*.

F/V Anticipation,
Cape May, NJ

F/V Barbara Anne,
Cape May, NJ

F/V Determination,
Point Judith, RI

F/V Excalibur,
Point Judith, RI

F/V Gabby G,
Montauk, NY

F/V Heather Lynn,
Point Judith, RI

F/V M.F. Hy - Grader,
Point Pleasant, NJ

F/V Jersey Girl,
Cape May, NJ

F/V Kassidy Lyn,
Point Judith, RI

F/V Lightning Bay,
Point Judith, RI

F/V Maizey James,
Point Pleasant, NJ

F/V Nordic Explorer,
New Bedford, MA

F/V Alexis Martina
Point Judith, RI

F/V Perception,
Montauk, NY

F/V Pontos,
Cape May , NJ

F/V Rebecca Mary,
Point Judith, RI

F/V Silver Sea,
Cape May, NJ

F/V Susan Rose,
Point Judith, RI

F/V Thunder Bay,
Cape May, NJ

F/V Travis and Natalie,
Cape May, NJ

We appreciate your consideration.

2 State Street | PO Box 608
Narragansett, RI 02882

July 6, 2020

Chairman Michael Luisi
Mid-Atlantic Fishery Management Council
800 North St. Street, Suite 201
Dover, DE 19901

RE: Illex Amendment – Final Action

Dear Chairman Luisi and Council Members:

Thank you for the opportunity to provide a written comment. I am the CEO and owner of The Town Dock and several active Illex fishing vessels. We continue to support the position of the Illex Coalition and its members, including the following options related to the Illex Fishery Permitting Amendment:

1) **Preferred**: (Option #1) No action; requalification of all 76 permits.
2) **Preferred Alternative:** (Option #2) Minimal action; full requalification of 51 active permits.
3) **Acceptable Alternative:** (Option #5) Tiering option to include high level recent participants into Tier 1.

The *MSB Committee* has moved forward to recommend Option #4, with a Tier2 trip limit of 62,000 lbs, along with exceptions for live-weight and one (1) special permit exemption for a Tier2 vessel to obtain a Tier1 permit.

We are strongly opposed to Option #4, as it is economically detrimental to our company, employees, and owned and partner-vessels in the following ways:

The Town Dock: Looking retrospectively at our actual 2019 purchase data from over 130 trips of Illex squid from this newly created Tier2 vessel category in Option #4, our company would have suffered a loss of at least 2,300,000 landed pounds purchased from our Tier2 vessel partners due to the low trip limit of 62,000 lbs per trip. This will negatively be impacting our revenues and profitability for years to come. Compounded negative revenue impacts and overall profitability losses would be in the millions of dollars per year going forward. This would curtail the growth of the business, our employees, and negatively impact our USA customers that have grown accustomed to buying their cleaned Illex calamari from The Town Dock.

In the midst of the COVID-19 pandemic, the entire nation is suffering immensely with a catastrophe that is far from over. Like our hospitality and restaurant industries, the domestic squid industry is not immune to this pandemic, and is suffering economically with lower demand, lower pricing, and an uncertain future. This amendment, especially Option #4, would inflict more economic pain to our

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fishing families and many other Americans who are trying to make a living in this industry. The current situation surrounding Illex does the exact opposite, providing all stakeholders with the opportunity to positively impact the economy and keep people employed. It is a true shared resource for all current stakeholders. This Illex resource is abundant, well managed, and the quota is increasing. We hope the council members consider making this resource *more* inclusive to Americans and American companies instead of more exclusive and restrictive, which Option #4 will do.

Permit Suite / Vessels: Based upon 2019 landings and purchases, our owned vessels and vessel partners would suffer a myriad of negative circumstances, including six of my active vessels locked into a constrained Tier2 – low trip limit situation. This low trip limit restrains their current catching capacity by up to 55% of actual 2019 Illex revenues. This loss of revenues and profits would also be in the millions of dollars per year range for this group, which would have further negative impacts on the vessel captains and crews. Also Included here would be lower values for permits with Tier2 potential in at least an evaporation of $200,000 per permit from their current value on the open market.

One of our vessels (FV Susan Rose) would suffer a catastrophic loss of permit value and Illex catching opportunity for the boat/permit under Option#4. This boat was purchased from Joe Rose in late 2018, closed on in early 2019 for $1.1 million dollars. The intent was to catch illex squid. The boat immediately needed additional structural work to get her properly and safely outfitted for illex fishing with an additional investment of $321,000. The vessel had a successful 2019 Illex catching year, harvesting over one million pounds of illex squid. The vessel will miss most of the 2020 fishing year being hauled out again at Fairhaven Shipyard for additional steel work to further improve the safety and longevity of the vessel's future active service. The estimated cost for this 2020 haul out is $418,000. Our combined capital investment in this vessel and illex permitting equates to $1,839,000. Option #4 without modification renders this entire investment in the illex fishery moot for both FV Susan Rose Inc., her captain and crew, and corresponding shoreside businesses, because this vessel would only end up with an incidental Illex permit under Option #4. This would be a catastrophic loss of investment for us.

Cost/Benefit Analysis:
Should Option #4 be adopted "as is" by the full council, it will result in permanent negative consequences to my companies and vendor-partners with losses in the several million-dollar range. Not only is this option #4 not defensible, it also destroys permit values, destroys profitability and jobs for active vessels and shoreside plants, excludes at least 1 active vessel entirely from the fishery, increases regulatory discards, and does nothing to meaningfully stop or slow "race to fish". It does not address any of the following concerns in a meaningful way: safety at sea, user conflicts (should they differ from any other fishery on the East Coast), or overages in quota (which are currently being

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addressed by faster dealer reporting and VMS data usage). What it does do, is create a lot of inefficiency in how a Tier2 vessel would now have to operate under a trip limit, as opposed to the efficient manner which the boat is currently able to fish.

The Council has discussed the desire to "freeze the footprint" in the fishery. Freezing the footprint's interpretation means keeping all active participants whole while freezing catching capacity. Option #4 does nothing of the sort, and if enacted will squeeze out the recent participants with a trade-off of just a few extra days of fishing for the Tier1 vessels. There is discussion surrounding Vessel Hold Capacity, however 85% of Tier1 participants already have this done. This is unnecessary and burdensome to the remaining group of participants as they do not have high-horsepower vessels and will never be turned into large capacity RSW/FAS vessels anyway.

Option #4 will effectively spread 2.3 million pounds lost from the Tier2 fleet across 35 Tier 1 boats. This would equate to 2 or 3 days of extra fishing time for the Tier1 fleet based upon 2019 catch rates of 5-6 million pounds per week. Also, spread amongst the 35 tier 1 boats, that equates to a paltry extra 65,714 pounds per vessel, or extra revenue of $26,285 per boat, per year. For a large RSW boat catching in excess of 4,000,000 pounds of illex per year, or a large Frozen At Sea vessel catching in excess of 6,000,000 lbs per year, this would impact their overall revenues inconsequentially (1% or 2% difference) but negatively impact Tier2 boats of up to 55% of their current Illex revenue.

Spreading out 2.3 million pounds of a 60,000,000 pound quota (3.8%) from one user group to another, eliminating 26 permits from the fishery, inflicting economic pain on the recent participants, and increasing the fishing season by 3 days will be the legacy of this Illex Amendment should the Council elect to approve the MSB Committee's Option #4 without any modification. All in the face of an increasing quota with no current bycatch or biological problems.

I urge the full council to reconsider the MSB Committee Recommended option #4 as it currently is written, and replace it with Option #1, Option #2, or Option #5 to mitigate the economic pain inflicted on recent participants. Thank you all for your diligence and careful consideration during this amendment process.

Sincerely,

Ryan G. Clark
President and CEO
The Town Dock

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Dr. Chris Moore
Executive Director
Mid-Atlantic Fishery Management Council
800 North Street
Suite 201
Dover, DE 19901

July 6th, 2020

Dear Dr. Moore,

I am writing to express my final thoughts and comments on the Illex Amendment.

After participating on all of the Committee meetings, FMAT and public hearings I still firmly believe that moving forward with requalification goes against the Goals and Objectives of this very Amendment itself:

Goal 1: Maintain sustainable MSB stocks.

1. *Objective 1.1: Prevent overfishing and maintain sustainable biomass levels that achieve optimum yield in the MSB fisheries.*
   The Magnuson-Stevens Act states that any FMP *may* establish a limited access system for the fishery in order to achieve optimum yield. A limited access system was already created decades ago, and achieving OY is supposed to be the goal of a fishery. However, after successfully reaching the goal of meeting OY these past few years, suddenly meeting this goal has been made out to be a negative and now referred to as "overcapitalization", a term being used to intentionally confuse and muddle the discussion in order to encourage the removal/restriction of participation. It is clear the intent to requalify is not about achieving OY, but really about WHO should be allowed to achieve OY, making this about economics, not biology or ecology.

Goal 2: Acknowledging the difficulty in quantifying all costs and benefits, achieve the greatest overall net benefit to the Nation, balancing the needs and priorities of different user groups and effects of management on fishing communities.

1. *Objective 2.1: Provide the greatest degree of freedom and flexibility to harvesters and processors (including shoreside infrastructure) of MSB resources consistent with attainment of the other objectives of this FMP, including minimizing additional restrictions.*

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We are actively working against this objective by enacting further restrictions in an already limited access fishery and reducing the freedom and flexibility of certain harvesters and processors. As far as "balancing the needs" of different user groups, the 62k pound Tier 2 trip limit that the Committee approved is not considering the needs of those that would qualify under that Tier. Neither does not allowing recent participation to qualify for both T1 and T2. I've made this point before, but if/when this fishery moves to an ITQ fishing, by limiting a portion of the fleet to a trip limit the Council will have disenfranchised them to be able to qualify for any decent portion of the quota, causing economic pain a second time.

2. *Objective 2.2: Allow opportunities for commercial and recreational MSB fishing, considering the opportunistic nature of the fisheries, changes in availability that may result from changes in climate and other factors, and the need for operational flexibility*. Further limited access is reducing the flexibility the industry needs to adapt to a changing climate and ecosystem. The public has now received the SSC and both Illex Working Groups reports. All groups provided us with positive information regarding the Illex stock, in fact it allowed for an increase in quota. If the SSC's analysis was used as a means for increasing the quota, then it should also be used to allow people to remain in the fishery as they do now.
3. *Objective 2.3: Consider and strive to balance the social and economic needs of various sectors of the MSB fisheries (commercial including shoreside infrastructure and recreational) as well as other fisheries or concerns that may be ecologically linked to MSB fisheries.*
   The people who have recently become active in the Illex fishery did so because they now had an opportunity to utilize their permit since certain dealers recently started accepting iced product. Prior to 2017 no dealer/processor would accept product from ice sector of the fishery; therefore, it was pointless to even enter the fishery unless you were an RSW or frozen vessel. The communities of New Bedford, Point Judith and all of Cape May should be equally considered.

Enacting further restrictions on an already limited access fishery so a few can benefit not only works against Goals and Objectives of this amendment, but that action also works against the Mission and Vision of this Council.

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In the MAFMC's Vision and Mission statement in the 2020-2024 Strategic Plan there is mention of sustainable fisheries, communities, and providing the overall benefit to the nation. Requalification would only provide benefit to a few. There is also mention of long-term sustainability and productivity of managed fisheries and being committed to these fisheries though collaborative development of effective science-bases fishery management plans and policies. The best available science we have was presented at the SSC meeting in May. This information should be used to benefit all participants and not just a select few.

Requalification would not be beneficial to all communities or the nation. In fact, further requalification will only benefit a few of those in the industry, while negatively impacting the rest as they will be hamstrung by a trip limit. The 62k pound trip limit approved by the Committee will disenfranchise the current active vessels by causing a reduction in productivity. The 62k pounds trip limit that was approved for T2 is too low and will put some Tier2 boats out of this fishery. The Council is creating great inefficiencies in the T2 sector by implementing such low trip limits. This fishery is known to be clean, efficient and lack discards. By supporting the Committee's option, the fishery now will be forced to operate inefficiently, fishing slower, making shorter trips, but having to make more trips out to sea to make up for lost poundage thereby spending more money in fuel and supplies. Economically and efficiency wise-this make no sense.
Biologically, this will almost certainly cause a discard issue for fear of coming in over quota. A discard issue that currently does not exist and that the remaining T2 participants will somehow exclusively have to pay for.

According to the Councils Strategic Plan:

Objective 13. "Collaborate with management partners to develop ecosystem approaches that are responsive to the impacts of climate change."

Within this Objective are two Strategies:

Strategy 13.3: Evaluate the flexibility/ability of current management approaches, including the NOAA Fisheries climate-ready fisheries management process, to respond to shifting species distributions.

Strategy 13.4: Consider management strategies that are responsive to the impacts of climate change on current fishery allocations.

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Moving forward with further requalification works against the Objective and Strategies listed above. It is enacting far stricter, less flexible management to a species that is already restricted and that we know is likely going to be impacted by climate change (we are already seeing changes in distribution). There is no denying that we are witnessing and experiencing ecological changes due to changes in climate, yet we are not applying adaptive management styles to these changes, but rather falling back into ridged management choices without the much-needed flexibility. Further requalification is not a "climate ready fishery management process or response."

To once again quote Malin Pinksy, who has presented to the Council several times, *"...one of the most important ways that communities can adapt to a changing ocean environment is by shifting their species portfolio."* And that, *"…. there are also constraints to switching to new species, including limited entry in many fisheries or the high cost of permits or quota shares. Catch diversification can buffer fishers and communities against ocean change."*

I have been consistent in my comments throughout the years that it is my belief that having profitable access to a variety of species will provide resilience to ecosystem changes. As you can see from above, it is not only my opinion, but the belief of respected scientists and managers as well.

It is a personal business decision when companies decide to forgo or drop other permits and risk narrowing themselves down to depending on a few species. As everyone saw from the public hearing document, all Illex fishery participants have a very similar suite of permits and are actively involved in other fisheries. There is no one that depends on Illex alone. Recent Illex participants should not have to be negatively impacted because of someone else's business decisions.

Given the natural ups and downs and the added changes that come with climate change, the industry needs to be able to be adapt to these changes, they need the flexibility to round out their portfolio to be able to have a resilient and successful business. In fact, many industry participants have commented in the past that we need MORE flexibility in management, not less, and yet we see many of those same participants advocating for the opposite in this current case.

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Control Date

The MSA states that a control date MAY be used, not that it MUST be used.
A seven-year-old control date is stale. There is no reasonable way to make a sound business decision on a fishery that has a control date that is so old. Utilizing this control date completely disregards the transformation that has occurred in this fishery and contradicts objectives 2.1, 2.2, and 2.3 of this Amendment and its use will negatively impact recent participants.

SSC/Illex working groups

This past year, two working groups put significant time and effort into updating, gathering, and analyzing data and information on the Illex stock. The information gathered and analyzed was used in determining an increase in quota to 30,000MT for 2021 with the likelihood that it will go up again in the future. Raising the quota while lowering the effort puts at risk no longer being able to continuously reach OY, as we have successfully done the past few years.
Over the past 32 years the fleet has reached OY 5 times, each time they were able to do so with increased participation.
Both groups churned up lots of great data and analysis that should be benefiting the WHOLE fleet, not a select few.

I thank all of you who have taken the time over the past year to truly hear to our concerns. We know it was often redundant and time consuming, but we have a lot at stake with this amendment.

Sincerely,

Katie Almeida

Katie Almeida | Fishery Policy Analyst | The Town Dock

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July 6, 2020

Mr. Michael Luisi, Chairman
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901

Re: **Fishing Vessel Enterprises and The Town Dock's Comments on the MSB Committee's Proposed Alternative for the *Illex* Fishery Permitting Amendment**

Dear Chairman Luisi:

On behalf of Fishing Vessel Enterprises, Inc. and The Town Dock, we submit this letter strongly opposing the Atlantic Mackerel, Squid, and Butterfish ("MSB") Committee's preferred alternative for the *Illex* permitting amendment to the MSB Fishery Management Plan ("FMP"). As you know, Fishing Vessel Enterprises is an active participant in the *Illex* fishery. Its vessels operate out of Cape May, New Jersey. The Town Dock is based in Point Judith, Rhode Island and is the largest supplier of squid in the United States. The Town Dock owns seven fishing vessels that fish primarily for squid, and it also buys squid from several dozen independently-owned vessels.

This alternative, set to receive a final vote by the Mid-Atlantic Fishery Management Council ("Council") on July 16, would reallocate quota within the *Illex* fishery based on a stale and abandoned control date from 2013. Simply put, this alternative should have never advanced beyond the due diligence stage of scoping, especially given that the Scientific and Statistical Committee ("SSC") deemed the *Illex* fishery a healthy stock and raised the quota by 4,000 metric tons. Indeed, the SSC has recently stated that quota may increase again in the near future, further highlighting the fishery's long-term inability (at least, until recent investments) to achieve optimum yield consistently, if at all.

Moreover, NMFS has expressed its concerns on several occasions—including in an April 22nd letter from GARFO Regional Administrator Michael Pentony—that this alternative suffers from both legal and technical flaws. Nevertheless, the MSB Committee opted to advance the preferred alternative without revisions. **We therefore request that the Council reject this alternative and take no action on this amendment**, as these fundamental flaws have not been addressed.

PREFERRED ALTERNATIVE CONTRARY TO EXECUTIVE ORDER

The President of the United States recently promulgated an Executive Order on May 7, 2020, which addressed the need for "additional streamlining of fishery regulations…to revolutionize American seafood production, enhance rural prosperity, and improve the quality of American lives," as well as "revitalize our Nation's seafood industry" and "get more Americans back to work." The Order established that "[i]t is the policy of the Federal government to remove unnecessary regulatory barriers restricting American fishermen" and to "avoid duplicative, wasteful, or inconclusive permitting processes." The President's Order also requires all Fishery Management Councils to submit a list of actions that would reduce burdens on domestic fishing and increase production within sustainable fisheries.

The Committee's preferred alternative for the MSB FMP amendment provides benefits to a select few participants in the fishery at the disadvantage of many, including certain fishing communities. The alternative does not satisfy the Executive Order's criteria and intent for a permitting regime or a management action more generally. Rather, it would create more burdensome regulations that remove active participants from the industry and reduce the ability of the *Illex* fishery to maximize its productivity and economic potential.

FLAWS WITH THE PREFERRED ALTERNATIVE

The first and most prominent flaw is the alternative's reliance on the 2013 control date. Control dates are meant to discourage ***speculative*** investment in a fishery that is thought to be at or near full harvesting capacity. As previously explained, participants only landed more than 75% of the quota three times between 2000 and 2016, and achieved optimum yield only once during that time. Meanwhile, the fishery has filled its quota each of the past three years after additional investments were made by recent participants and other shore-side entities.

Further, Councils have long been directed to work diligently to implement new management measures following the publication of a control date.[1] Nearly six years between publication of a control date and the initiation of an amendment cannot credibly be claimed as "diligent," especially when there have been prior opportunities to advance a management decision. For instance, the Council developed a similar permitting measure in the *Loligo* fishery between 2016 and 2018 while also relying on a 2013 control date. Yet during that same action, the Council specifically opted to take no action in the *Illex* fishery.

Any rational observer could only conclude that the Council had effectively abandoned the 2013 control date for *Illex* and, therefore, definitively signaled to industry participants that any new participation in the fishery would no longer be speculative. And although the Council purportedly later voted to "reaffirm" the 2013 control date in 2018, that action failed to satisfy the necessary legal requirements as it was never published in the Federal Register.

Beyond its legal deficiencies, utilization of this stale control date would also lead to absurd results, especially when the Committee has made one-off accommodations for certain participants the preferred alternative would allow to qualify. For instance, the current preferred alternative would assign Tier I permits to vessels that have not significantly participated in the fishery over the past decade. Indeed, there is a Virginia vessel that appears to have not captured *Illex* since 1998 that would receive a Tier I permit. By contrast, more than a dozen current, active participants—several of whom have also made significant financial investments into improving the shore-side aspects of the fishery—would either receive a Tier II permit or be excluded from participating in the fishery altogether.

To that end, there is no reason to disregard, much less exclude, these 2019 participants, as all of the 2019 fishing data, including incidental catch, has been completely recorded and made available during the amendment process. There is simply no benefit to the fishery, or any other plausible justification, for excluding participants who are actively investing

[1] *See* a June 1998 memorandum to regional council directors from then-acting NMFS Assistant Administrator Nancy Foster, which advised that delays of even ***three months*** between the establishment of a control date and its final publication in the Federal Register *undermined the goals that such notices were meant to serve*. N. Foster, NMFS Acting Administrator, MEM. FOR REGIONAL DIRECTORS OF REGIONAL FISHERY MANAGEMENT COUNCILS, "*Control Date Notices*," p. 1 (June 17, 1998).

in the fishery and helping to achieve optimum yield while idle, inactive participants receive unlimited quota.

Beyond the stale control date, the use of a two-tiered system would not provide added efficiency to the fishery; nor has the Council demonstrated that the amendment would serve more than economic interests under National Standard 5. While proponents of this amendment have touted it as providing relief regarding the current "race to fish," the *Illex* fishery is by its very nature a derby fishery. Indeed, the biology of the stock dictates the necessary fishing tactics to employ. *Illex* are a seasonal stock that appear in fishable waters for only a few months during the summer and early fall, so effort needs to be mobilized when the species are available. Moreover, no other common adverse attributes of a race to fish have been observed. Prices are increasing, and bycatch is essentially non-existent.

Moreover, the Council and NMFS are required to demonstrate that the benefits of any proposed action outweigh its costs before approving that measure. To-date, no quantitative benefits have been asserted and, as discussed above, the only alleged qualitative benefit enumerated—that this two-tiered system would reduce a race to fish—is premised on hypothetical and flawed logic. Yet the *costs* to recent active participants from implementation of this alternative are both <u>real</u> and <u>numerous</u>.

For example, revenue losses for the seven most active vessels which would become Tier II permittees are projected to be over $1 million per year. Moreover, the negative impacts to shore-side processors and market suppliers who purchase from these vessels would be roughly four to five times as high as the *ex vessel* loss, based on a reasonable multiplier. Conversely, the average gain for each Tier I permittee would equate to no more than a couple days' fishing per year. Simply put, the potential costs to Tier II vessels and shore-side businesses grossly outweigh any minimal benefits to the many Tier I permittees. Coupled with the lack of any tangible quantitative or qualitative benefits for the fishery as a whole, there is simply no justification for advancing the Committee's preferred alternative.

GARFO'S EXPRESSED – AND UNRESOLVED – CONCERNS

As previously mentioned, GARFO has already identified several legal shortcomings related to this alternative – namely, that its analyses are insufficient to satisfy the Magnuson-Stevens Act ("MSA") National Standards 1, 4, 5, and 8, and the accompanying

Guidelines ("NSG"). The Committee's preferred alternative does not improve the fishery's potential for achieving optimum yield under National Standard 1, as the fishery only achieved optimum yield ***twice*** prior to 2017. Indeed, this issue may only be further exacerbated now that the quota has increased by 4,000 metric tons. Under National Standard 4, the alternative does not provide any conservation benefit for a resource with an increasing quota and limited availability on the continental shelf. Further, the amendment is not consistent, in terms of promoting flexibility in the fishery, with the goals and objectives the Council is updating in the very same action. Nor, as explained above, has the Council demonstrated the alternative creates or adds any efficiency to the fishery under National Standard 5. Finally, while the alternative is admittedly designed to benefit certain fishing communities, National Standard 8 "does not constitute a basis for allocating resources to a specific fishing community nor for providing preferential treatment based on residence in a fishing community." Yet this alternative would have impacts on only a handful of communities that have made recent investments into the fishery.

Further, the low Tier II (and Tier III) trip limits likely will promote regulatory discards, contrary to National Standard 9. In fact, a bycatch issue could very well be created where none exists. According to National Standard 9 guidelines, "[a]ny proposed conservation and management measure that does not give priority to avoiding…bycatch must be supported by appropriate analyses. In their evaluation, the Council must consider net benefits to the Nation…." No such analyses exist on this record.

Despite NMFS' warnings that this alternative is not defensible on the existing record, the Committee took no action to ameliorate any of these inherent flaws. Accordingly, we respectfully request that the Council reject the MSB Committee's preferred alternative and take no action.

* * *

Thank you for the opportunity to submit this letter and for your consideration of these critical issues. Please do not hesitate to contact us if you require any additional information.

Respectfully submitted,

David E. Frulla
Andrew E. Minkiewicz
Bret A. Sparks
Counsel for Fishing Vessel Enterprises, Inc. and The Town Dock

July 6, 2020

Dr. Chris Moore, Executive Director, Mid-Atlantic Fishery Management Council
By email: cmoore@mafmc.org
Re: **Tier 2 Limits and Hold Measurement in Illex Permitting A21**

Dear Chris:
Please provide these comments to the Council, specific to a discussion that occurred at the April 29 Committee meeting concerning trip limits and the importance of requiring hold measurements of both Tier 1 and Tier 2 Illex fishing vessels. The A21 fish hold measurement requirement would be consistent with the Council's "freeze the footprint" approach taken in other actions in recent years, including A16, the 2016 Deep Sea Corals Amendment and A11, the 2011 Mackerel Limited Access amendment. Fish hold volume could still be increased by up to 10% of the vessel's baseline hold measurement, whether through refitting or vessel replacement. Each of the Illex vessels holding Tier 1 or Tier 2 mackerel permits have already been measured and at a reasonable cost.

Tier 2 Trip Limits: We continue to support a 48,000 pound trip limit for Tier 2 vessels. Trips landing up to 48,000 pounds (1997-2018) only accounted for 5% of landings (PHD, page 27). This provides a fair opportunity for vessels without fishing history earned prior to the control date to remain in the fishery. However, we expect that some of the smaller Tier 2 vessels will still be able to work at close to their fish hold capacity within this trip limit and, essentially, become a Tier 1, unlimited vessel. A larger trip limit, using a more recent landings history, rewards speculative entry into the fishery and negatively impacts historic participants and communities by increasing Tier 2 landings as a percentage of the annual catch.

Fish Hold Measurement for Tier 1 and Tier 2 Vessels: In describing fish hold measurement requirements for both Tier 1 and Tier 2 vessels, the Mackerel A11 FEIS states that these "provisions that limit upgrades would limit additional capitalization which could provide potential benefits (especially long-term) to the fishery". We agree. A matching requirement in the Illex fishery would ensure stability in the fleet's current characteristics and reduce the potential for fishing capacity to significantly increase in the future, with the result being an overall decrease in the value of the limited access permits being fished today.

In the event of future quota increases through a change in specifications, the value of limiting upgrades through a Tier 2 hold measurement provision becomes even more important, not only to speculative entrants with larger hold capacities who find themselves in Tier 2 but also to the historic participants in the fishery; with both group's proportional access to the fishery being reduced over time unless Tier 2 vessels' ability to upgrade without restriction is limited by the Council requiring fish hold measurement through this Amendment. This fact holds true, also, if trip limits were to scale with quotas in the future; a management option discussed by the FMAT in April, which we do not support.

Thank you for the opportunity to clarify our rationale for our previous requests to the Council. We understand that additional analyses from Jason will be posted prior to the meeting so we may provide supplemental comments for the Council prior to July 13.

With best regards,

Meghan Lapp

Meghan Lapp
Seafreeze Ltd. and Seafreeze Shoreside

Greg DiDomenico

Greg DiDomenico
Lund's Fisheries, Inc.

July 6, 2020

Dr. Chris Moore, Executive Director
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901
By email: cmoore@mafmc.org

Dear Dr. Moore:

In advance of the Council being scheduled to take final action on the MSB FMP Goals/Objectives and Permits Amendment, on July 16, I am writing to ask that you provide the Council with our comments about two issues that came up during one of the recent FMAT calls – 'excessive shares' in the fishery and the relationship between OY and historic shoreside investment in the face of recent speculative entry. In response, we thought it was important to explain a few things about our business and describe the negative impacts of speculative entry as it pertains to the Illex fishery, particularly the negative economic and social effects on communities that have invested in this fishery for longer than the last 2 or 3 years.

We were very concerned about the excessive shares discussion intended by members of the public, apparently, to convey a sense that success in this fishery over a long period of time equates to the potential for monopoly power, which must be constrained. As you know, the U.S. Illex price and market are determined by world squid production in both the Argentinian and Northwest Pacific fisheries, which are orders of magnitude larger than our own. We are price takers here, not price setters and can only be successful in the market by investing in technology to produce the highest quality products possible.

While the MSA's National Standard 4 includes the term 'excessive shares' it is not defined in the Act except for the specific language in §303A relating the term to limited access privilege holders. We are not aware of GARFO using this metric in any of the region's FMPs other than those regulating sectors or LAPPs/ITQs. We are not clear on how the term is addressed in the NS 4 guidelines, however, and we have not had the opportunity to investigate that question.

This fishery is commonly known as a "high volume / low value fishery" and requires a specialized shore side processing facility to compete in the U.S. and world market.

To be more specific about our investment, please consider the following:

1) We are in our 4th iteration of a freezer plant. Our investments began in the 80's with opportunities available from joint venture partnerships leading to the Americanization of the fishery. We know we will have to continue to invest in order to survive.
2) The investments we have made are staggering, tens of millions of dollars just in equipment and plant modifications. In fact, in each upgrade we learned we had to get better and freeze faster and unload quicker to attain the quality needed to be able to sell product in all market conditions. We do not process iced Illex, incidentally, as we learned long ago it leads to a degradation of market quality which works to the detriment of the U.S. fishery.
3) We have also made significant investments in cold storage facilities. In fact, we are now in the process of a new, 9-million-dollar expansion of our cold storage facilities, in Bridgeton, NJ, and recently spent millions of dollars in updating all our unloading equipment in Cape May.

In addition to these shoreside investments, please consider that the Agency encouraged the 'Americanization' of U.S. pelagic 'underutilized' fisheries more than 3 decades ago. In response to this opportunity, we and historic, independent vessel owners like us, who developed the region's squid fisheries along with our joint venture partners, changed our focus and business plans to participate in high volume / low value fisheries and built or purchased vessels for this specific purpose. In fact, our founder, Mr. Warren Lund, built the first freezer trawler in this area, based upon the insights he gained through participation in these JVs.

Because permits move together, even if some of these purpose-built vessels, like our own, may still hold groundfish or fluke or red crab or black sea bass permits, they do not work in those fisheries due to the expenses and other restrictions involved, which have worked to effectively close our options to participate in them. This contrasts with the vessel owners who are new entrants in the Illex fishery and were previously active in demersal fisheries, which is where they have been historically dependent and where they will continue to operate in the future. While other fishing companies also participated in joint ventures from the Port of Cape May, ours is the only company that has consistently invested in the infrastructure necessary to successfully produce pelagic species, including Illex and Loligo squid, here.

The other aspect of this fishery is the species' natural, inter-annual variability, which can be characterized as "bad years", "OK years" and "extraordinary years" where persistent availability of the resource, combined with favorable demand and a high price, allow our investments' value to be realized and keeps our people, and several independent vessels, working. It is important to understand that we have been active in this fishery year in and year out, regardless of these condition factors in the fishery.

In our opinion, the benefits to the individuals and communities that have historically invested and participated in this fishery, from the Council's use of the Illex control date, greatly outweighs the impacts on recent participants who participated in this fishery on speculation and took advantage of an "extraordinary year". They will not lose access to the fishery, they simply should not earn Tier 1 access to it by launching their business plan after the Council launched the Illex amendment and reconfirmed the Illex control date, in 2018, with the decision to move the Loligo amendment first.

It is equally important to recognize that our company has been faced with the loss of access to numerous permits and fisheries over time, as control dates have been applied by both of our regional councils in the past. Our response has been to buy back in, and gain permits with history to grow our business. This has been the case in many fisheries where we have invested in permits wisely and made sure our investment in those fisheries contemplated past and future fisheries management actions.

With that said, we respectfully request that the Council reflect upon the implications of the use of the 2013 control date in this fishery and weigh the negative impacts of speculative entrants against the impact they have had on historic, shoreside participants. The justification for this amendment providing a small measure of protection for the historic participants in this fishery, in addition to the community and socio-economic benefits associated with maintaining a strong position in it, are numerous and should be apparent.

There is no better example of how overcapitalization and speculative entry in this fishery operated in the last year. Below you will find the percentage of landings and poundage by port. Consider that the landings in Massachusetts for years prior to 2019 are near zero or zero.

Commercial Illex landings (live weight) by state in **2019.**

State Percent
NJ 9,910 36%
RI 8,480 31%
MA 8,146 30%
Other 740 3%
Total 27,276 100%

There has been much discussion of Optimum Yield during this process, such that one would assume it refers to ensuring that each participant in a fishery should be, essentially, unrestrained. That is clearly not how OY is defined in the MSA. As we all know, the Act defines OY as the yield from the fishery '*as reduced by any relevant economic, social or ecological factor*.'

The rationale for reducing the share of Illex OY for speculative entrants into the Illex fishery, in favor of those who have been in the fishery since before 2013 and continue to participate in it, resides in the language of NS 8, which not only requires an FMP to prevent overfishing and provide for rebuilding but to *'take into account the importance of fishery resources to fishing communities by utilizing economic and social data…provide for the sustained participation of such communities (and) minimize adverse economic impacts on such communities.'* Certainly, the Port of Cape May meets this definition and we hope this fact will guide the Council's recommendations for final action on the Illex permits amendment next week.

Thank you for your consideration of our perspective on these critical issues.

With best regards,

Wayne Reichle

Wayne Reichle
President
wreichle@lundsfish.com

Monday July 6, 2020

Dr. Chris Moore
Executive Director
Mid-Atlantic Fishery Management Council

RE: MSB Goals and Illex Permits

Dear Dr. Moore,

Thank you for the opportunity to publicly comment regarding the *Illex* squid permitting amendment to the Mackerel, Squid, Butterfish Fishery Management Plan.

I would first like to take this opportunity to introduce Northern Pelagic Group "NORPEL" and its connection to the *Illex* Squid fishery. NORPEL first started as a pelagic processing plant in 2002. For many years, NORPEL processed domestically caught Atlantic Herring and Atlantic Mackerel. As cuts to quotas and rigorous regulations were enacted in these fisheries, NORPEL turned to the freezing, as well as the harvesting of squid as an alternative to keep the doors open and the staff employed.

Last month, the Mackerel, Squid, Butterfish Committee voted to accept a tiered approach to the management of the *Illex* squid fishery as the preferred alternative to the current requalification amendment. Under this new tiered approach, many active permits and fishing vessels would be forced into the Second Tier, where a trip limit would be enforced. The trip limit, which was set at 62,000 lbs, would remove many active participants from the fishery, as the limit would not allow vessels to catch required to cover expenses for a trip. The *Illex squid* fishery is a volume fishery and vessels rely on that volume to cover the lower ex-vessel landing price.

With a wider variety of harvesters and processors entering the *Illex* fishery over the last 5 years, we have been able to develop a strong international and domestic market for the squid, one that had not been relatively untapped by the traditional participants of the fishery. These new markets support a local, healthy, sustainable biological stock. By moving towards a tiered system, with a low trip limit for the second tier, we are only hurting the growth of these markets, as a diverse set of participants are vital to this growth. Additionally, with the quota only being caught several times over the last 20 years, we are only inhibiting the ability for the fleet to harvest Optimum Yield.

As one of the only large-scale, shoreside squid processor located north of Rhode Island, the *Illex* Squid permit requalification amendment could have vastly negative consequences on not only NORPEL, but an entire region. Although, the fishery is new to the region, many support services such as ice houses and fuel companies have become reliant on the summer revenue as a source of income, as traditional fisheries have dwindled.

NORPEL continues to support the following three positions regarding the current *Illex* Amendment:

1) **Preferred**: No action; requalification of all 76 permits.

2) **Preferred Alternative:** Minimal action; full requalification of 51 active permits. This allows for requalification of all active permit holders with more than 50,000 pounds landed in any one year from 1997 to 2019. This essentially eliminates permits for the non-participants in the fishery in the time frame from 1997-2019.

3) **Acceptable Alternative:** Should the council insist on a tiered approach, we can support the following:
    - *Tier 1 Classification:* 500,000 pounds best year qualifier 1997-2013; or 1,000,000 lbs. best year qualifier 2014-2019 (+/- 41 permits).
    - *Tier 2 Classification:* 100,000 pounds best year qualifier 1997-2019; 90,000 lbs. trip limit; no sub-quota (+/- 7 permits).
    - *Tier 3 Classification:* 50,000 pounds best year qualifier; 47,000 lb. trip limit; no sub-quota (+/- 3 permits).
    - *Incidental limit:* 10,000 lbs. (+/- 25 permits).
    - No new fish-hold capacity limitation.

The *Illex* Squid fishery is currently a limited access fishery. All of the 76 limited access permits have previously requalified under prior amendments. Additionally, *Illex* Squid is a national public resource. That being said, enacting overly aggressive requalification criteria will only limit participation in the fishery and further privatize this resource, which will have no net benefit to the nation, or the 76 limited access permit holders. NORPEL cannot support aggressively limiting participation for the following reasons:

There is currently no biological basis for requalification. The *Illex* Squid fishery is healthy and vibrant. There are currently several collaborative working groups of fishermen, shoreside industry, the science community and fishery managers who are working together to increase the quota for the *Illex* Squid fishery. If the quota is to be raised, and permits and/or participation reduced, there is a strong chance that in the coming years, Optimum Yield will not be harvested. This is further backed by the idea that the *Illex* Squid fishery has only reached its quota a handful of times over the last 20 years.

Fisheries need a diverse fleet of harvesters and processors. Many of the traditional participants in the fishery would requalify under stricter limits, whereas many of the other permit holders potentially would not requalify. This would limit the fleets geographic distribution and would ultimately concentrate the fleet to just a few ports and permit holders. By limiting the number of ports where *Illex* Squid was landed, there would be less incentive for competition amongst vessels and processors. Less competition would lead to less innovation and the further development of new markets, both domestically and internationally. Traditionally, ice boats could not catch *Illex* Squid, due to the lack of available processors who would be willing to process ice boat caught *Illex*. Over the last several years, due to innovation within the industry and a robustly diverse fleet of catchers and processors, new markets have developed for *Illex*. One of the key areas of development was in the domestic food service industry. Further reducing participation will only serve to inhibit the growth and positive momentum of the expansion of a healthy and sustainable squid fishery.

Fisheries need to be flexible, in order to react to changing climate and ocean conditions. As seen many times within a variety of fisheries, the climate and oceanographic conditions have a vast influence on the stock structure and physical location of fisheries. The *Illex* Squid fishery needs to be flexible in order to adapt to the potential for a shift in the location of *Illex* Squid stocks. By limiting permits and participation, the ability for future flexibility will be greatly limited. Removing permits will ultimately lead to the removal of processing infrastructure, particularly in areas north of Rhode Island. Should the stocks migrate in the future, with limited permitted vessels within proximity to the fishing grounds, no access to additional permits and/or no processing structure, there will be an inability to harvest Optimum Yield for the *Illex* Squid fishery.

As mandated by the Magnuson-Stevens Fishery Conservation and Management Act, NOAA Fisheries has developed guidelines for each National Standard. The National Standards are principles that must be followed in any fishery management plan to ensure sustainable and responsible fishery management. If the Council were to modify the current *Illex* squid permitting system, they would do so in potential violation of National Standards 4 (Allocations), and 8 (Communities).

Under National Standard 4, *Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (a) fair and equitable to all such fishermen; (b) reasonably calculated to promote conservation; and (c) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privilege. By implementing a new permitting system, much of the fishery, which is currently geographically distributed throughout the East Coast, would be consolidated to a significantly smaller region. The fisheries based in Rhode Island and Massachusetts would truly suffer.*

Under National Standard 8, Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that meet the requirement of paragraph (2) [i.e., National Standard 2], in order to (a) provide for the sustained participation of such communities, and (b) to the extent practicable, minimize adverse economic impacts on such communities. By implementing a new permitting system, there would be a great loss of economic activity in the Rhode Island and Massachusetts regions, as outlined above. Not only would the companies directly involved in the fishery suffer, there would be a negative impact on all the related shoreside workers and businesses. Many of these companies rely on the Illex fishery as It often bridges the gap between Spring and Fall fisheries.

The main goal and objective of the MSB FMP should be to determine an accurate and real time Spawning Stock Biomass (SSB) Annual Catch Limit (ACL) for the Illex fishery that takes into consideration the squid's extremely short lifespan and highly migratory pattern. The issue at hand with the Illex squid fishery is not one of allocation. I believe all Council and Committee effort should be focused on completing a scientifically acceptable stock assessment for Illex squid. This will greatly assist in setting the Allowable Biological Catch (ABC) and reaching Optimum Yield (OY). Upon completion of a successful and scientifically accepted stock assessment, when we have satisfied National Standards 1 (Optimum Yield) and 2 (Scientific Information), the Council and Committee should direct their resources to making management decisions for the Illex squid fishery.

I urge the Council to consider the motives behind a requalification amendment, which seeks to remove current, active participants from a healthy fishery that supports hardworking fishermen, vessels, shoreside industries and communities from Massachusetts to South Carolina. *Illex* squid is a public resource that all permitted vessels should be allowed to pursue in order to provide the greatest net benefit to the nation and not hoarded by a few entities, especially those that have sold to foreign investors. As a US based, family owned company, NORPEL cannot support an amendment that would cut jobs, revenue, community development and international trade, with no biological basis.

Thank you very much for your consideration of NORPEL's comments. Should you have any additional questions, please feel free to reach out to me.

Sincerely,

Brendan Mitchell
Fisheries Liaison

To the Mid Atlantic Fisheries Management Council: July 6,2020

This is a You Tube link of the JV's that I was involved in, first for loligo then illex
.https://www.youtube.com/watch?v=sJB5y5yKHIg

Preview YouTube video F/V Karen Sue JV Part 2

Along with all the documentation I have provided including one year's landings, affidavits from industry members. I am sending this to the Council to demonstrate the Japanese JVs that I participated in during the original qualifying period when my permit was taken away.

I would request that the Council ask GARFO to examine reinstating my permit as a measure of equity.

In the longfin sqid amendment the rules were made to accommodate one boat. I am the only Illex boat that got it's permit taken away due to lack of CPH to hold my permit in, GARFO took my permit and associated history away, after the Council and NMFS had assured me there was no problem that I could keep it.

Even in years when I only had an incidental permit I landed Illex at Amory's and Seafreeze.

Because the Council is considering giving people that never participated in the illex fishery until after this action was started a Tier 2 permit, I believe I should qualify for at least the same, given that the tonnage of my historic landings would have qualified me for a Tier 1.

I am the only boat in this situation. So I am asling the Council to request that GARFO look into reinstating me for a Tier 2 permit.

Thank you

MarK S Phillips
210 Atlantic Ave
Greenport, NY 11944

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930

April 22, 2020

Dr. Christopher M. Moore
Executive Director
Mid-Atlantic Fishery Management Council
800 North State Street
Suite 201
Dover, DE 19901

Dear Chris:

I offer the following comments for consideration by the Mid-Atlantic Fishery Management Council on the Atlantic Mackerel, Squid, and Butterfish Fishery Management Plan (FMP) Goals/Objectives and *Illex* Permit Amendment. Before taking final action on this amendment, I encourage the Council to clearly define the problem this action would address, consider all available information regarding the status of the fishery, and fully justify measures it adopts relative to applicable law and the FMP objectives.

The Council should clearly identify and understand what problems it is trying to address through this action. During recent meetings and public hearings, both Council members and industry participants expressed different opinions about the health of the stock, the state of the fishery, and the implications of recent high fishery landings and seasonal closures. The public hearing document lays out a number of possible reasons for taking action, most notably to reduce the implications of a race to fish. A clear and accepted problem statement will help the Council identify and justify appropriate measures focused on the most important issues raised during the scoping process for this action and discussed during recent public hearings.

The Council should consider the current state of the fishery to provide context for this action and assess what this action may accomplish in addressing the articulated problem statement. Based on available information, both the stock and the fishery are healthy and robust at this time. The Council's Scientific and Statistical Committee (SSC) continues to maintain that the stock is lightly exploited and not subject to overfishing. Although still under development and subject to future peer review, preliminary analysis by the SSC's *Illex* Working Group may offer further evidence to support previous SSC conclusions, which could be used to support higher *Illex* quotas in future years. Since 2017, the fishery has fully harvested available quotas and achieved optimum yield (OY). Market prices are high, participants are profiting from the fishery, and there are few bycatch concerns. Given the current condition and future outlook for the fishery, I would encourage the Council to consider compromise measures that would help mitigate the race to fish, minimize impacts to active permits, and preserve the ability of the fishery to achieve OY during years in which *Illex* is less available.

As you know, measures adopted under this action must be consistent with applicable law and the objectives of the FMP. The public hearing document notes that section 303(b)(6) and National Standards 4, 5, and 8 of the Magnuson-Stevens Fishery Conservation and Management Act are

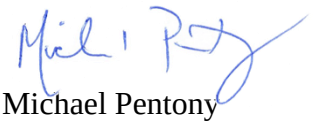
central to this action.[1] Analysis supporting this action should relate to the Council's rationale, take into account present participation in the fishery, and demonstrate how permit measures help achieve OY, minimize economic impacts, and maximize overall benefits to the fishery, including how total benefits outweigh hardships for affected fishery participants. Updated FMP objectives proposed for this action emphasize minimizing additional restrictions and providing the greatest degree of freedom and flexibility (Objective 2.1), and allowing operational flexibility (Objective 2.2). In adopting final measures, the Council should clearly describe how revisions to *Illex* permits would achieve these objectives and balance the social and economic needs of various sectors of the fishery (Objective 2.3). I am concerned that it may be difficult to demonstrate compliance with applicable law and FMP objectives without sufficient justification, and recommend that the Fishery Management Action Team prepare comprehensive analysis before the Council takes final action in June.

I recognize this will not be an easy decision for the Council. Both proponents and opponents have presented valid arguments for and against various alternatives. In balancing these perspectives, the Council must consider the tradeoffs and potential costs/benefits to the fishery. For example, if the Council wants to rely solely upon the 2013 control date to re-qualify existing moratorium permits and determine eligibility for the highest tier of fishery access, it must demonstrate that doing so is consistent with the goals and objectives of the action and the FMP and that the associated benefits to the Illex fishery at large outweigh potential costs to recent participants whose fishing opportunities would be constrained.

I encourage the Council to fully consider all relevant information regarding past and present performance of the fishery and ongoing efforts to improve the science supporting the status determination and future catch limits. Clearly articulating its rationale and developing sufficient supporting analysis will help the Council ensure this action is consistent with FMP objectives and applicable law.

Thank you for considering these comments. Doug Christel is available to discuss these comments with your staff, if you have questions regarding this letter.

Sincerely,



Michael Pentony
Regional Administrator

cc: Michael Luisi, Council Chairman

[1] National Standard 4 Guidelines at 50 CFR 600.325 indicate that any allocation of fishing privileges must be reasonably calculated to promote conservation, and should help achieve OY and be justified in terms of the FMP objectives. National Standard 5 Guidelines at § 600.330 indicate that measures cannot have economic allocation as their sole purpose and should not redistribute gains without also increasing efficiency. The National Standard 8 Guidelines (§ 600.345) suggest the Council should select a permit alternative that minimizes adverse economic impacts and provides the greatest potential for sustained participation by fishing communities.

Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201, Dover, DE 19901
Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Michael P. Luisi, Chairman | G. Warren Elliott, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: June 6, 2020

To: MSB Committee

From: J. Didden

Subject: April 29, 2020 MSB Committee Summary and Follow-Up

The Mackerel, Squid, and Butterfish (MSB) Committee met to make recommendations regarding the MSB FMP Goals/Objectives and *Illex* Permits Amendment. The Committee did not make final recommendations, but did discuss various aspects of the action and requested development of several additional options/analyses. All Committee members were able to attend except for LCDR David Stutt. NMFS' Greater Atlantic Regional Fisheries Office (GARFO) was represented by Emily Gilbert. A complete list of attendees is available by contacting Council staff.

Potential modifications to the *Illex* quota for 2020/2021 may be relevant, and are detailed in materials for the June 2020 Council at https://www.mafmc.org/briefing/june-2020. In summary, potential 2020/2021 changes might represent at most about a 5% increase relative to 2019 landings (which exceeded the 2019 quota by about 10%). At the rate of landings experienced in 2019 before the fishery closed, this might represent 2-3 days of extra fishing.

The Committee spent considerable time fine-tuning the action's problem statement and addressing GARFO's concern about how decision making aligns with the proposed updated goals and objectives, as well as relevant National Standards (NS).

Points included:

Staff reviewed that the document highlights the primary "concern" (i.e. problem) that recent and/or future activation of latent effort/permits could exacerbate a race to fish and associated negative outcomes.

In addition to this, the Committee noted that increased entry/participation risks gear conflicts, as raised in public comments, both from commercial and recreational perspectives. Addressing gear conflicts is part of NS 6. GARFO was requested to follow-up regarding the applicability of considering gear conflicts and report back if gear conflicts were not viable as part of the rationale for decision-making.

The negative effects to historically dependent communities from early closures and a shortened season were highlighted.

Overcrowding in the relatively small fishery area (between coral protection areas and other restricted gear areas inshore), especially in the southern area was also discussed.

Concerns about bycatch were also raised, noting that the FMAT found that in the month of May for 2017-2019 bycatch appeared higher than the overall discard rate for that time period.

Also related to early closures, there could be displacement of the historical fleet, which has said they (including large vessels) will be forced inshore into the summer longfin squid fishery by continued early *Illex* closures. There's an inability to freeze the footprint of participants at the currently-permitted fleet size. NS4 notes that transfer of effort and impact on other fisheries should be considered.

Operational flexibility considerations tie some of the above problems to the proposed FMP goals and objectives – a number of vessels in the fishery do not have operational flexibility to participate in other fisheries once *Illex* closes, while the more recently-entering vessels have more operational flexibility based on their historical revenues. Extending the season improves operational flexibility for the historical participants.

There was discussion that the goals and objectives can be modified but new ones can't be added without going out for additional public comment. The Council's actions need to be made in the context of the goals and objectives and National Standards.

It was discussed that under Goal 2 the needs of various sectors and concerns is an objective, and this also ties to NS 8 and communities - to provide for sustained participation of communities and avoid adverse impacts. Analyses already highlight the dependence of N. Kingston and Cape May, and guidance requires taking the importance of fisheries to fishing communities, and favors alternatives that, all else being equal, provide for the more sustainable participation of and avoids adverse impacts on such communities. While the two industry proposals are similar in some ways, the impacts on dependent fishing communities with sustained participation varies.

The Committee requested additional information of the prevalence of unclassified (by species) squid landings.

The following motion was made regarding the type of landings used for qualification – the FMAT did re-run the qualification estimates with live weight (see below), and only one vessel was affected.

I move that any consideration made of vessel qualification criteria be based on live weight, not landed weight.

Reid/Nolan 10, 2 abstentions, Motion Passes

The following motion passed regarding participants who made investments around the 2013 control date:

I move to recommend that a vessel is eligible for a Tier 1 permit if it purchased a refrigerated seawater system, plate freezing system or blast freezer and had it installed between January 1, 2012 through the control date of August 2, 2013, AND landed a minimum of 200,000 lbs of *Illex* in the 2013 fishing year, ending December 31, 2013. This would be paired with the Tier 1 qualifier in options #4 or #5.

Bolen/Nolan 11-0-1

It is anticipated that this would only add 1-2 vessels into Tier 1, but cannot be directly estimated given the proposed criteria and the available landings information.

The following motion passed regarding the alternatives:

I move to recommend to accept the staff's recommendation on simplifying the alternatives to the two bookends and the two tier options from public comments as modified today and no action. An appendix would track the number of qualifiers in the original calculations and after the switch to live pounds.

Nolan/Bolen 12/0/0

The resulting alternatives would be (requalifiers based on live pounds):

#1. No action. (75 Permits)

#2. 51 requalifiers: 1997-2019 @ 50 K pounds (no Tiering)

#3. 13 requalifiers: 1997-2013 **plus** 2014-2019 w/1,000,000 pounds **each** (no Tiering)

#4. 35 requalifiers: Tier 1 - 1997-2013 @ 500 K pounds
13 requalifiers: Tier 2 - 1997-2018 @ 100 K pounds (48K trip limit)
02 requalifiers: Tier 3 - 1997-2018 @ 50 K pounds (20K trip limit)
25 of 75 permits would not requalify for any Tier

#5. 42 requalifiers: Tier 1 - 1997-2013 @ 500 K pounds **OR** 2014-2019 @ 1 M pounds
07 requalifiers: Tier 2 - 1997-2019 @ 100 K pounds (90K trip limit)
02 requalifiers: Tier 3 - 1997-2019 @ 50 K pounds (47K trip limit)
24 of 75 permits would not requalify for any Tier

Changing the qualification to live pounds appears to have only moved one vessel from Tier 2 to Tier 1. GARFO staff is creating dependence boxplots, revenue source, and permit figures (like in the public hearing document) for options #4 and #5. It is hoped they will be ready to share during the Committee Meeting.

The Committee requested by unanimous consent for staff/FMAT to develop an option for a trip limit system that allowed trip limits to scale with quotas, and for the trip limits to be originally based on either the median or 75th percentile of recent trips by vessels in Tier 2. The original discussion was to apply a ratio-based model/formula, but review of the math involved indicated that having the trip limit simply scale directly with any quota changes is the same mathematically. So all the Committee/Council would need to do is clarify in an alternative that any initially-identified trip limits would scale proportionately with the quota (and identify the base quota year). So if the quota went up 5% from the base year, the trip limit would also go up 5%.

In terms of the median and 75th percentile of recent trips over 10,000 pounds for recalculated potential Tier 2 vessels (recall Tier 3 vessels were not active recently), the following tables describe potential trip limits and how these Tier 2 vessels might be affected.

#4 (2013) 2017-2019 Trips Tier 2 - 13 Vessels, 251 Trips Above 10,000 Pounds					
Trip Size Percentile	Pounds	% Illex Landings Lost if all trips held to these amounts.	% of all revenues represented by ALL Illex	Approximate Total Reveneus Affected	Average Total Revenues Per Vessel Per Year
Median Trip Size	62,144	17%	15%	3%	$1.1 Million
75th Percentile	77,723	9%		1%	
Proposal	48,000	31%		5%	

#5 2017-2019 Trips Tier 2 - 7 Vessels, 71 Trips Above 10,000 Pounds					
Trip Size Percentile	Pounds	% Illex Landings Lost if all trips held to these amounts.	% of all revenues represented by ALL Illex	Approximate Total Reveneus Affected	Average Total Revenues Per Vessel Per Year
Median Trip Size	59,802	11%	9%	1%	$1.1 Million
75th Percentile	72,103	3%		0%	

There were 4 trips between 90,000 pounds and 100,000 pounds from 2017-2019 for the #5 option, so the proposed 90,000-pound trip limit would not appear substantially constraining. The FMAT noted that the above trip analyses assumes all trips still occurred, and some may not have occurred especially at lower trip limits.

There was a public request to the FMAT to consider years before 2017 for the calculation of the median and 75th percentile, but since there are few trips from earlier years for these vessels and there didn't seem to be a clear indication from the Committee to not use 2017-2019, these analyses still use 2017-2019. The Committee/Council could direct staff differently if desired. Staff notes that extending to earlier years may erode the case that present participation is being taken into account, as required per the MSA. Only looking at trips above the 10,000 pound incidental trip limit level also increases the median/75th percentile trip identification, but staff's understanding is that the concern is to account for directed trips, and the smaller trips by these vessels made up about 2% of their *Illex* landings.

The Committee developed the following recommendations to Council leadership (this was communicated to Council Leadership immediately after the meeting) regarding timing issues:

1. Committee meets again before final action.

2. For *Illex* final action to be on the June agenda unless staff can not complete the analysis in time.

3. If June not appropriate, then prior to installation of new Council Members.

All 12 Committee members indicated support with no opposition.

The action's FMAT met on May 18, 2020 to address additional follow-up from the Committee meeting.

The FMAT noted that the SSC's increase to the *Illex* ABC would not have a substantial impact on quotas relative to 2019 landings because 2019 landings were over the quota and were probably pretty close to what a new quota might be.

Staff noted plans to look at activity 2017-2019 and "pin" any trips above proposed trip limits to the trip limit to see what loss might be for revenue and put into context of total revenues (see table above). Some vessels are more impacted than others – staff will add that prior to final action.

The FMAT discussed updating Table 5 from the public hearing document with similar timeframes as Table 4 (2011-2013, 2014-2016, 2017-2019) to see if ports' shares of landings by weight changes over time:

PORT	% Landings 2011-2013
Cape May, NJ	53%
North Kingston, RI	40%
Hampton, VA	3%
Pt. Judith, RI	2%
Wanchese, NC	2%
Other	0%

PORT	% Landings 2014-2016
North Kingston, RI	62%
Cape May, NJ	33%
Hampton, VA	3%
Pt. Judith, RI	2%
New Bedford, MA	0%
Other	0%

PORT	% Landings 2017-2019
Cape May, NJ	45%
North Kingston, RI	26%
Pt. Judith, RI	12%
New Bedford, MA	11%
Hampton, VA	3%
Gloucester, MA	2%
Other	0%

There was a request from the public to look at state-by-state annual performance. A similar request was made directly to GARFO, and the results were included as public comments for the June 8 Committee meeting.

The FMAT has been looking at ways to expand efficiency concepts and staff will summarize those efforts during the meeting. In general the analyses are indicating there is substantial overcapacity even just considering the 30 vessels most active in 2019 (30 vessels made up 98% of total 2019 landings by each accounting for at least 0.5% of 2019 landings).

There has been lively FMAT discussion regarding the overall usefulness of this action. On one hand since the measures under consideration do not reduce permits drastically enough to get to a capacity that would be considered more "efficient," there is questioning regarding the overall

usefulness of any of the proposed actions. On the other hand, additional capacity entering an already over-capitalized fishery should further decrease efficiency and add to the difficulty of managing this fishery effectively now (note recent quota overages), as well as complicating any future actions to address capacity/efficiency. If additional capacity enters (depressing efficiency further) and the Council decided to pursue another action regarding capacity/efficiency, accumulating overcapacity may complicate how to fairly assign related fishing privileges.

MSB FMP Goals/Objectives and *Illex* Permits Amendment

Public Hearing Document

March-April 2020

For more information and to sign up to receive email updates on this action, visit
http://www.mafmc.org/actions/*illex*-permitting-msb-goals-amendment

How to Provide Comments

Written comments should be submitted by 11:59 pm on April 20, 2020 through one of the following methods with the subject "MSB Goals and *Illex* Permits":

- **Email** to Jason Didden: jdidden@mafmc.org
- Through an **online form** at: http://www.mafmc.org/comments/*illex*-permitting-msb-goals-amendment
- **Mail** to Dr. Chris Moore, Executive Director, Mid-Atlantic Fishery Management Council, 800 North State Street, Suite 201, Dover, DE, 19901
- **Fax** to Dr. Chris Moore, Executive Director, Mid-Atlantic Fishery Management Council at 302-674-5399
- **Hearings,** listed below

Hearings – Due to public health concerns, hearings have been switched to webinars.

Please contact Jason Didden at jdidden@mafmc.org or (302) 526-5254 if you would like to test your ability to connect to the webinar. Telephone instructions are provided upon connecting, or you can call direct: 800-832-0736, Rm: 7833942#. You can listen-in using the link, but you must call in by phone to participate.

Date and Time	Location
Monday **March 30**, 2020, **6 p.m.**	http://mafmc.adobeconnect.com/msb-illex-2020/
Tuesday **March 31**, 2020, **6 p.m.**	http://mafmc.adobeconnect.com/msb-illex-2020/
Wednesday **April 1**, 2020, **6 p.m.**	http://mafmc.adobeconnect.com/msb-illex-2020/
Thursday **April 2**, 2020, **6 p.m.**	http://mafmc.adobeconnect.com/msb-illex-2020/
Monday **April 13**, 2020, **6 p.m.**	http://mafmc.adobeconnect.com/msb-illex-2020/

A video presentation for this action will also be recorded and linked at http://www.mafmc.org/actions/*illex*-permitting-msb-goals-amendment by March 21, 2020.

1. Overview, Tables of Contents, and Acronyms

Overview

This amendment to the Atlantic Mackerel, Squid, and Butterfish Fishery Management Plan (MSB FMP) considers revisions to the MSB goals and objectives and modifications to *Illex illecebrosus* squid (simply "*Illex*" hereafter) fishery permitting, plus related management measures.

The goals and objectives revisions are addressed in the introduction section and are not treated as alternatives per se (similar to the chub mackerel amendment). The Mid-Atlantic Fishery Management Council (Council) seeks to ensure that the MSB goals and objectives align with the Council's current vision and priorities. Related to *Illex* permitting, the Council is evaluating effort in the *Illex* squid fishery, which closed early in 2017-2019 after reaching its quota. The majority of annual landings have been harvested by a relatively small portion of permitted vessels, and the Council is responding to concerns from some fishery participants that recent and/or future activation of latent effort/permits could exacerbate a race to fish and associated negative outcomes. Accordingly, the objectives of this action are to A) consider revising the overall MSB goals and objectives and B) consider the appropriate number of permits and related management measures in the *Illex* fishery, and reduce the number of directed permits if appropriate.

After reviewing Fishery Management Action Team (FMAT), Advisory Panel, and other public recommendations, the Council developed a range of alternatives and associated analyses described in this document. The Council will select final preferred alternatives after considering comments received during public hearings, written comments, and comments at relevant Council meetings. The Council can modify the alternatives before final action provided there is sufficient rationale for such modification. Final Council action is planned for June 2020.

If the Council recommends some action alternatives, NOAA Fisheries will then publish a proposed rule along with an Environmental Assessment for public comment. After considering public comments on the proposed rule NOAA fisheries will determine the approvability of the measures. If action is approved, NOAA Fisheries will publish a final rule that will include implementation details.

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Acronyms and Other Wording Conventions

ABC	Acceptable Biological Catch
Council	Mid-Atlantic Fishery Management Council
EAFM	Ecosystem Approach to Fisheries Management
FMAT	Fishery Managmenet Action Team
FMP	Fishery Management Plan
MAFMC	Mid-Atlantic Fishery Management Council
MRI[1]	moratorium right identification
MSB	Mackerel, Squid, and Butterfish
MT	Metric Tons (1 metric ton = 2,204.62 pounds)
NEFSC	Northeast Fisheries Science Center
NMFS	National Marine Fisheries Service
VMS	Vessel Monitoring System
VTR	Vessel Trip Report

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[1] The term MRI or "moratorium right identification" may be a new term for some people. An MRI number tracks fishing history of a limited access permit even if it moves between vessels.

2. Introduction

This amendment to the Atlantic Mackerel, Squid, and Butterfish (MSB) Fishery Management Plan (FMP) considers A) revisions to the MSB FMP goals and objectives and B) modifications to *Illex* fishery permitting and related management measures. The Council is seeking public input on all aspects of this action. No preferred alternatives have been identified at this time. Data and preliminary analyses are based on standard databases (dealer data, Vessel Trip Report (VTR) data, observer data, permit data, etc.).

A) MSB FMP Goals and Objectives

The Council identified review of FMP goals and objectives via strategic planning in order to ensure that FMP goals and objectives remain relevant. The current MSB objectives have not been reviewed since the merged MSB plan was adopted in 1981. The Magnuson–Stevens Fishery Conservation and Management Act ("Magnuson-Stevens Act") has been amended several times since then, and the Council has also since adopted two Strategic Plans and an Ecosystem Approach to Fisheries Management (EAFM) Guidance Document (http://www.mafmc.org/eafm). Chub mackerel were also added to the FMP with specific goals and objectives that were informed by the EAFM Guidance Document. The EAFM goal is to manage for ecologically sustainable utilization of living marine resources while maintaining ecosystem productivity, structure, and function.

The goals and objectives are not alternatives in the traditional sense, but generally inform decision making, so the existing and potentially new goals and objectives are reviewed in this section rather than in the alternative section.

The current MSB FMP objectives are:

1. Enhance the probability of successful (i.e., the historical average) recruitment to the fisheries.

2. Promote the growth of the U.S. commercial fishery, including the fishery for export.

3. Provide the greatest degree of freedom and flexibility to all harvesters of these resources consistent with the attainment of the other objectives of this FMP.

4. Provide marine recreational fishing opportunities, recognizing the contribution of recreational fishing to the national economy.

5. Increase understanding of the conditions of the stocks and fisheries.

6. Minimize harvesting conflicts among U.S. commercial, U.S. recreational, and foreign fishermen.

The Council recently adopted goals and objectives for managing chub mackerel within the MSB FMP:

Goal 1: Maintain a sustainable chub mackerel stock.

> *Objective 1.1:* Prevent overfishing and achieve and maintain sustainable biomass levels that achieve optimum yield in the fisheries and meet the needs of chub mackerel predators.
>
> *Objective 1.2:* Consider and account for, to the extent practicable, the role of chub mackerel in the ecosystem, including its role as prey, as a predator, and as food for humans.

Goal 2: Optimize economic and social benefits from utilization of chub mackerel, balancing the needs and priorities of different user groups.

> *Objective 2.1:* Allow opportunities for commercial and recreational chub mackerel fishing, considering the opportunistic nature of the fisheries, changes in availability that may result from changes in climate and other factors, and the need for operational flexibility.
>
> *Objective 2.2:* To the extent practicable, minimize additional limiting restrictions on the *Illex* squid fishery.
>
> *Objective. 2.3:* Balance social and economic needs of various sectors of the chub mackerel fisheries (e.g. commercial, recreational, regional) and other fisheries, including recreational fisheries for highly migratory species.

Goal 3: Support science, monitoring, and data collection to enhance effective management of chub mackerel fisheries.

> *Objective 3.1:* Improve data collection to better understand the status of the chub mackerel stock, the role of chub mackerel in the ecosystem, and the biological, ecological, and socioeconomic impacts of management measures, including impacts to other fisheries.
>
> *Objective 3.2:* Promote opportunities for industry collaboration on research.

Unified Goals and Objectives

Over the course of several meetings the Council, with input from the FMAT and AP, melded the above two sets of goals/objectives into a single unified goals and objectives that can apply to the entire FMP:

Goal 1: Maintain sustainable MSB stocks.

> *Objective 1.1*: Prevent overfishing and maintain sustainable biomass levels that achieve optimum yield in the MSB fisheries.
>
> *Objective 1.2*: Consider and, to the extent practicable, account for the roles of MSB species/fisheries in the ecosystem.

Goal 2: Acknowledging the difficulty in quantifying all costs and benefits, achieve the greatest overall net benefit to the Nation, balancing the needs and priorities of different user groups and effects of management on fishing communities.

> *Objective 2.1*: Provide the greatest degree of freedom and flexibility to harvesters and processors (including shoreside infrastructure) of MSB resources consistent with attainment of the other objectives of this FMP, including minimizing additional restrictions.
>
> *Objective 2.2*: Allow opportunities for commercial and recreational MSB fishing, considering the opportunistic nature of the fisheries, changes in availability that may result from changes in climate and other factors, and the need for operational flexibility.

Objective 2.3: Consider and strive to balance the social and economic needs of various sectors of the MSB fisheries (commercial including shoreside infrastructure and recreational) as well as other fisheries or concerns that may be ecologically linked to MSB fisheries.

Objective 2.4: Investigate opportunities to access international/shared resources of MSB species.

Goal 3: Support science, monitoring, and data collection to enhance effective management of MSB fisheries.

Objective 3.1: Improve data collection to better understand the status of MSB stocks, the role of MSB species in the ecosystem, and the biological, ecological, and socioeconomic impacts of management measures, including impacts to other fisheries.

Objective 3.2: Promote opportunities for industry collaboration on research.

Objective 3.3: Encourage research that may lead to practicable opportunities to further reduce bycatch in the MSB fisheries.

B) Modifications to Illex Fishery Permitting and Related Management Measures

As discretionary provisions of FMPs, the Magnuson-Stevens Act states that any FMP may establish a limited access system for the fishery in order to achieve optimum yield if, in developing such system, the Council and the Secretary take into account:

(A) present participation in the fishery;
(B) historical fishing practices in, and dependence on, the fishery;
(C) the economics of the fishery;
(D) the capability of fishing vessels used in the fishery to engage in other fisheries;
(E) the cultural and social framework relevant to the fishery and any affected fishing communities;
(F) the fair and equitable distribution of access privileges in the fishery; and
(G) any other relevant considerations.

The Council must also take into account the Magnuson-Stevens Act's ten national standards during all decisions (https://www.fisheries.noaa.gov/national/laws-and-policies/national-standard-guidelines). National Standards 4, 5, 6, and 8 are particularly relevant to this action:

National Standard 4 - Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (a) fair and equitable to all such fishermen; (b) reasonably calculated to promote conservation; and (c) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privilege.

National Standard 5 - Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.

National Standard 6 - Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

National Standard 8 - Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data… in order to (a) provide for the sustained participation of such communities, and (b) to the extent practicable, minimize adverse economic impacts on such communities.

Some fishery participants requested that the Council consider modifying limited access *Illex* permits to reduce the number of directed permits in the fishery given the increasing participation and early closure in 2017, which was repeated in 2018 and 2019. While the *Illex* fishery had only landed more than 75% of its quota three times between 2000 and 2016, the majority of annual landings (including 2017-2019) have been harvested by a relatively small portion of permitted vessels. The Council is responding to concerns from some fishery participants that recent and/or future activation of latent effort/permits could exacerbate racing to fish. With racing to fish, fishery participants typically use more and more capital and/or effort in an increasingly rushed attempt to catch a limited quota before closure. Capital continues to enter the fishery if there are any profits, increasing costs until profits are dissipated, creating a loss of efficiency (see Warming 1911 and Gordon 1954 for some of the first of many discussions of this phenomena). Besides tending to erode profits from the fishery overall, racing to fish can cause a number of other negative outcomes that the Council is considering including[2]:

-Safety at sea: Racing to fish may lead to taking more risks related to weather, maintenance and overloading (e.g. see NRC 1991 and FAO 2016 for reviews of related literature as well as Pfeiffer and Gratz 2016).

-Monitoring difficulties: Higher weekly landings make it more difficult to close the fishery near the quota (at least without adding reporting burden or setting aside more quota for larger closure buffers). The quota was exceeded by about 5% in 2018 and 9% in 2019.

-Business disruptions: More rapid catch by additional vessels could lead to shorter seasons for vessels that have been historically dependent on *Illex.* The fishery can operate into October or November but closed in August in 2018 and 2019, and in September in 2017.

-Yield reduction: Catching the quota earlier may mean that smaller squid are harvested, which means that more individuals are harvested per metric ton, which may reduce yield per recruit and total yield given the fast-growing nature of *Illex* (NAFO 1978, NEFSC 1999).

-Community impacts: The Council is also concerned about disruptions in communities if new entrants rapidly change the distribution of landings at relevant ports in communities that have dependence on *Illex*.

These issues would not be completely solved by reducing permits in the *Illex* fishery. Solving the race to fish is generally very challenging with quota-based management unless individual quotas or effort controls are utilized. Based on public scoping comments that were predominantly opposed to individual quotas, the Council is not considering individual quotas at this time. Given the variability in *Illex* productivity and availability, the Council believes that effort controls are not appropriate for the primary

[2] While bycatch can be exacerbated by racing to fish, bycatch is not currently a substantial issue for the *Illex* fishery.

directed fishery. However, the Council believes that given the latent permits that have existed in this fishery and recent effort levels, reducing the number of permits may be appropriate at this time in order to at least slow the worsening of the race to fish in the *Illex* fishery. So one purpose of this action is to mitigate worsening of the race to fish by considering reducing the number of permits that have unlimited access to the fishery.

In 2019, landings by the top 20 vessels (out of 76 potential permits[3]), accounted for 90% of the landings, and ranged from approximately 7.3 to 0.8 million pounds, with a median of 1.6 million pounds. The season lasted approximately 14 weeks, so the top vessel averaged around 0.52 million pounds per week and the median vessel (out of the top 20) averaged 0.12 million pounds per week. Based on this information, five less active vessels performing like the top vessel for 10 weeks could thus land nearly 26 million pounds, or 47% of the quota. Five less active vessels performing like the median of the top 20 vessels for 10 weeks could likewise land nearly 6 million pounds, or 11% of the quota. While it's not possible to know how vessels may participate in the future or at what level, it does appear that increased catch by even a handful of formerly latent/less active participants could have a substantial impact on racing to fish and how soon the fishery closes at the current quota.

3. *Illex* Life History and Status of the Stock

Illex squid is a benthopelagic schooling species distributed between Newfoundland and the Florida Straits. Current research indicates they live less than one year but several aspects of their life cycle are unknown due to their generally offshore habitat. Spawning is believed to take place in the water column with pelagic egg masses. *Illex* squid prey mostly on crustaceans at small sizes but increasingly prey on fish as they grow larger. Cannibalism of small squid by larger squid is especially prevalent during fall. A wide variety of fish (including large pelagics), seabirds, and marine mammals are predators of *Illex* squid. Additional life history information is detailed in the EFH document for the species, located at: http://www.nefsc.noaa.gov/nefsc/habitat/efh/. The current stock status of *Illex* is unknown with respect to either stock biomass or fishing mortality, due to the fact that the data necessary for assessing this species, given its short lifespan, is lacking and productivity of the resource is uncertain. The current acceptable biological catch (ABC) (26,000 metric tons (MT) or 57.3 million pounds) resulted from a generally qualitative evaluation by the Council's Scientific and Statistical Committee (SSC) that determined catches associated with an ABC up to 26,000 MT are unlikely to cause overfishing. More details on the rationale for the current ABC are available at: http://www.mafmc.org/ssc-meetings/2018/sept-11.

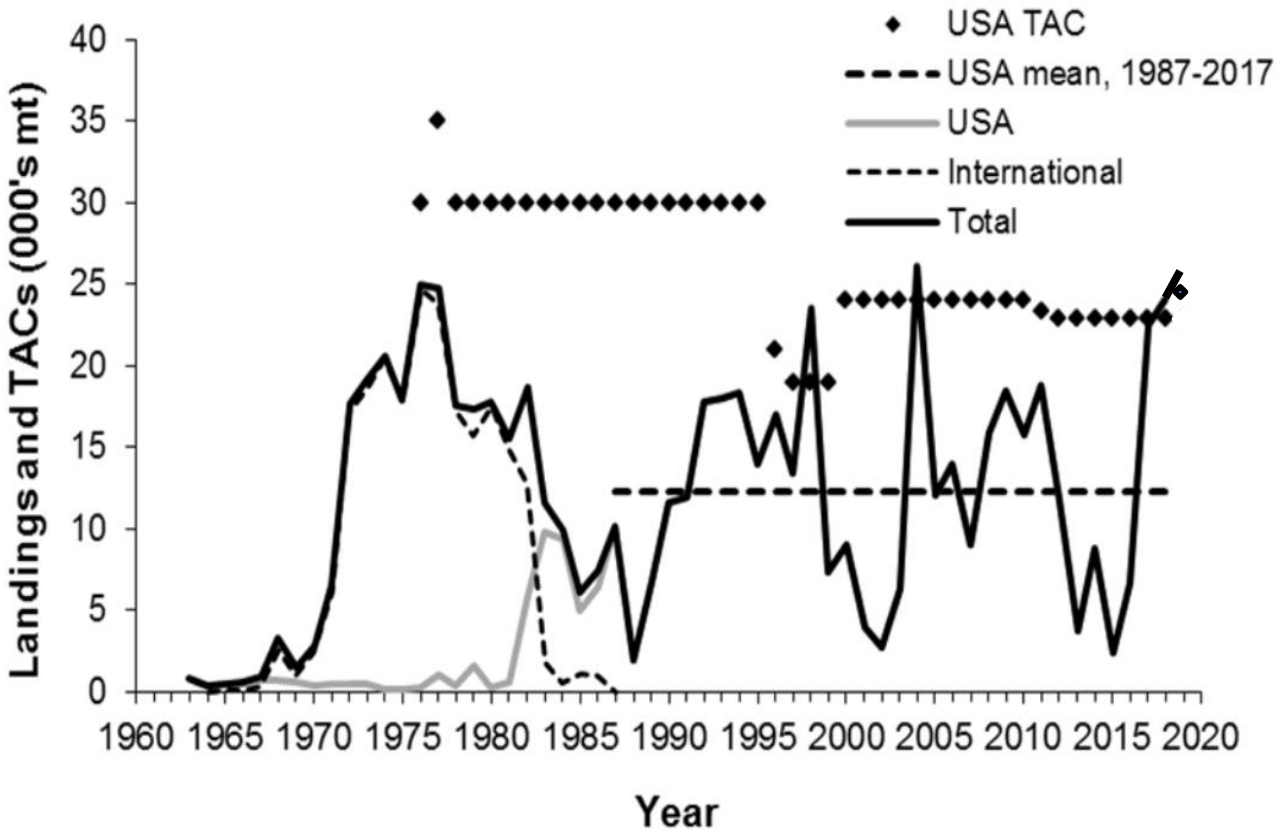
The Council has also established a working group (http://www.mafmc.org/actions/*illex*-working-group) to investigate if current information suggests that adjustments to the *Illex* quota are appropriate, and if there are ways to make the quota more responsive to real-time conditions. There is also a benchmark *Illex* assessment planned for 2021. At this time, the outcome of these endeavors is uncertain. Some short-term results of the workgroup will likely be known by June 2020 and may influence SSC discussions regarding short-term ABCs, but there are also longer-term tasks that may be in progress beyond 2020.

[3] There were 76 *Illex* permits as of late 2019, but this number can change (shrink) if a permit is relinquished.

4. U.S. *Illex* Fisheries and Communities

International jig and trawler fleets initially fished *Illex* in U.S. waters, ramping up quickly in the 1970s to about 20,000-25,000 metric tons (MT) (52.9-55.1 million pounds) annually before being phased out by 1987. Development of the domestic *Illex* squid bottom trawl fishery began in the early 1980s as the U.S. industry developed the appropriate technology to catch and process squid in large quantities. Domestic landings have been highly variable (see Figure 1). The 2019 *Illex* landings were the highest on record, over 27,100 MT (the quota was exceeded by about 9%).

Figure 1. Landings and Quotas (TAC) (000's mt) of *Illex* from NAFO Subareas 5+6, by fleet during 1963-2019.



Annual *Illex* ex-revenues (Figure 2, red-dashed line) are determined by the combination of availability, global and domestic squid prices, and the resulting landings. Ex-vessel values during 2017-2019 were the three highest points in the time series due to the combination of high landings and high prices (see Figures 2 and 3). 2019 ex-vessel value was about $28.0 million. Input from industry has noted that international squid supply and demand can have strong effects on *Illex* prices. Industry has also noted that recent processing advancements and sustainability certifications have expanded markets for *Illex*. As *Illex* availability, *Illex* prices, and opportunities in other fisheries have changed, so has vessel participation in the *Illex* fishery (Table 1).

Figure 2. U.S. *Illex* Landings and Nominal *Illex* Ex-Vessel Values 1982-2019

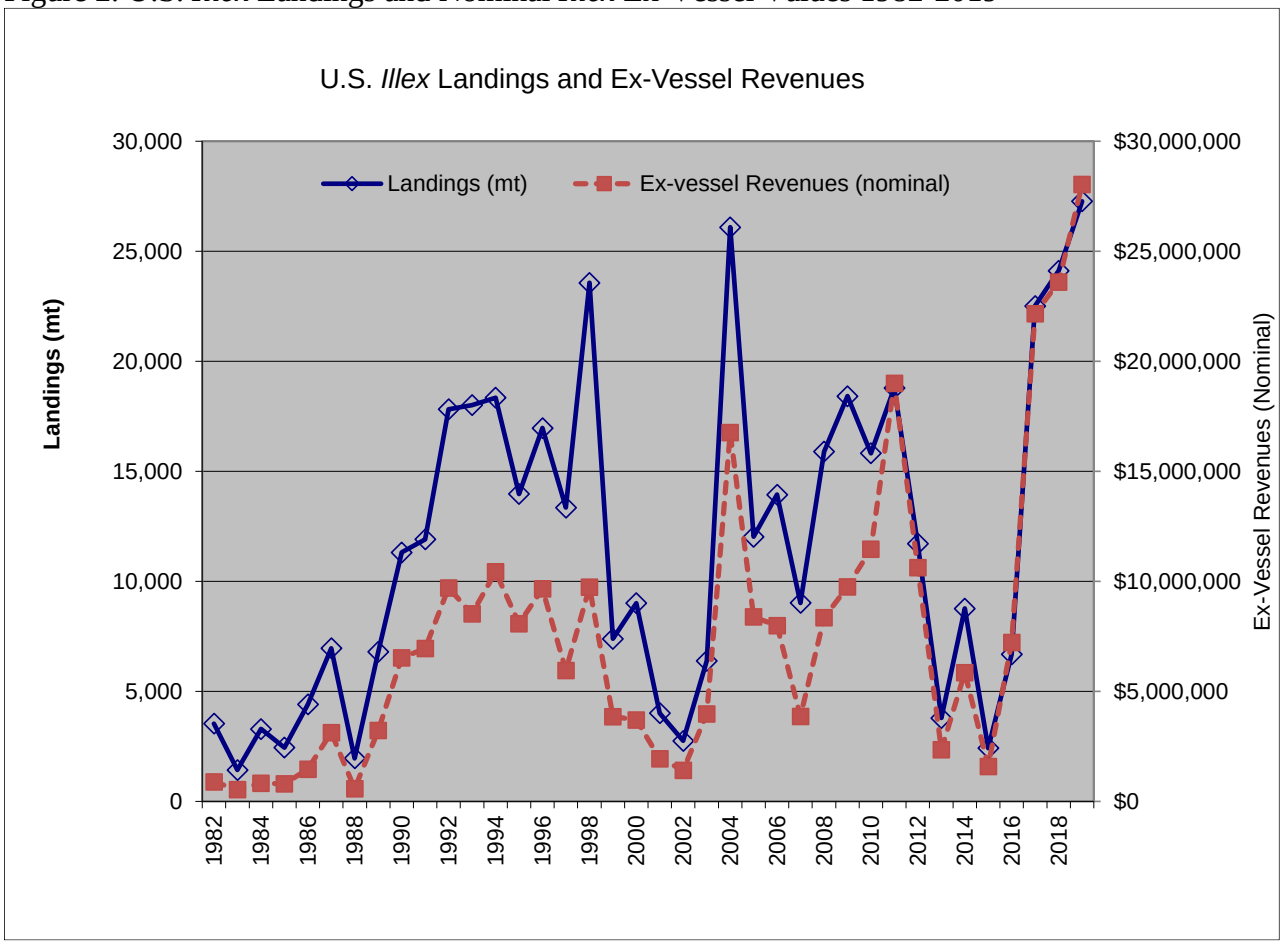
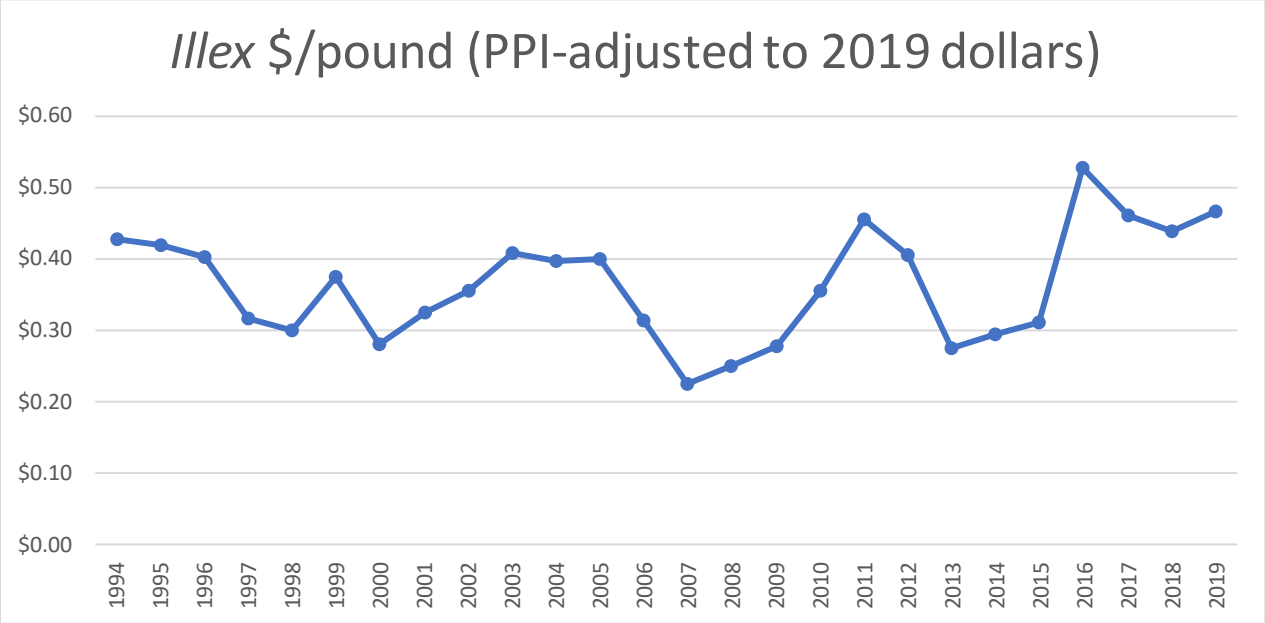


Figure 3. Ex-Vessel *Illex* Prices 1994-2019 Adjusted to 2019 Dollars Based on Producer Price Index.



Tables 1-2 provide background information on vessel activity (Table 1) and vessel length (Table 2). While imprecise, permit data suggest that the currently-permitted vessels' fish holds sum to about 9,000 MT (so if all vessels participated, the quota theoretically could be caught in several rounds of trips). The median active vessel age is about 36 years.

Table 1. 1994-2019 vessel activity (pound ranges developed previously with MSB AP).

YEAR	Vessels 500,000+	Vessels 100,000 - 500,000	Vessels 50,000 - 100,000	Vessels 10,000 - 50,000	Total
1994	21	7	5	8	41
1995	24	5	2	7	38
1996	24	5	6	4	39
1997	13	9	2	0	24
1998	25	4	1	3	33
1999	6	9	2	10	27
2000	7	7	0	2	16
2001	3	4	1	2	10
2002	2	3	1	1	7
2003	5	6	1	2	14
2004	23	5	2	0	30
2005	10	10	2	2	24
2006	9	8	1	2	20
2007	8	2	1	0	11
2008	12	4	0	0	16
2009	10	3	1	1	15
2010	12	3	0	6	21
2011	17	4	2	0	23
2012	8	3	2	2	15
2013	5	4	3	5	17
2014	5	3	2	2	12
2015	3	0	1	1	5
2016	4	3	3	2	12
2017	14	6	0	0	20
2018	19	7	0	5	31
2019	26	7	0	3	36

Table 2. *Illex* Vessel Sizes in 2019.

Length (ft)	All Active 2019 Permits	Top 15 Accounting for 81% of 2019 Landings	Top 25 Accounting for 95% of 2019 Landings
50+ to 60	2	0	0
60+ to 80	38	6	16
80+ to 100	19	3	3
100+ to 120	3	1	1
120+ to 140	3	3	3
140+ to 150	2	2	2
Totals	67	15	25

For this table, "Active" just means the permit is on a vessel and not in Confirmation of Permit History (i.e. not "on the shelf")

Cape May, NJ, North Kingston, RI, Point Judith, RI, Wanchese, NC, and Hampton, VA have historically been ports with substantial *Illex* landings. Table 3 lists the active ports in recent years, and Table 4 provides information regarding the dependence of those ports on *Illex* in 2011-2013, 2014-2016, and 2017-2019[4]. MSB Advisory Panel members have highlighted that the low relative value of *Illex* in a given port in terms of ex-vessel value may mask potential impacts to particular dealers, especially given the high value of scallops in some ports. Table 5 lists ports' share of total 2010-2019 *Illex* landings by weight. Table 6 identifies the numbers of vessels listing the relevant states as their home or principal port. Figure 4 describes fishery activity in terms of trips for 1997-2019 (median directed trip size, maximum trip size, and numbers of permits with a trip over 10,000 pounds).

Table 3. Rankings of ports with substantial *Illex* landings 2017-2019.

Port Rank	2017	2018	2019
1	Cape May	Cape May	Cape May
2	N Kingstown	N Kingstown	New Bedford
3	Pt. Judith	Pt. Judith	N Kingstown
4	Hampton, VA	New Bedford	Pt. Judith
5		Hampton, VA	Gloucester
6			Hampton, VA

Table 4. Dependence on *Illex* for Relevant Ports

	Illex as a percent of total port vessel revenues					
	Cape May	New Bedford	N. Kingston	Pt Judith	Gloucester	Hampton
2011-2013	7%	<1%	44%	1%	<1%	1%
2014-2016	2%	<1%	31%	1%	<1%	1%
2017-2019	16%	<1%	59%	4%	1%	4%

Table 5. Ports' Share of 2010-2019 *Illex* landings (by weight)

Port	% *Illex*
Cape May, NJ	47%
North Kingston, RI	35%
Point Judith, RI	7%
New Bedford, MA	6%
Hampton, VA	3%
All others	2%
Total	100%

[4] These three periods were selected to cover a variety of fishery production levels.

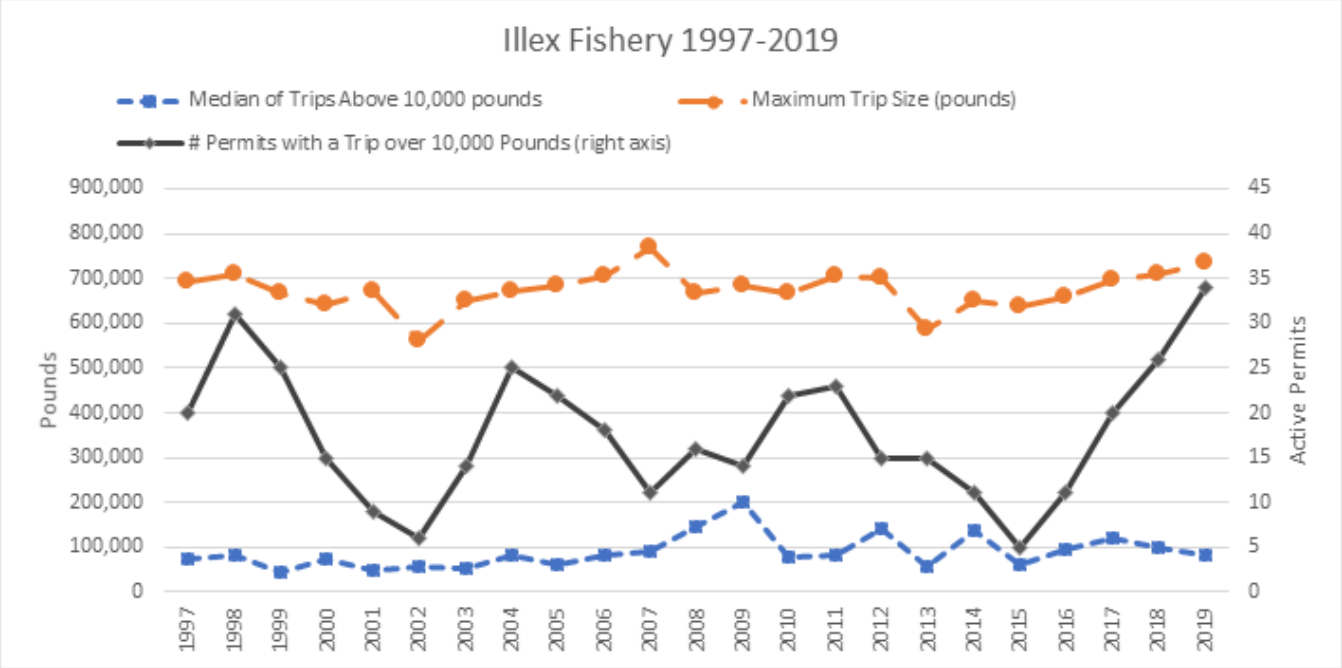
Table 6. *Illex* Vessels' Principal and Homeport States

Illex Permits/Vessels by principal and homeport state		
State	**Principal State**	**Homeport State**
ME	-	-
NH	-	-
MA	12	14
RI	14	11
CT	3	3
NY	4	4
NJ	26	26
PA	-	1
DE	-	-
MD	-	-
VA	6	5
NC	3	4
ACTIVE VESSELS*	**68**	
CPH PERMITS**	**8**	
TOTAL PERMITS	**76**	

*Vessels with *Illex* moratorium permits in 2019.

**Confirmation of Permit History (i.e. "on the shelf")

Figure 4. 1997-2019 *Illex* Fishery Trip Information



Figures 5-8 describe the approximate location of *Illex* catch in recent years: Figure 5 for 2018, Figure 6 for 2017, Figure 7 for 2013-2016, and Figure 8 for 2009-2012. Outliers may be the result of misreports.

Figure 5. Approximate Primary 2018 *Illex* Catch Locations (from dealer and VTR data)

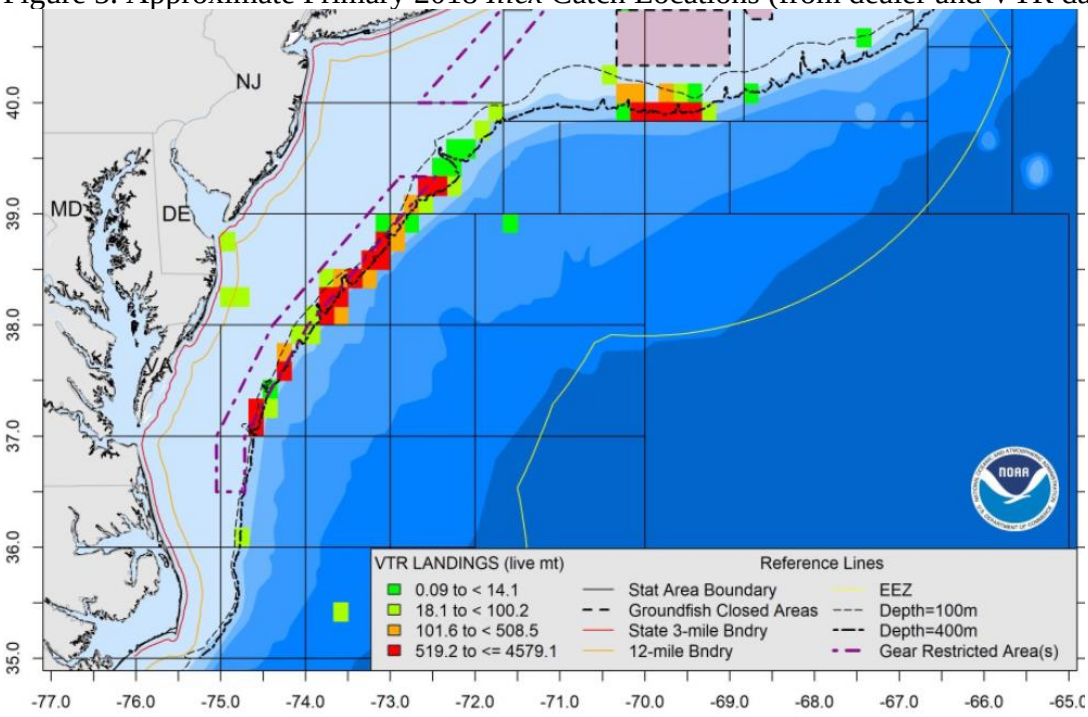


Figure 6. Approximate Primary 2017 *Illex* Catch Locations (from dealer and VTR data)

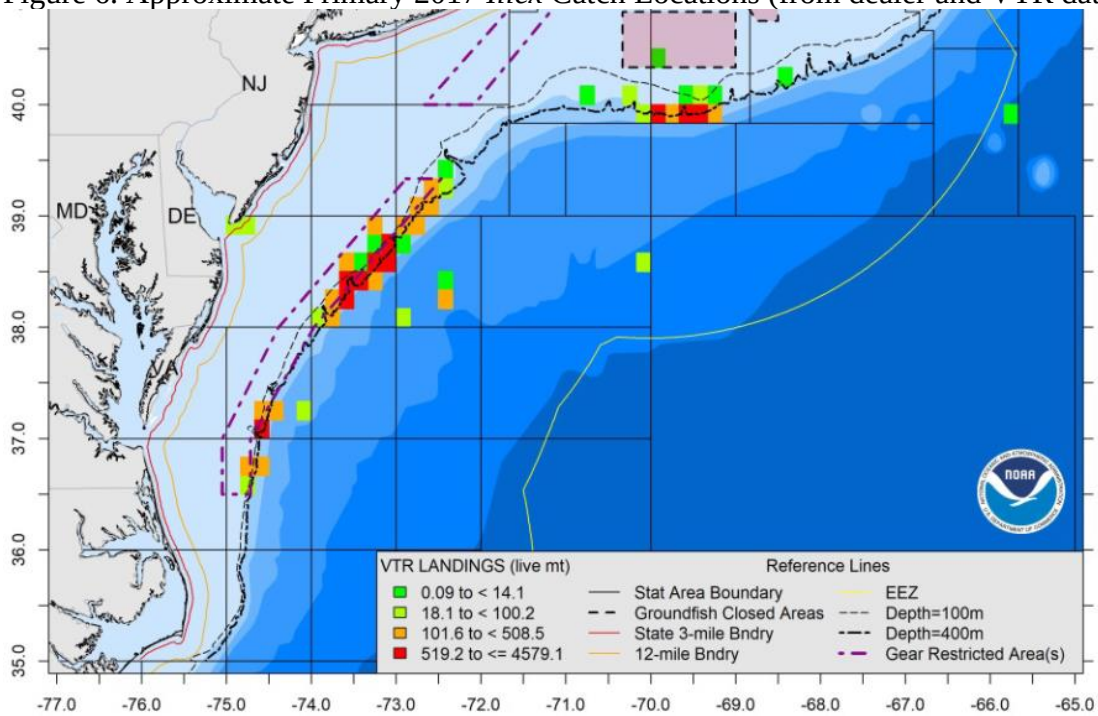


Figure 7. Approximate Primary 2013-2016 *Illex* Catch Locations (from dealer and VTR data)

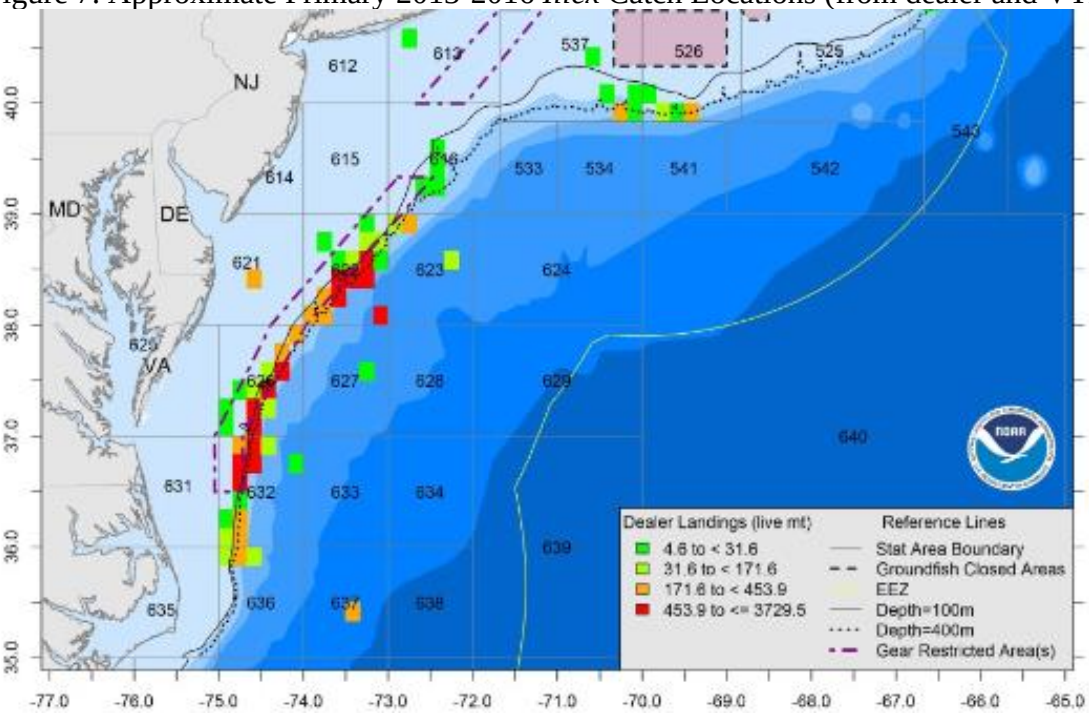
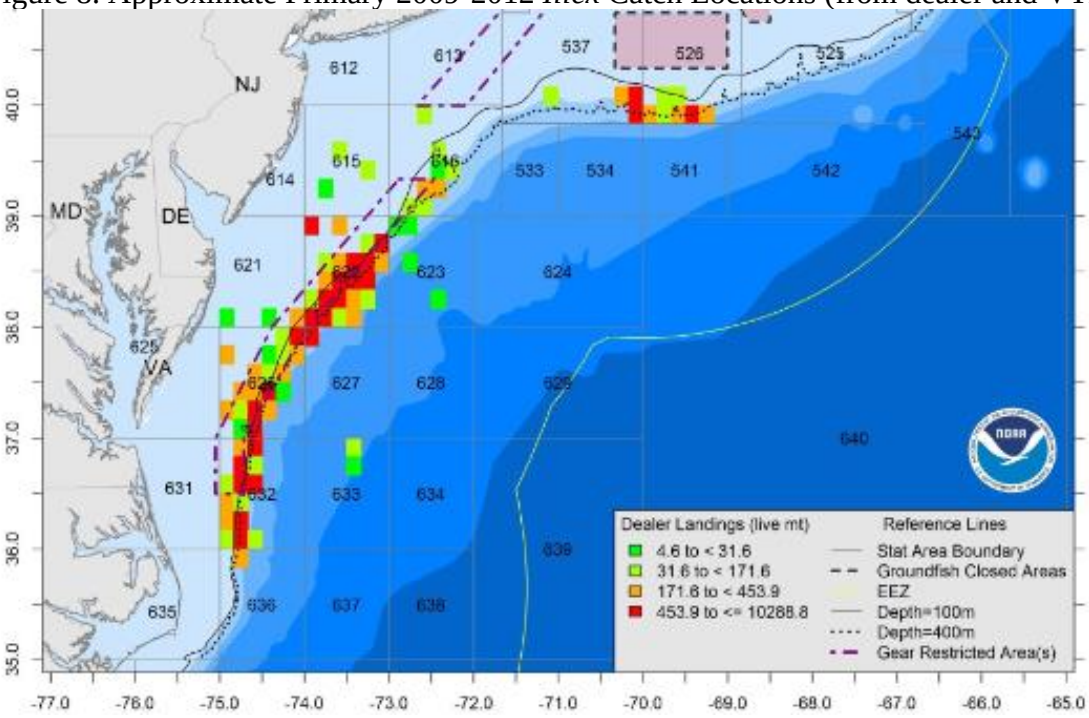


Figure 8. Approximate Primary 2009-2012 *Illex* Catch Locations (from dealer and VTR data)



Social Indicators for Fishing Communities

Social indicators are measures that describe and evaluate the social, economic, and psychological well-being of individuals or communities. They were developed to characterize community well-being for coastal communities engaged in fishing activities. First the various indices are described, and then the most recent (2016[5]) indicator ratings for the active *Illex* ports are provided. Additional details on the social vulnerability indicators is available at https://www.fisheries.noaa.gov/national/socioeconomics/social-indicators-fishing-communities-0.

Social Vulnerability Indices

The social vulnerability indices represent social factors that can shape either an individual or community's ability to adapt to change. These factors exist within all communities regardless of the importance of fishing.

Labor force characterizes the strength and stability of the labor force and employment opportunities that may exist. A high rank means likely fewer employment opportunities and a more vulnerable population.

Housing characteristics is a measure of infrastructure vulnerability and includes factors that indicate housing that may be vulnerable to coastal hazards. A high rank means a more vulnerable infrastructure and a more vulnerable population. On the other hand, the opposite interpretation might be that more affordable housing could be less vulnerability for some populations.

Poverty is a commonly used indicator of vulnerable populations. A high rank indicates a high rate of poverty and a more vulnerable population.

Population composition shows the presence of populations who are traditionally considered more vulnerable due to circumstances often associated with low incomes and fewer resources. A high rank indicates a more vulnerable population.

Personal disruption represents factors that disrupt a community member's ability to respond to change because of personal circumstances affecting family life or educational levels or propensity to be affected by poverty. A high rank indicates more personal disruption and a more vulnerable population.

Gentrification Pressure Indices

The gentrification pressure indices characterize those factors that, over time, may indicate a threat to the viability of a commercial or recreational working waterfront, including infrastructure.

Housing Disruption represents factors that indicate a fluctuating housing market where some displacement may occur due to rising home values and rents. A high rank means more vulnerability for those in need of affordable housing and a population more vulnerable to gentrification.

Retiree migration characterizes areas with a higher concentration of retirees and elderly people in the population. A high rank indicates a population more vulnerable to gentrification as retirees seek out the amenities of coastal living.

[5] While *Illex* landings were not high in 2016, the indicators are general in nature and not directly related to *Illex* fishing.

Urban sprawl describes areas experiencing gentrification through increasing population and higher costs of living. A high rank indicates a population more vulnerable to gentrification.

Fishing Engagement and Reliance Indices

The fishing engagement and reliance indices portray the importance or level of dependence of commercial or recreational fishing to coastal communities.

Commercial fishing engagement measures the presence of commercial fishing through fishing activity as shown through permits, fish dealers, and vessel landings. A high rank indicates more engagement.

Commercial fishing reliance measures the presence of commercial fishing in relation to the population size of a community through fishing activity. A high rank indicates more reliance.

Recreational fishing engagement measures the presence of recreational fishing through fishing activity estimates. A high rank indicates more engagement.

Recreational fishing reliance measures the presence of recreational fishing in relation to the population size of a community. A high rank indicates increased reliance.

Climate Change Indices

The climate change indices characterize environmental conditions that may affect the sustainability of essential commercial and recreational fishing businesses and infrastructure.

Sea level rise risk signifies the overall risk of inundation from sea level rise from one foot level to six foot level projections over the next ~90 years. The indicator represents the possibility of inundation based upon the combined projections at each stage of sea level rise and could vary depending upon future circumstances. A high rank indicates a community more vulnerable to sea level rise.

Storm surge risk refers to the overall risk of flooding from hurricane storm surge categories 1-5. The indicator represents the "worst-case" possibility of inundation based on the combined hurricane storm surge categories and could vary depending on future circumstances. A high rank indicates a community more vulnerable to a particular hurricane storm surge.

Figure 9. Cape May Vulnerability Indicators

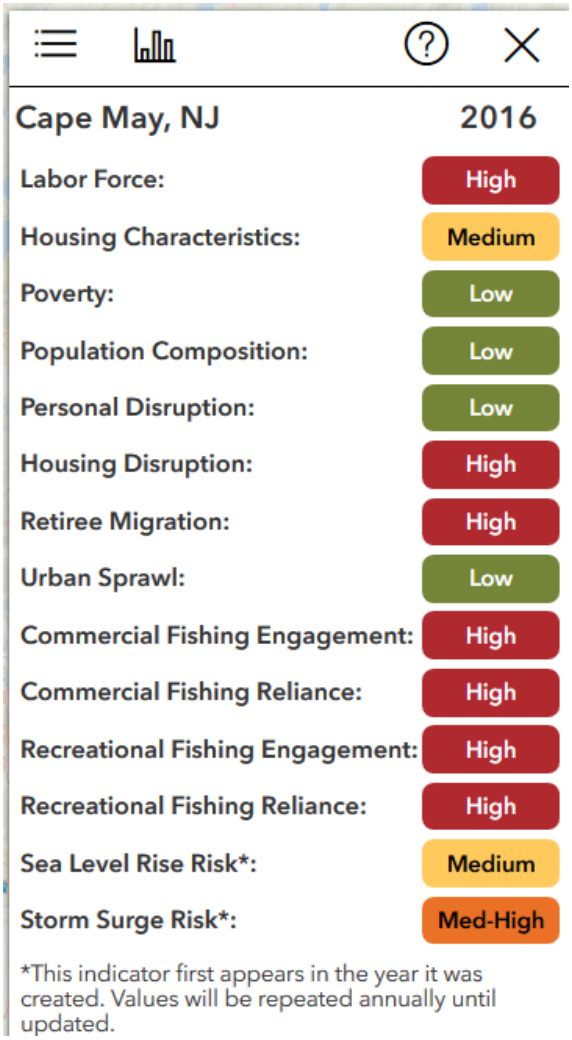


Figure 10. New Bedford Vulnerability Indicators

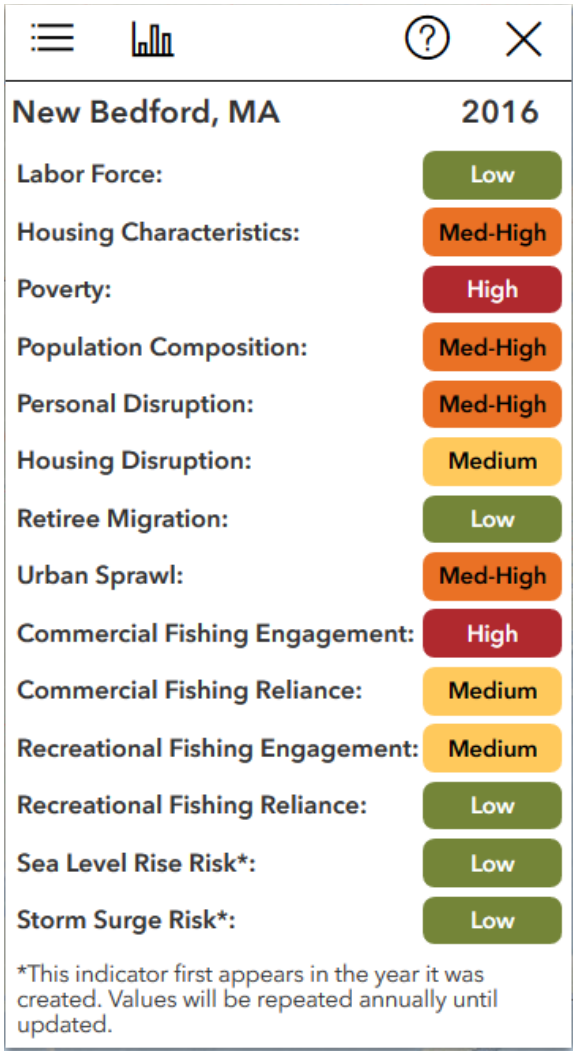


Figure 11. North Kingston/Saunderstown, RI Vulnerability Indicators

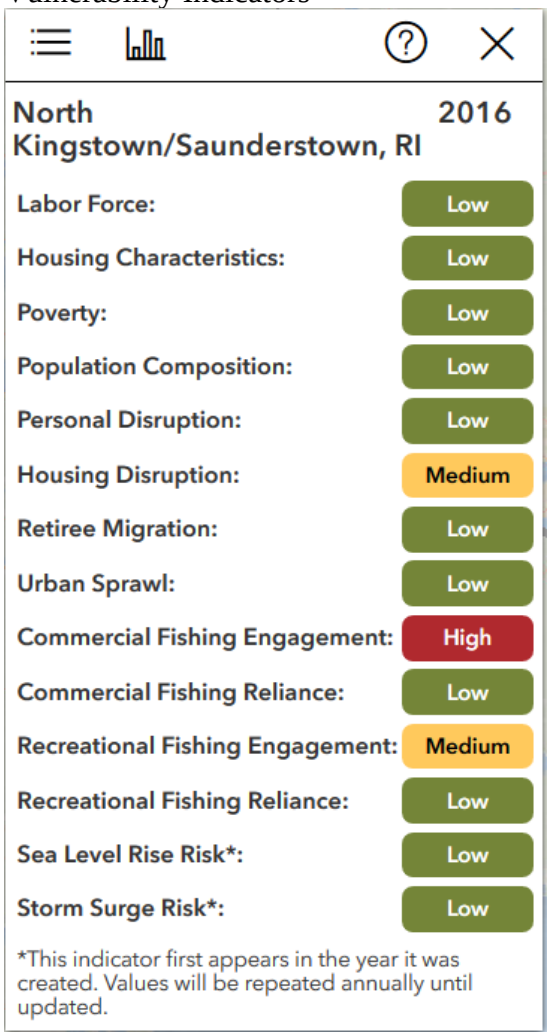


Figure 12. Narragansett/Point Judith RI Vulnerability Indicators

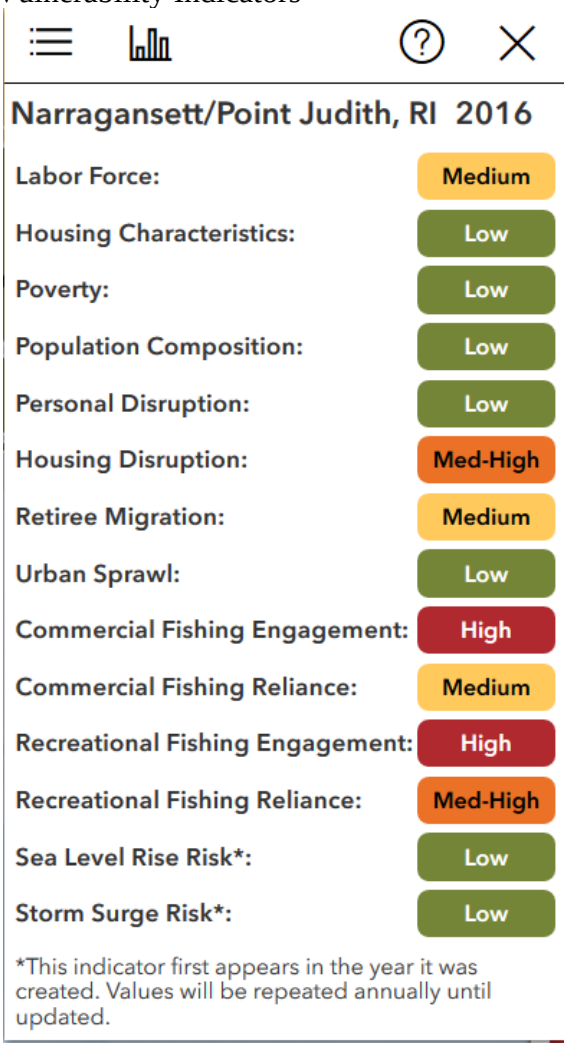


Figure 13. Gloucester, MA Vulnerability Indicators

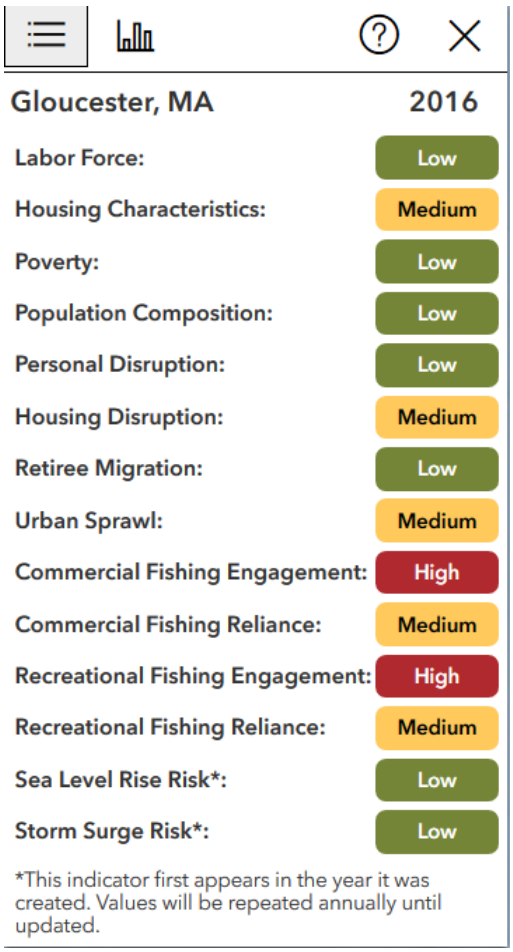
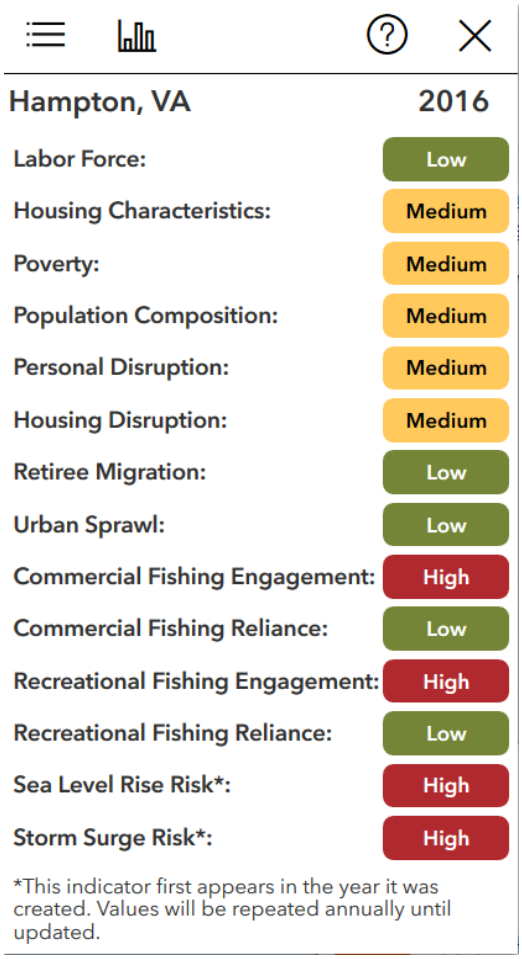


Figure 14. Hampton, VA Vulnerability Indicators



5. Current Management Measures

The 2020 ABC for *Illex* is currently 26,000 MT, with a commercial quota of 24,825 MT to account for discards (4.52%). In 2019 there were 76 limited access "moratorium" permits. These permits allow unlimited trip limits and no effort restrictions when the fishery is open. Open access incidental permits can be obtained by any vessel at any time and allow up to 10,000 pounds of *Illex* per trip. The season runs on the calendar year. The directed fishery closes when NOAA Fisheries predicts that 95% of the quota will be landed. After that closure, a 10,000 pound trip limit is in place for the remainder of the calendar year. An overview of additional management measures is available at https://www.fisheries.noaa.gov/species/shortfin-squid-0#management.

The original *Illex* qualification criteria for the moratorium permit were five landings of at least 5,000 pounds (including joint venture) of *Illex* between Aug 13, 1981 and August 13, 1993. In addition, a vessel that was under construction for, or was being re-rigged for, use in the directed fishery for *Illex* on August 13, 1993, qualified for a moratorium permit if 5,000 lb (2.27mt) or more of *Illex* were landed from it and sold on at least 5 trips prior to December 31, 1994. These qualification criteria became effective in June 1997 as part of Amendment 5. Extending the qualification date prior to 1988 and after August 13, 1993 occurred later in the development process to include more vessels.

6. Alternatives in this Action

Note: The term MRI or moratorium right identification may be a new term for some people. The MRI tracks fishing history of a limited access **permit** even if it moves between vessels.

No preferred alternatives have been identified at this time. If the Council decides to take action to change *Illex* permits through a requalification, the time period(s) chosen, the threshold(s) chosen, and other related management measures combine to create the effects on participants. While the Council is taking a matrix of alternatives out for public comment (there are 20 possible options between the various time period and threshold options – see Table 7), the Council may narrow the options for additional analysis prior to final action. The Council could also create an alternative that combines several options to create a tiered permit system. For example, the Council could select more restrictive requalification criteria that requalify fewer MRIs for a tier that operates as current (no trip limit), and then create a second tier managed with trip limits for the MRIs that don't requalify under the more restrictive criteria, but would requalify under a more liberal requalification option. Tiering is discussed in more detail in Alternative Set C below.

It is generally expected that the Council will select from the time periods (Alternative Set A) and thresholds (Alternative Set B) to create requalification criteria, and then Alternative Set C may be used to create limitations for non-requalifying MRIs, or tiers. Alternative Set D options could be added to create a vessel hold measurement and baseline and/or clarify daily Vessel Monitoring System (VMS) requirements.

6A - ALTERNATIVE SET A: TIME PERIODS FOR RE-QUALIFICATION

Alternative A1: No action/status quo. No changes to the current permitting system could occur without establishing a requalification time period. The 76 2019 limited access "moratorium" permit would retain unlimited trip limits and no effort restrictions. Open access incidental permits can be obtained and allow up to 10,000 pounds of *Illex* per trip.

Introduction for time period action alternatives

The Council has developed four possible time periods for an *Illex* permit requalification. Some options consider landings through 2019 for requalification, and some do not consider landings after 2013. August 2, 2013, was published as a control date for *Illex* squid. The control date notification in the Federal Register stated that "NMFS intends this notice to promote awareness of possible rulemaking, alert interested parties of potential eligibility criteria for future access, and discourage speculative entry into and/or investment in the *Illex* squid fishery while the Council considers if and how access to the *Illex* squid fishery should be controlled." The Council reaffirmed the August 2, 2013, control date at its August 2018 Council meeting. The alternatives are presented in approximately the order that would result in the most to the fewest requalifiers. The thresholds for amounts of landings during the time periods are considered in Alternative Set B, and the numbers of requalifiers when combining the time periods and thresholds are provided in the impacts section (Table 7).

Alternative A2: Use a requalification time period that considers landings between 1997-2019. This allows a broad consideration of historic and present participation.

Alternative A3: Use a requalification time period that considers landings between 1997-2018. This allows consideration of historic and recent participation through 2018 when then Council reaffirmed the control date and development of this action began.

Alternative A4: Use a requalification time period that considers landings between 1997-2013. This allows consideration of alternatives that utilize the control date and landings from the previous seventeen years.

Alternative A5: Use a requalification time period that considers, and requires, landings both between 1997-2013 and 2014-2019. If MRIs did not have landings in both time periods they would not requalify. This allows consideration of alternatives that requalify MRIs that demonstrate both historic and recent participation.

6B - ALTERNATIVE SET B: THRESHOLDS FOR RE-QUALIFICATION

Alternative B1: No action/status quo. No changes to the current permitting system could occur without establishing a requalification threshold. The 76 2019 limited access "moratorium" permit would retain unlimited trip limits and no effort restrictions. Open access incidental permits can be obtained and allow up to 10,000 pounds of *Illex* per trip.

Introduction for threshold action alternatives

The Council has developed five possible thresholds for an *Illex* permit requalification, focusing on the MRIs' best year of *Illex* landings. The alternatives are presented in the order that would result in the most to the fewest requalifiers. The time periods are considered in Alternative Set A, and the numbers of

requalifiers when combining the thresholds and time periods are provided in the impacts section (Table 7).

The range of options was chosen to achieve a range of requalifying MRIs given the activity levels observed in the fishery. All of the poundage options also represent thresholds that account for the majority of landings in most years. For example, MRIs landing over 1,000,000 pounds accounted for 85-95% of landings from 2014-2019. MRIs landing at least 50,000 pounds accounted for at least 99% of landings in the same period. So based on how the fishery operates, these thresholds represent either a strong majority of landings in a given year or nearly all landings in a given year. For each alternative, a MRI whose *Illex* landings exceed the threshold in at least one year during the period(s) identified in Alternative Set A above would requalify and be able to continue to land an unlimited amount of *Illex* squid until the fishery is closed. All analyses are based on **landed** weight.

Alternative B2: Use a threshold of at least 50,000 pounds in a MRI's best year during the requalification period selected in Alternative Set A.

Alternative B3: Use a threshold of at least 100,000 pounds in a MRI's best year during the requalification period selected in Alternative Set A.

Alternative B4: Use a threshold of at least 300,000 pounds in a MRI's best year during the requalification period selected in Alternative Set A.

Alternative B5: Use a threshold of at least 500,000 pounds in a MRI's best year during the requalification period selected in Alternative Set A.

Alternative B6: Use a threshold of at least 1,000,000 pounds in a MRI's best year during the requalification period selected in Alternative Set A.

6C - Alternative Set C: Provisions for Tiers and/or non-requalifying permits.

In October 2019 the Council requested that the FMAT develop potential options for a tiered permit system. As discussed above, the Council could use a mix of the requalification criteria to construct tiers. The Council also voted to add to this document an **example** combination of measures for requalification: Alternative A4, landings between 1997-2013 with the current Alternative B5, a threshold of 500,000 lbs. (best year between 1997-2013), creating TIER 1, **and** Alternative A2, landings between 1997-2019, with Alternative B2, a threshold of 50,000 lbs. (best year between 1997-2019), creating TIER 2. **This is not a preferred alternative**, only an example of how alternatives from sets A and B above could be mixed to create tiers when the Council takes final action. In this example, there would be 34 MRIs in tier 1 based on the 1997-2013 and 500,000-pound criteria (see Table 7). 51 MRIs would qualify under the 1997-2019 50,000-pound criteria (see Table 7), so the difference, 51-34 = 17 MRIs that would become tier 2, potentially limited by a trip limit (options discussed below). The 25 MRIs that didn't meet either qualification (76-51 = 25) could be restricted at one of the lower trip limit options described below. Different combinations of alternatives would result in different groupings of MRIs that fit into each tier. The public is welcome to recommend a different combination of measures for any potential tier system.

The FMAT discussed options for limiting tiers, and recommended against a separate quota, as that might effectively increase the race to fish, or just create multiple races to fish (one for each tier). Accordingly,

the other two ways to limit any tiers would be days at sea or trip limits. The Council has previously indicated that it is not interested in a days at sea approach, which leaves trip limits. Trip limits are not a perfect way to limit effort in this high-volume fishery, because of the way catch is handled and the potential for discarding to occur as vessels near/achieve their trip limit. There is also difficulty in enforcing trip limits on a high volume fishery. However, given the Council's intent, trip limits appear to be the only remaining practicable way to limit a tier. In all cases, trip limits would be a measure that could be monitored and changed via annual specifications. A range of trip limits has been considered as listed below.

For alternatives C4-C6: During a January 8, 2019, FMAT meeting, the FMAT discussed the trip limit issue, and public comments noted that given the nature of the *Illex* fishery (high volume with substantial travel time), trip limits up to 48,000 pounds do not allow any real directed fishing and that higher trip limits should be considered. To explore this issue, staff sorted 2019 trips by the 17 permits (51-34=17) that would not qualify under a 1997-2013 500,000 pound criteria but would qualify under a more liberal 1997-2019 50,000 pound criteria (see Table 7). Those permits made 157 trips over 10,000 pounds in 2019. The median pounds of *Illex* on those trips was 66,485 pounds (50% are above and below that amount), 75% of the trips were below 85,000 pounds, and 95% of trips were below 124,000 pounds. During review of the FMAT summary after the call, the FMAT concurred that these thresholds could be used as the basis for additional (higher) trip limit options for tiers. For comparison, if similar 2017-2019 trips are pooled (i.e. not just 2019), the numbers C4-C6 are each around 10% less**. It is critical to note that while the criteria to identify trips match the re-qualification example above, these criteria were not selected to indicate a preferred requalification option, but to develop an expanded range of possible trip limits for tiers based on recent fishery performance. The Council may or may not use tiers, and the Council may use other combinations from alternative sets A and B to create tiers.**

Alternative C1: No action/status quo. No additional trip limits would be considered, so non-requalifying MRIs would only be eligible for an open-access incidental catch squid/butterfish permit that allows up to 10,000 lb of *Illex* squid per trip.

Alternative C2: Use longfin squid approach of providing non-requalifying/tiered MRIs with double the current incidental permit limit (10,000 pounds * 2 = 20,000 pounds) in consideration of their historic participation that qualified them originally for the *Illex* permit, but does not meet the requalification criteria.

Alternative C3: Provide non-requalifying/tiered MRIs with a 48,000 pound trip limit. Trips landing up to 48,000 pounds 1997-2018 only accounted for 5% of landings, so 48,000 pounds could be a *higher than incidental* trip limit that shouldn't result in using a large percentage of the quota (but performance would need to be monitored in case 48,000 pound trips utilized more of the quota than anticipated).

Alternative C4: Provide non-requalifying and/or tiered MRIs with a 67,000 pound trip limit.

Alternative C5: Provide non-requalifying and/or tiered MRIs with an 85,000 pound trip limit.

Alternative C6: Provide non-requalifying and/or tiered MRIs with a 124,000 pound trip limit.

6D - ALTERNATIVE SET D: OTHER *ILLEX* PERMITTING MANAGEMENT MEASURES

In Set D the Council is considering several other alternatives that could accompany the requalification options. The Council had some discussion of a start date for the *Illex* fishery and the FMAT discussed additional changes to reporting, but the FMAT recommended that these particular issues are not ripe for action given ongoing work of the *Illex* Working Group, which may generate relevant information on *Illex* growth, productivity, and more responsive monitoring/assessment approaches.

Alternative D1: No action/status quo. No changes to other *Illex* management measures.

Alternative D2: Require a maximum volumetric fish hold measurement for limited access *Illex* MRIs. To remain in the *Illex* limited access fishery, vessels would be required to obtain a fish hold measurement from an individual credentialed as a Certified Marine Surveyor with a fishing specialty by the National Association of Marine Surveyors (NAMS) or from an individual credentialed as an Accredited Marine Surveyor with a fishing specialty by the Society of Accredited Marine Surveyors (SAMS). Vessels that are upgraded or used as replacement vessels would have to be resurveyed by a surveyor (accredited as above) unless the replacement vessel already had an appropriate certification and the documentation would have to be submitted to NMFS. Vessels that are sealed by the Maine State Sealer of Weights and Measures will also be deemed to meet this requirement. The hold capacity measurement would serve as another permit baseline in addition to existing vessel length and horsepower baselines. The fish hold baseline would be established by the vessel issued the *Illex* limited access permit at the time this action becomes effective, if approved, or by the first replacement vessel in excess of 25 feet length overall. The fish hold volume could be increased by up to 10 percent of the MRI's baseline hold measurement, whether through refitting or vessel replacement. For vessels that are also issued an Atlantic Mackerel Tier 1 or 2 permit and have previously established a fish hold baseline, existing hold measurements and baseline from the mackerel permit would be used if the *Illex* permit is issued to the same vessel that established the mackerel fish hold baseline. NMFS may provide additional suggestions to refine this measure based on lessons learned implementing the mackerel fish hold baseline

NMFS staff has noted concerns with enforcing the upgrade restrictions – they don't have anyone to inspect fish holds and rely on the documentation provided by applicants and surveyors. The FMAT has also noted that while there might be some impact on capacity utilization by regulating fish hold, there are many factors that can affect capacity use.

Alternative D3: Clarify that daily catch of *Illex* is required via Vessel Monitoring Systems (VMS) for vessels with limited access *Illex* permits. Vessels are currently required to declare into the *Illex* fishery with VMS but some of the language for daily catch reporting is vague.

7. Impacts of the Alternatives

This section summarizes the expected potential impacts of this action. Biological and socioeconomic, as well as potential impacts to habitat and protected species, will be analyzed in more detail in an environmental assessment which will be finalized in accordance with the National Environmental Policy Act after the Council selects preferred alternatives (scheduled for June 2020). Significant habitat and/or protected species impacts are not expected. The environmental assessment would be subject to an additional public comment period during the proposed rule phase.

The impacts of the alternatives depend on how many of the 2019 76 *Illex* MRIs[6] requalify, what their recent participation in the fishery has been, and what restrictions are placed on non-requalifiers. The first step in understanding impacts is to identify how many MRIs re-qualify (or not) under each alternative, and what their fishery participation has been. Approximately 13 MRIs had no landings during any time period under consideration.

Re-Qualifiers

Table 7 provides the numbers of MRIs that **do** requalify and Table 8 (next page) provides the numbers that **do not** requalify for each combination of requalifying time period (Alternative Set A) and threshold (Alternative Set B). The numbers of non-requalifiers equal *76 (the current total) minus the number of requalifiers*. For both tables, the percentage of permit reduction is provided in parentheses.

Table 7. Numbers of Requalifiers and Percent Permit Reduction from 76 2019 Limited Access Permits for Each Possible Time Period and Threshold Option.

Note: All re-qualifier estimates preliminary.		More re-qualifiers → Less re-qualifiers				
Percent in paranthesess is percent reduction of MRIs(1) (76 total in 2019)	Thresholds / Qualification Periods	**At least 50,000 pounds in any one year**	**At least 100,000 pounds in any one year**	**At least 300,000 pounds in any one year**	**At least 500,000 pounds in any one year**	**At least 1,000,000 pounds in any one year**
More re-qualifiers	1997-2019	**51 (-33%)**	**49 (-36%)**	**47 (-38%)**	**45 (-41%)**	**35 (-54%)**
↓	1997-2018	**50 (-34%)**	**48 (-37%)**	**44 (-42%)**	**41 (-46%)**	**30 (-61%)**
↓	1997-2013	**43 (-43%)**	**42 (-45%)**	**38 (-50%)**	**34 (-55%)**	**28 (-63%)**
Less re-qualifiers	Need landings in **both** 1997-2013 ***and*** 2014-2019	**30 (-61%)**	**30 (-61%)**	**27 (-64%)**	**21 (-72%)**	**13 (-83%)**
	(1) A Moratorium Rights Identifier (MRI) is a unique NMFS-issued number that identifies a unique permit history, and may move between vessels over time.					

[6] MRI = Moratorium right ID, which tracks fishing history of a limited access permit even if it moves between vessels.

Table 8. Numbers of Non-Requalifiers and Percent Permit Reduction from 76 2019 Limited Access Permits for Each Possible Time Period and Threshold Option.

Note: All re-qualifier estimates preliminary.		More re-qualifiers → Less re-qualifiers				
Percent in paranthesess is percent reduction of MRIs(1) (76 total in 2019)	Thresholds / Qualification Periods	**At least 50,000 pounds in any one year**	**At least 100,000 pounds in any one year**	**At least 300,000 pounds in any one year**	**At least 500,000 pounds in any one year**	**At least 1,000,000 pounds in any one year**
More re-qualifiers	1997-2019	**25 (-33%)**	**27(-36%)**	**29 (-38%)**	**31 (-41%)**	**41 (-54%)**
↓	1997-2018	**26 (-34%)**	**28 (-37%)**	**32 (-42%)**	**35 (-46%)**	**46 (-61%)**
	1997-2013	**33 (-43%)**	**34 (-45%)**	**38 (-50%)**	**42 (-55%)**	**48 (-63%)**
Less re-qualifiers	Need landings in **both** 1997-2013 ***and*** 2014-2019	**46 (-61%)**	**46 (-61%)**	**49 (-64%)**	**55 (-72%)**	**63 (-83%)**
	(1) A Moratorium Rights Identifier (MRI) is a unique NMFS-issued number that identifies a unique permit history, and may move between vessels over time.					

Potential Impact Relative to Recent Landings

The next step is to identify how ***Illex* landings** might be impacted based on the requalification options. Tables 9-11 identify how much of the landings in three time periods, 2011-2013, 2014-2016, and 2017-2019 (one table per timeframe) were made by permits that would **not** requalify under each option. The take home message from these tables is that if the most recent (2019) landings are not used for requalification, MRIs representing about 1%-13% of 2017-2019 *Illex* landings (see Table 11) would not be able to participate in the directed fishery, or could be subject to reduced trip limits, depending on Council action in other alternative sets. The threshold also partially determines what part of landings would have been affected. Given that under the most restrictive option at most 19% of landings would have been affected, and given the early closures in recent years, during a good year the remaining requalifying MRIs could likely make up the potential "lost" proportion of catch at current quota levels. In other words, the MRIs that would requalify under each alternative would likely still be able to catch the current quota if the landings of non-requalifying MRIs are reduced. During slower fishing years, eliminating some more recently-active MRIs may reduce total landings and the probability of achieving the quota (less vessels would be out looking for *Illex*). However, it is not possible to determine how much landings might be reduced because participation will broadly change during slower fishing years.

Table 9. Percent of total 2011-2013 *Illex* landed by MRIs that would not requalify under each requalification option.

	Percent of total 2011-2013 Illex landed by MRIs that would not requalify under each requalification option				
Thresholds / **Qualification Periods**	**At least 50,000 pounds in any one year**	**At least 100,000 pounds in any one year**	**At least 300,000 pounds in any one year**	**At least 500,000 pounds in any one year**	**At least 1,000,000 pounds in any one year**
1997-2019	0%	0%	0%	0%	4%
1997-2018	0%	0%	0%	0%	4%
1997-2013	0%	0%	1%	1%	4%
Need landings in **both** 1997-2013 ***and*** 2014-2019	4%	4%	5%	6%	12%

Table 10. Percent of total 2014-2016 *Illex* landed by MRIs that would not requalify under each requalification option.

	Percent of total 2014-2016 Illex landed by MRIs that would not requalify under each requalification option				
Thresholds / **Qualification Periods**	**At least 50,000 pounds in any one year**	**At least 100,000 pounds in any one year**	**At least 300,000 pounds in any one year**	**At least 500,000 pounds in any one year**	**At least 1,000,000 pounds in any one year**
1997-2019	0%	0%	0%	0%	1%
1997-2018	0%	0%	0%	0%	1%
1997-2013	0%	0%	2%	2%	2%
Need landings in **both** 1997-2013 ***and*** 2014-2019	0%	0%	2%	2%	3%

Table 11. Percent of total 2017-2019 *Illex* landed by MRIs that would not requalify under each requalification option.

	Percent of total 2017-2019 Illex landed by MRIs that would not requalify under each requalification option				
Thresholds / **Qualification Periods**	**At least 50,000 pounds in any one year**	**At least 100,000 pounds in any one year**	**At least 300,000 pounds in any one year**	**At least 500,000 pounds in any one year**	**At least 1,000,000 pounds in any one year**
1997-2019	0%	0%	0%	1%	5%
1997-2018	1%	1%	3%	5%	11%
1997-2013	8%	8%	9%	12%	13%
Need landings in **both** 1997-2013 ***and*** 2014-2019	8%	8%	9%	13%	19%

Dependence on *Illex* by Non-Requalifying and Requalifying MRIs

Tables 12-14 describe non-requalifiers *Illex* landings **as a percent of their total landings (by weight)**. Non-requalifiers were more dependent on *Illex* since 2017.

Table 12. Non-requalifiers total *Illex* landings as a percent of ***their*** total landings during **2011-2013**

	Non-requalifiers total Illex landings as a percent of their total landings during 2011-2013				
Thresholds / **Qualification Periods**	**At least 50,000 pounds in any one year**	**At least 100,000 pounds in any one year**	**At least 300,000 pounds in any one year**	**At least 500,000 pounds in any one year**	**At least 1,000,000 pounds in any one year**
1997-2019	0%	0%	0%	0%	5%
1997-2018	0%	0%	0%	0%	4%
1997-2013	0%	0%	1%	1%	3%
Need landings in **both** 1997-2013 ***and*** 2014-2019	3%	3%	4%	5%	6%

Table 13. Non-requalifiers total *Illex* landings as a percent of ***their*** total landings during **2014-2016**

	Non-requalifiers total Illex landings as a percent of their total landings during 2014-2016				
Thresholds / **Qualification Periods**	**At least 50,000 pounds in any one year**	**At least 100,000 pounds in any one year**	**At least 300,000 pounds in any one year**	**At least 500,000 pounds in any one year**	**At least 1,000,000 pounds in any one year**
1997-2019	0%	0%	0%	0%	1%
1997-2018	0%	0%	0%	0%	0%
1997-2013	0%	0%	1%	1%	1%
Need landings in **both** 1997-2013 ***and*** 2014-2019	0%	0%	1%	1%	1%

Table 14. Non-requalifiers total *Illex* landings as a percent of ***their*** total landings during **2017-2019**

	Non-requalifiers total Illex landings as a percent of their total landings during 2017-2019				
Thresholds / **Qualification Periods**	**At least 50,000 pounds in any one year**	**At least 100,000 pounds in any one year**	**At least 300,000 pounds in any one year**	**At least 500,000 pounds in any one year**	**At least 1,000,000 pounds in any one year**
1997-2019	0%	0%	1%	3%	17%
1997-2018	4%	4%	12%	17%	26%
1997-2013	22%	22%	24%	27%	28%
Need landings in **both** 1997-2013 ***and*** 2014-2019	20%	20%	22%	27%	27%

Tables 15 and 16 count the number of **non-requalifying (Table 15)** and then *requalifying (Table 16)* MRIs that had *Illex* representing at least 25% of their 2019 revenues for each alternative set. Not using the most recent years to requalify MRIs results in more MRIs not requalifying that had *Illex* as at least 25% of their 2019 revenues. The threshold is also important – the higher thresholds exclude a higher number of MRIs that had *Illex* as a substantial percent of their 2019 revenues. More requalifiers had *Illex* as at least 25% of their 2019 revenues (Table 16 vs Table 15).

Table 15. Number of non-requalifying MRIs that had *Illex* representing at least 25% of their 2019 revenues for each qualification period and landing threshold combination.

	Number of non-requalifying vessels that had Illex representing at least 25% of their 2019 revenues under each requalification option.				
Thresholds / Qualification Periods	**At least 50,000 pounds in any one year**	**At least 100,000 pounds in any one year**	**At least 300,000 pounds in any one year**	**At least 500,000 pounds in any one year**	**At least 1,000,000 pounds in any one year**
1997-2019	0	0	0	0	3
1997-2018	1	1	3	4	8
1997-2013	6	6	6	8	9
Need landings in **both** 1997-2013 ***and*** 2014-2019	6	6	6	10	14

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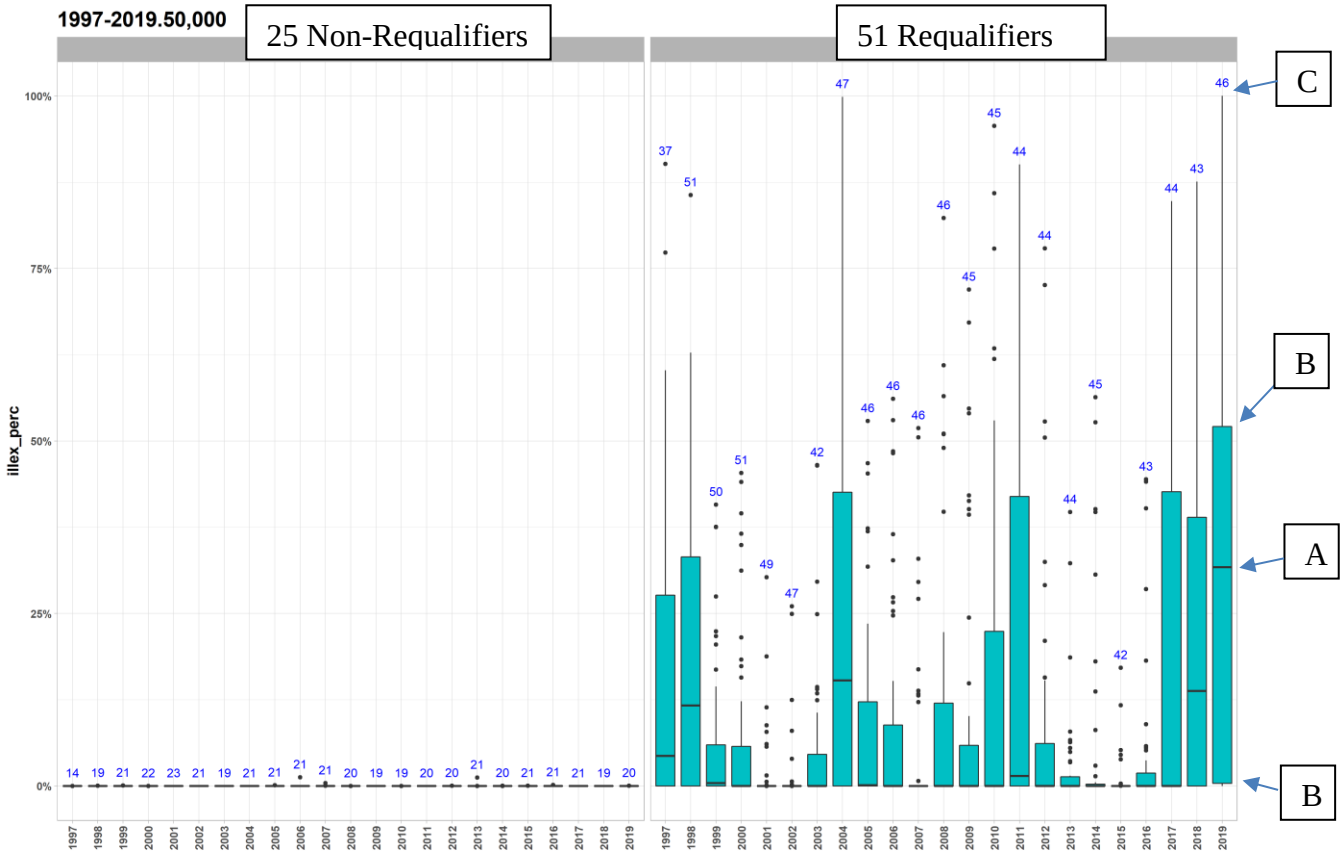
Table 16. Number of requalifying MRIs that had *Illex* representing at least 25% of their 2019 revenues for each qualification period and landing threshold combination.

	Number of requalifying vessels that had Illex representing at least 25% of their 2019 revenues under each requalification option.				
Thresholds / **Qualification Periods**	**At least 50,000 pounds in any one year**	**At least 100,000 pounds in any one year**	**At least 300,000 pounds in any one year**	**At least 500,000 pounds in any one year**	**At least 1,000,000 pounds in any one year**
1997-2019	25	25	25	25	22
1997-2018	24	24	22	21	17
1997-2013	19	19	19	17	16
Need landings in **both** 1997-2013 ***and*** 2014-2019	19	19	19	15	11

Tables 15 and 16 above were the results for 2019 from a broader analysis that looked at each MRI's annual dependence on *Illex* for revenues over time from 1997-2019. We cannot list *Illex* dependence for each permit due to data confidentiality constraints, but figures called "boxplots" can communicate the information for the fleet in some detail. Appendix A provides boxplot figures that describe the requalifying and non-requalifying MRI's annual dependence on *Illex* for each time period/threshold option (20 figures). Three of those options are provided below, both to explain how to generally interpret the figures in Appendix A and because their comparative findings are generally instructive. They are not chosen to suggest them as preferred options. The example time period/threshold options are: 1997-2019 with 50,000 pounds in any year (requalifies the most), 1997-2013 plus 2014-2019 with 1,000,000 pounds in one year in each (requalifies the least), and 1997-2013 with 300,000 pounds in any year (middle option). The general result is that more MRIs are impacted, and impacted to a greater degree, if more recent years are not used for requalification, or if higher thresholds are used, especially relative to their recent landings.

In Appendix B, a series of similar boxplots is shown for seasonal (June 1-Sept 30) dependence on *Illex* (revenues) for the various requalification options. For MRIs with some dependence on *Illex*, be they requalifiers or non-requalifiers, they generally have higher dependence during June 1-September than when considering the full year.

Figure 15. MRI *Illex* Revenue Dependencies for the 1997-2019/50,000-pound option.
Bar is the interquartile (middle) range (IQR); black horizontal line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots.



This is an example figure from the 20 figures in Appendix A and describes *Illex* dependency relative to all revenues for the 1997-2019/50,000 pounds requalification option. Dependence on *Illex* revenues for **non**-requalifiers is on the **left** and for ***requalifiers*** is on the ***right***. The blue numbers for each year show the MRIs that had at least some revenues (any species) in each year. For example there are 51 requalifiers in this option but in 2019 only 46 had some revenues from any species ("C"). The median of active MRIs' *Illex* dependence is represented by a black horizontal line (e.g. "A"). If the median is zero (or close to zero) in a year it will not be visible. The solid bars indicate the typical (i.e. the middle 50% group) MRIs' dependence on *Illex* revenues. This is called the interquartile range (IQR). If no bar is visible then that middle group's dependence is at or near zero for that year. The vertical lines or "whiskers" extend to an observation about 1.5 times the IQR to highlight outliers (the dots) even further out. This boxplot (Figure 15) shows that for the 1997-2019/50,000 pounds option there are no non-requalifiers with any substantial ongoing dependence on *Illex* (note the nearly empty left side). There is a wide range of dependencies for the 51 requalifying MRIs on the right side. In 2019, the median dependency on *Illex* by requalifiers (far right) was about 30% ("A") and the typical MRIs (middle 50% of MRIs) ranged from 0% dependence to about 50% dependence ("Bs") but at least one had about 100% dependence on *Illex* (the top of the vertical line near "C").

Figure 16. MRI *Illex* Revenue Dependencies for the 1997-2013 plus 2014-2019 with 1,000,000 pounds in one year in each period option.
Bar is the interquartile (middle) range (IQR); black horizontal line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots.

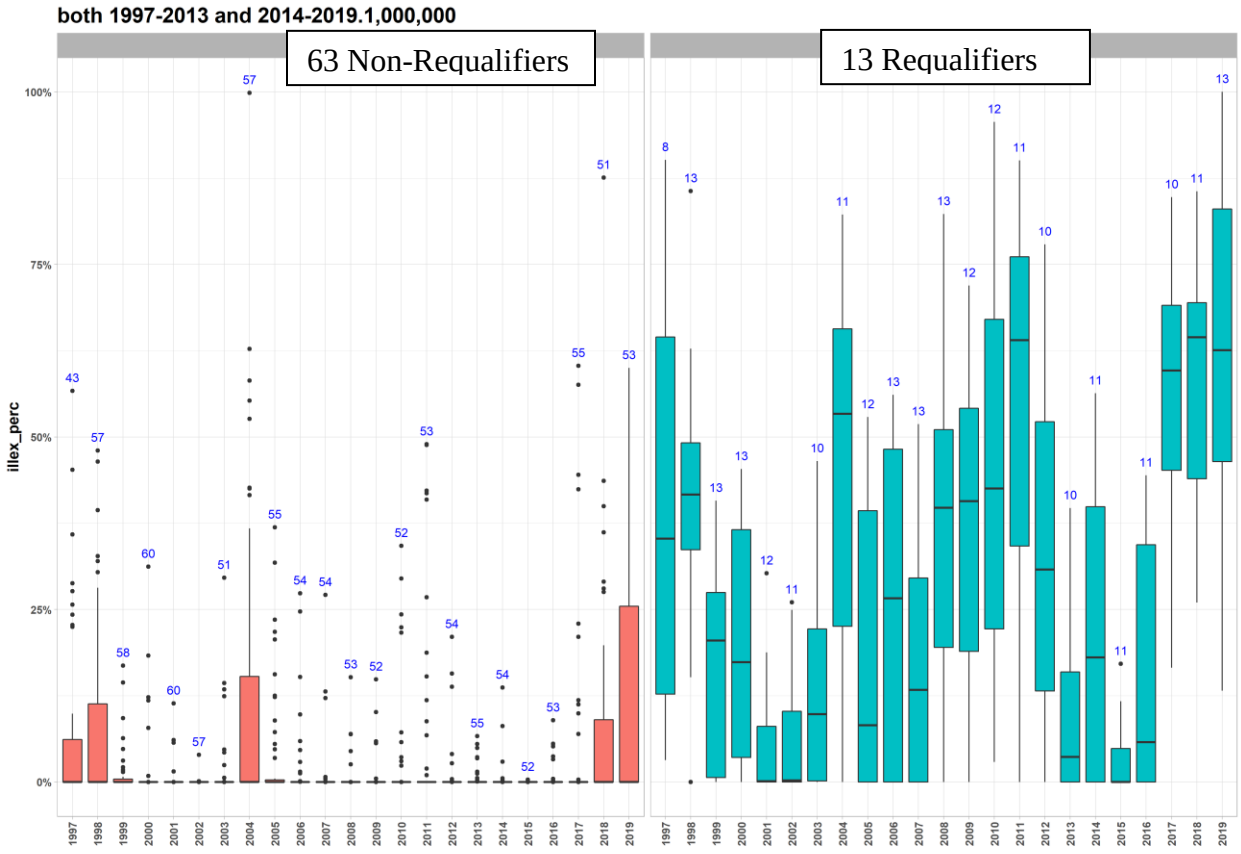


Figure 16 contrasts with Figure 15 since the 1997-2013 plus 2014-2019 with 1,000,000 pounds in one year in each period option requalifies the fewest (13) MRIs. While in most years most non-requalifiers (left side) still had relatively little dependence on *Illex* (the bars are on or near zero in most years), there are some years where the range of the bars (representing the middle 50% of MRIs) extends beyond 10% dependence (including in 2019 which was above 25%), and there are numerous outliers in nearly every year, indicating ongoing participation but not enough to requalify under this option. There is a wide range of dependencies for the 13 requalifiers, and the requalifying MRIs tend to have relatively high dependencies compared to other options.

Figure 17. MRI *Illex* Revenue Dependencies for the 1997-2013/300,000 pounds option.
Bar is the interquartile (middle) range (IQR); black line horizontal is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots.

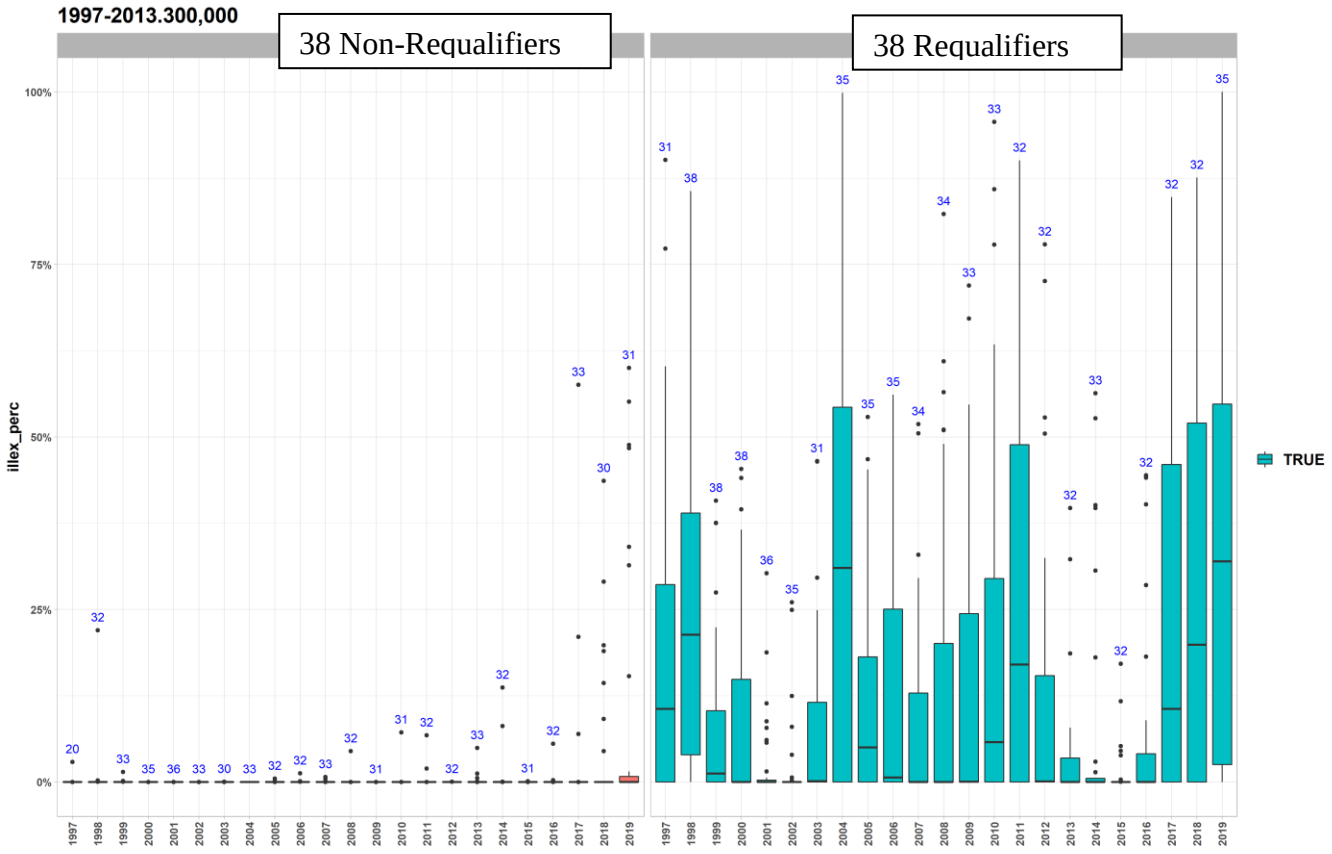


Figure 17 above illustrates a relative middle ground between the other two illustrated extremes from an analytical perspective - these are the results for the requalification using 1997-2013 with 300,000 pounds in any year (38 requalifiers). Most non-requalifying MRIs have minimal dependence on *Illex*, as evidenced by the bars on the left being at or near zero, but there are a number of outliers that had more dependence, especially in the most recent years, as would be expected given this option utilizes the 2013 control date.

Participation in Other Fisheries

The figures in Appendix C build off of the revenue dependence to ask what species (*Illex* and others) make up MRIs' revenue portfolios when sorted into non-requalifying (left side) and requalifying (right side) groups for each of the 20 requalification criteria options. Several general conclusions can be made after reviewing the figures in Appendix C. As above, the same three options are provided immediately below, both to explain how to generally interpret the figures in Appendix C and because the general findings of the analysis aligns with these three examples. Again the three example illustrative time period/threshold options are: 1997-2019 with 50,000 pounds in any year (requalifies the most), 1997-2013 plus 2014-2019 with 1,000,000 pounds in one year in each (requalifies the least), and 1997-2013 with 300,000 pounds in any year (middle option).

The general result observable in Appendix C is that if more recent years are not used for requalification, or if higher thresholds are used, *Illex* contributes a greater portion of revenues for non-requalifiers, though still relatively low for most. Scallops are the dominant revenue source in recent years for non-requalifiers. Requalifiers have a relatively high contribution from *Illex* but other species make substantial contributions as well, including in recent years scallops, longfin squid, and butterfish. Appendix C can be consulted for each time period/threshold option to see more precisely how MRIs are affected under various options.

Revenues from other fisheries (this section) and possession of other permits (next section) provide information about fleet behavior generally and the capabilities to participate in other fisheries.

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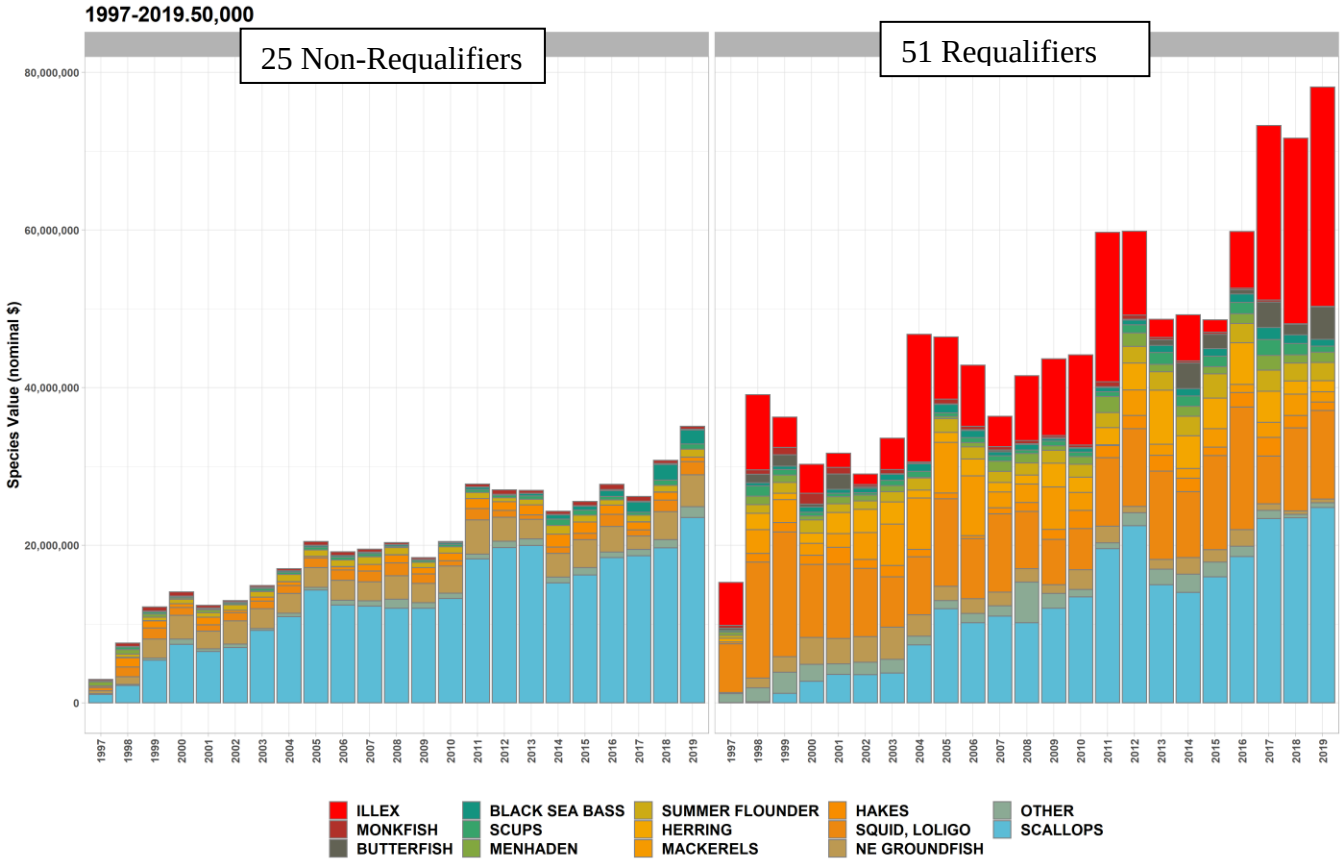
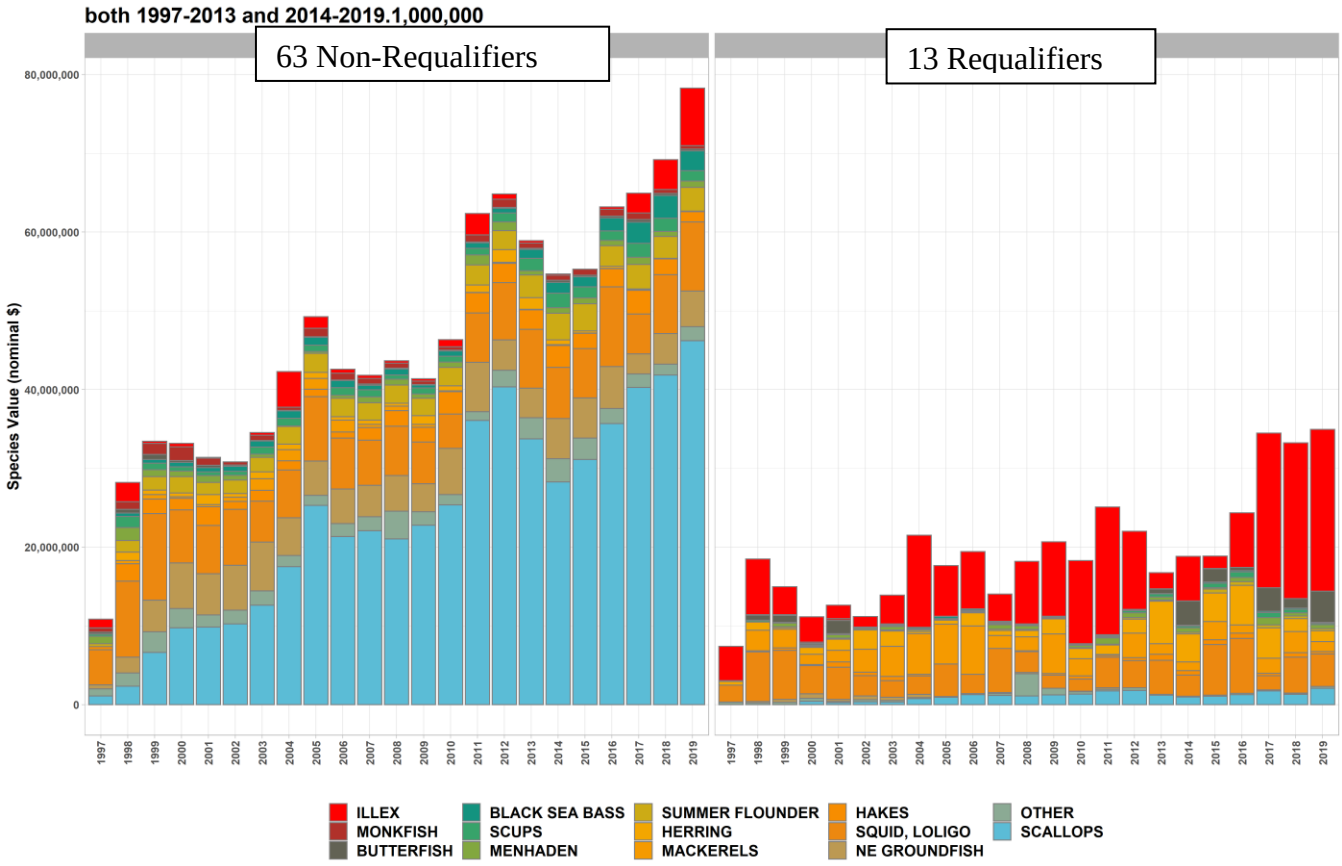
Figure 18. Species revenues, by year, for the 1997-2019/50,000-pound option. Species in the top 10 for any year are included.



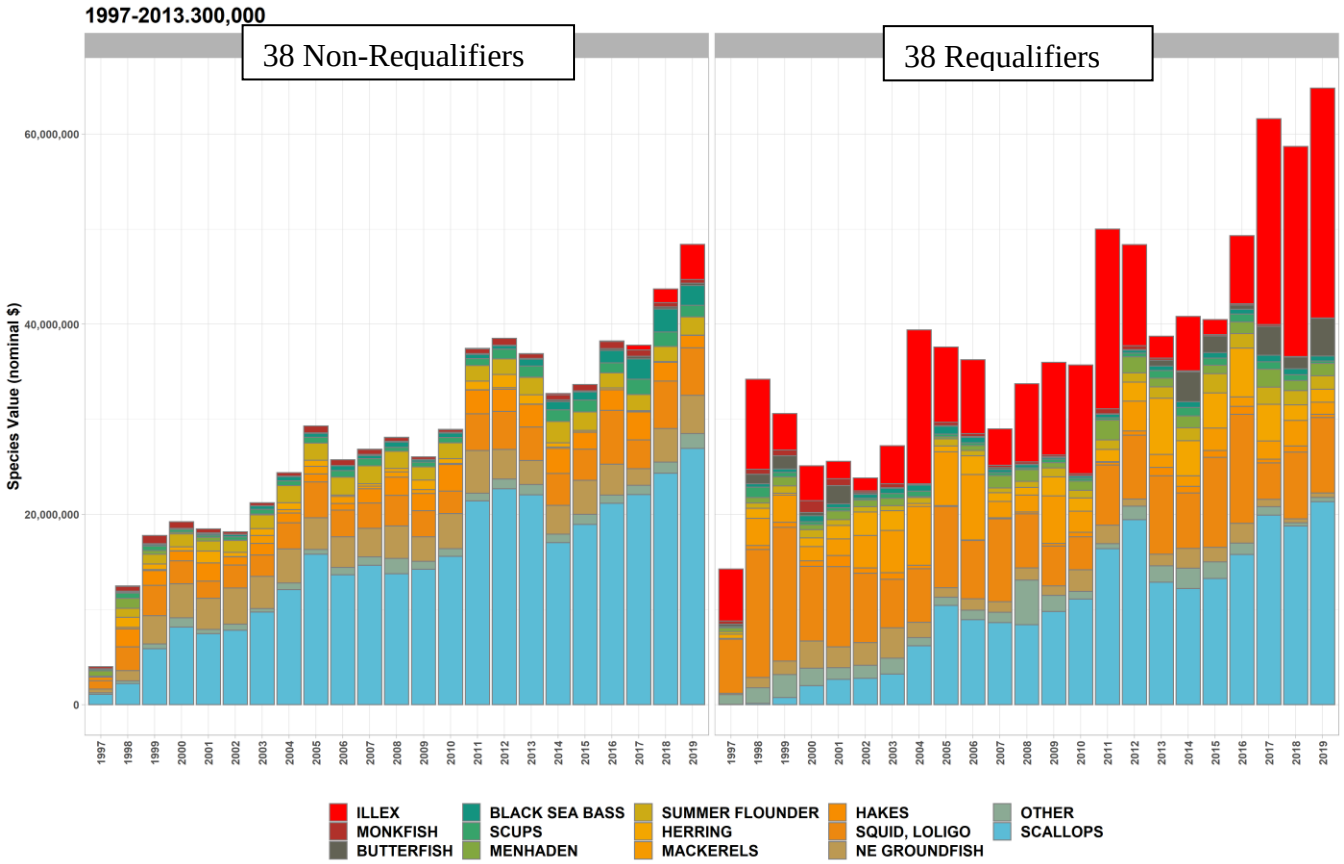
An immediate observation is that for the 1997-2019 50,000 pound option, non-requalifiers as a group have very little revenue from *Illex* (top red component), matching the MRI-level analysis in Appendix A. Most of their revenues in recent years came from scallops (bottom blue component). For qualifiers, in addition to *Illex*, scallops and longfin squid (middle orange component) are major contributions.

Figure 19. Species revenues, by year, for the 1997-2013 plus 2014-2019 with 1,000,000 pounds in one year in each period option. Species in the top 10 for any year are included.



For the 1997-2013 plus 2014-2019 with 1,000,000 pounds in one year in each option, the revenue distributions change. *Illex* contributes more for the non-requalifiers revenues as a group, but is still a relatively small portion. Scallops remain the dominant revenue source in recent years. For the few (13) requalifiers in this group, *Illex* frequently contributes more to total revenues than other individual species. For requalifiers, total revenues are lower as would be expected with so few MRIs in the requalifying group.

Figure 20. Species revenues, by year, for the 1997-2013/300,000-pound option. Species in the top 10 for any year are included.



For the 1997-2013 with 300,000 pounds in one year option, the revenue distributions change again. For non-requalifiers *Illex* revenues are in between the other two previous examples, and are still a relatively small portion. Scallops remain the dominant revenue source for non-requalifiers in recent years. For the requalifiers in this group, *Illex* is a major portion of revenues, with scallops, longfin squid, and butterfish also making substantial contributions.

Permits in Other Fisheries

Depending on the MRI and the MRI's permit suite, possession of other permits may allow participation in other fisheries, which is a required consideration for limited access systems. The figures below provide information on permits that the FMAT determined might be most relevant – some permits such as spiny dogfish and tilefish have been omitted. Counts of MRIs that have the permit are shaded black, and counts of MRIs that do not have the permit are shaded grey. The figures in this section reflect the same three illustrative example time period/threshold options as above: first 1997-2019 with 50,000 pounds in any year (requalifies the most), then 1997-2013 plus 2014-2019 with 1,000,000 pounds in one year in each (requalifies the least), and finally 1997-2013 with 300,000 pounds in any year (middle option). Inactive permits currently in confirmation of permit history are not included in this analysis so not quite all 76 2019 *Illex* MRIs are included. Permit counts for all 20 requalification combinations are included in Appendix D.

Figure 21. Permits held by non-requalifying (left) and requalifying (right) MRIs for the 1997-2019/50,000-pound option.

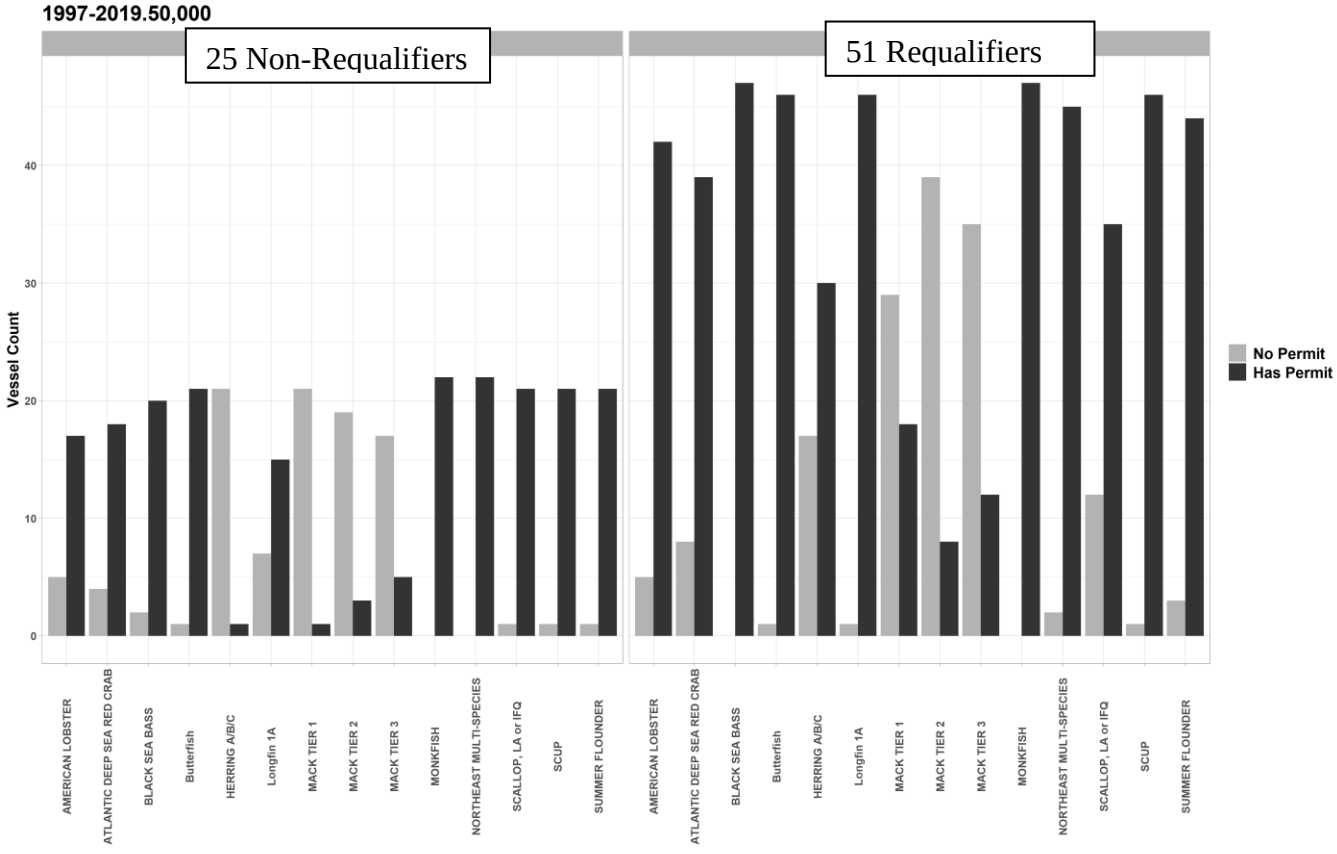


Figure 22. Permits held by non-requalifying (left) and requalifying (right) MRIs for the 1997-2013 plus 2014-2019 with 1,000,000 pounds in one year in each period option

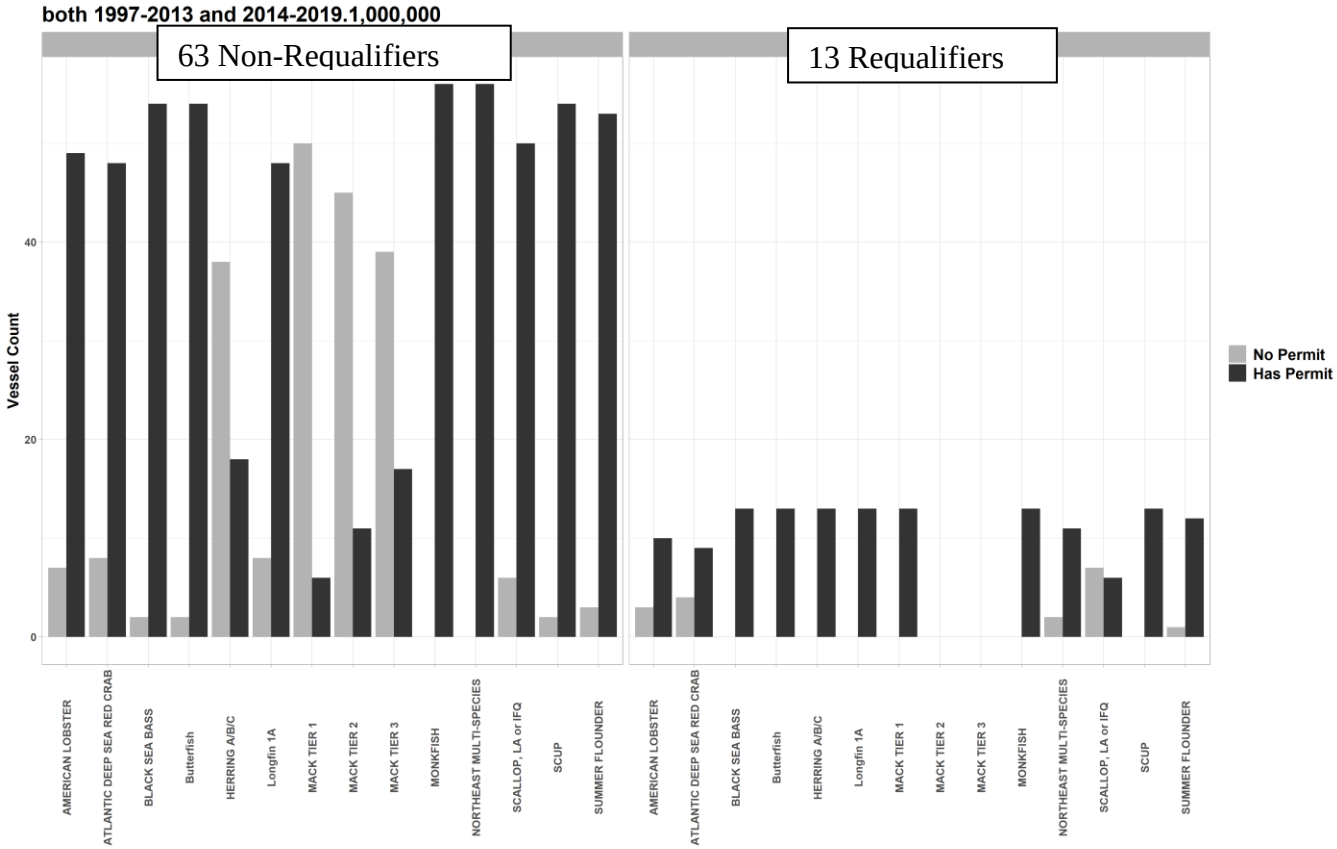


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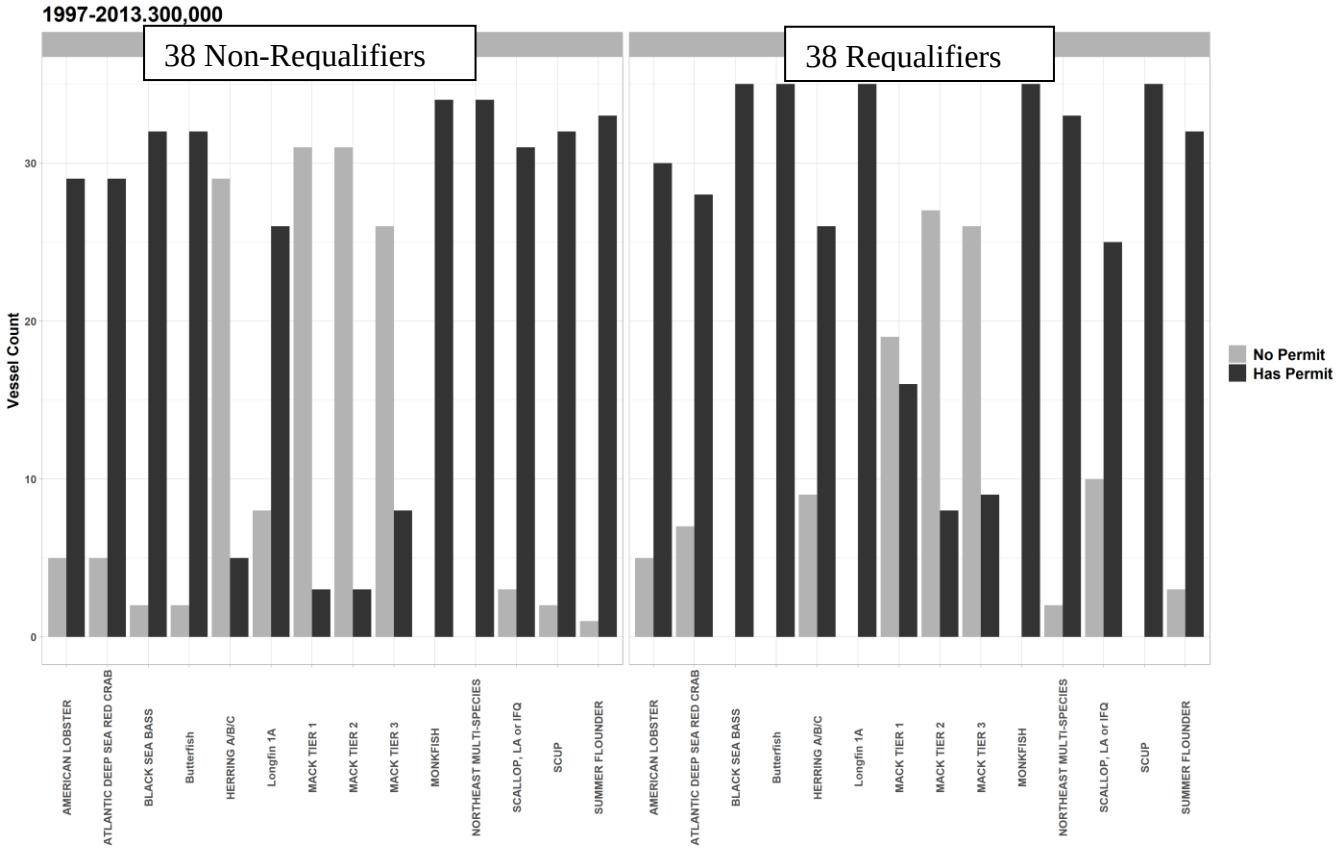
Figure 23. Permits held by non-requalifying (left) and requalifying (right) MRIs for the 1997-2013/300,000-pound option.



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Impacts

With an understanding of qualification and participation, several likely conclusions can be made regarding the impacts from the alternatives. Impacts will be analyzed in more detail in an environmental assessment which will be finalized in accordance with the National Environmental Policy Act after the Council selects preferred alternatives (tentatively scheduled for June 2020) but before additional public comment on any proposed rule.

Biological Impacts on the *Illex* Stock

Requalification alternatives (Sets A and B) will impact the number of MRIs that have access to the *Illex* squid fishery, in varying degrees. Since the resulting fleet will likely still have the capacity to harvest the full *Illex* quota in a manner similar to previous years when fishing is good, these alternatives are not likely to substantively change the amount or character of overall *Illex* fishing effort. However, since further racing to fish should be mitigated to some degree by reducing recent/additional activation of latent effort, requalification alternatives could help closures occur in a timely fashion to the degree they reduce participants and avoid even faster landings. There could thus be a positive impact to the *Illex* squid resource condition from being able to more effectively close the fishery before quota overages occur, but the impact is low positive due to the limited and indirect nature of the impact (with quota management, overages should be slight in most years).

If the trip limits provided for non-requalifying MRIs allow them to substantially increase effort compared to recent activity, then the goal of avoiding increase in racing to fish (and indirectly avoiding quota overages) may be subverted. Accordingly, higher trip limits for non-requalifying MRIs may have negative impacts compared to only allowing non-requalifying MRIs to obtain an incidental permit, but the impact is low negative due to the limited and indirect nature of the impact.

The hold measurement/upgrade restrictions, in combination with permit requalification, should help to slow additional capacity development in this fishery, reducing additional racing to fish. There would thus be a positive impact to the *Illex* squid resource condition from being able to more effectively close the fishery before quota overages occur, and the impact is low positive due to the limited and indirect nature of the impact. Clarifying that daily VMS reporting of *Illex* is required should have a positive impact on the *Illex* squid resource condition from collecting additional information to more accurately estimate catch rates and more effectively close the fishery before quota overages occur.

Economic Impacts

Requalification alternatives (Sets A and B) will impact the number of vessels that have access to the *Illex* squid fishery, in varying degrees. Since the resulting fleet will likely still have the capacity to harvest the full *Illex* quota in a manner similar to previous years when fishing is good, these alternatives are not likely to substantively change the amount of overall ex-vessel revenues from *Illex* fishing. During slower fishing years, eliminating the more recently active MRIs may somewhat reduce total landings (less vessels out looking for *Illex*), but it is not possible to determine by how much, since participation will broadly change during slower fishing years.

Alternatives that eliminate or reduce access for recent or additional entrants could have a positive impact on re-qualifiers because they would have more secure access to the squid quota and the value of their permit would likely increase. While the non-qualifying MRIs have generally not landed a large proportion of *Illex* historically, with more restrictive alternative combinations some individual non-qualifying MRIs have derived a substantial portion of their revenues from *Illex* in recent years, especially during 2017-2019. These MRIs would have a negative impact compared to their recent performance, and would also lose the value of their permit itself. It is not clear what the current value of an *Illex* permit with low catch history is currently, since to some degree catch history is factored into permit values, and permit trading entities have been aware that requalification is on the table for *Illex* (Council staff receives periodic calls from individuals and entities involved in the buying and selling of permits, requesting information on the status of this action).

If the trip limits provided for non-requalifying MRIs allow them to increase or maintain recent effort, then impacts on them would be mitigated, but then less quota would be available for the other requalified MRIs.

The hold measurement/upgrade restrictions have associated costs. Informal contacts by council staff with a few marine surveyors revealed that a fish hold measurement could run approximately $10-$80 per foot of vessel length, which could range from as low as $750 for a 75 foot vessel to as high as $12,000 for a 150 foot vessel, depending on the surveyor, the boat design, and travel expenses. To the extent that surveys are already required for insurance purposes these costs may be already part of a vessel's operating costs, and many of the *Illex* permitted vessels already have hold documentation due to their mackerel permits.

All limited access permitted *Illex* vessels must already use VMS and many already report their daily *Illex* catches via VMS. Accordingly, costs for clarifying that daily *Illex* catches must be reported via VMS should be minimal.

Safety at Sea Impacts

Racing to fish can have negative impacts on safety at sea related to weather, deferred maintenance, and overloading. Requalification alternatives (Sets A and B) may impact the number of MRIs that have access to the *Illex* squid fishery, in varying degrees. Since exacerbation of racing to fish should be mitigated to some degree by reducing recent/additional activation of latent effort, requalification alternatives should benefit safety at sea to the degree they reduce participants. If the trip limits provided for non-requalifying MRIs allow them to substantially increase effort, then the goal of avoiding increase in racing to fish may be subverted. It is not anticipated that other alternatives would affect safety at sea.

Community Impacts

The Council is also concerned about impacts to communities if re-activated permits rapidly change the distribution of landings at relevant ports in communities that have dependence on *Illex*. Based on Table 4, only in North Kingston, RI and Cape May, NJ are *Illex* revenues a sustained and substantial portion of port revenues, with North Kingston substantially more dependent on *Illex* than any other port. While Cape May, NJ has less reliance on *Illex,* according to NMFS' Social Indicators for Fishing Communities, Cape May has relatively higher vulnerability scores (see Figures 9 to 14). Based on these findings, both North Kingston, RI and Cape May, NJ seem potentially disproportionately impacted by disruption or rapid change in the *Illex* fishery.

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8. References

Birkenbach, Anna, Kaczan, David, and Smith, Martin. 2017. Catch shares slow the race to fish. Nature volume 544, pages 223–226.

Branch et. al. 2006. Fleet dynamics and fishermen behavior: lessons for fisheries managers. Canadian Journal of Fisheries and Aquatic Sciences, 2006, Vol. 63, No. 7 : pp. 1647-1668.

FAO 2016. International commercial fishing management regime safety study: synthesis of case reports. Food and Agriculture Organization of the United Nations.

Fujita, R. & Bonzon, K. Rev Fish Biol Fisheries (2005) 15: 309. Kluwer Academic Publishers

Gordon 1954. The Economic Theory of a Common-Property Resource: The Fishery. The Journal of Political Economy, Vol. 62, No. 2 (Apr., 1954), pp. 124-142.

Hilborn, R. (2007), Managing fisheries is managing people: what has been learned?. Fish and Fisheries, 8: 285–296.

Holland, Daniel and Ginter, Jay. 2001. Common property institutions in the Alaskan groundfish fisheries. Marine Policy 25 (2001) 33-42.

MAFMC 2019. 2019 AP Information Document. Available at http://www.mafmc.org/ssc-meetings/2019/may-7-8.

MAFMC 2019. 2019 Atlantic Mackerel, Squid, and Butterfish AP Fishery Performance Report. Available at http://www.mafmc.org/ssc-meetings/2019/may-7-8.

NAFO 1978. Redbook 1978. Standing Committee on Research and Statistics. Proceedings 1997-2917 Special Meetings. Available at https://www.nafo.int/Portals/0/PDFs/icnaf/ICNAF-rb/redbook-1978.pdf?ver=2016-11-01-173120-850.

NEFSC 1999. 29th Northeast Regional Stock Assessment Workshop.

NEFSC 2019. 2019 *Illex* Data Update. Available at http://www.mafmc.org/ssc-meetings/2019/may-7-8.

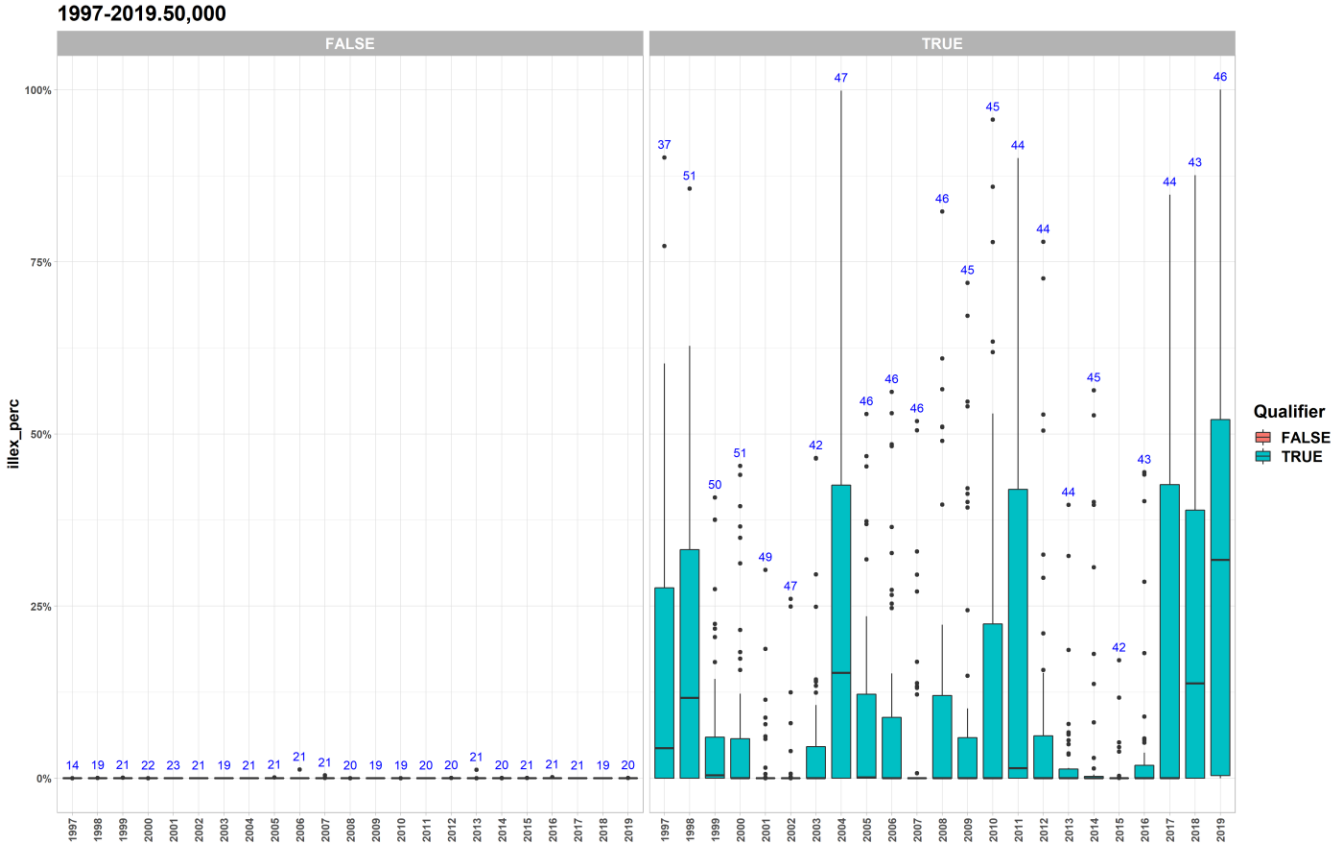
NRC 1991. Fishing Vessel Safety: Blueprint for a National Program. National Research Council, Division on Engineering and Physical Sciences, Commission on Engineering and Technical Systems, Committee on Fishing Vessel Safety.

Pfeiffer and Gratz 2016. The effect of rights-based fisheries management on risk taking and fishing safety. PNAS March 8, 2016 113 (10) 2615-2620; first published February 16, 2016 https://doi.org/10.1073/pnas.1509456113.

Warming, Jens. 1911. On rent of fishing grounds. Translation in History of Political Economy. Volume 15, Issue 3 Fall 1983

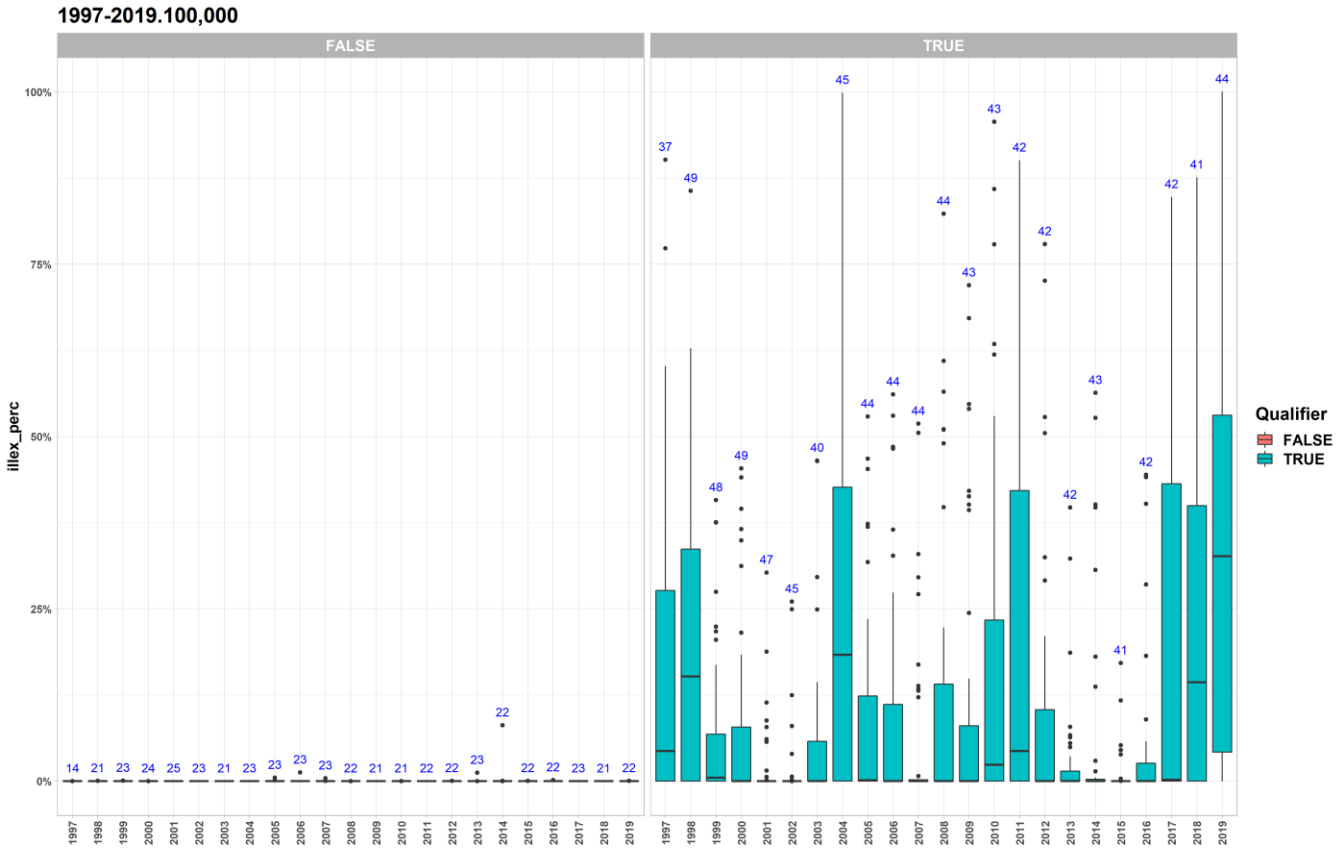
Appendix A. Boxplots of Dependence on *Illex* (Revenues) for Requalification Options

Figure A1. 1997-2019/50K Option Dependencies.



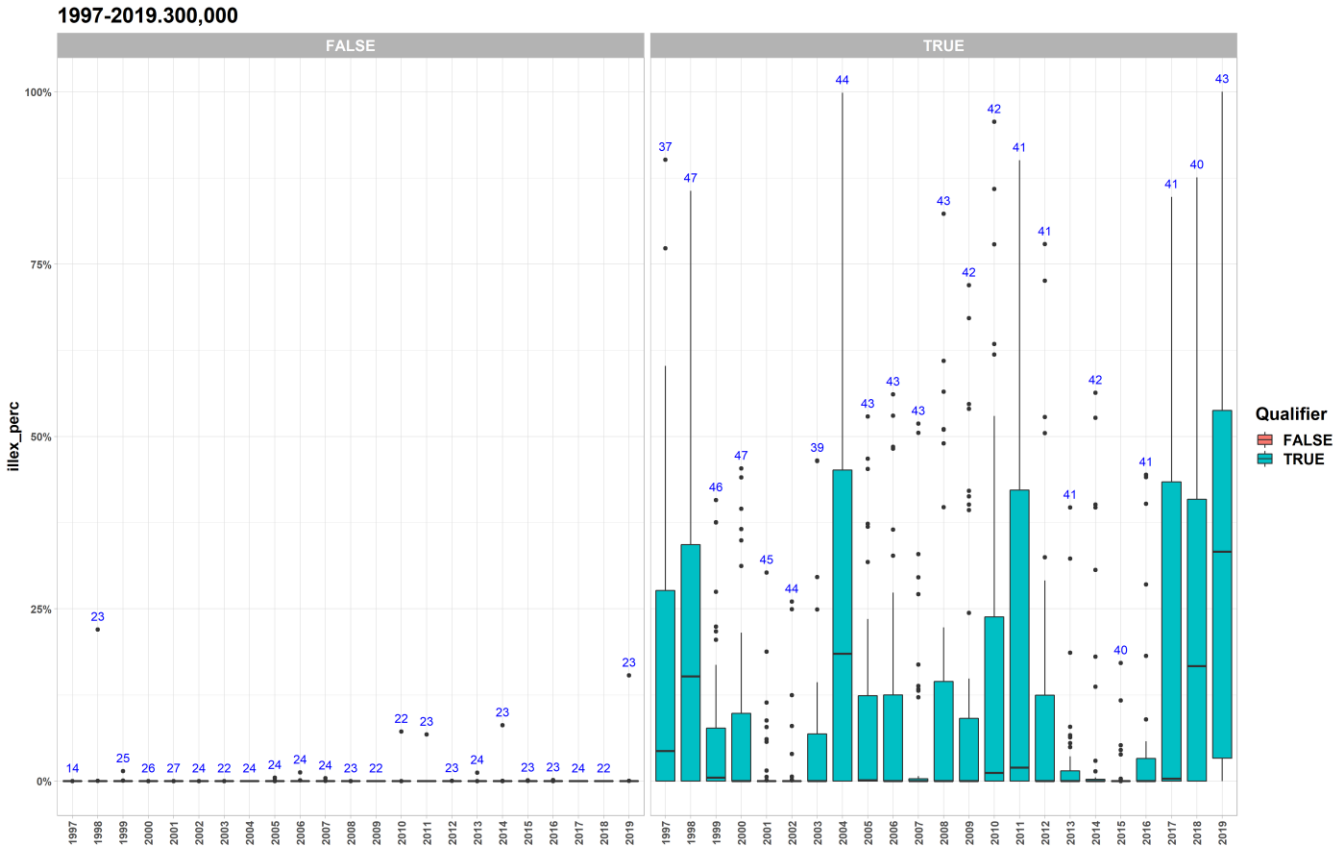
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A2. 1997-2019/100K Option Dependencies.



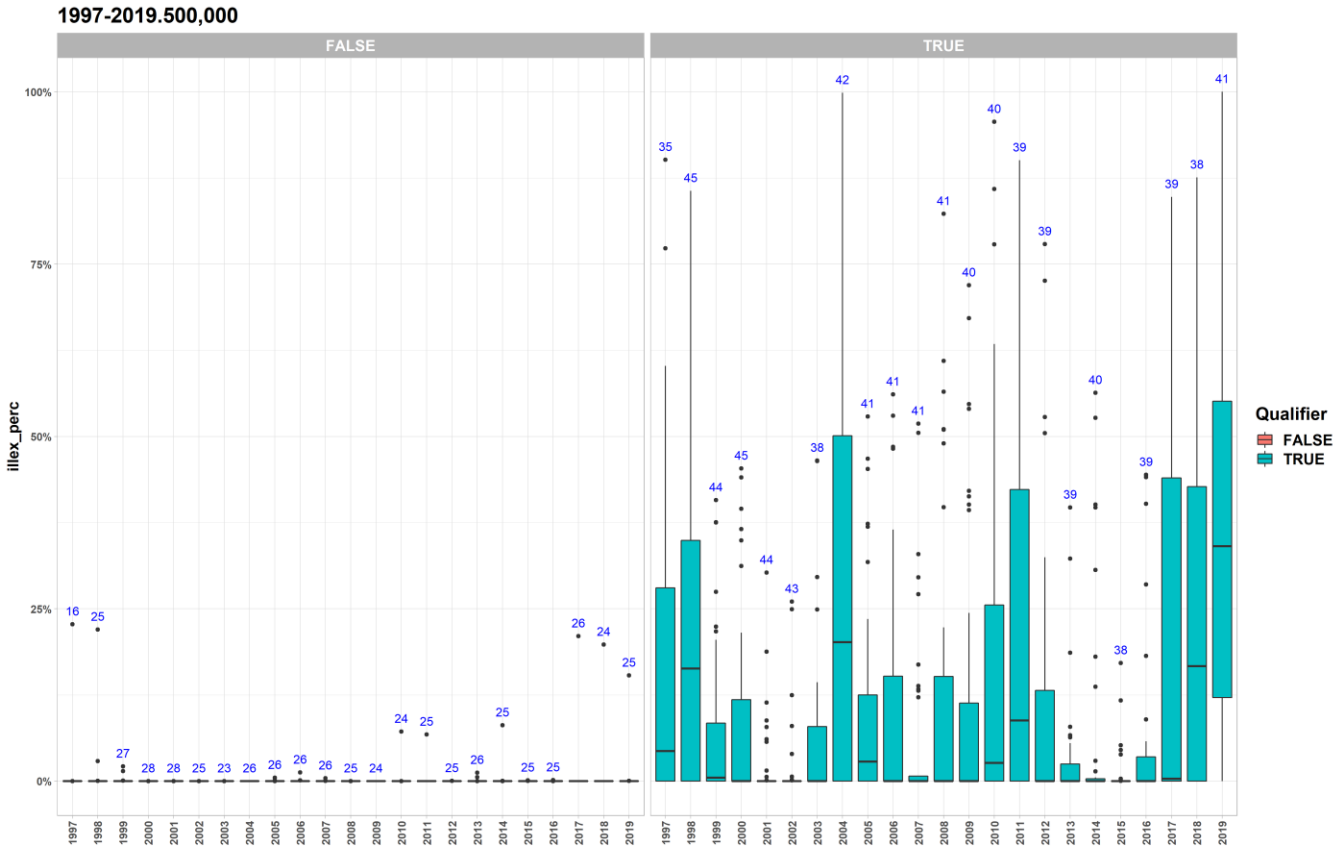
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A3. 1997-2019/300K Option Dependencies.



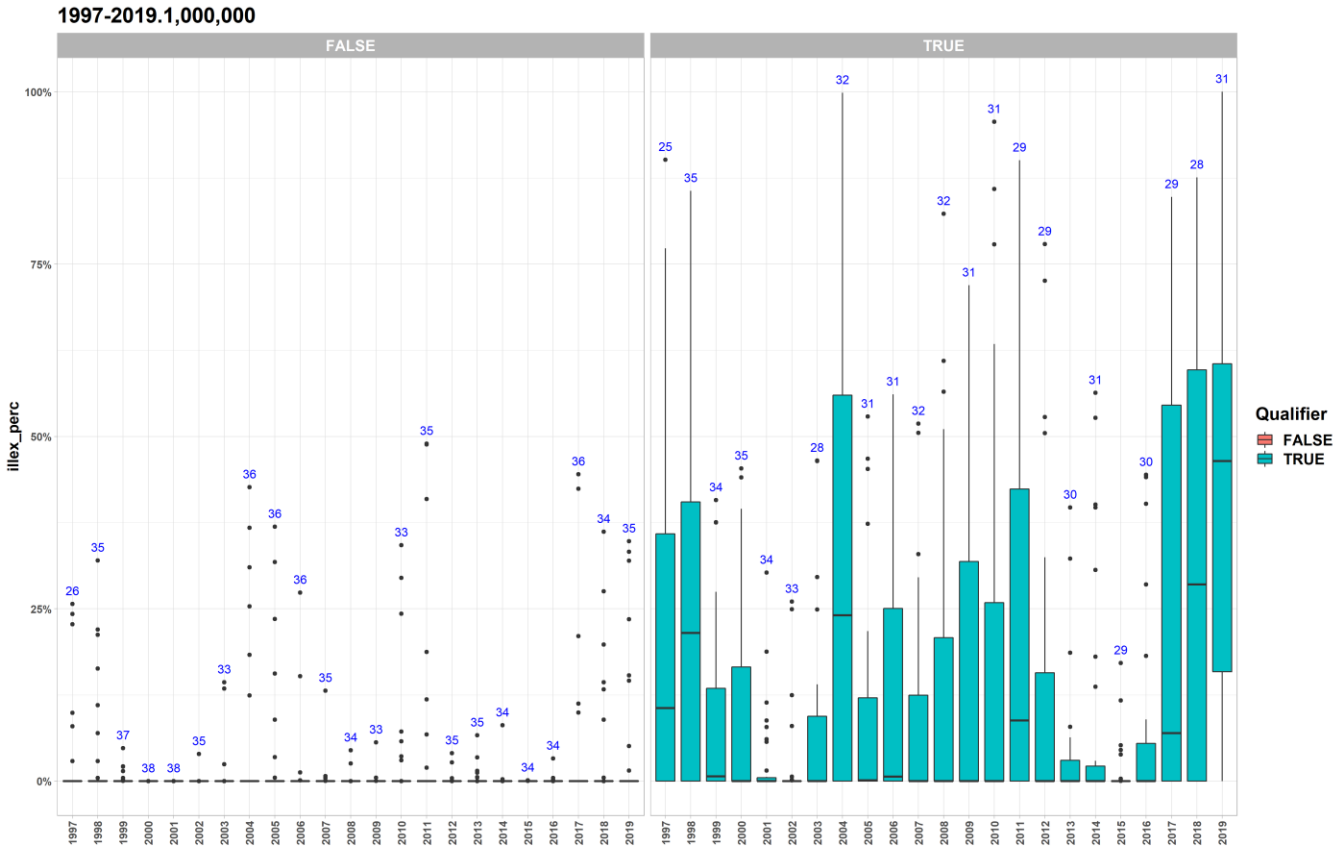
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A4. 1997-2019/500K Option Dependencies.



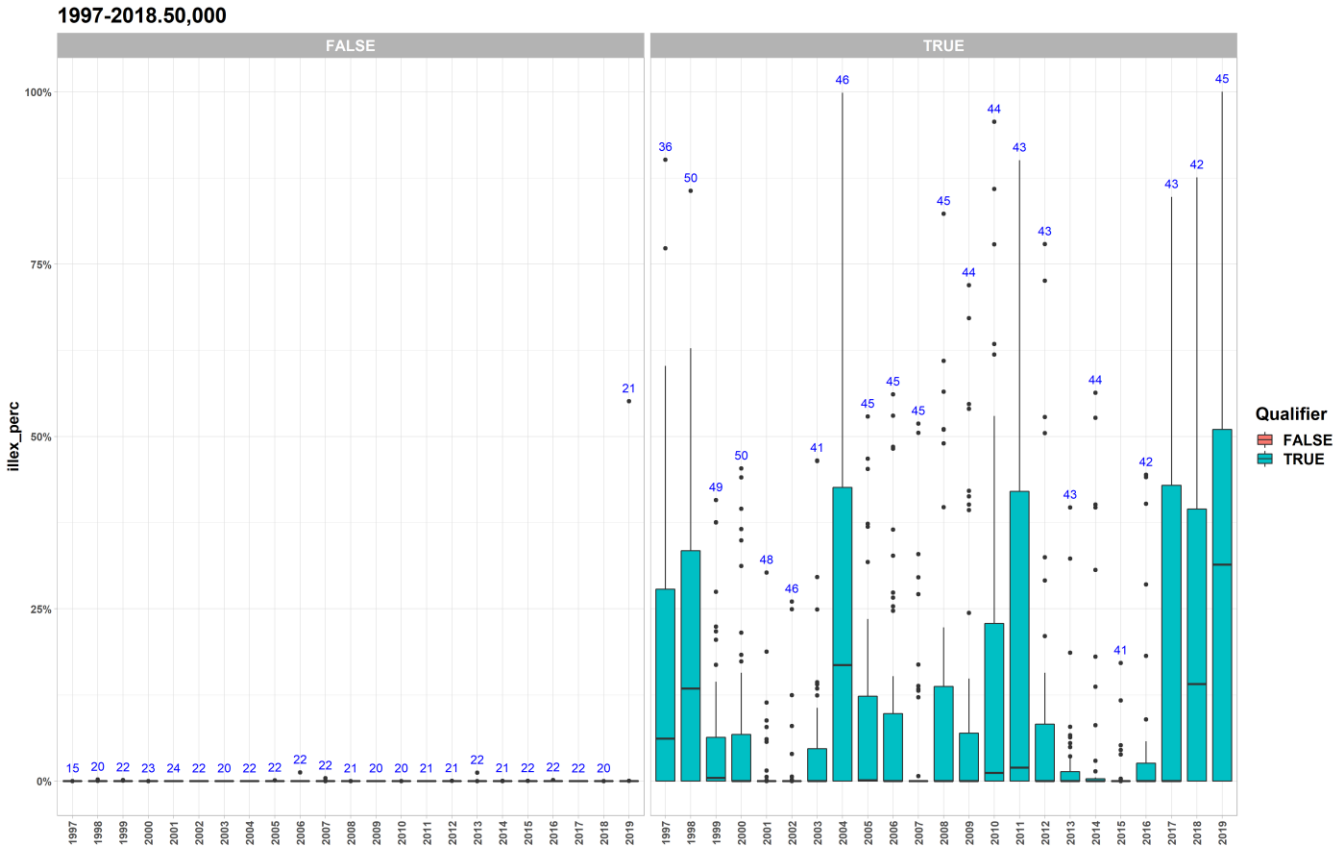
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A5. 1997-2019/1,000,000 Option Dependencies.



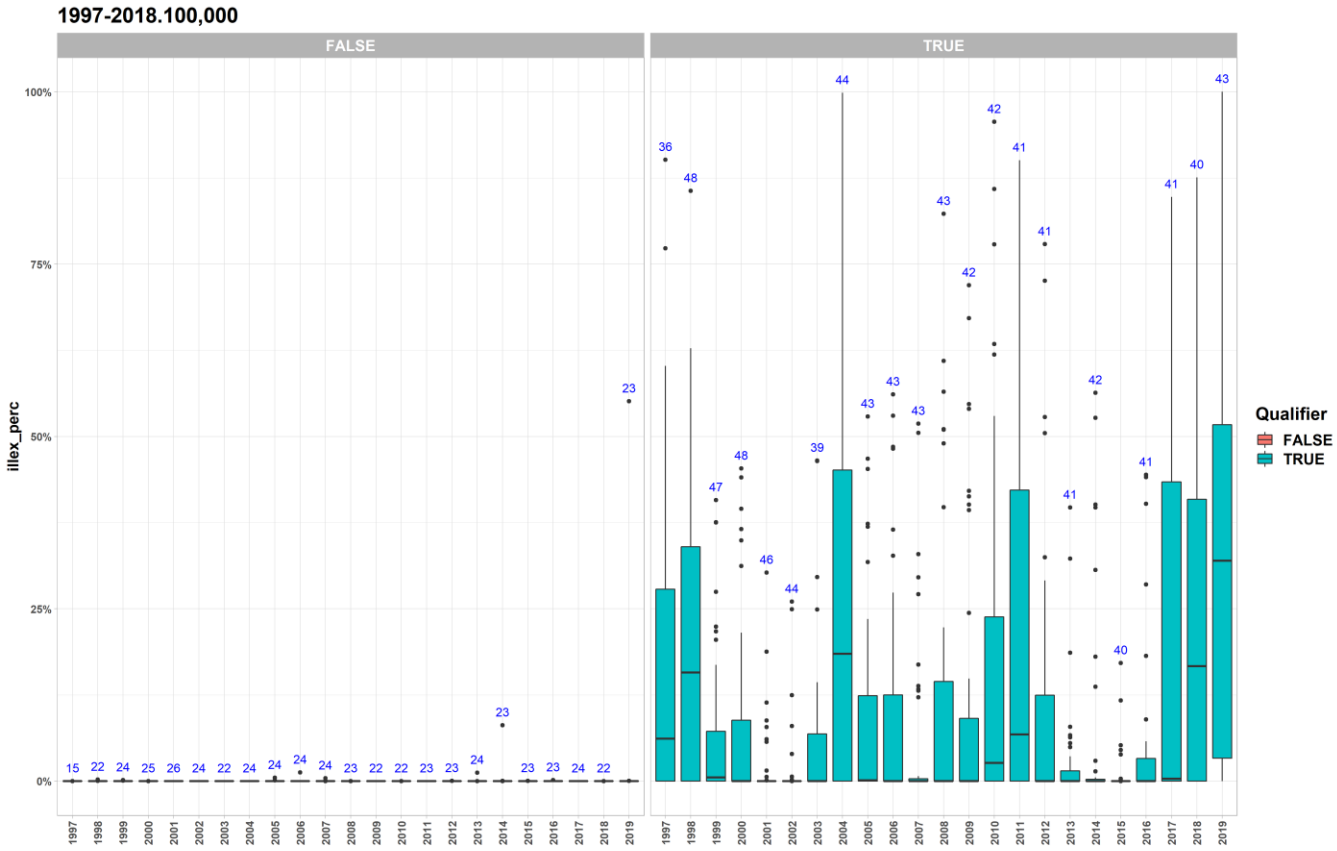
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A6. 1997-2018/50K Option Dependencies.



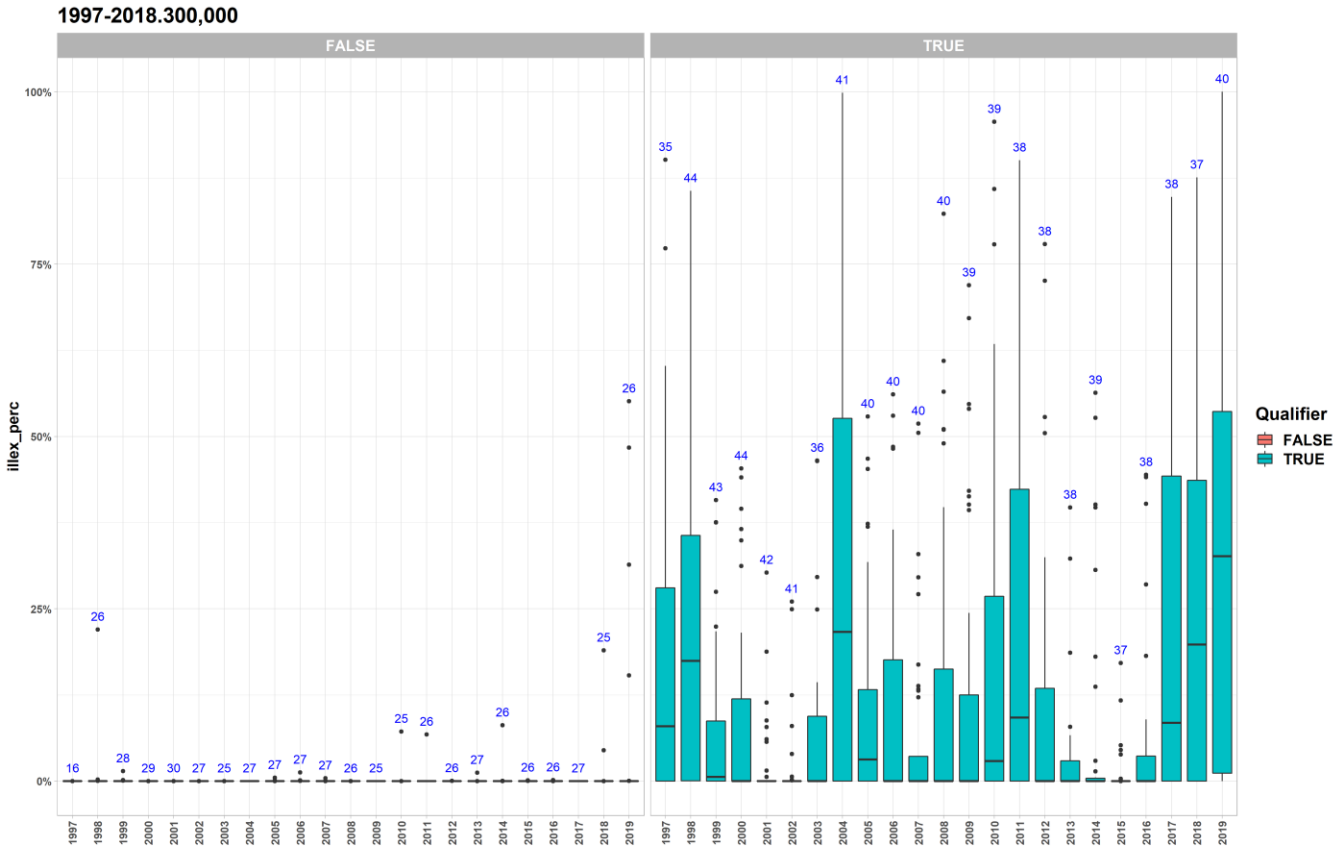
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A7. 1997-2018/100K Option Dependencies.



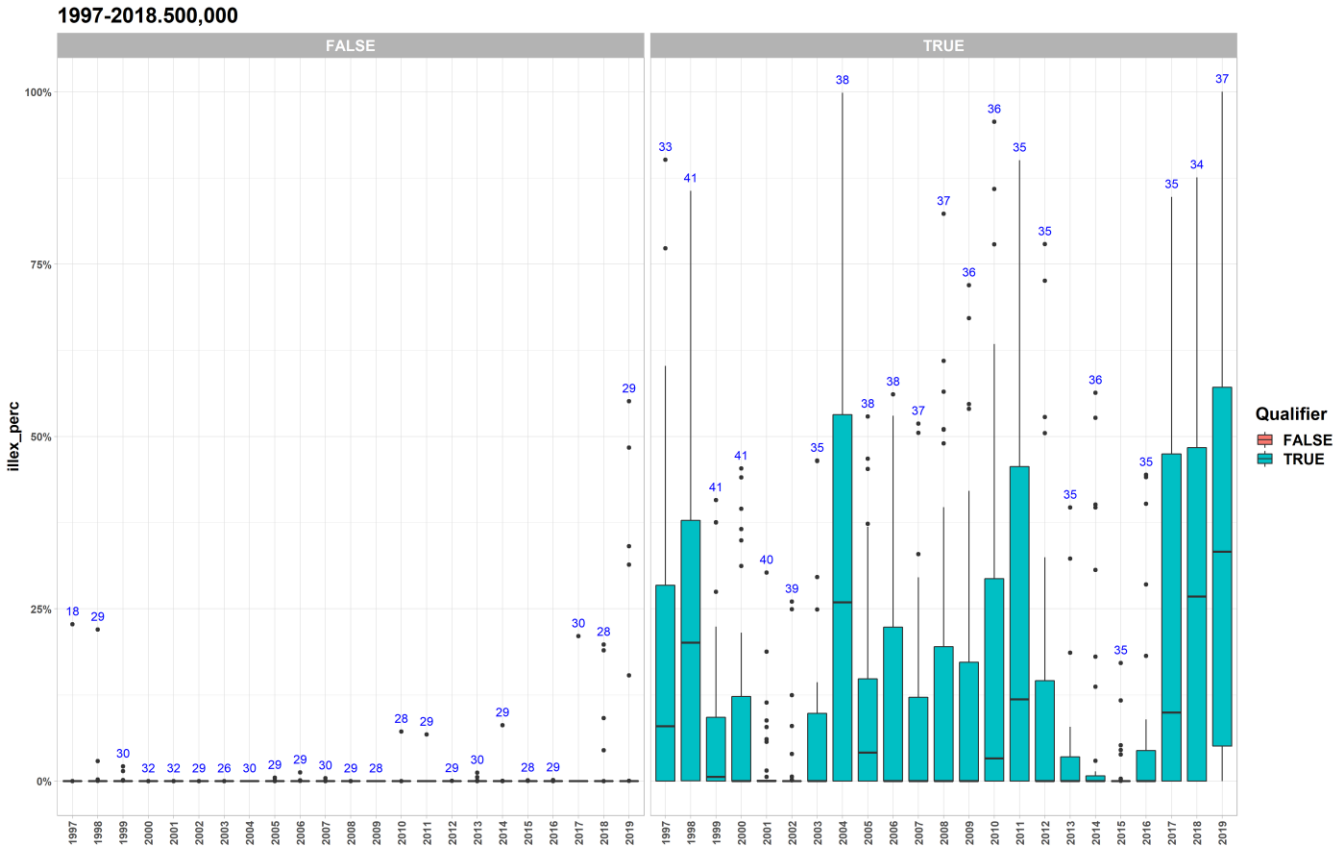
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A8. 1997-2018/300K Trip Option Dependencies.



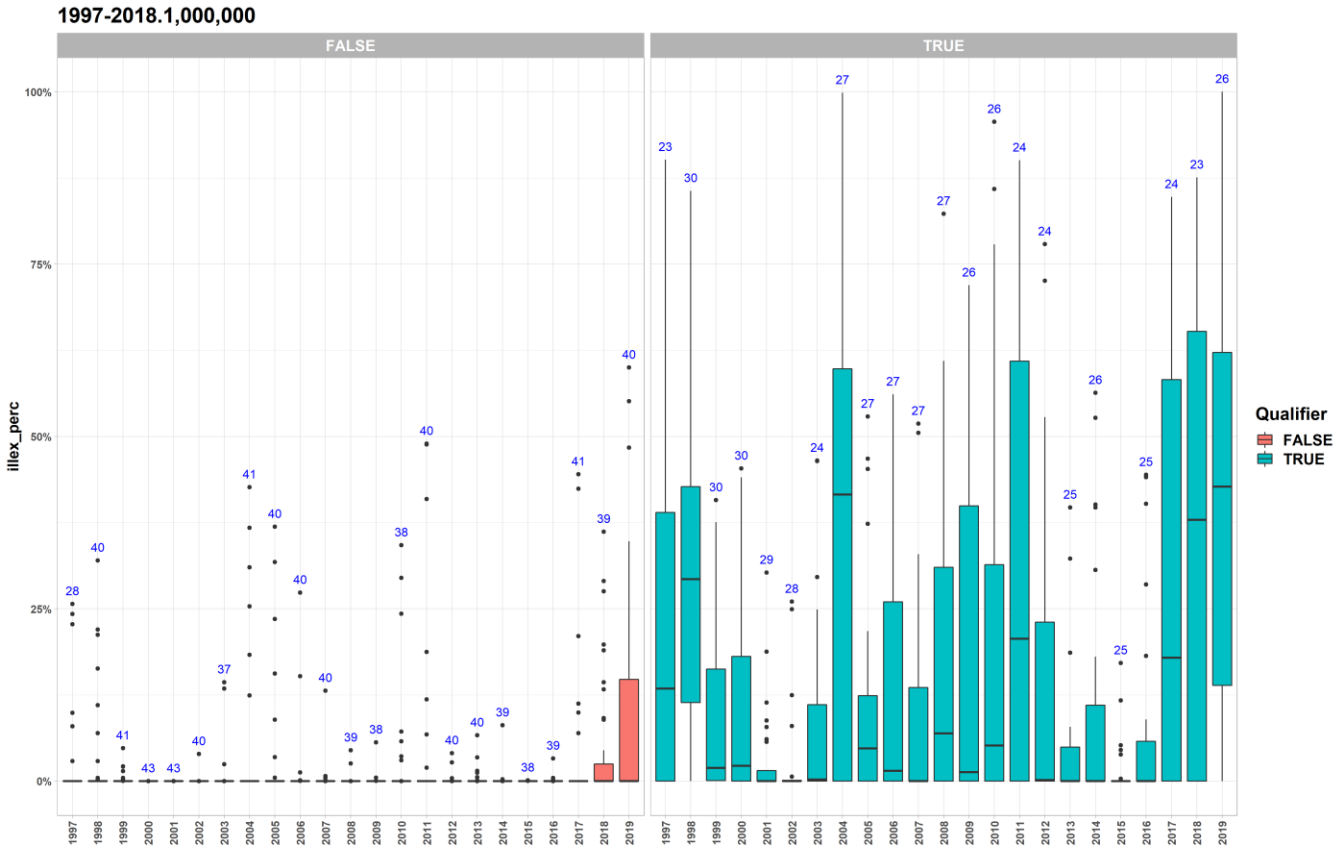
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A9. 1997-2018/500K Option Dependencies.



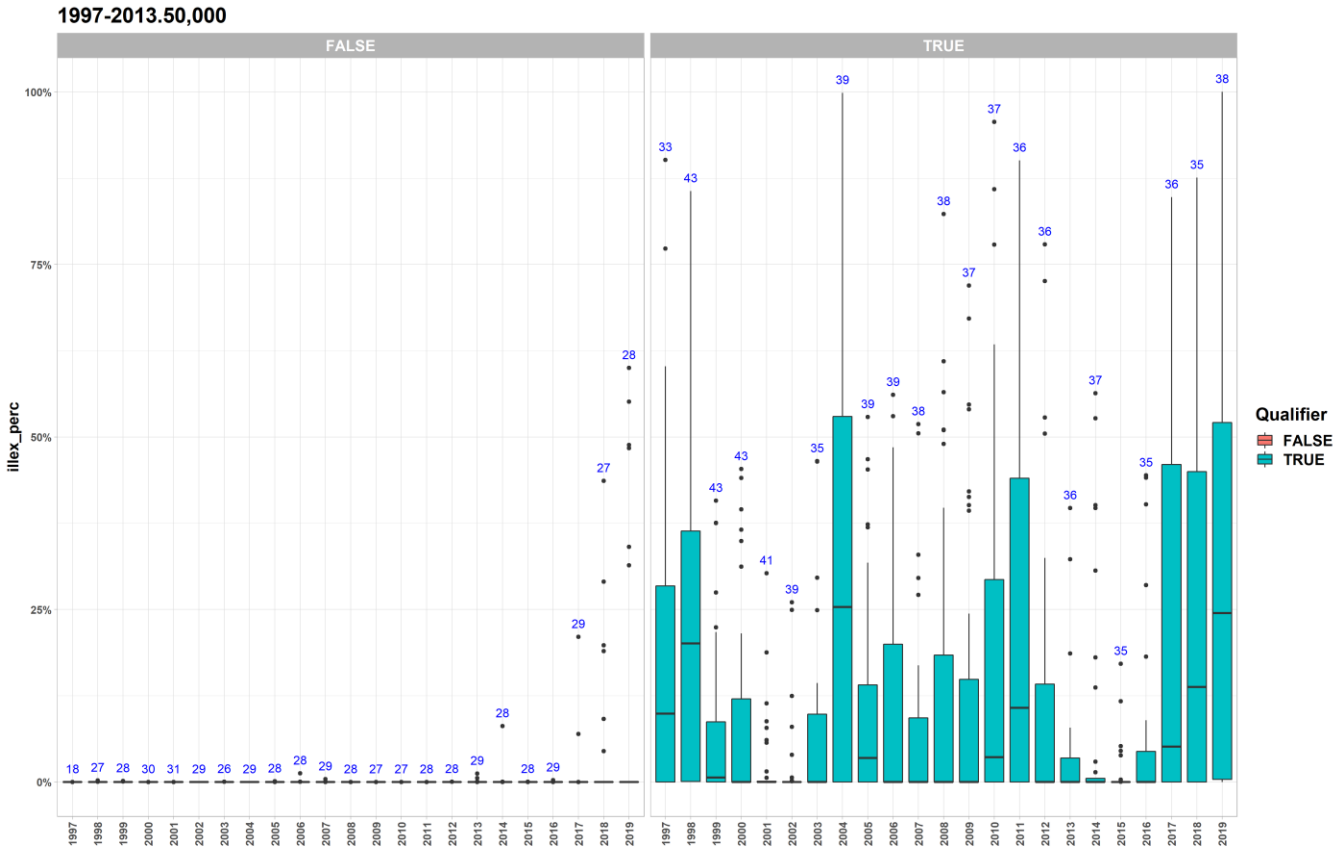
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A10. 1997-2018/1,000,000 Option Dependencies.



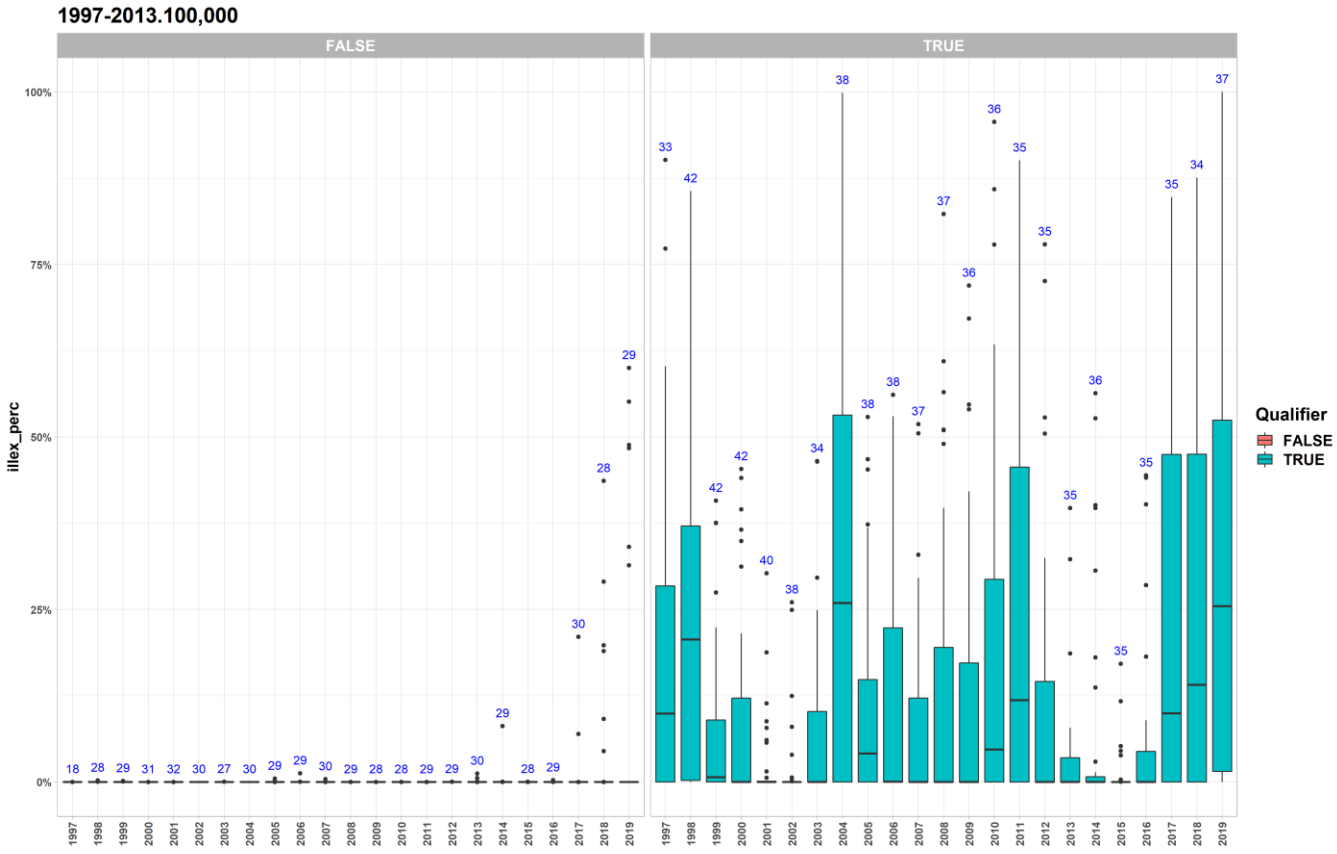
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A11. 1997-2013/50K Option Dependencies.



Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A12. 1997-2013/100K Option Dependencies.



Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A13. 1997-2013/300K Option Dependencies.

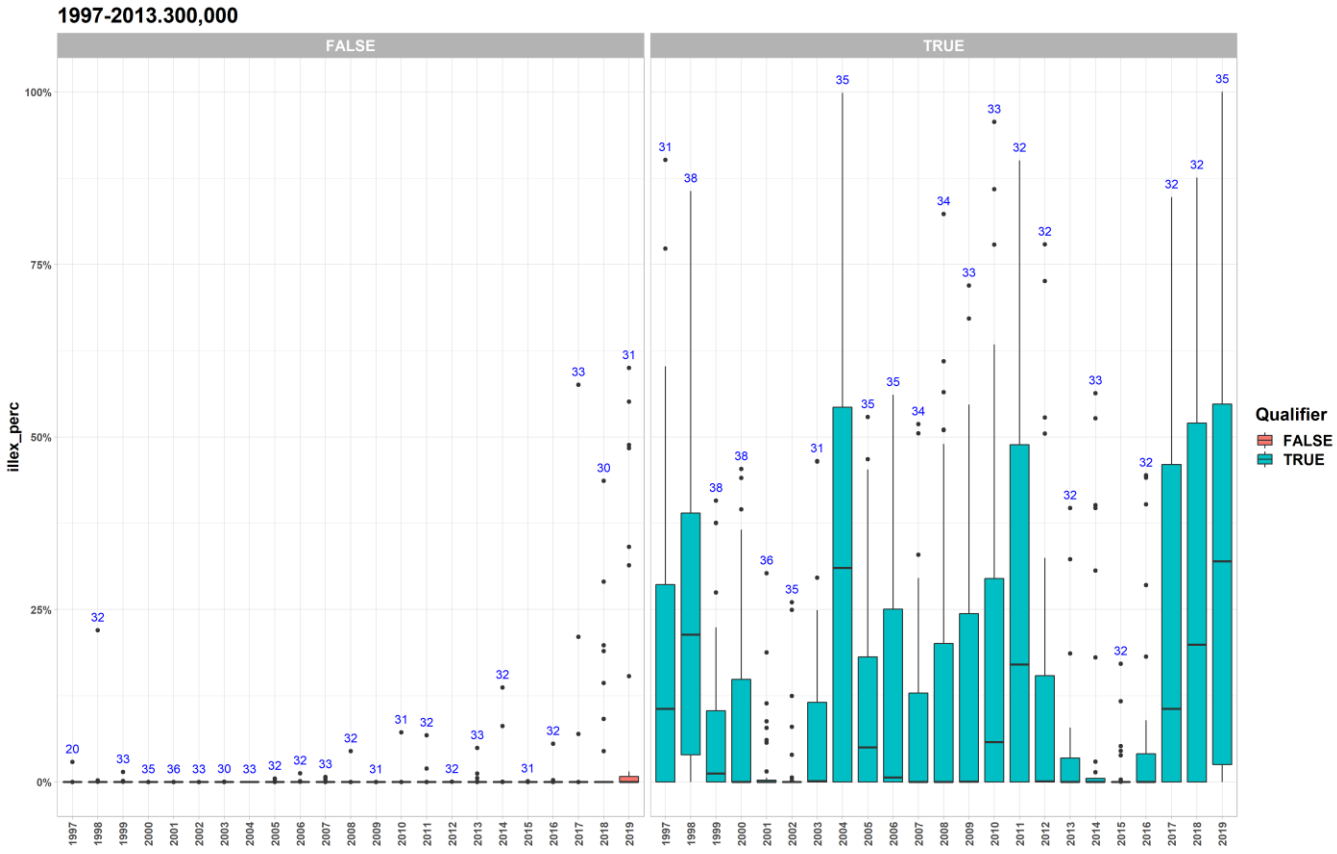


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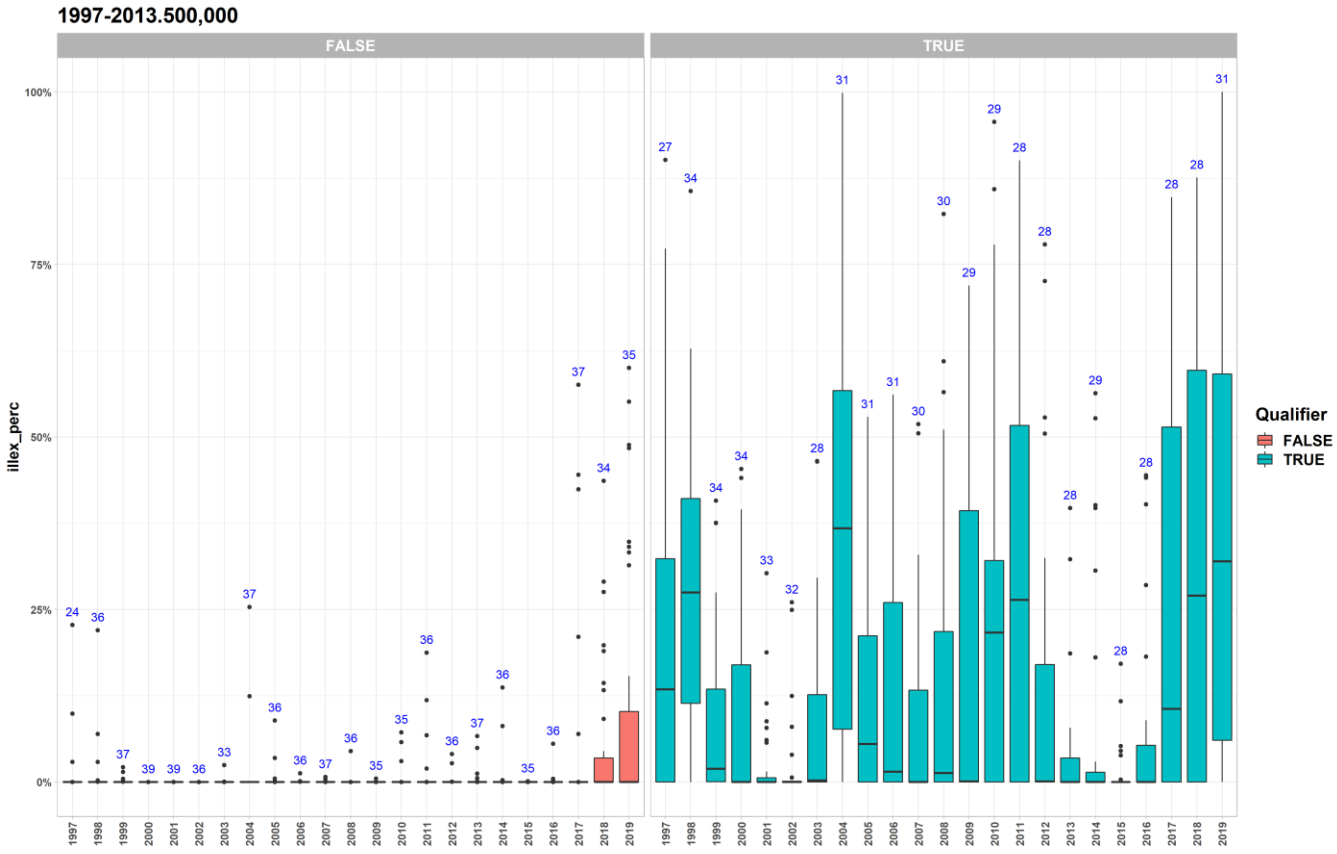
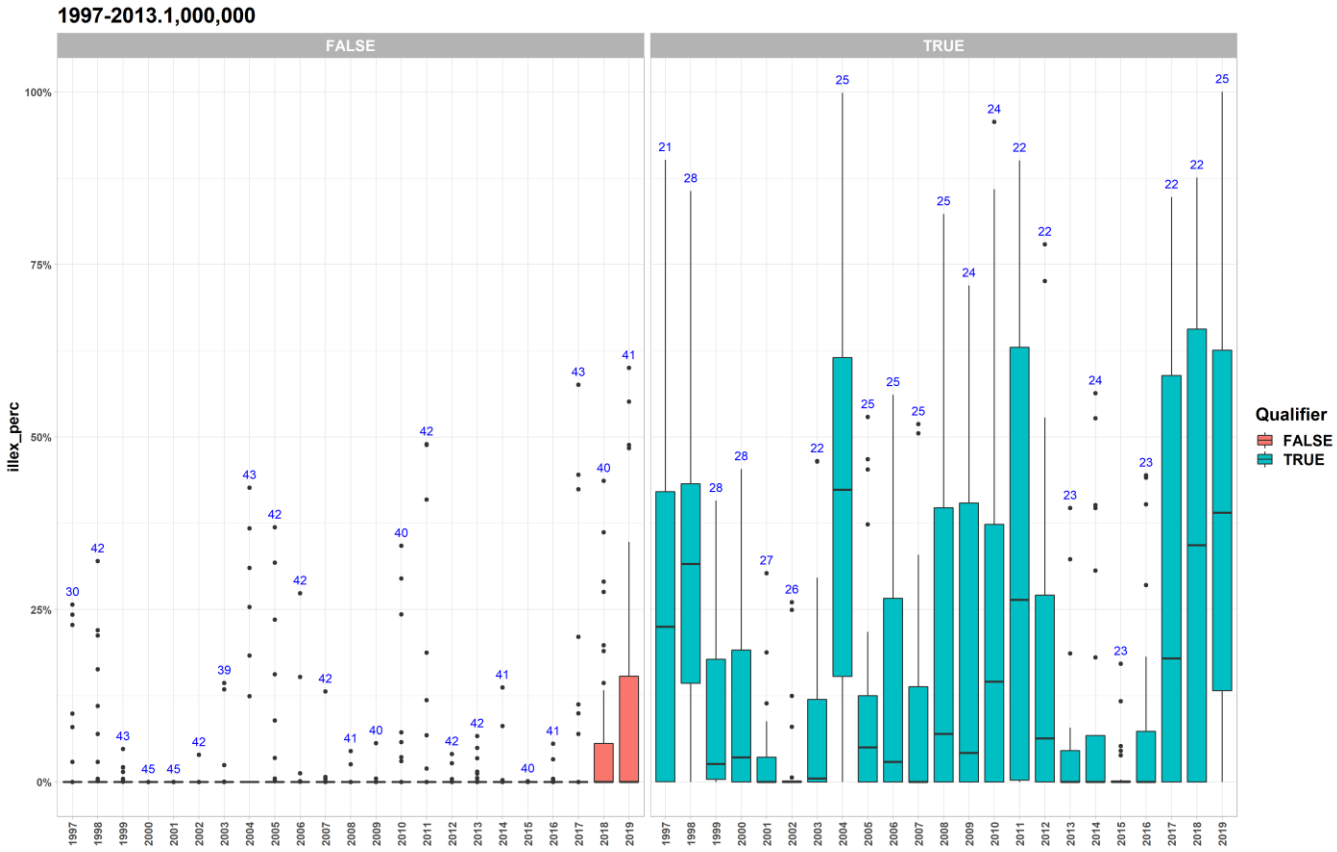
Figure A14. 1997-2013/500K Option Dependencies.



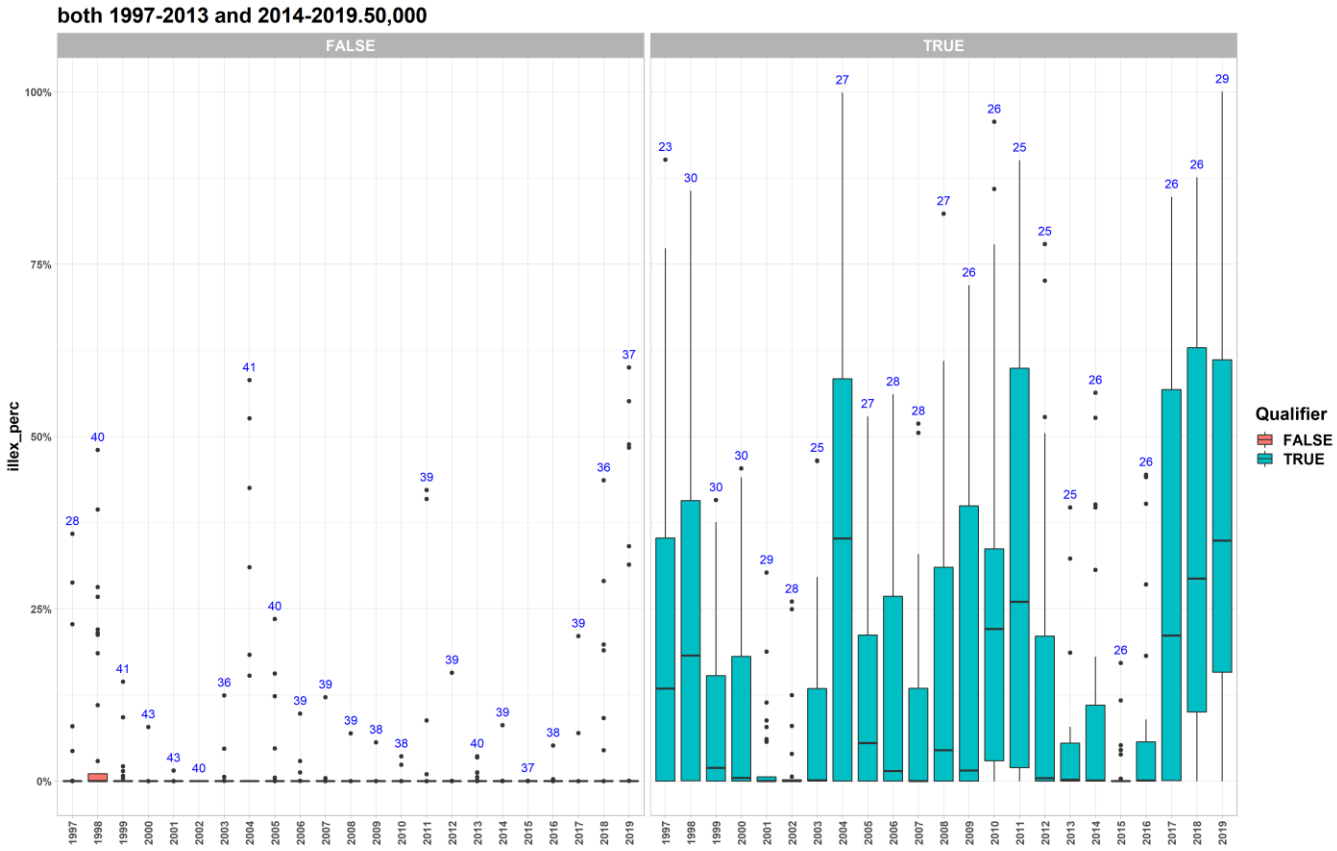
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A15. 1997-2013/1,000,000 Option Dependencies.



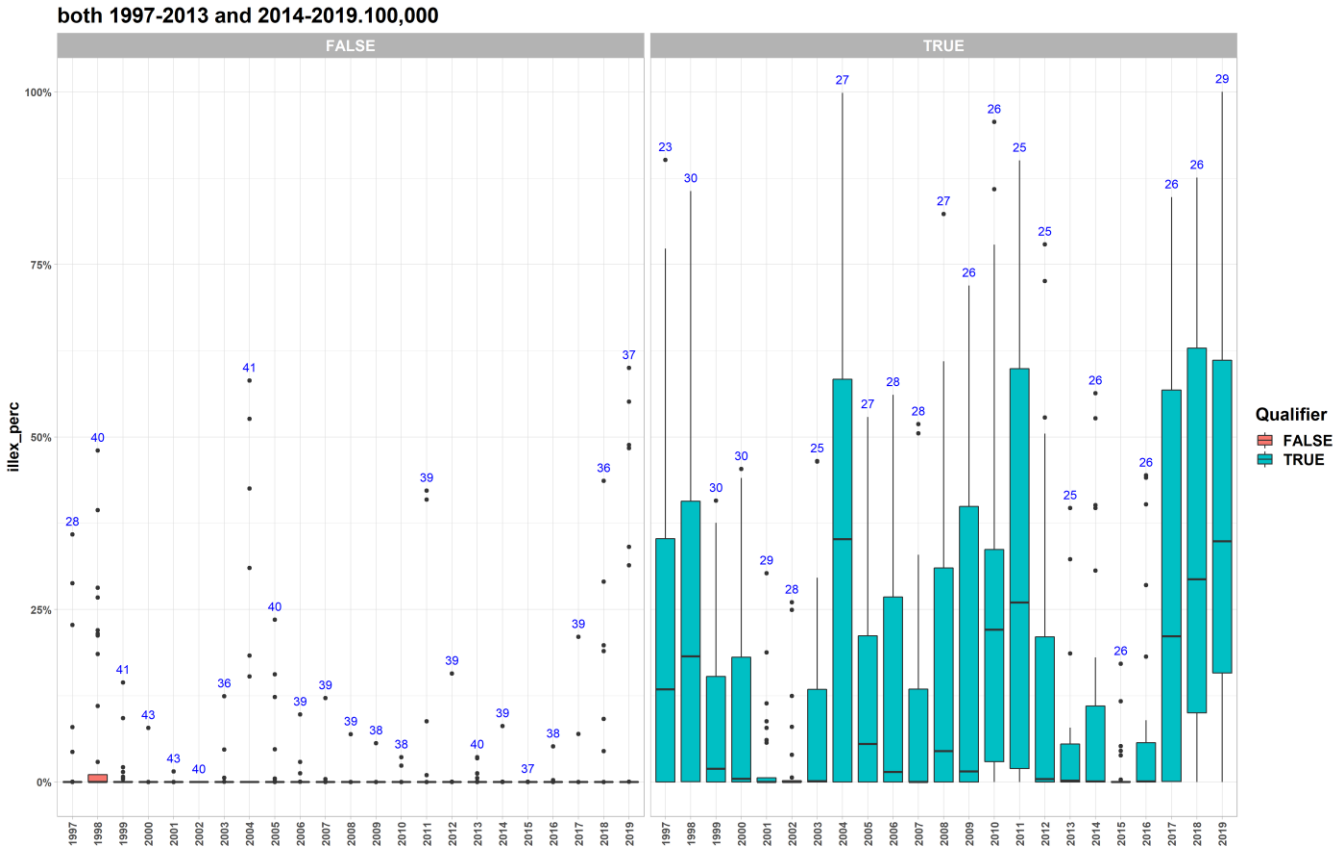
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A16. 1997-2013 plus 2014-2019/50K Option Dependencies



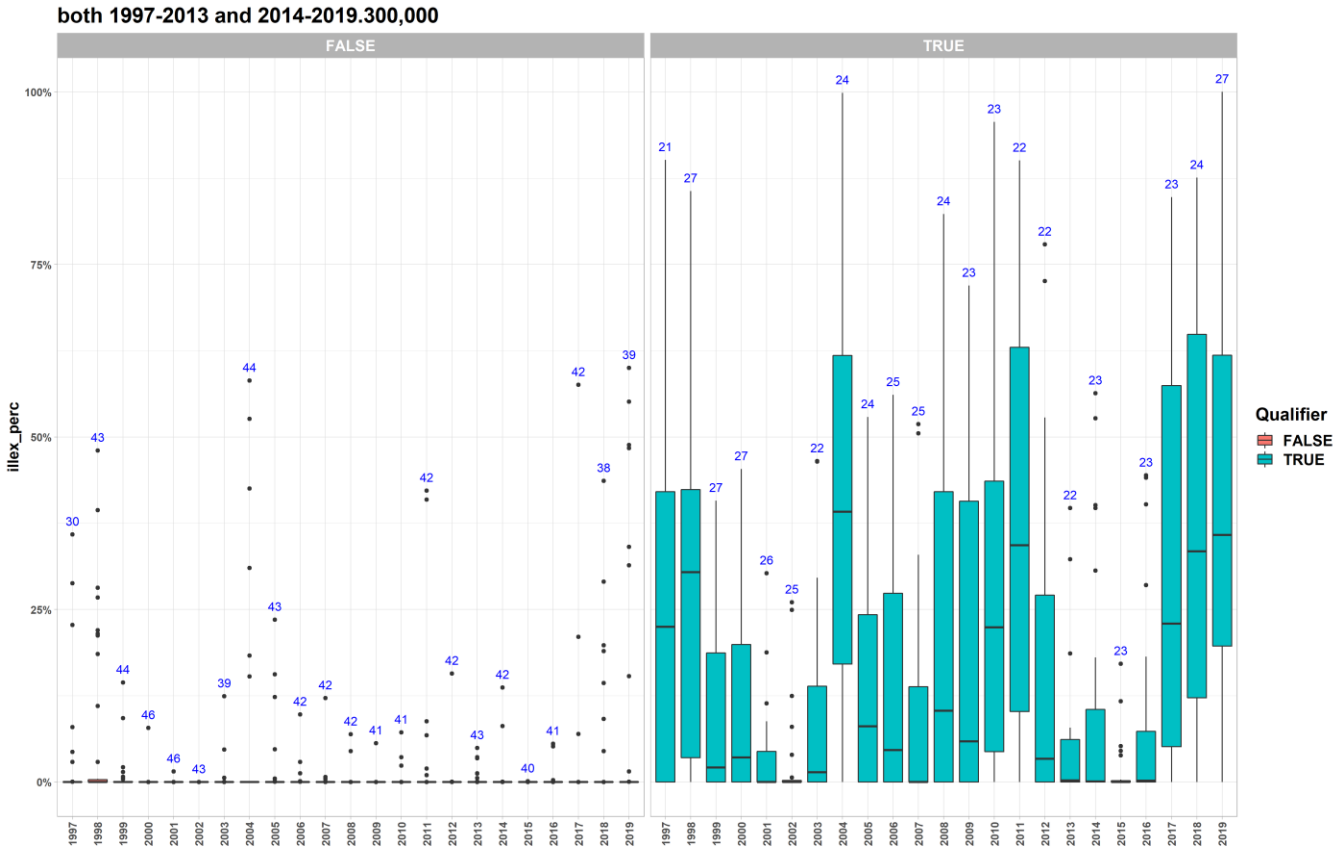
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A17. 1997-2013 plus 2014-2019/100K Option Dependencies



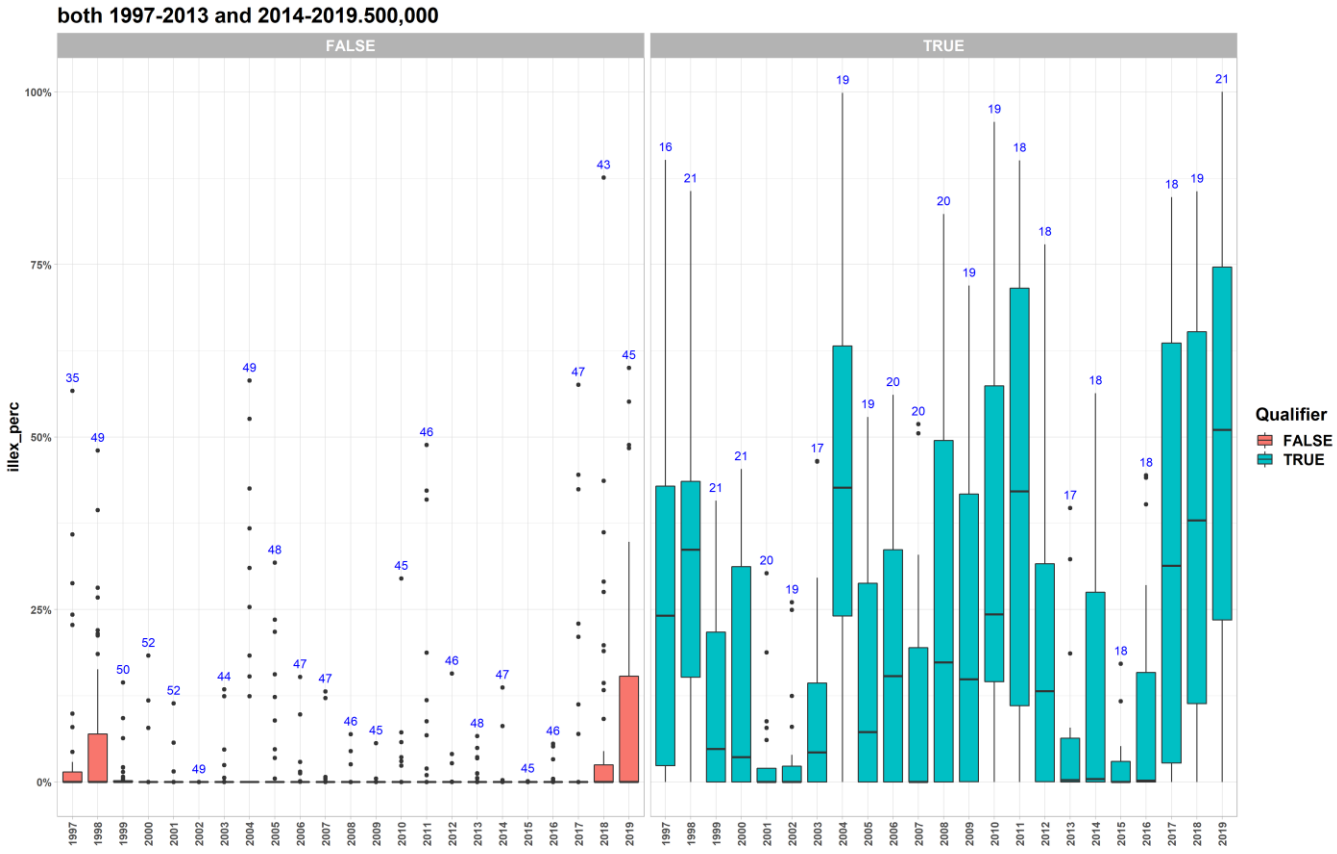
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A18. 1997-2013 plus 2014-2019/300K Option Dependencies



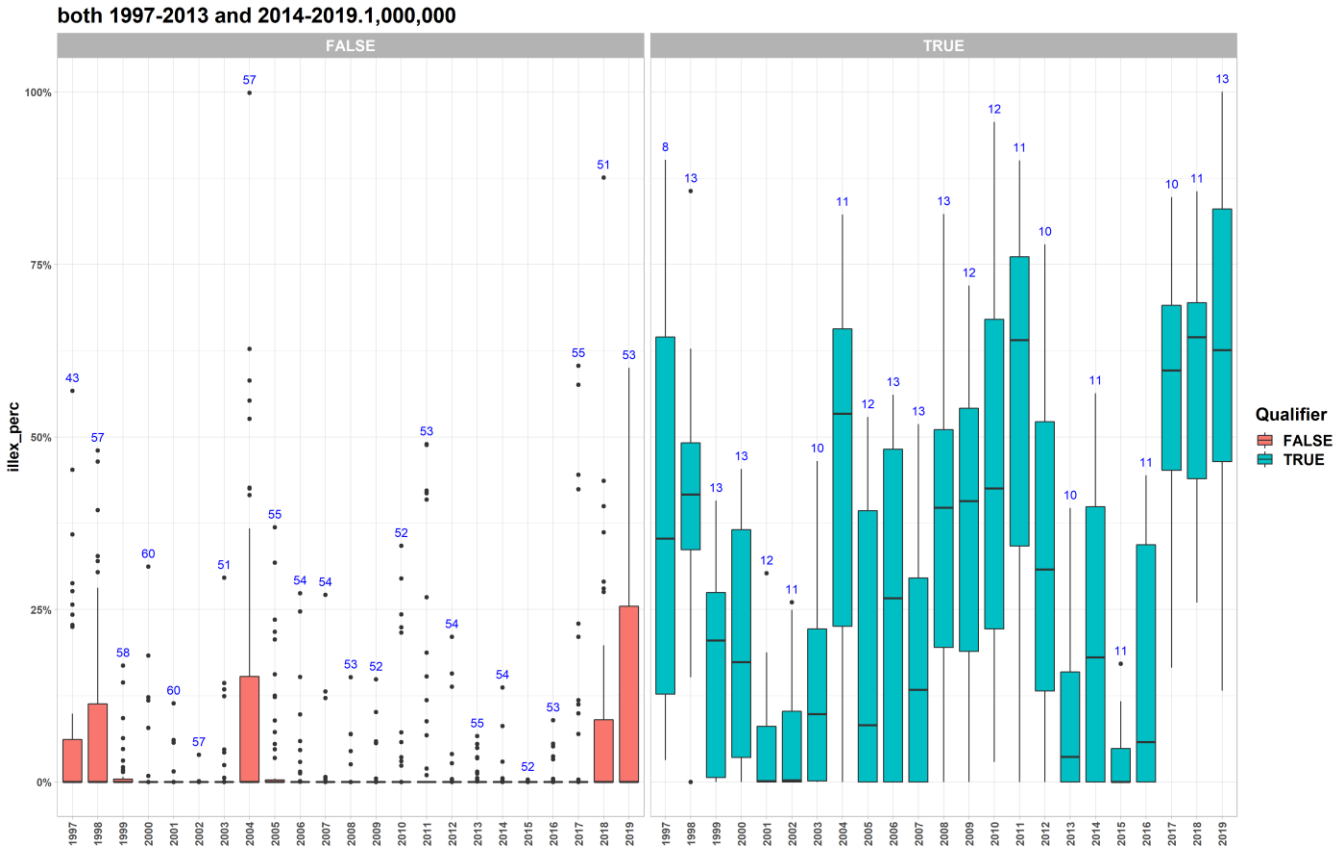
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure A19. 1997-2013 plus 2014-2019/500K Option Dependencies



Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

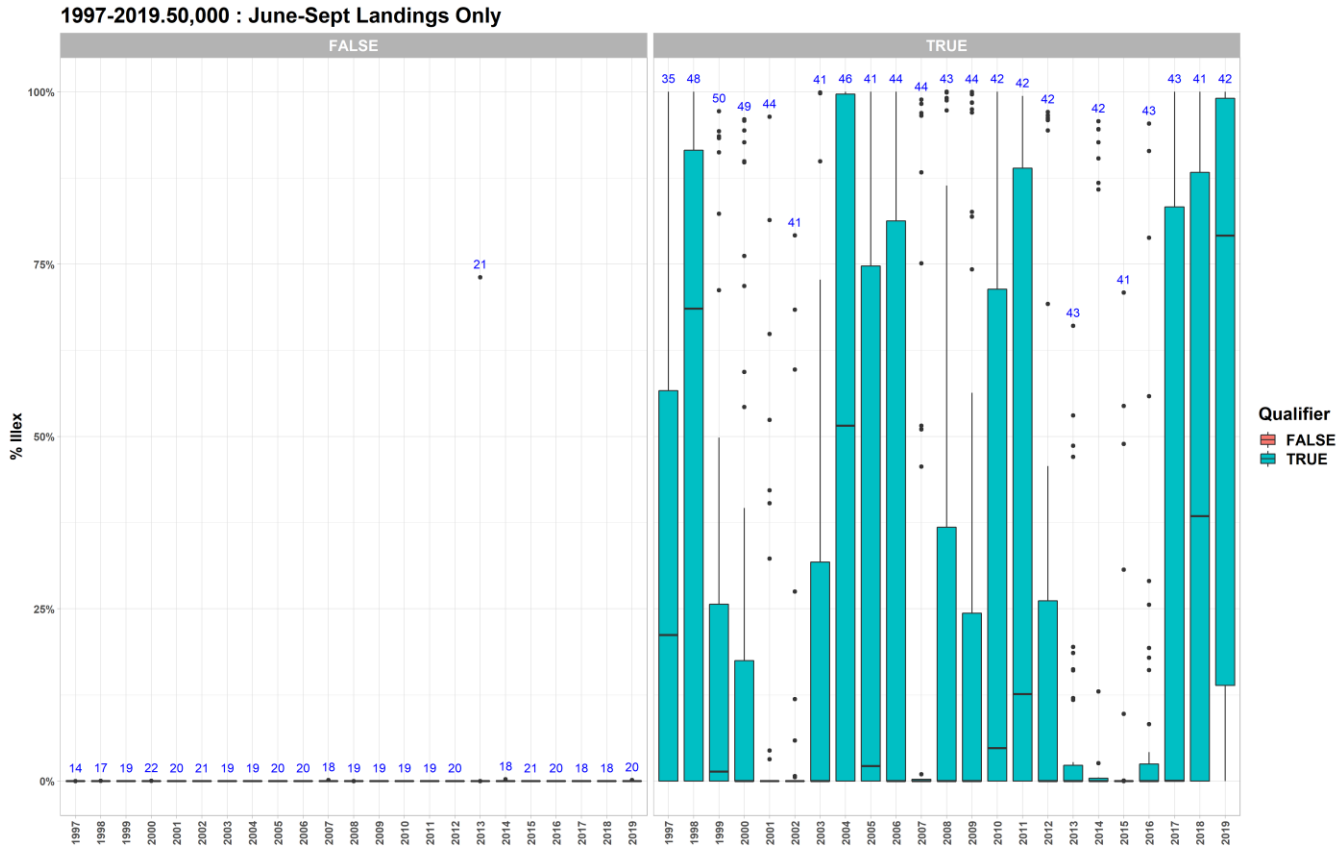
Figure A20. 1997-2013 plus 2014-2019/1,000,000 Option Dependencies



Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

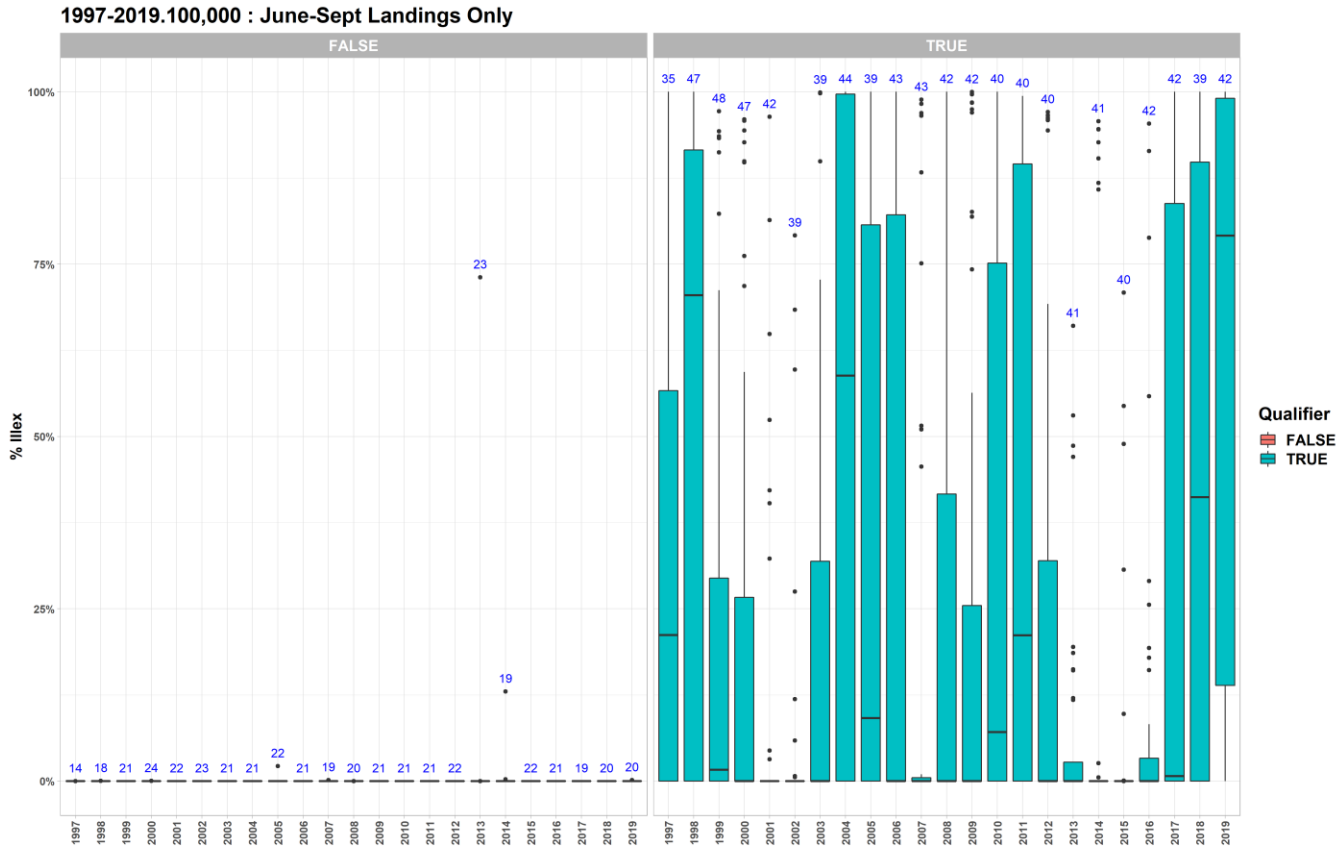
Appendix B. Boxplots of <u>Seasonal</u> (June 1-Sept 30) Dependence on *Illex* (Revenues) for Requalification Options

Figure B1. 1997-2019/50K Option Seasonal (June 1-Sept 30) Dependencies.



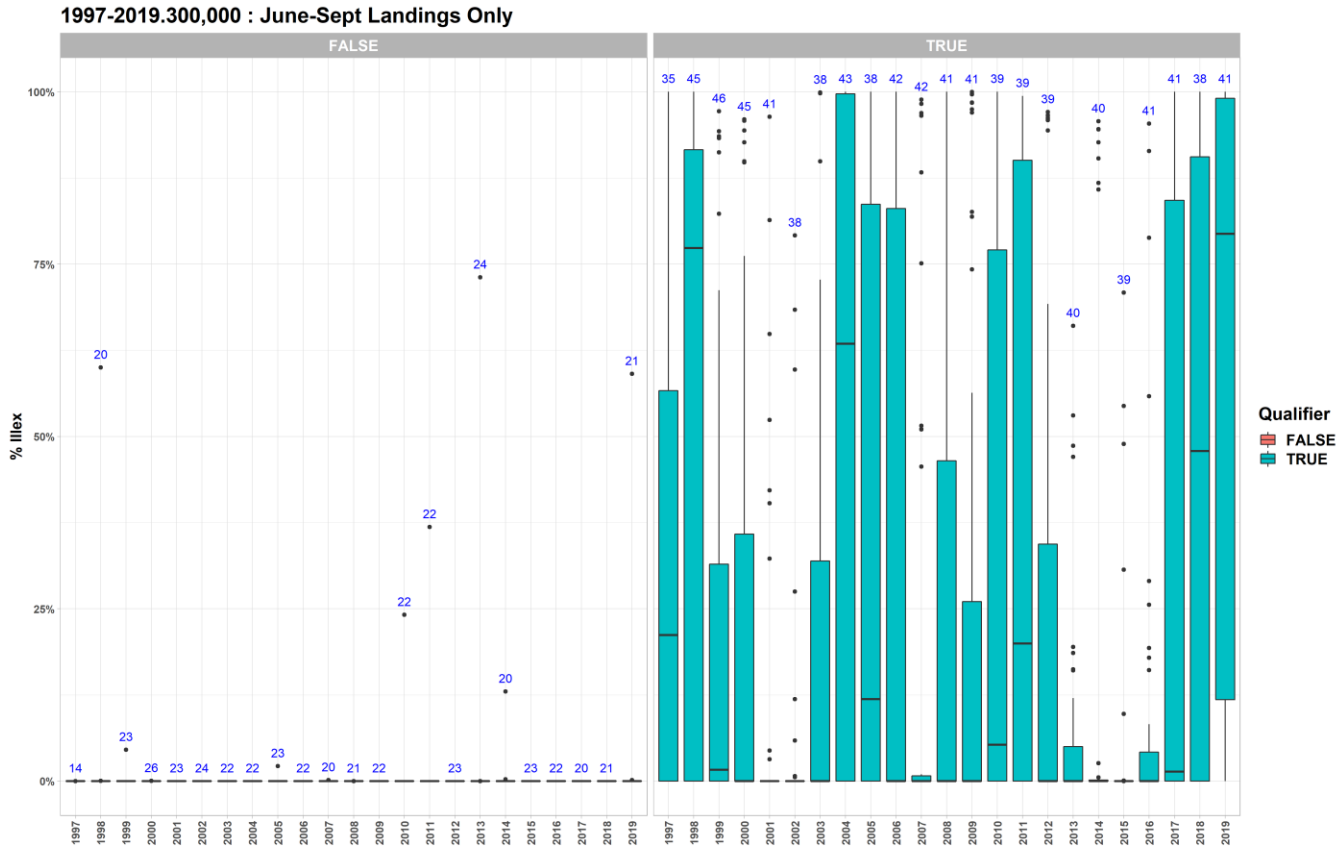
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B2. 1997-2019/100K Option Seasonal (June 1-Sept 30) Dependencies.



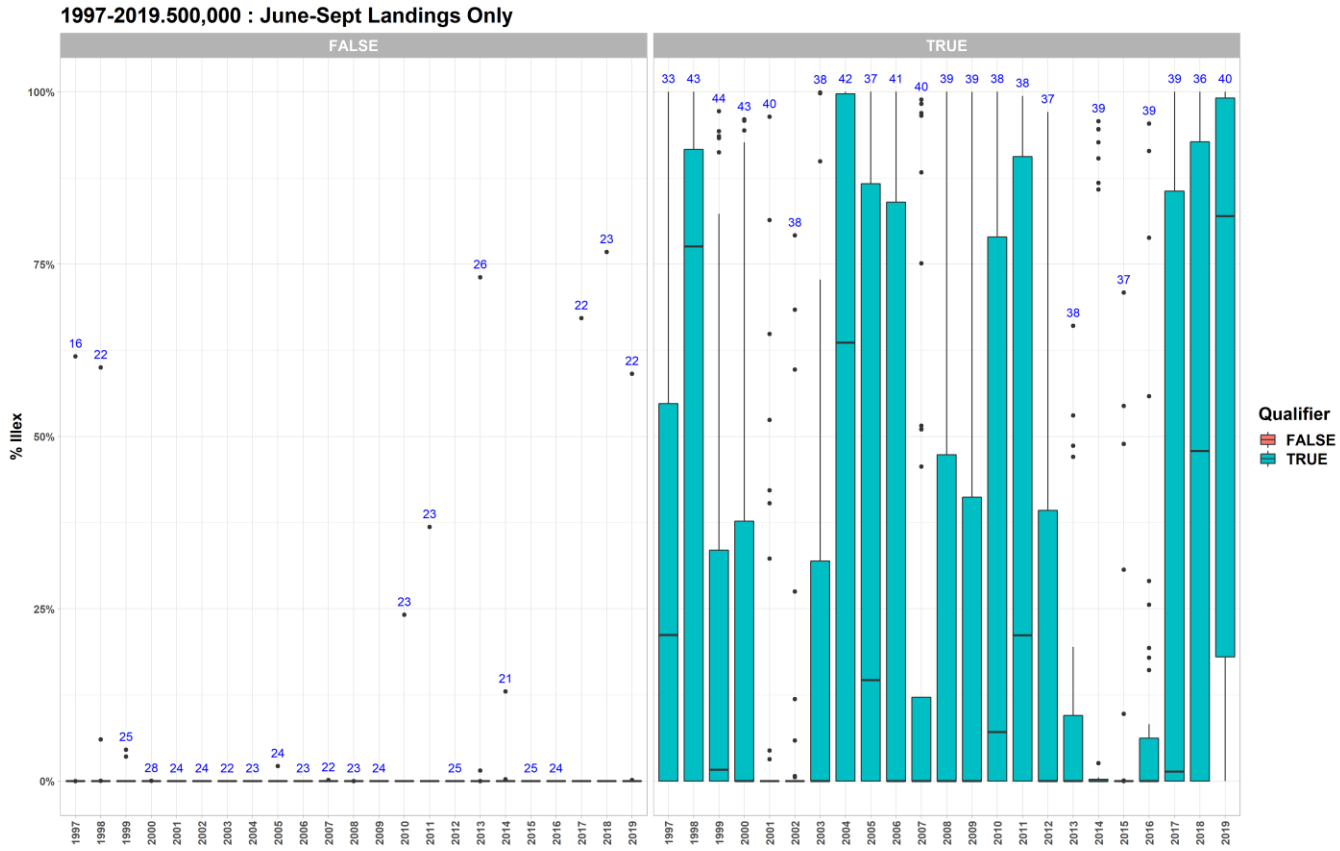
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B3. 1997-2019/300K Option Seasonal (June 1-Sept 30) Dependencies.



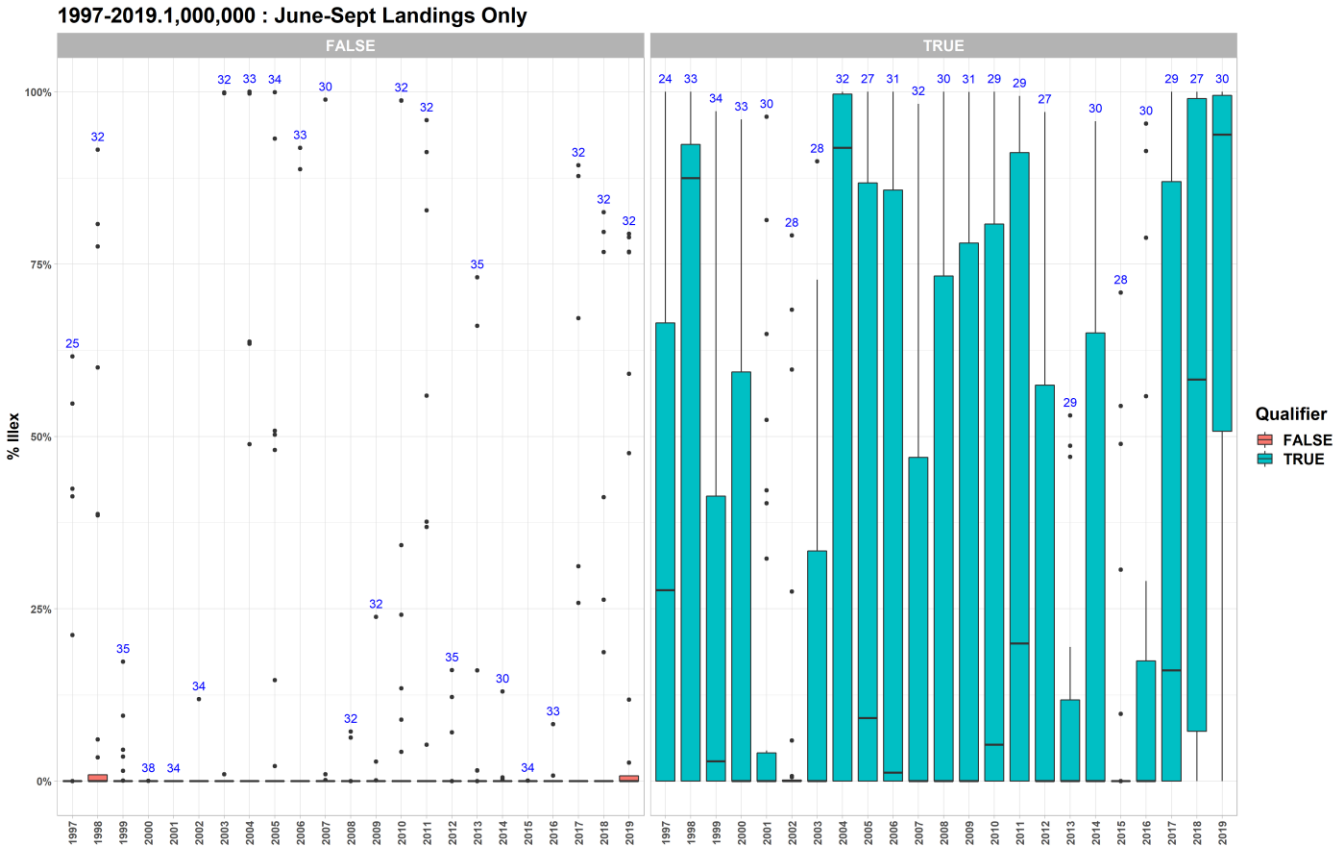
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B4. 1997-2019/500K Option Seasonal (June 1-Sept 30) Dependencies.



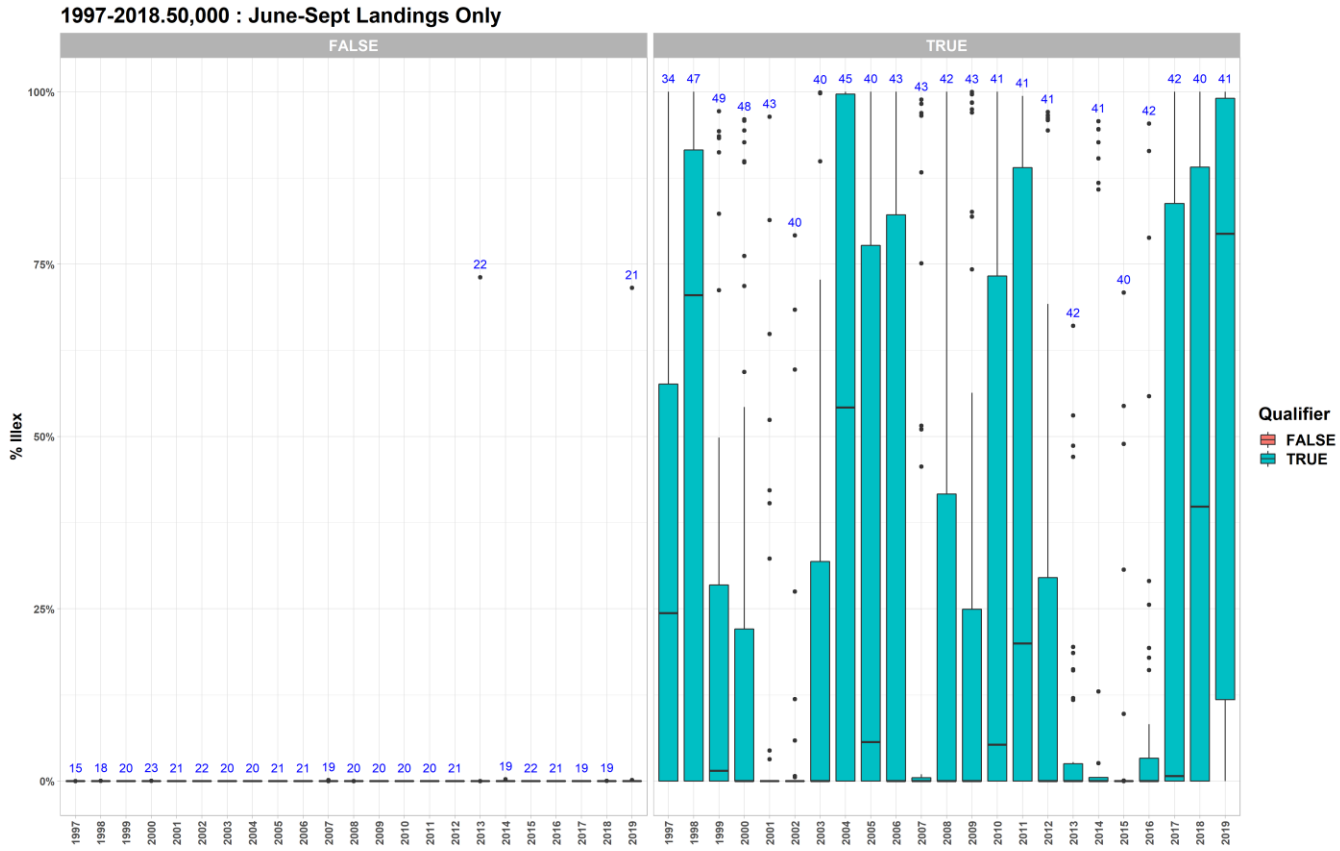
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B5. 1997-2019/1,000,000 Option Seasonal (June 1-Sept 30) Dependencies.



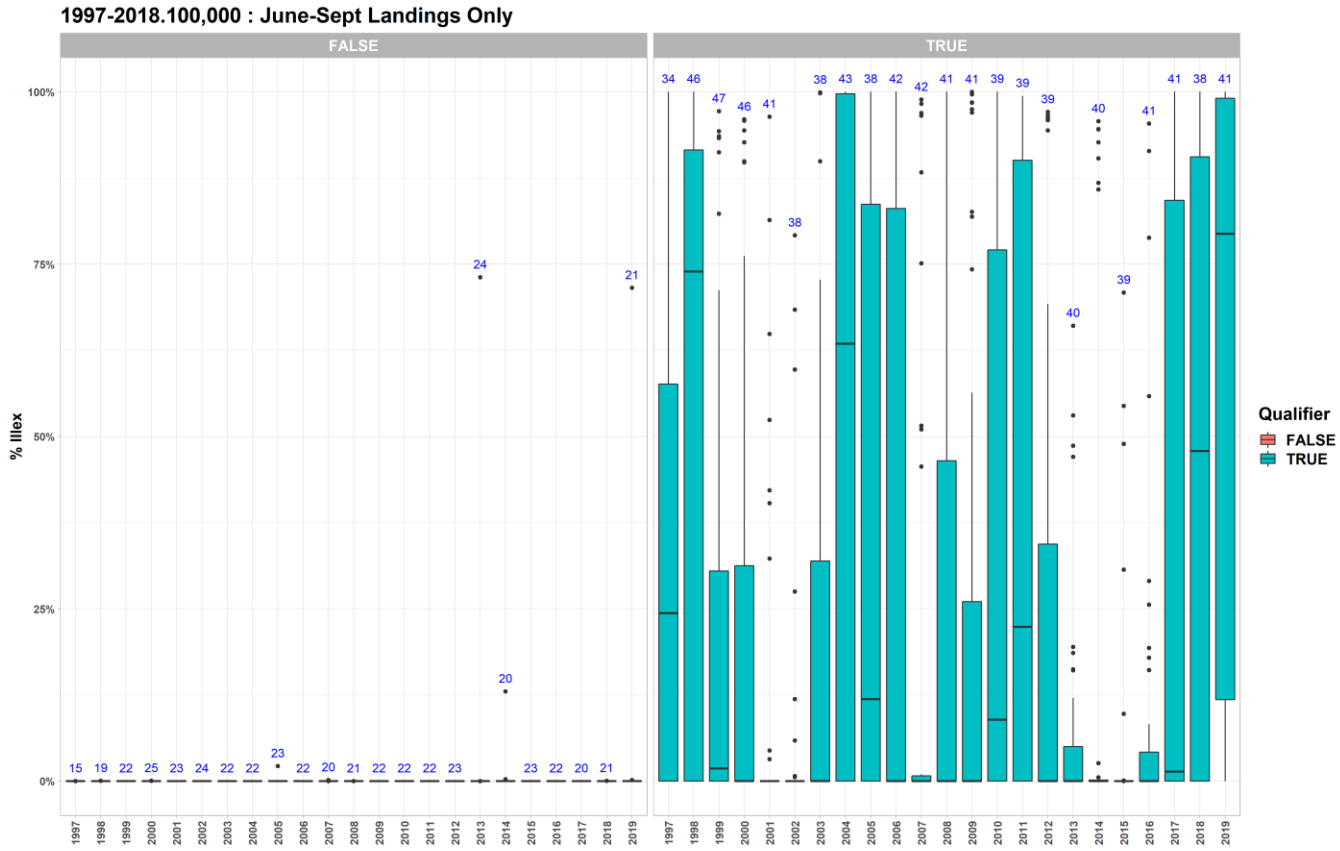
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B6. 1997-2018/50K Option Seasonal (June 1-Sept 30) Dependencies.



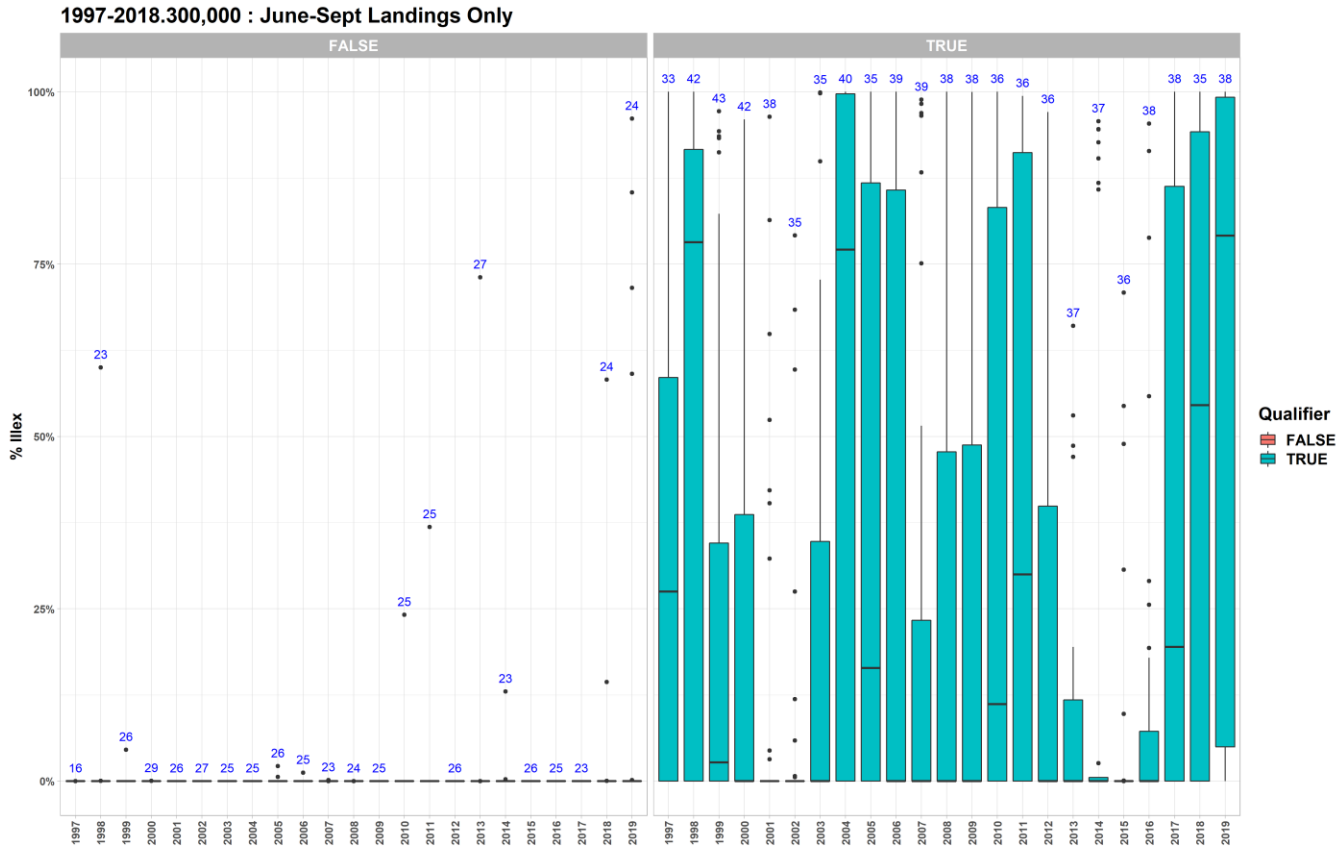
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B7. 1997-2018/100K Option Seasonal (June 1-Sept 30) Dependencies.



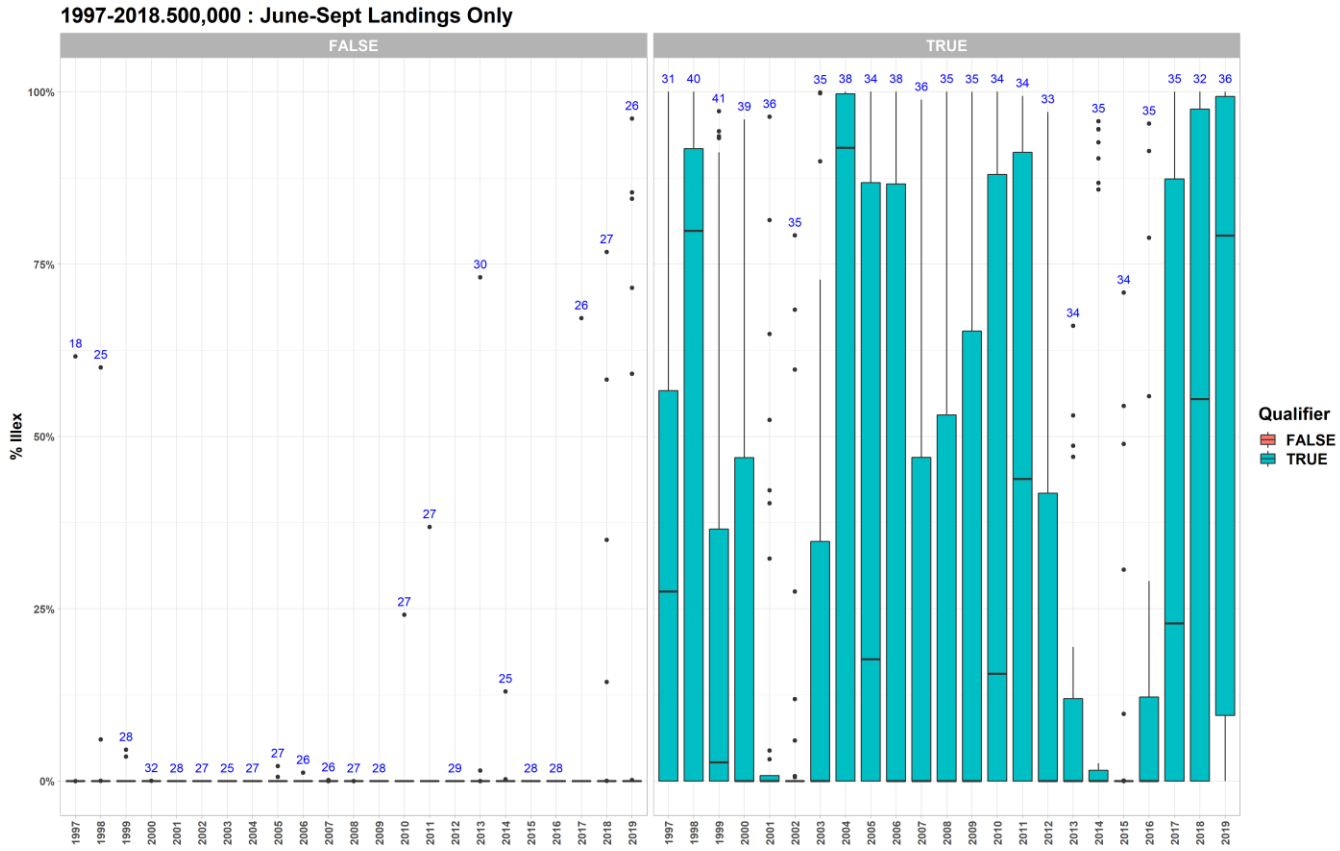
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B8. 1997-2018/300K Trip Option Seasonal (June 1-Sept 30) Dependencies.



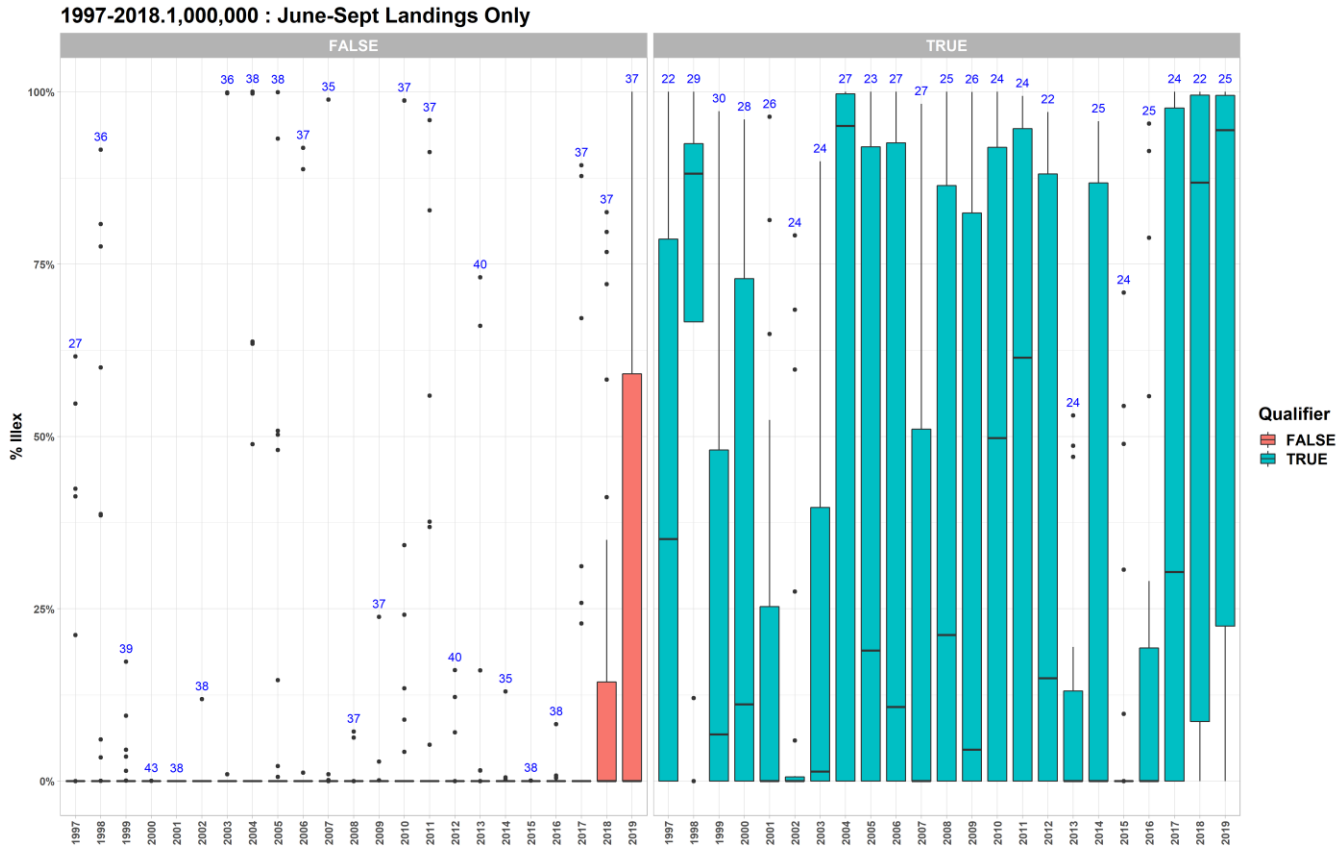
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B9. 1997-2018/500K Option Seasonal (June 1-Sept 30) Dependencies.



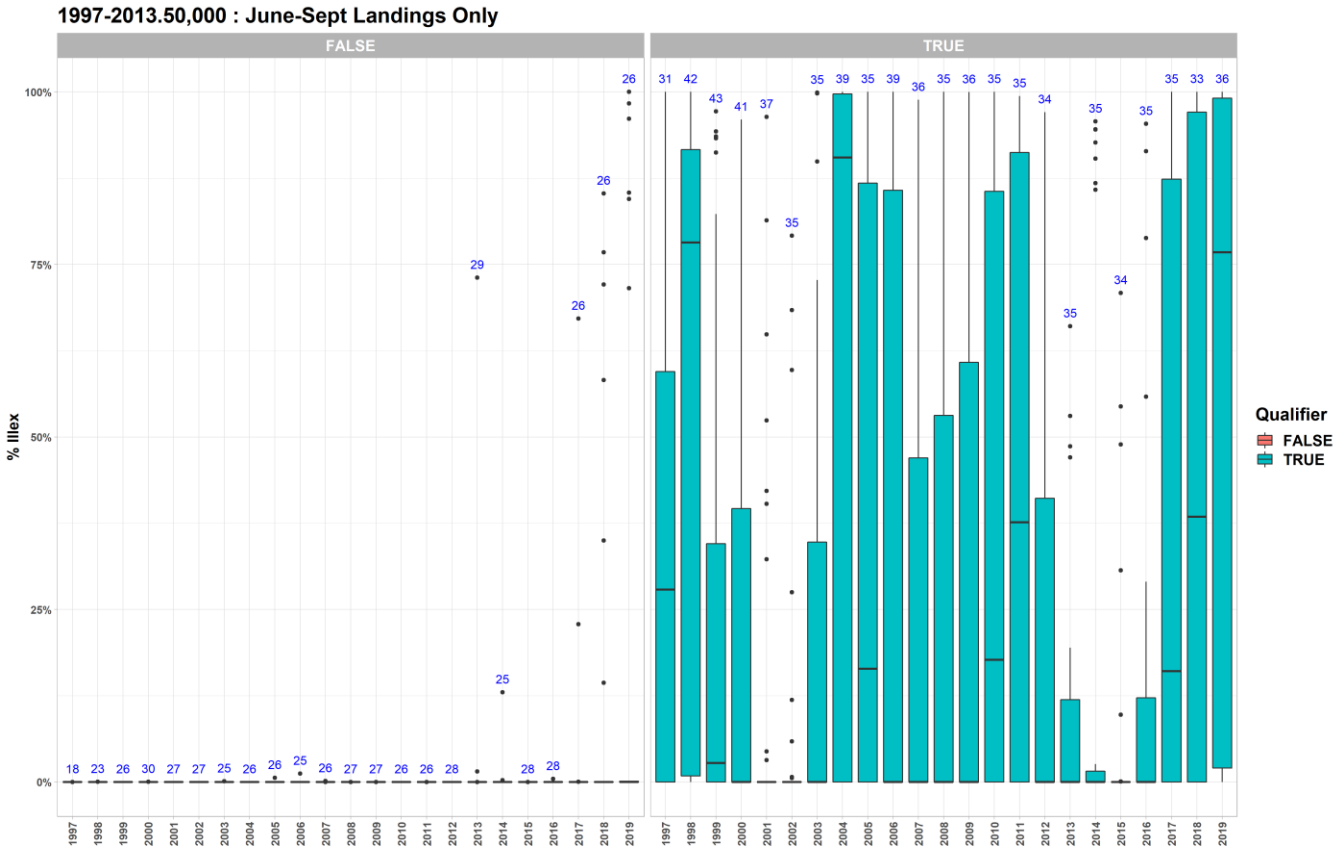
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B10. 1997-2018/1,000,000 Option Seasonal (June 1-Sept 30) Dependencies.



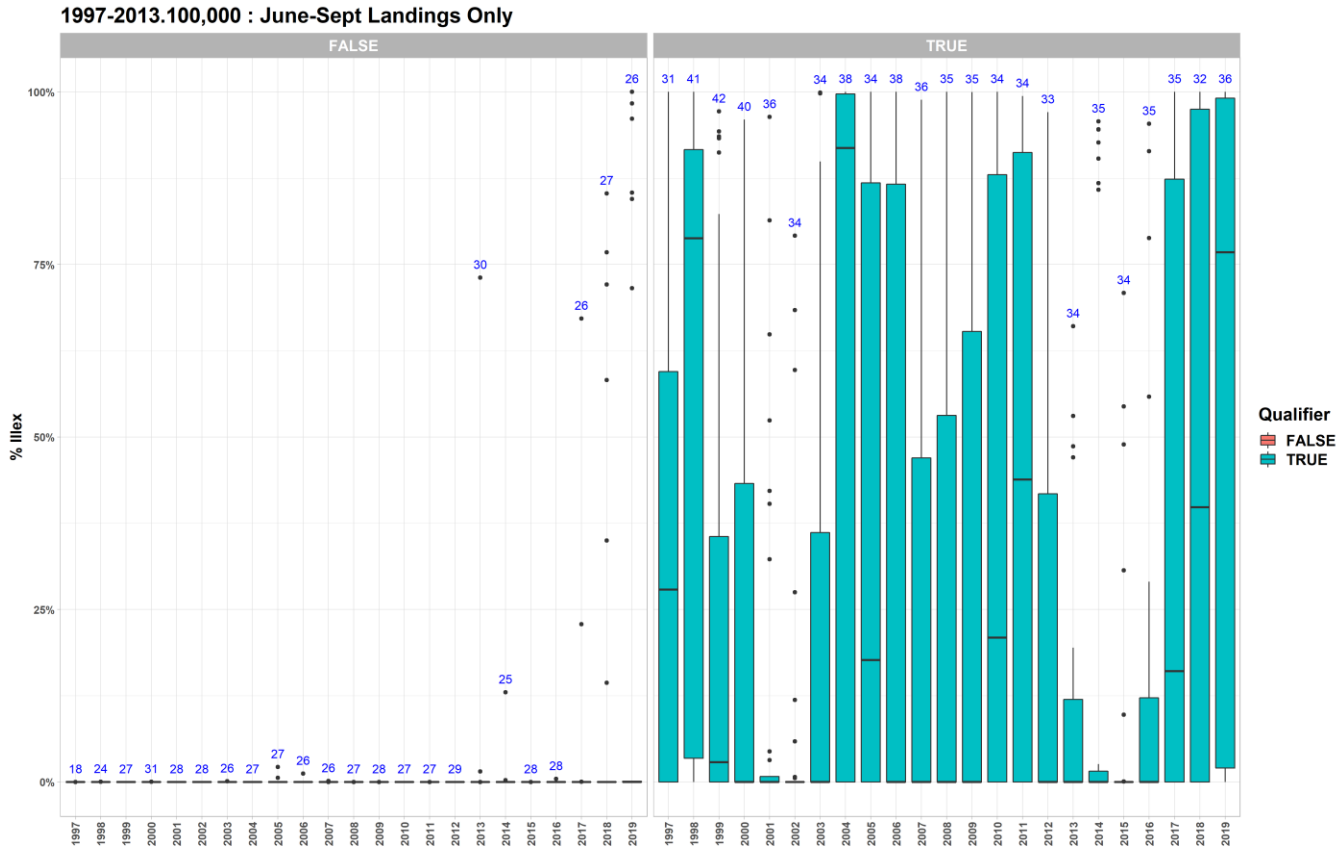
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B11. 1997-2013/50K Option Seasonal (June 1-Sept 30) Dependencies.



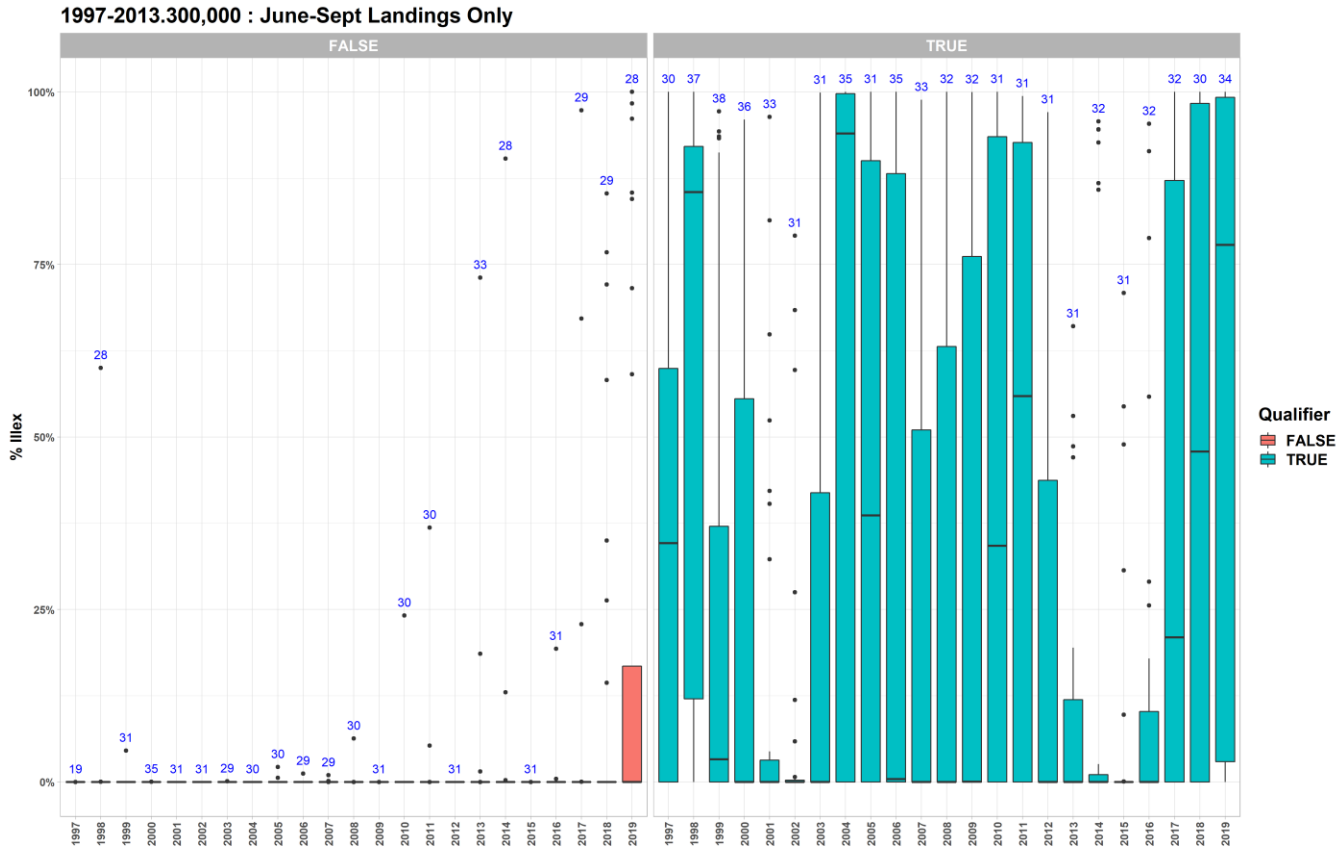
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B12. 1997-2013/100K Option Seasonal (June 1-Sept 30) Dependencies.



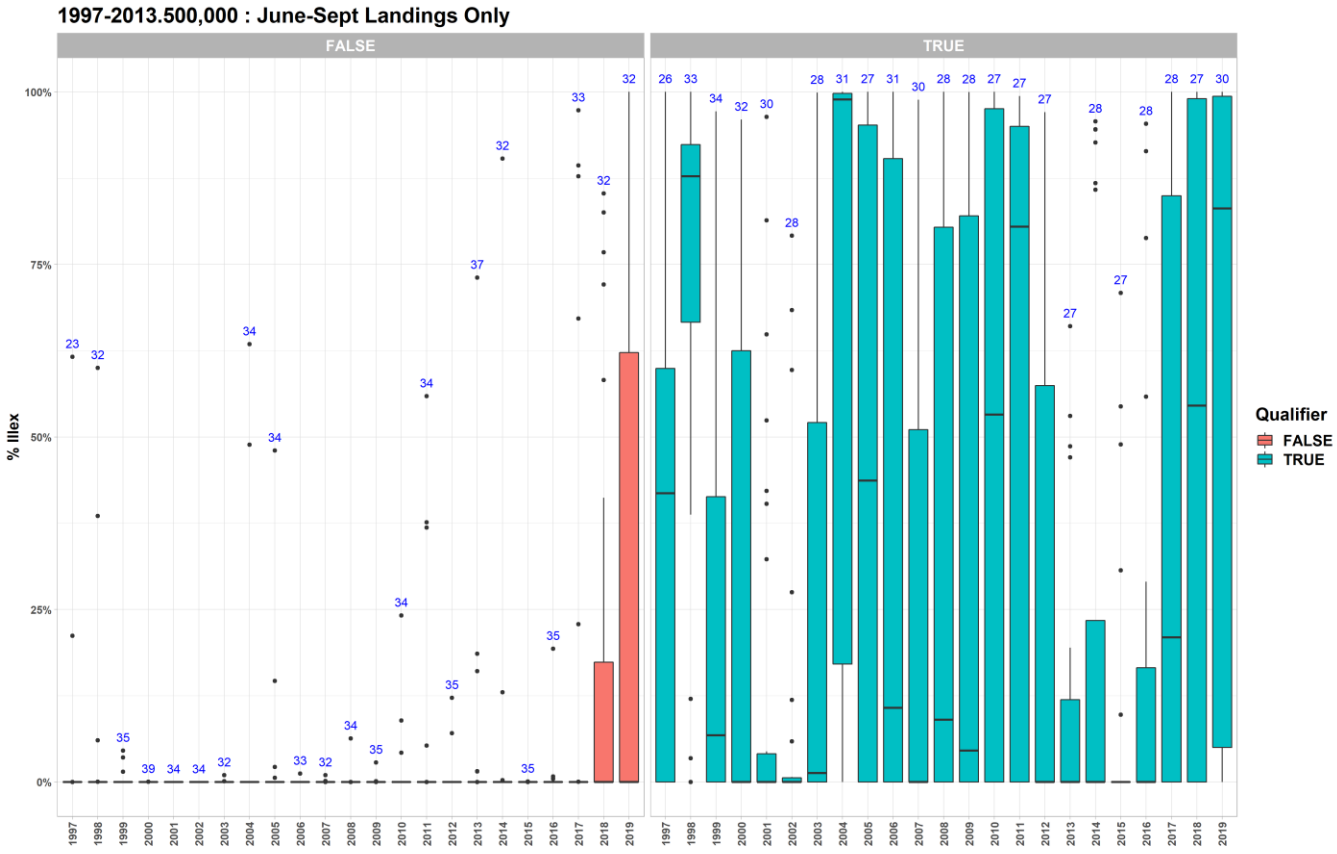
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B13. 1997-2013/300K Option Seasonal (June 1-Sept 30) Dependencies.



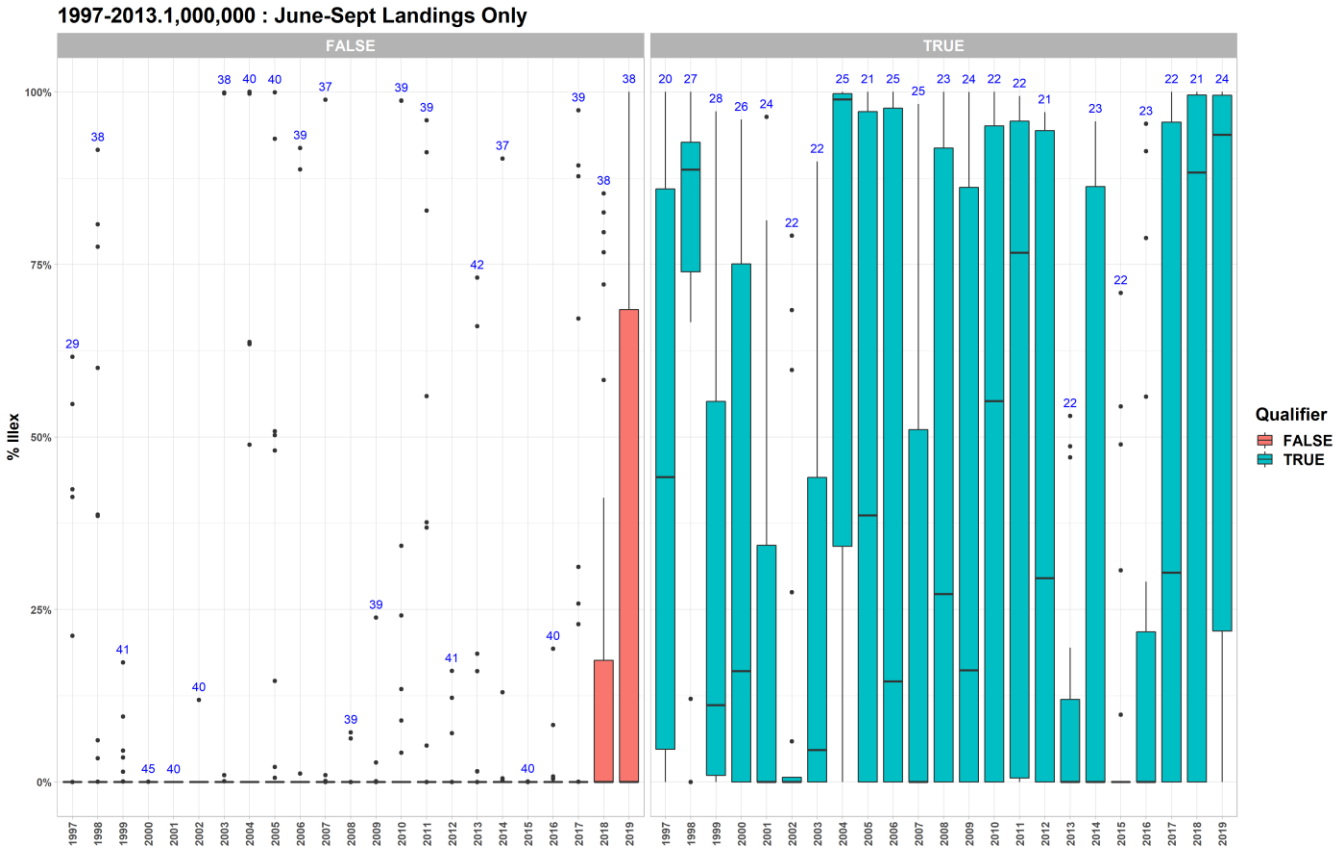
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B14. 1997-2013/500K Option Seasonal (June 1-Sept 30) Dependencies.



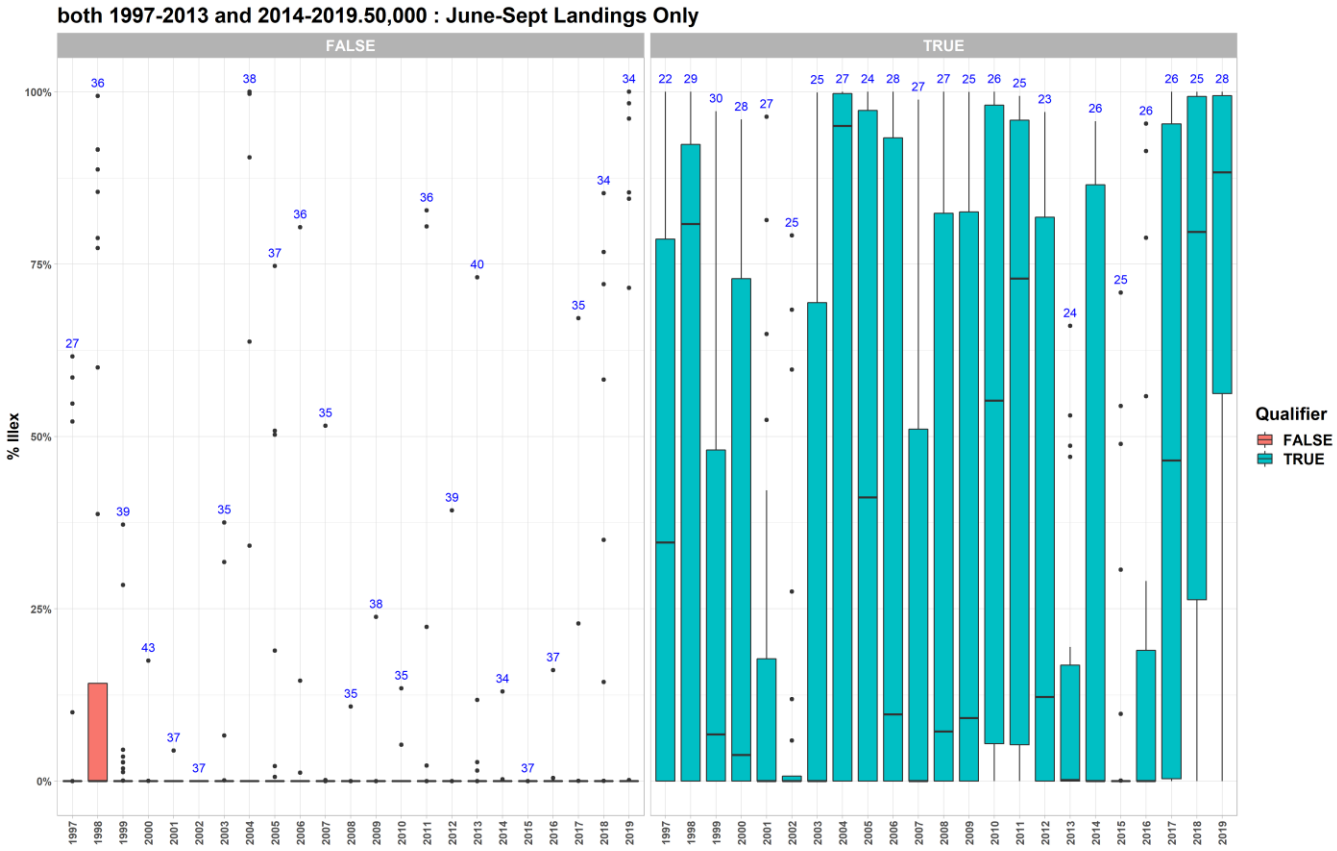
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B15. 1997-2013/1,000,000 Option Seasonal (June 1-Sept 30) Dependencies.



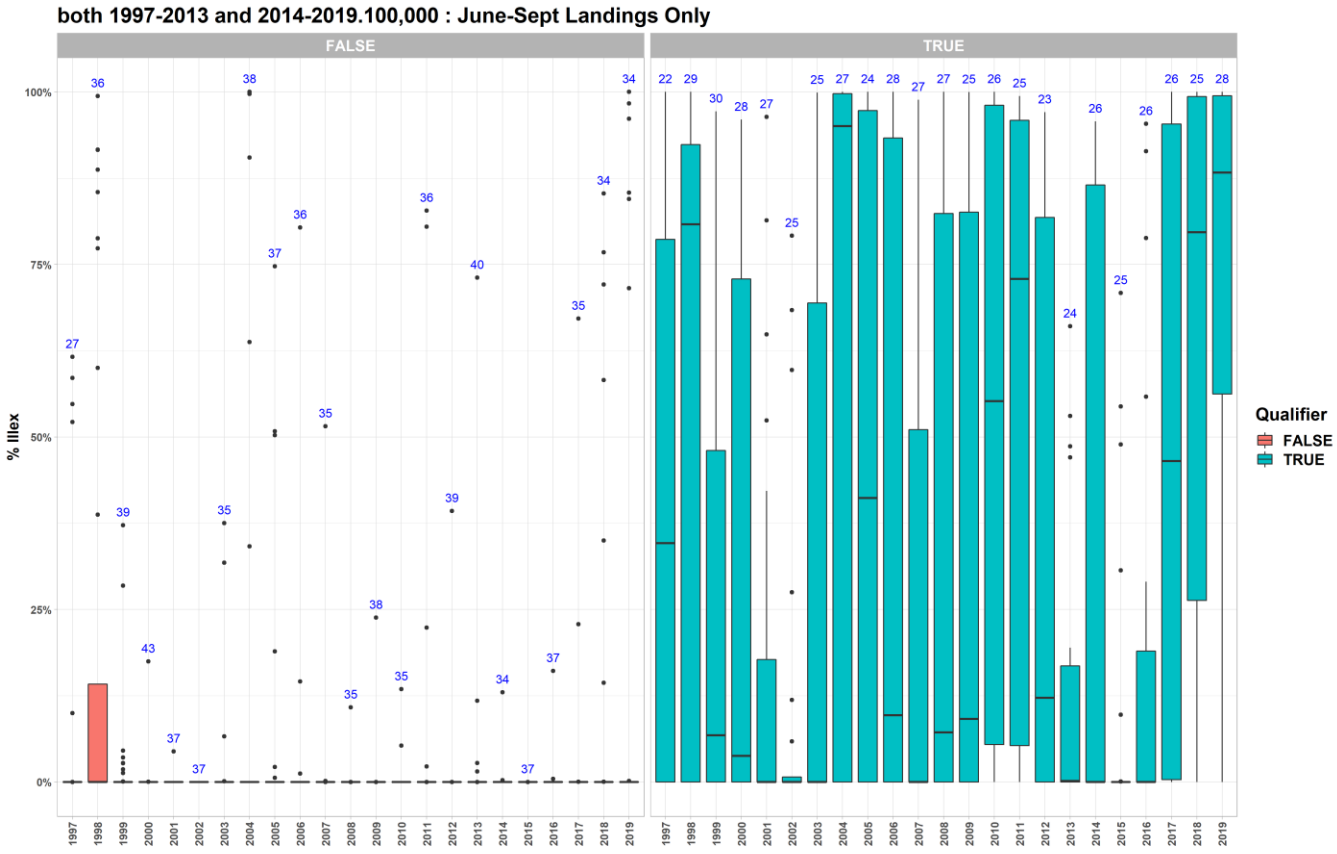
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B16. 1997-2013 plus 2014-2019/50K Option Seasonal (June 1-Sept 30) Dependencies



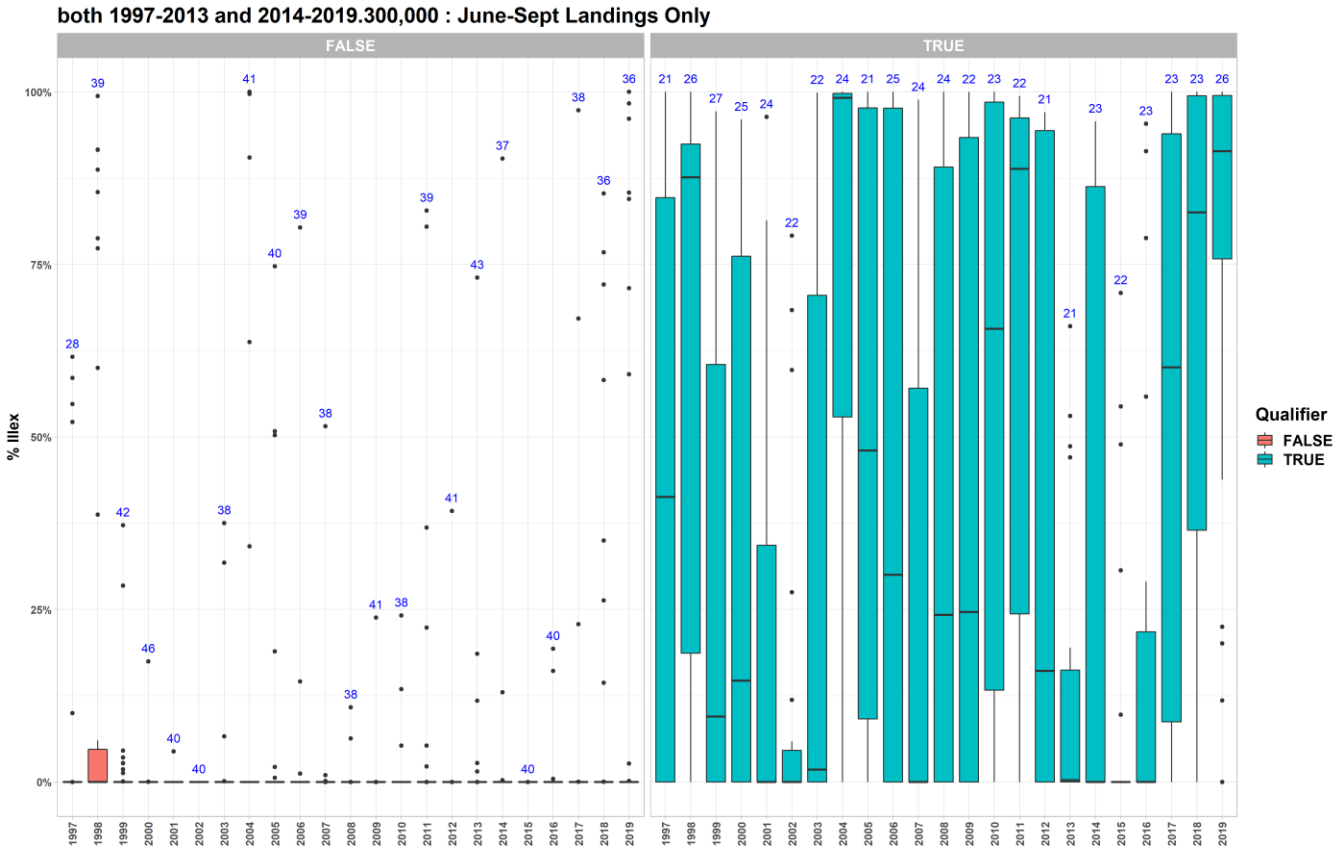
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B17. 1997-2013 plus 2014-2019/100K Option Seasonal (June 1-Sept 30) Dependencies



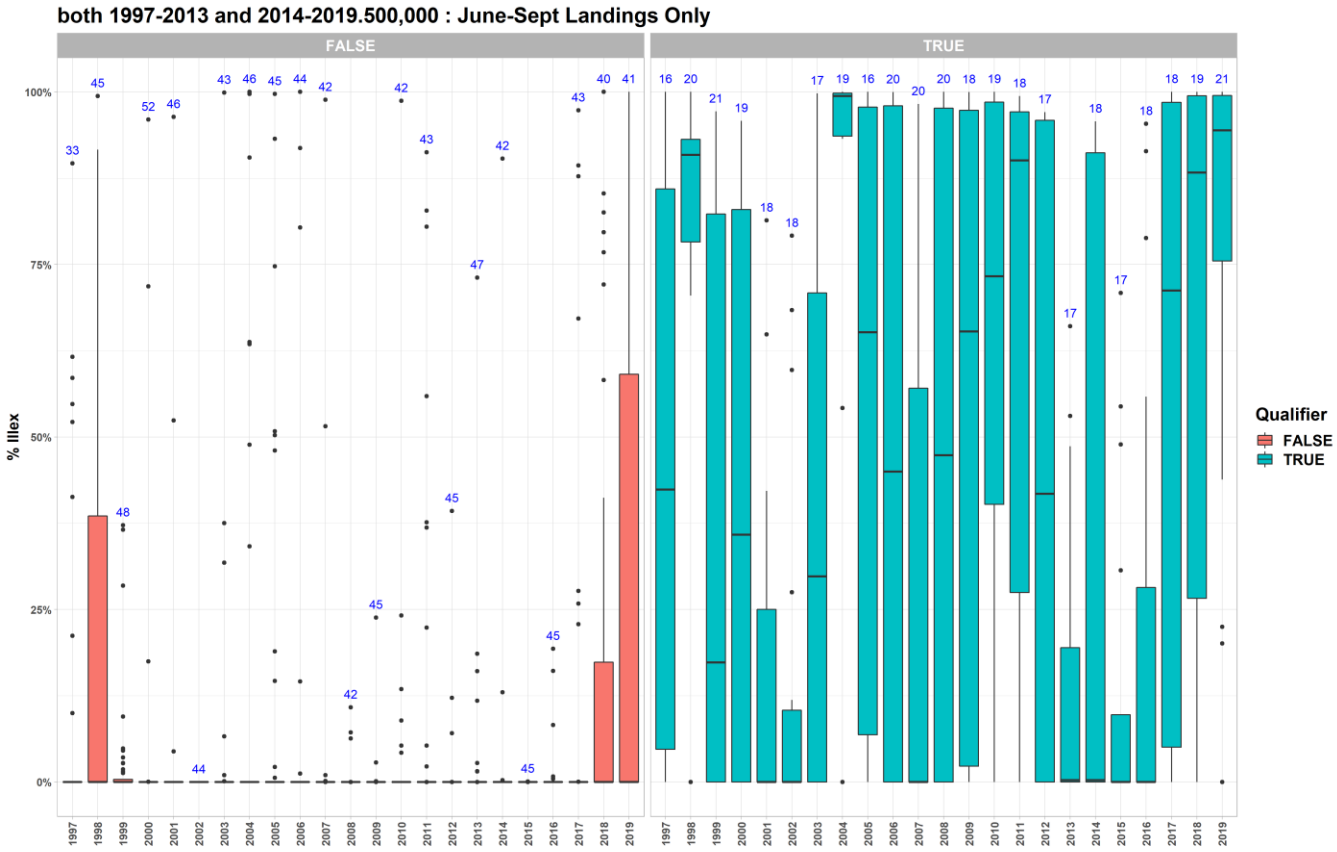
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B18. 1997-2013 plus 2014-2019/300K Option Seasonal (June 1-Sept 30) Dependencies



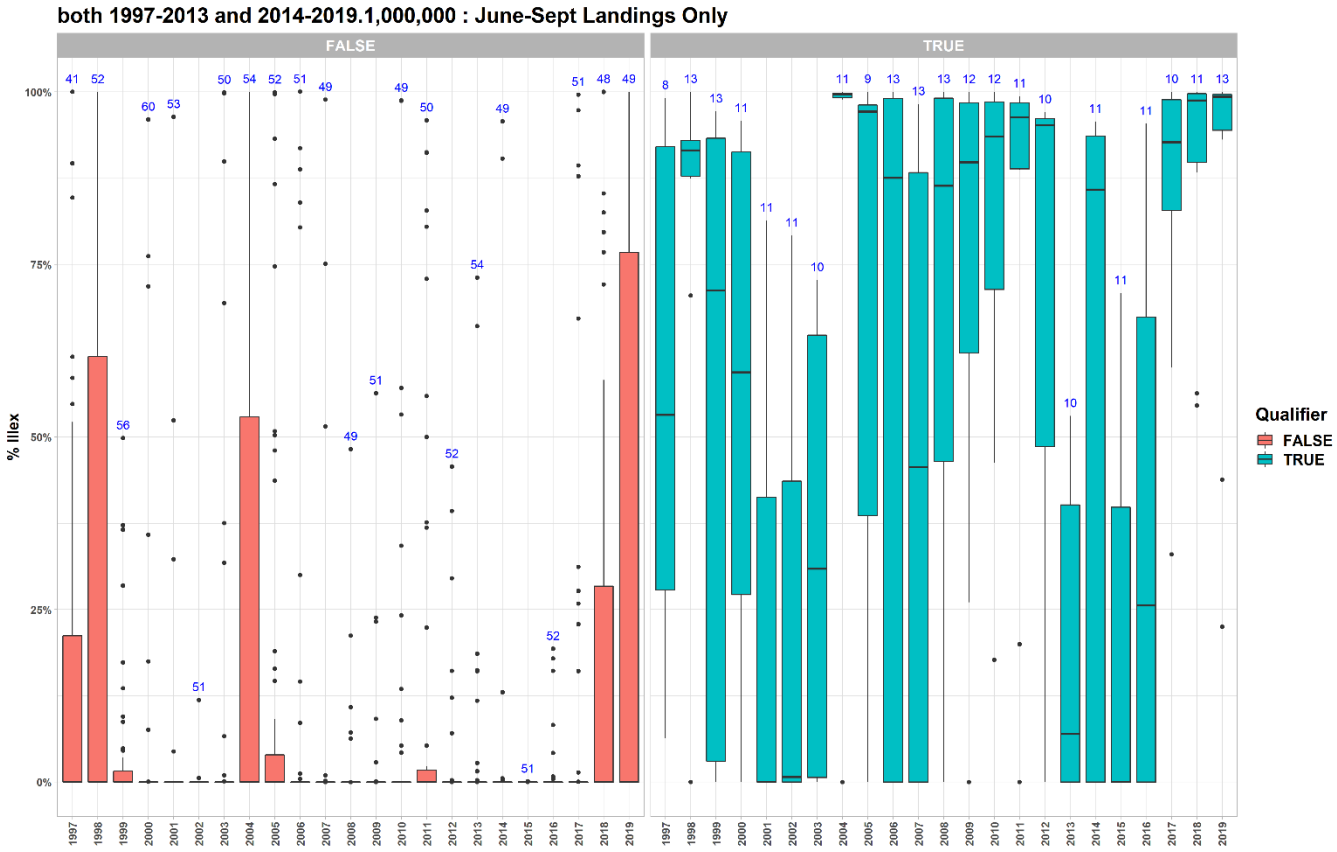
Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

Figure B19. 1997-2013 plus 2014-2019/500K Option Seasonal (June 1-Sept 30) Dependencies



Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

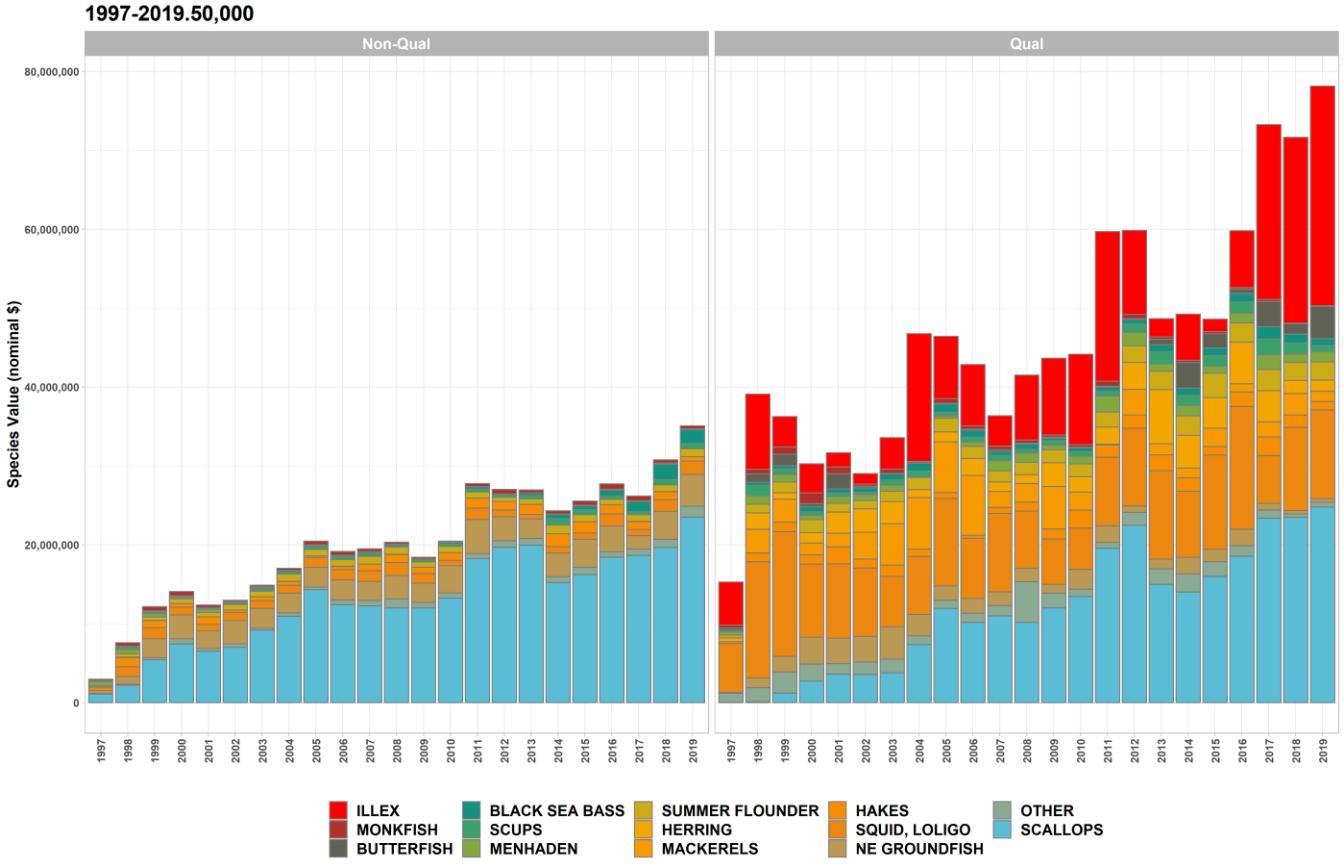
Figure B20. 1997-2013 plus 2014-2019/1,000,000 Option Seasonal (June 1-Sept 30) Dependencies



Bar is the interquartile (middle) range (IQR); black line is the median; vertical lines extend to observations near 1.5 * IQR; outliers are dots. “False” = Non-Requalifiers (on left); “True” = Requalifiers (on right)

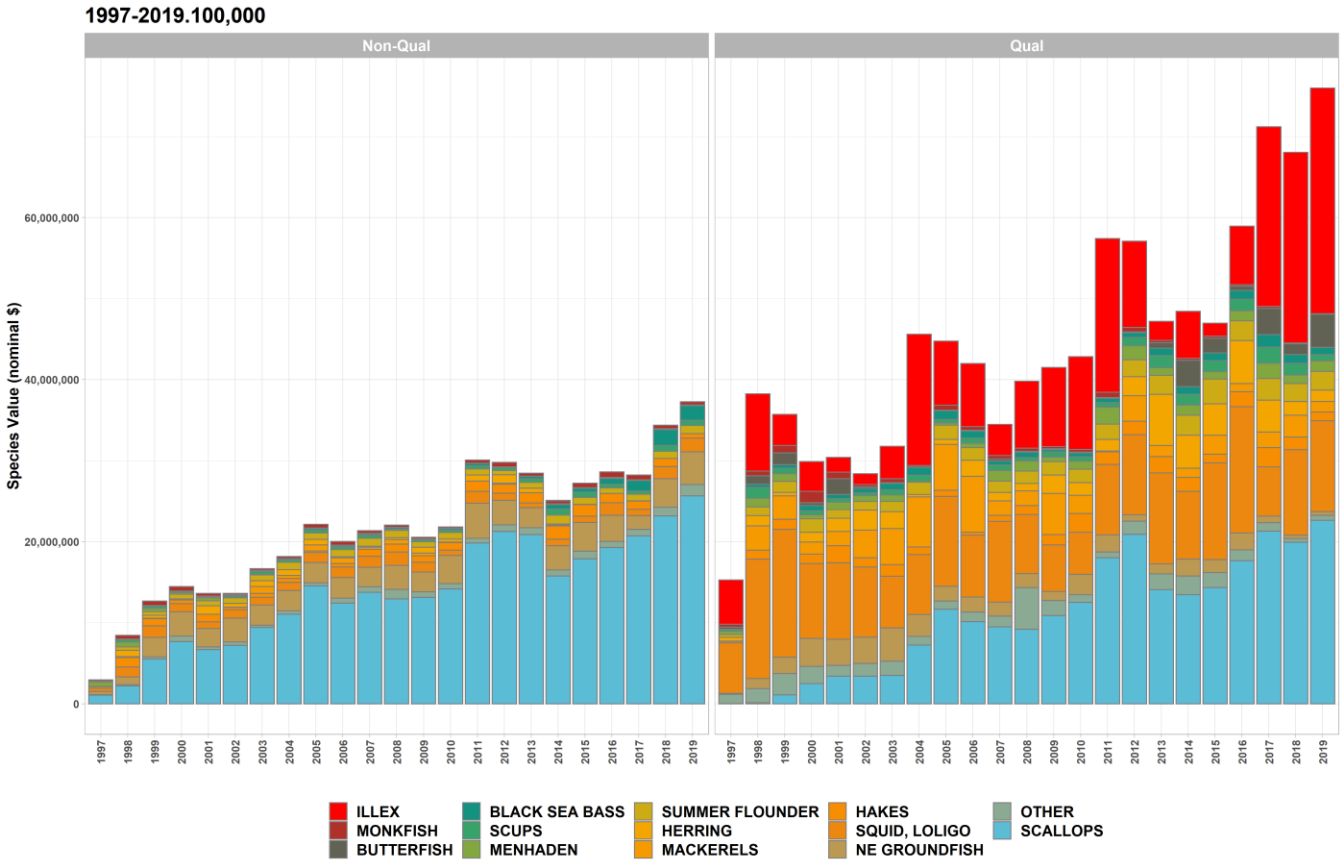
Appendix C. Barcharts of Revenue Sources for Non-Requalifiers and Requalifiers

Figure C1. 1997-2019/50K Option Revenues.



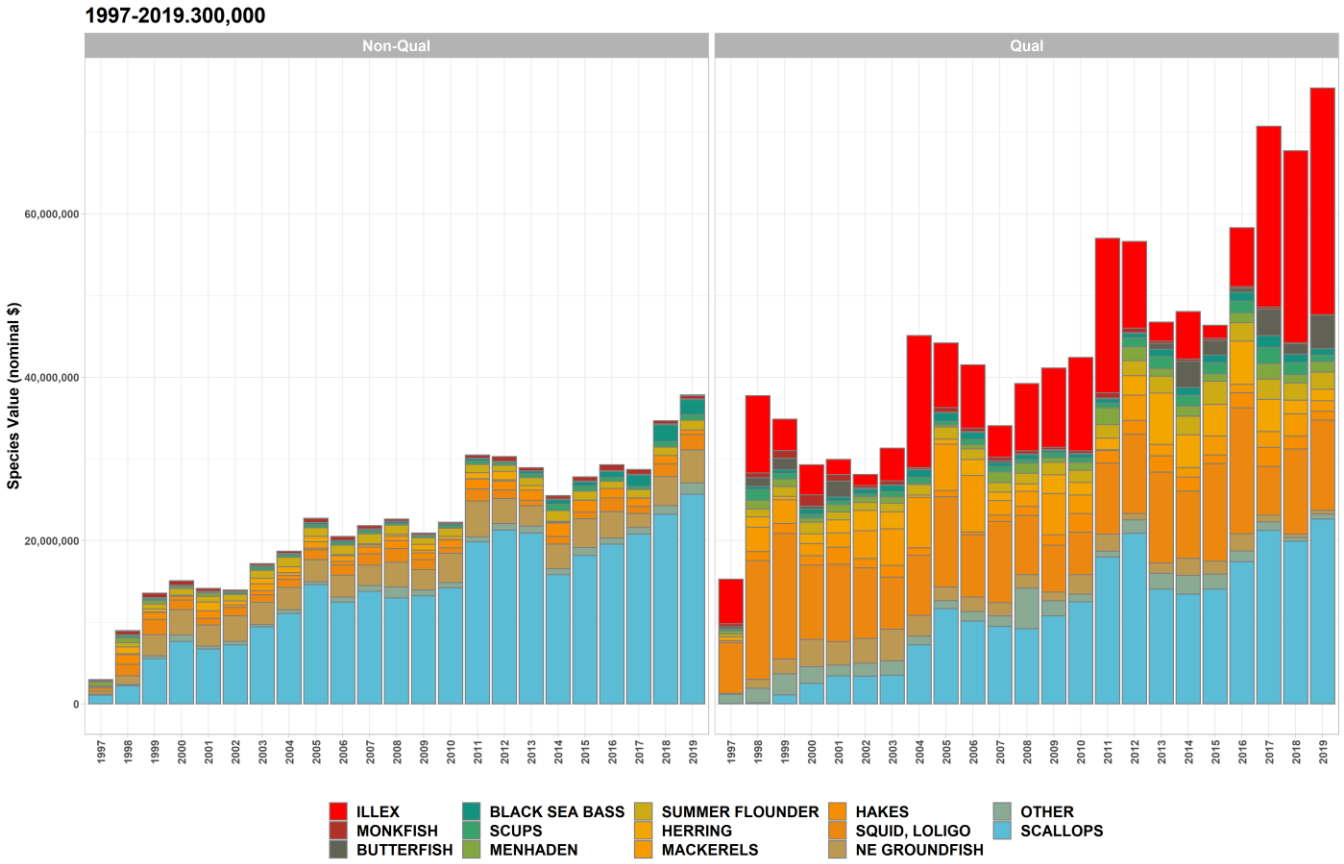
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C2. 1997-2019/100K Option Revenues.



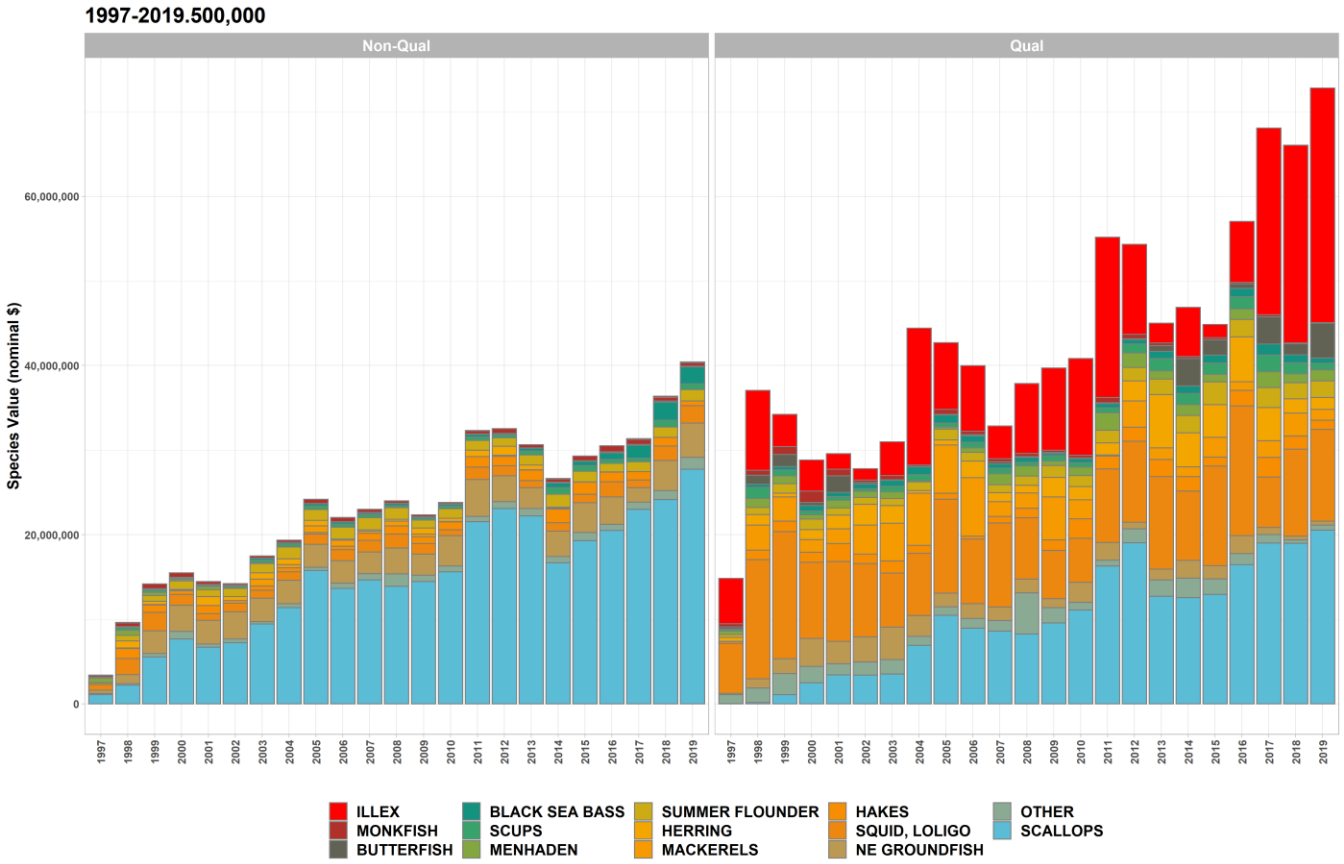
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C3. 1997-2019/300K Option Revenues.



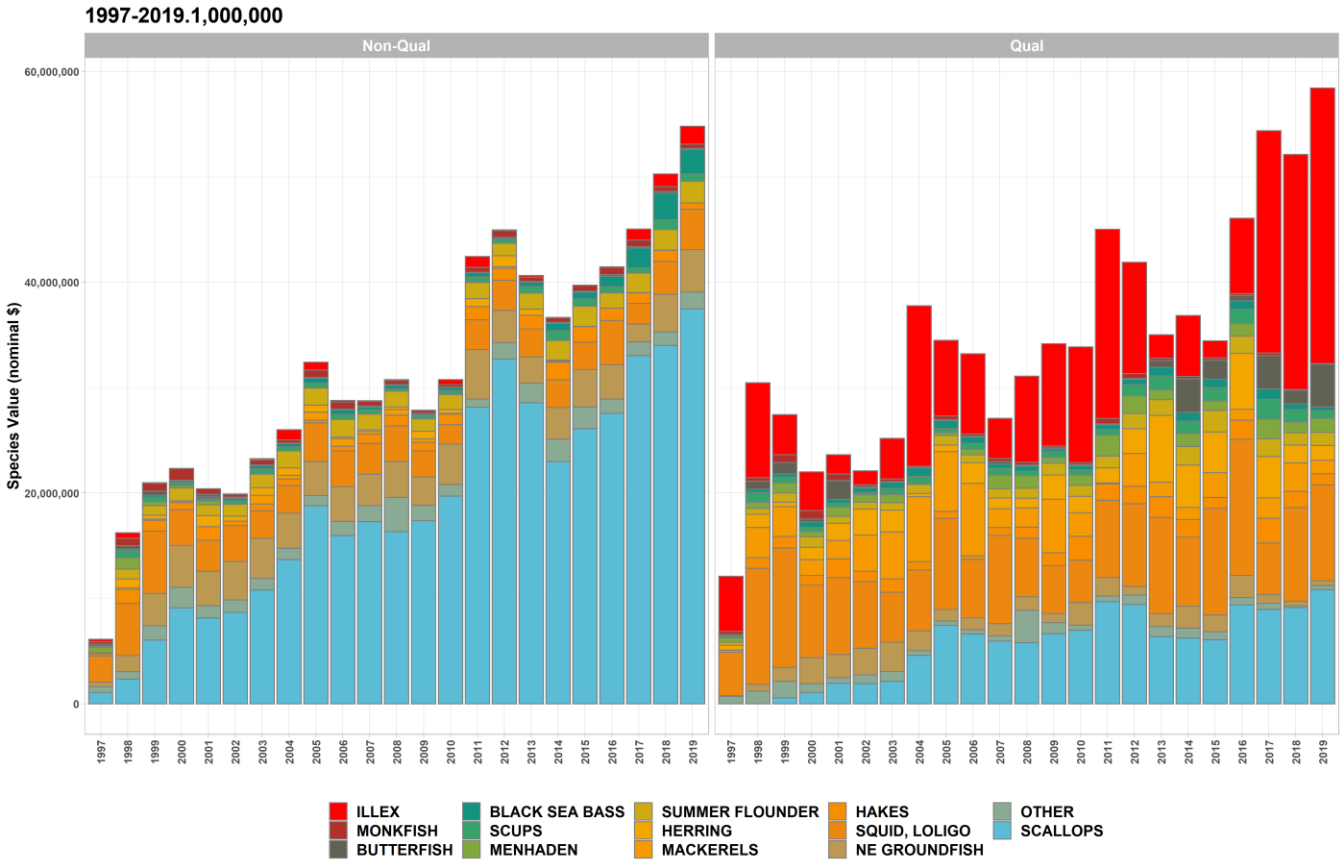
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C4. 1997-2019/500K Option Revenues.



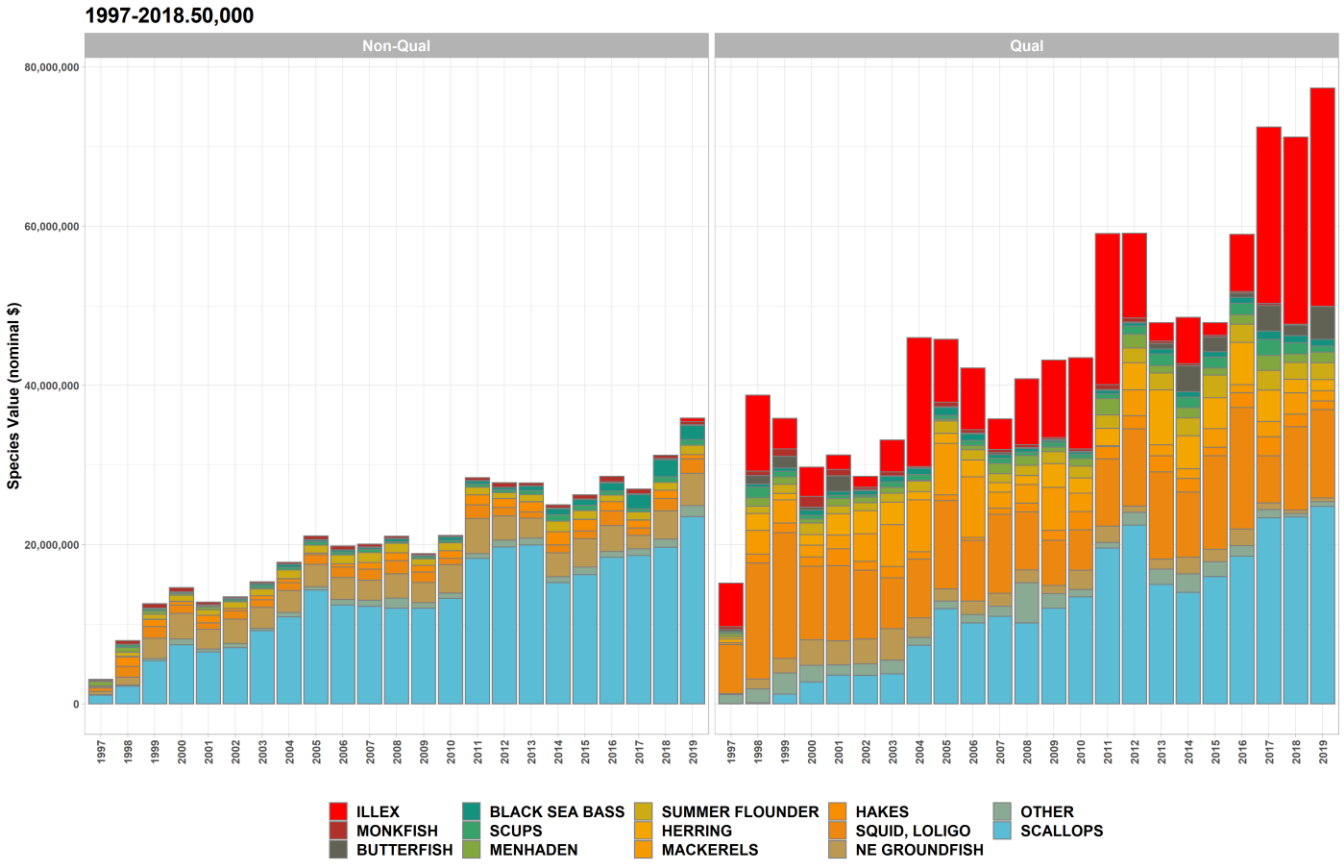
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C5. 1997-2019/1,000,000 Option Revenues.



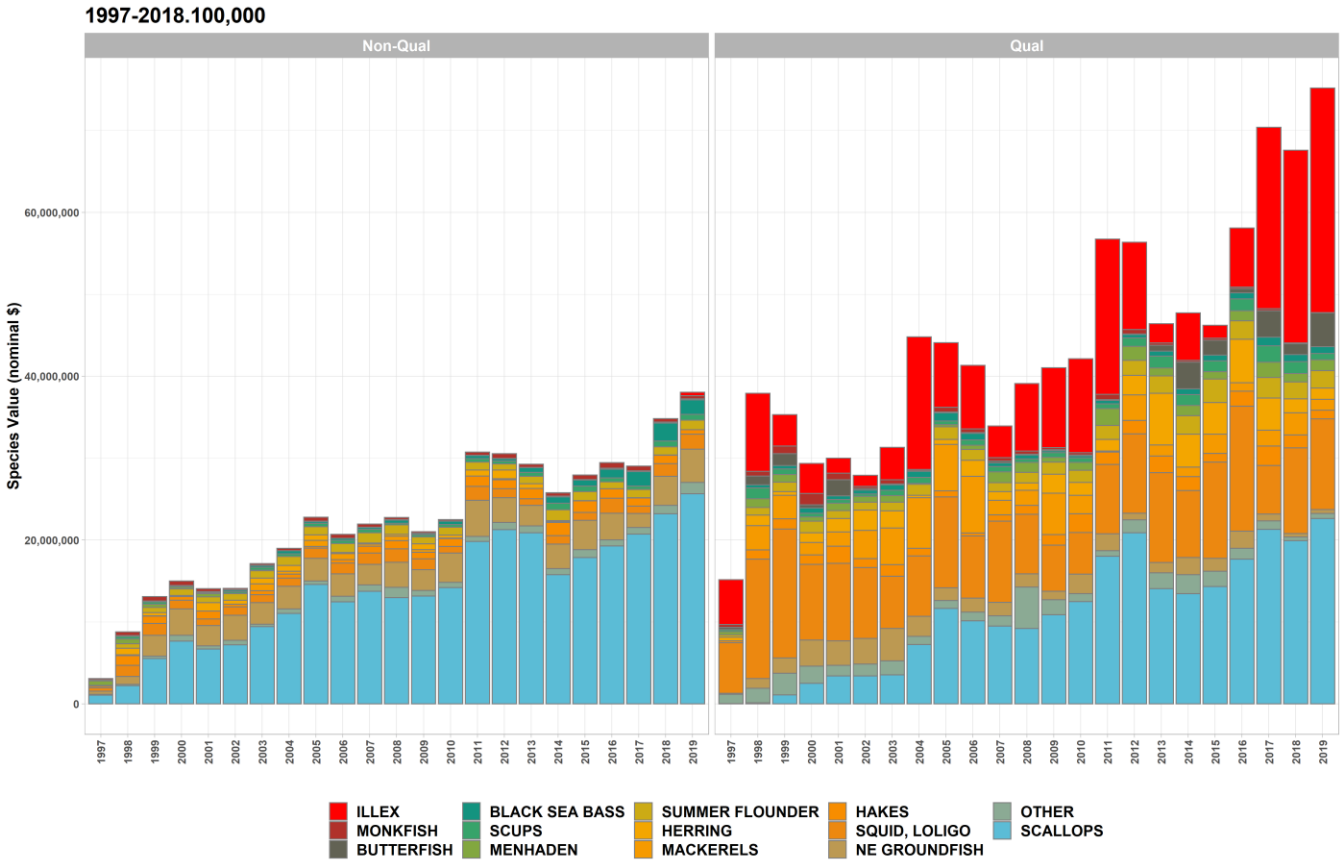
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C6. 1997-2018/50K Option Revenues.



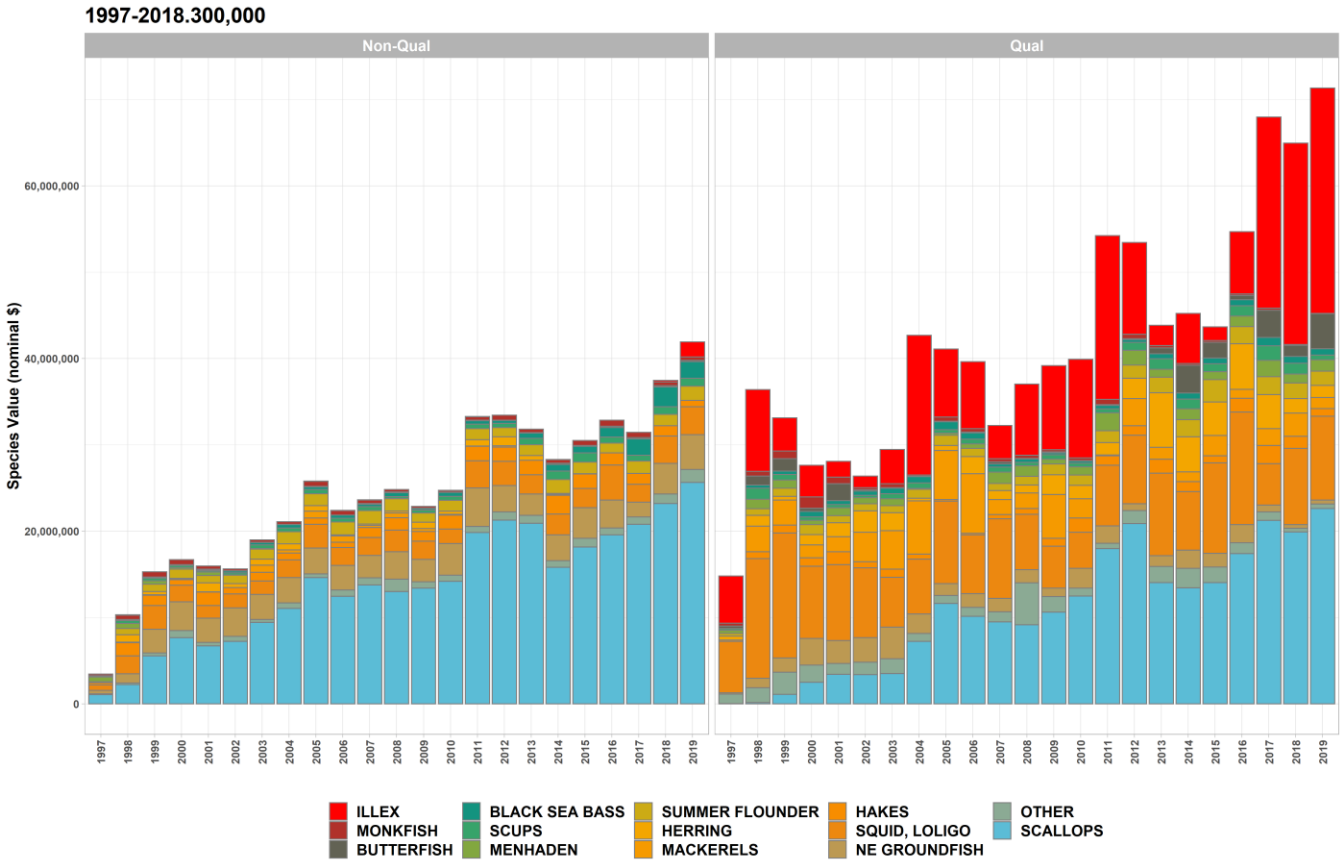
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C7. 1997-2018/100K Option Revenues.



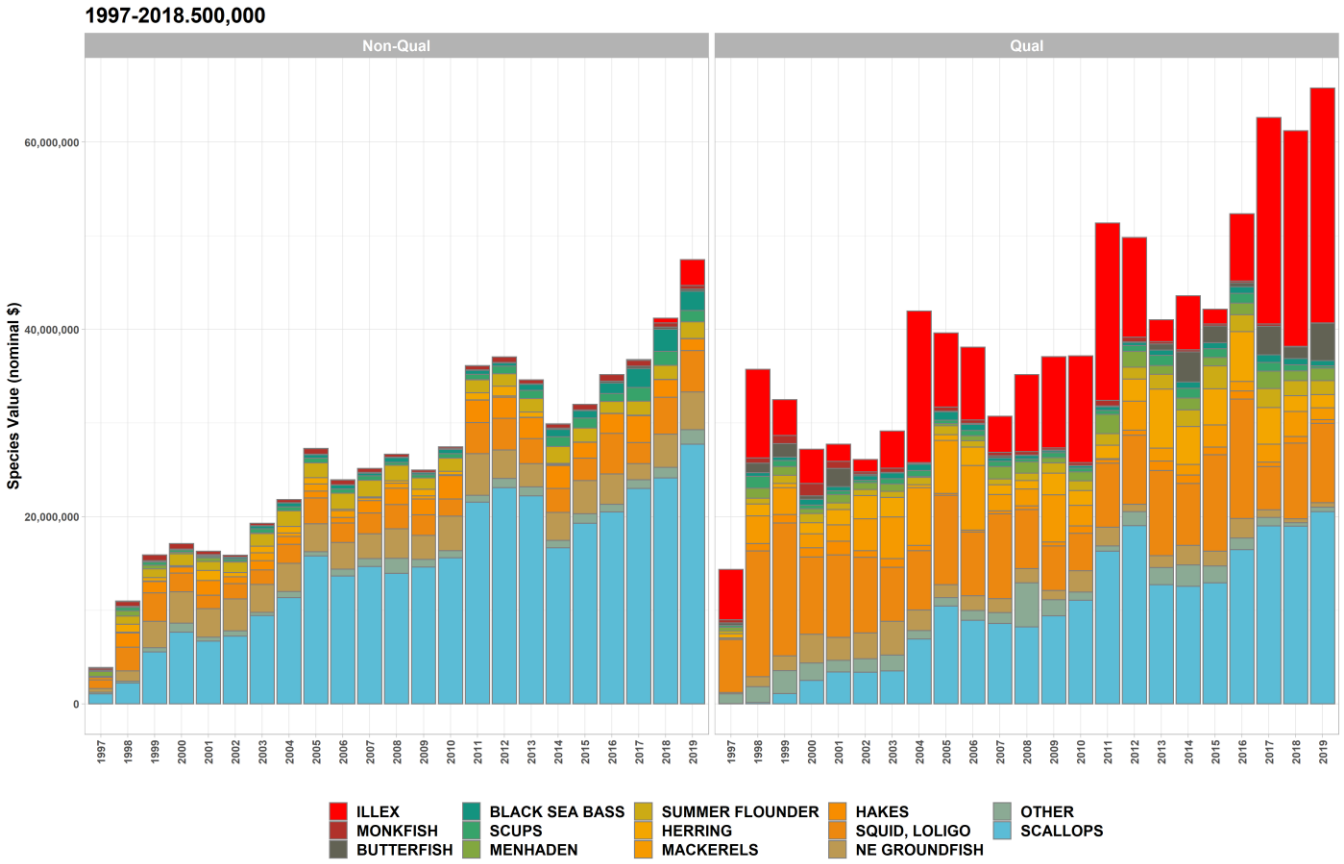
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C8. 1997-2018/300K Trip Option Revenues.



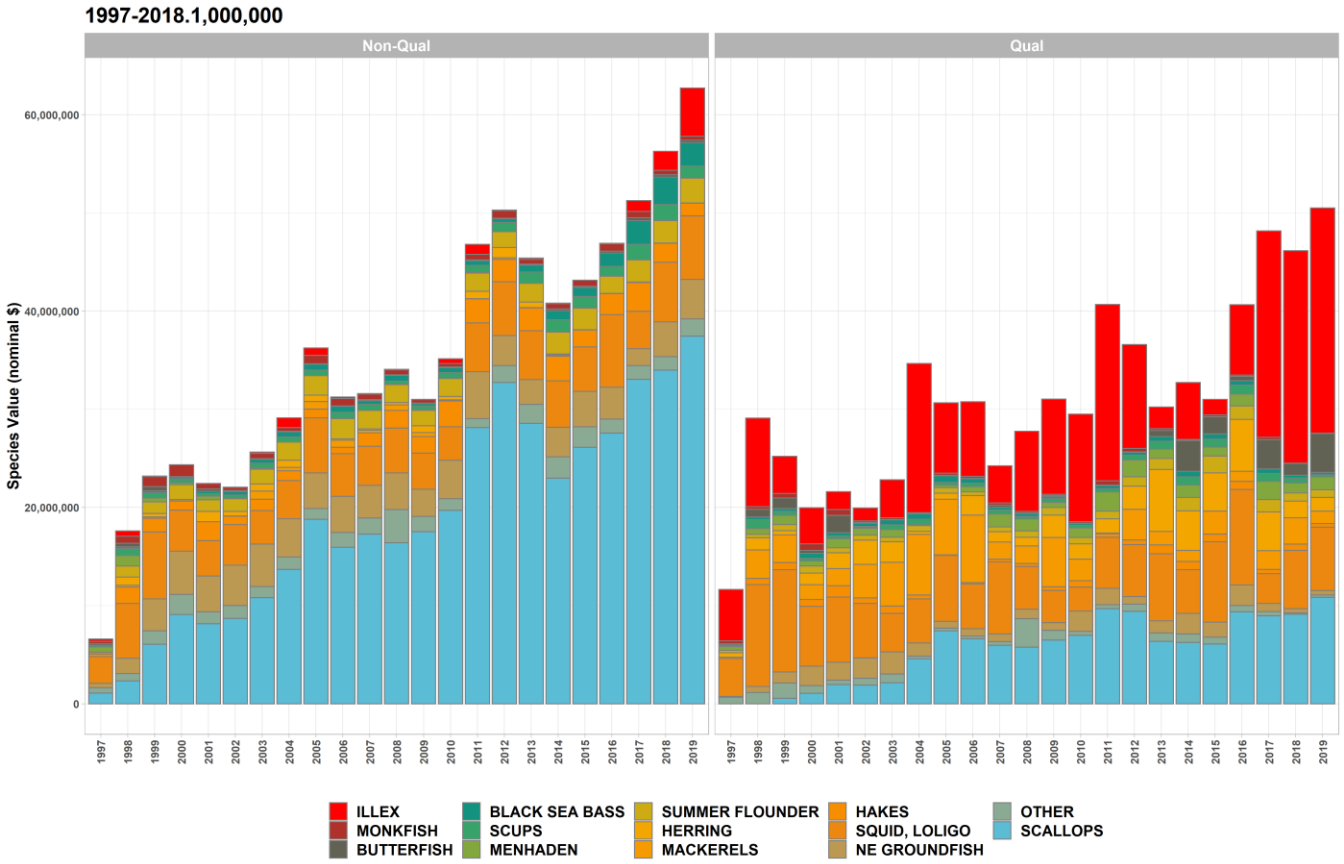
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C9. 1997-2018/500K Option Revenues.



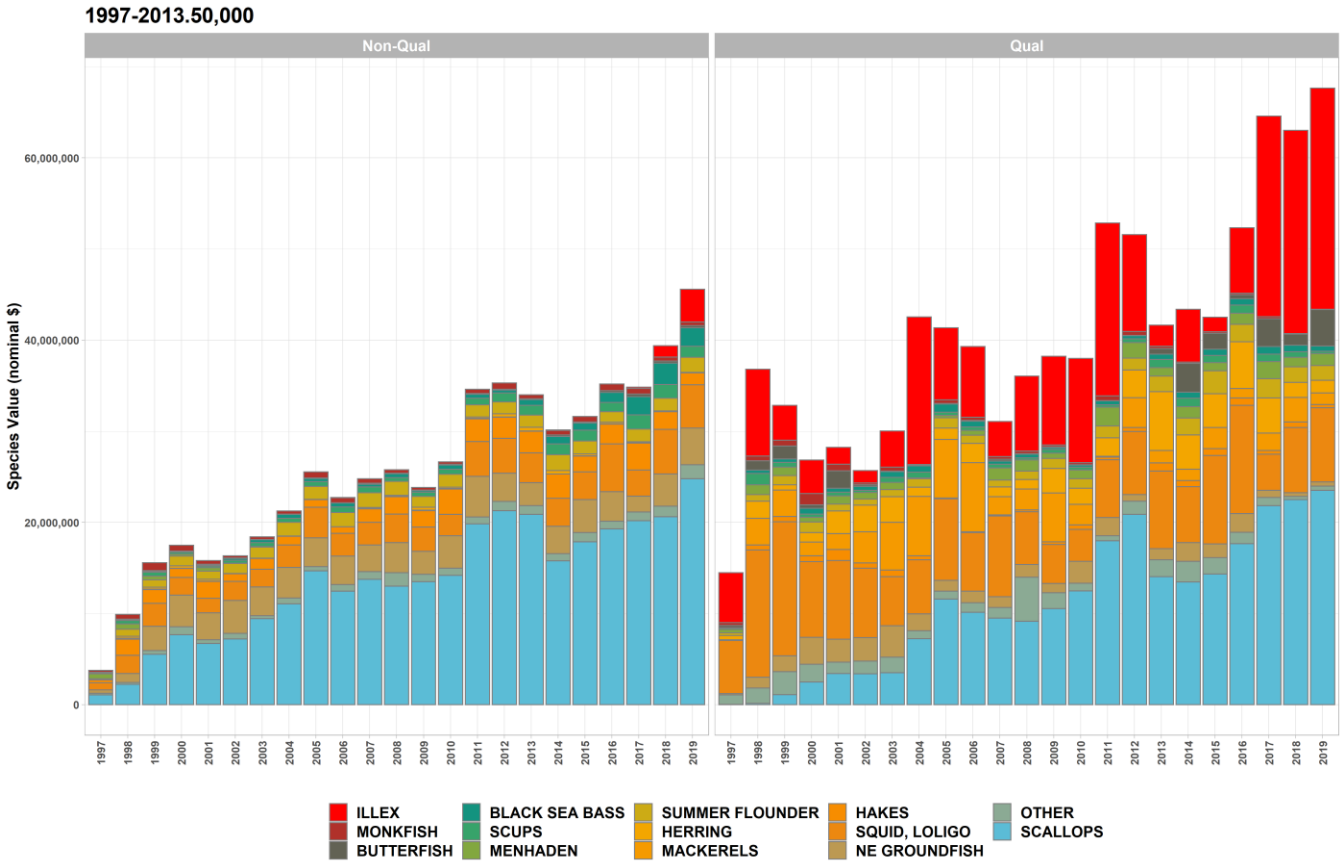
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C10. 1997-2018/1,000,000 Option Revenues.



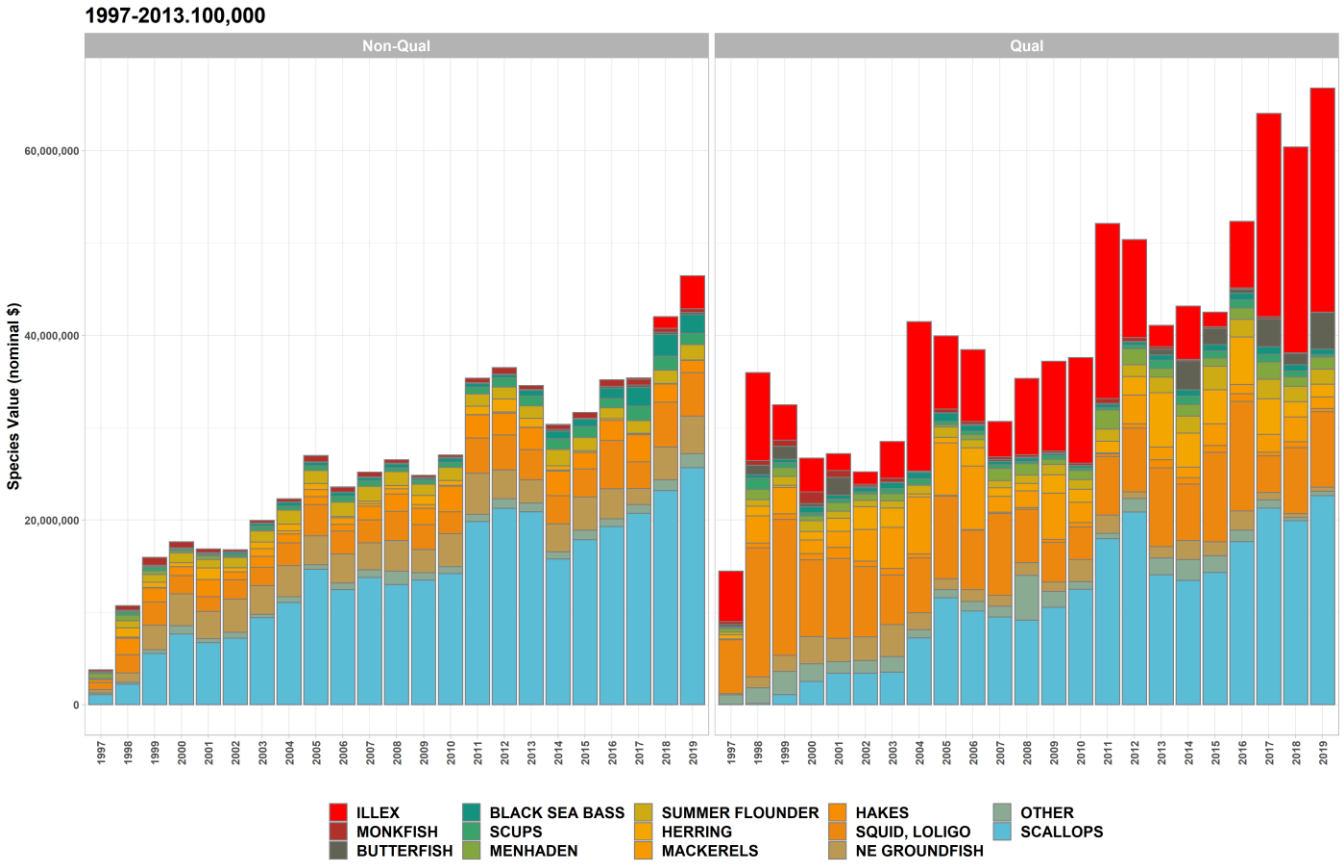
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C11. 1997-2013/50K Option Revenues.



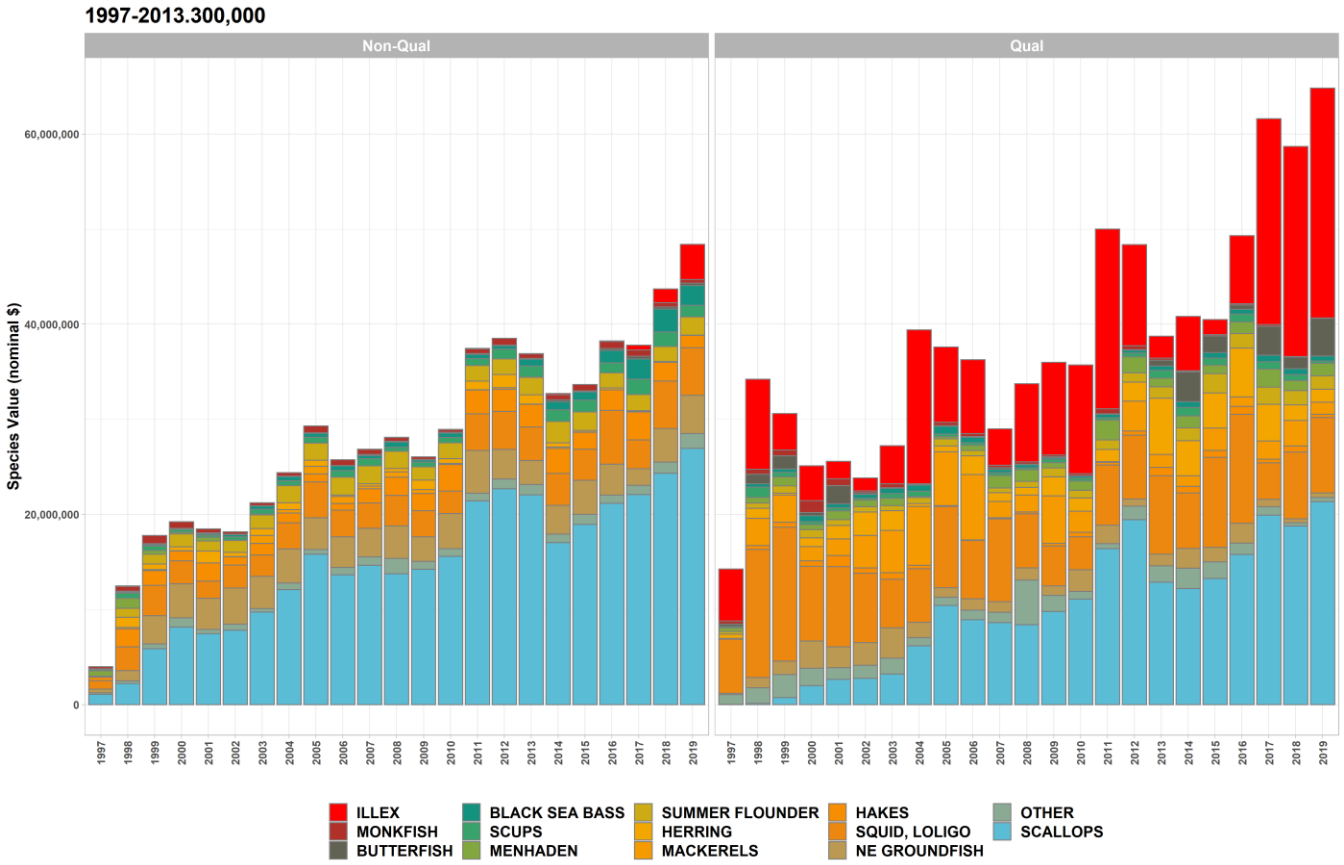
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C12. 1997-2013/100K Option Revenues.



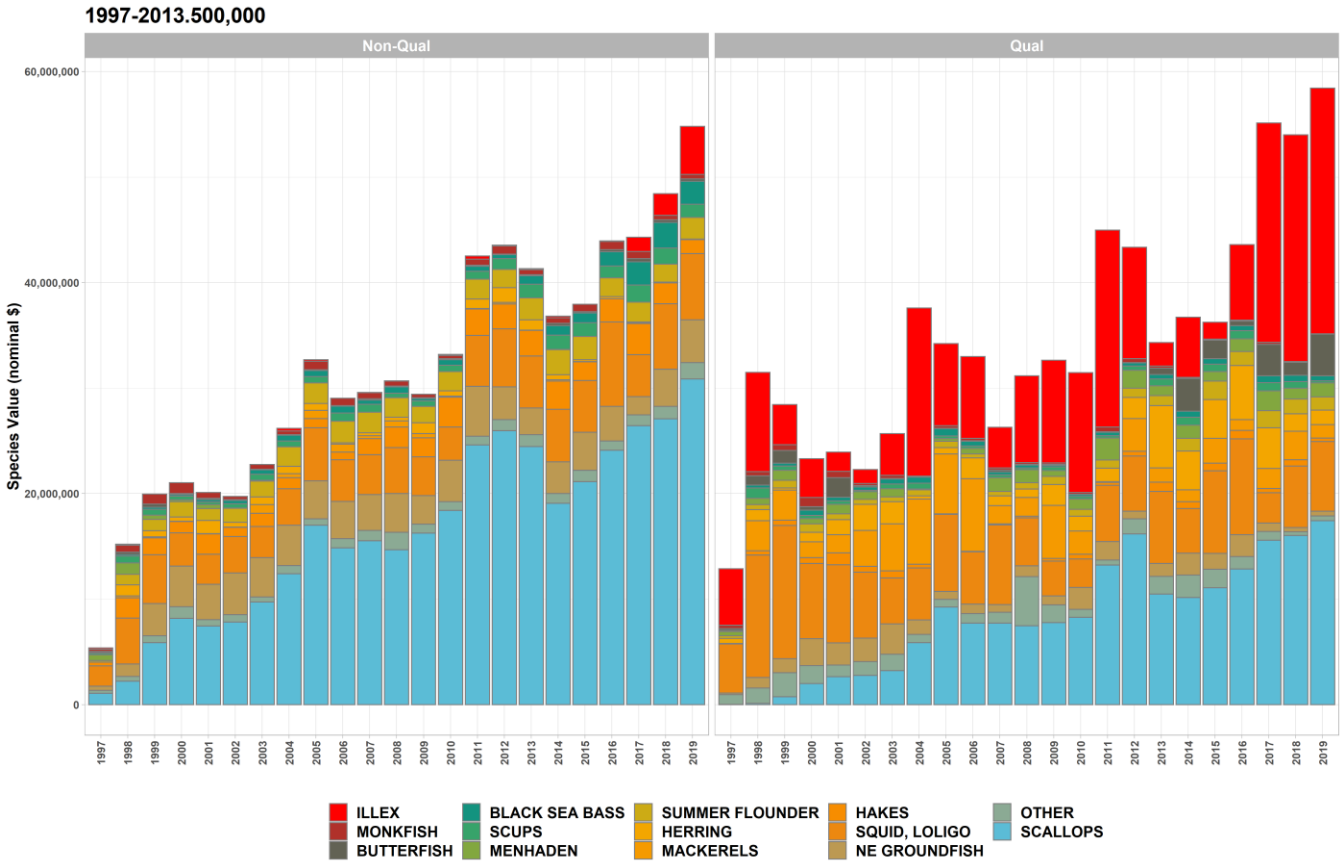
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C13. 1997-2013/300K Option Revenues.



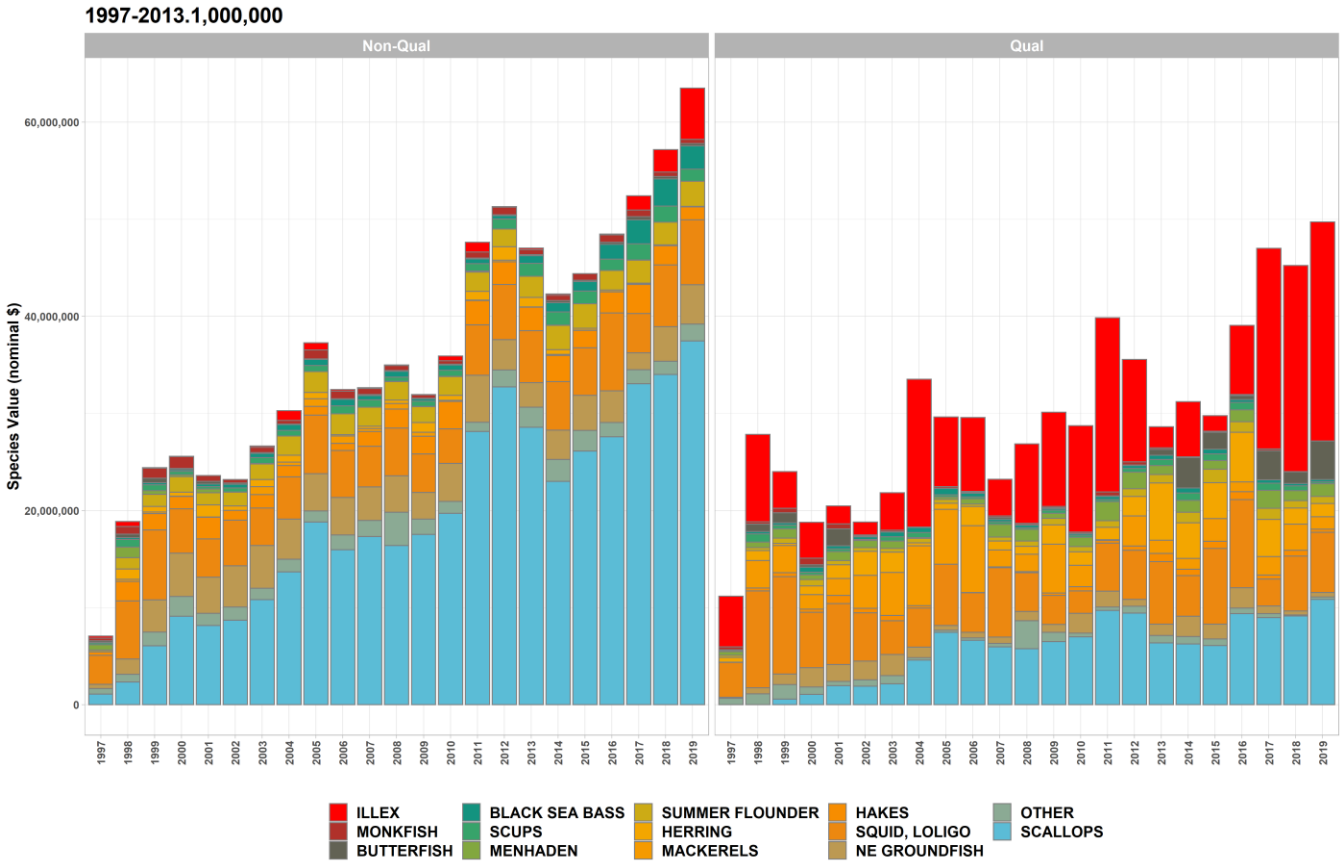
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C14. 1997-2013/500K Option Revenues.



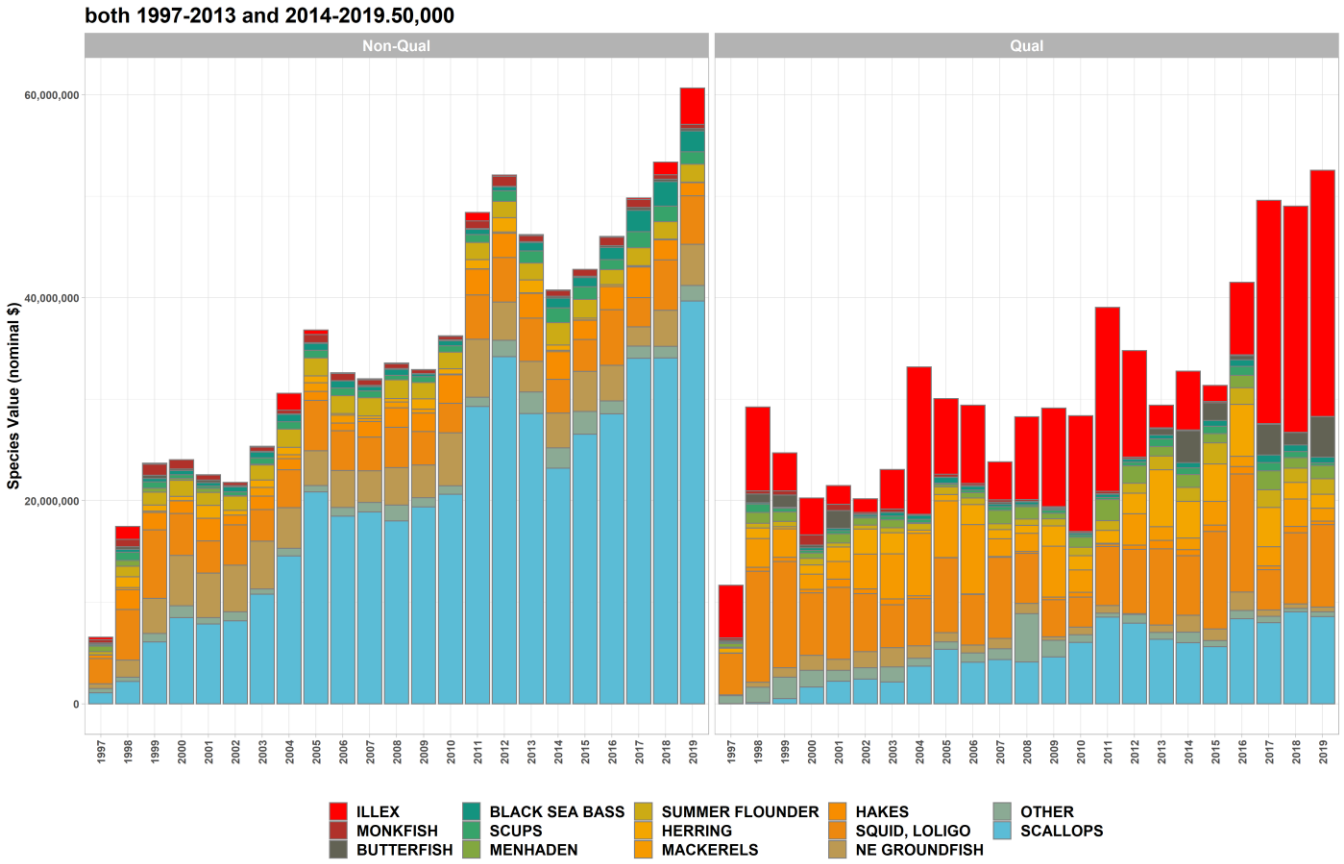
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C15. 1997-2013/1,000,000 Option Revenues.



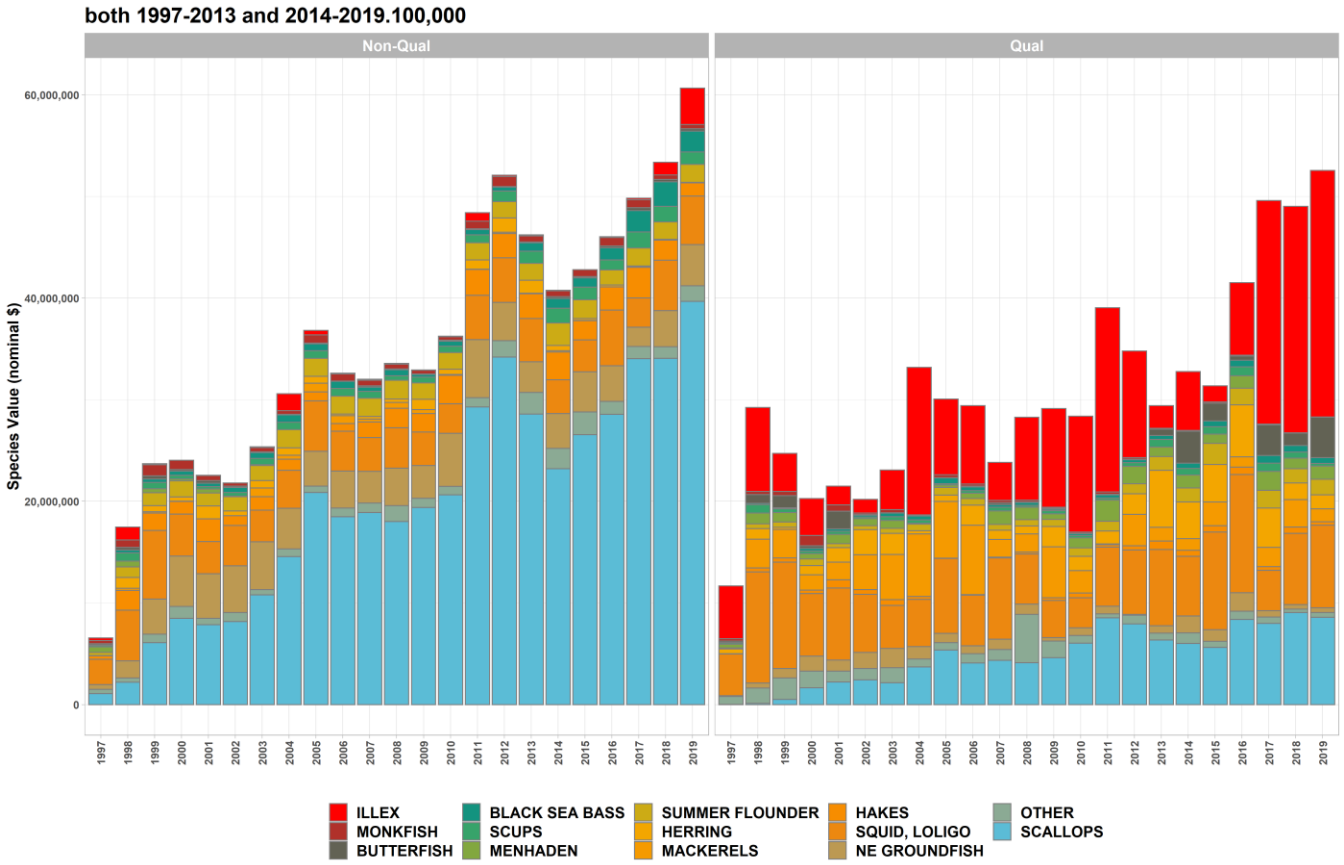
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C16. 1997-2013 plus 2014-2019/50K Option Revenues



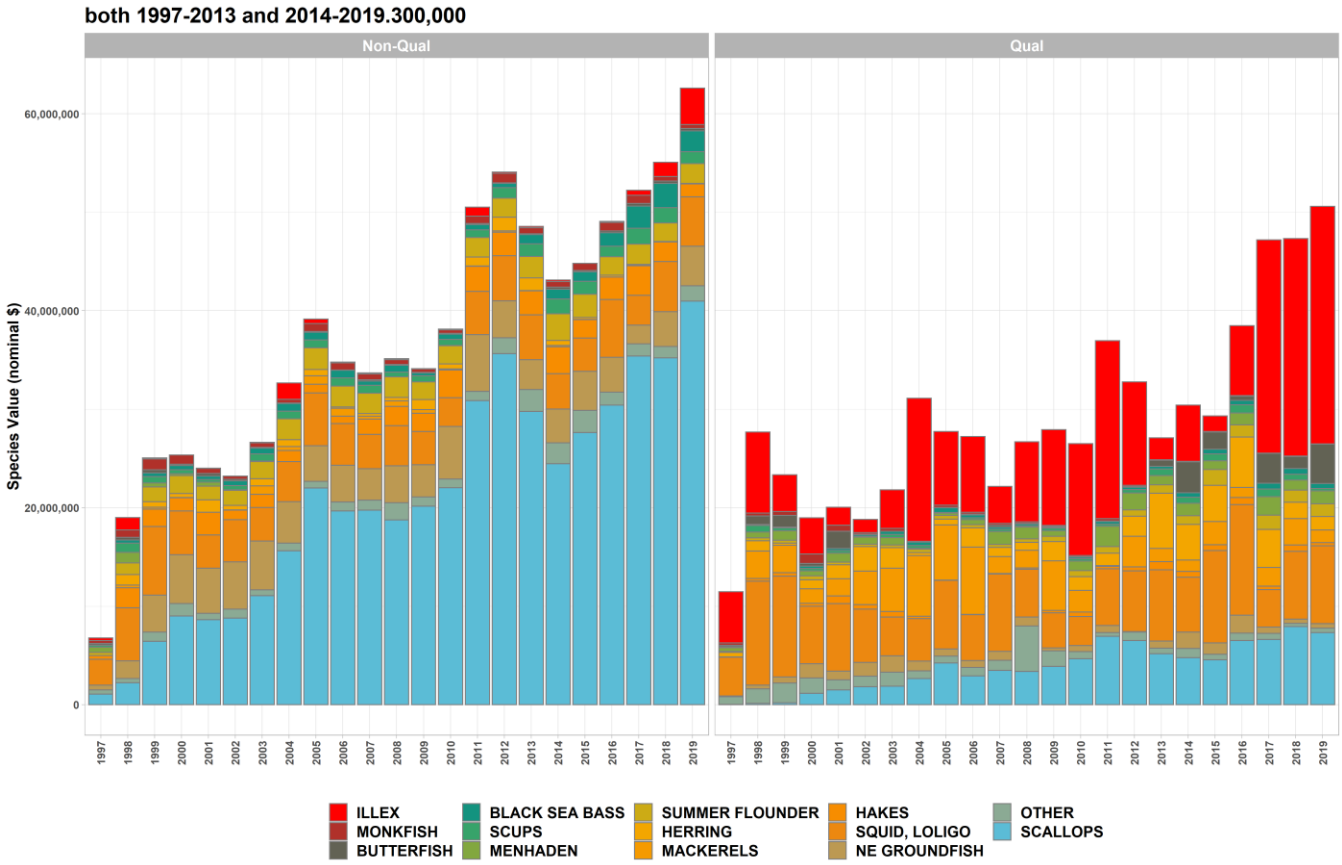
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C17. 1997-2013 plus 2014-2019/100K Option Revenues



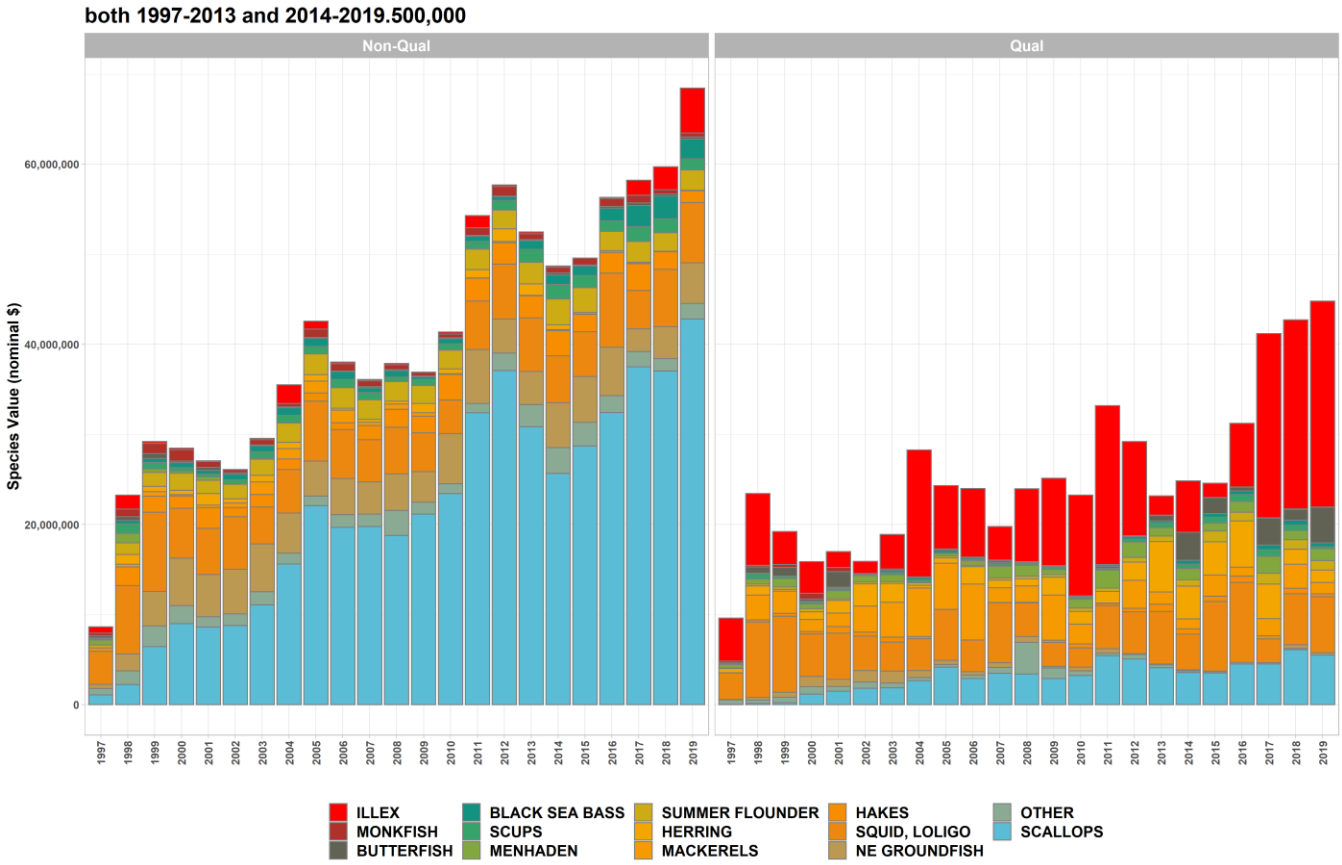
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C18. 1997-2013 plus 2014-2019/300K Option Revenues



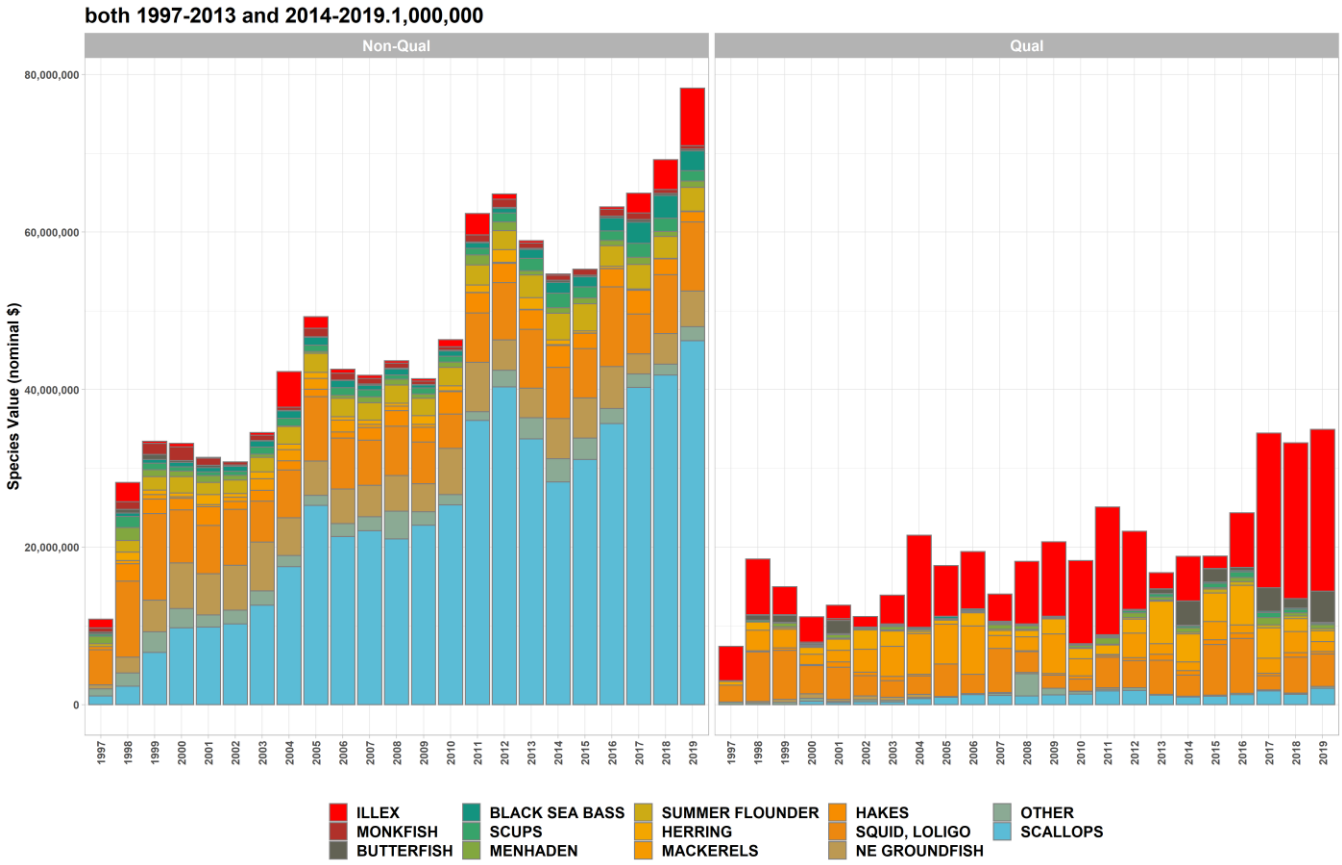
Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

Figure C19. 1997-2013 plus 2014-2019/500K Option Revenues



Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

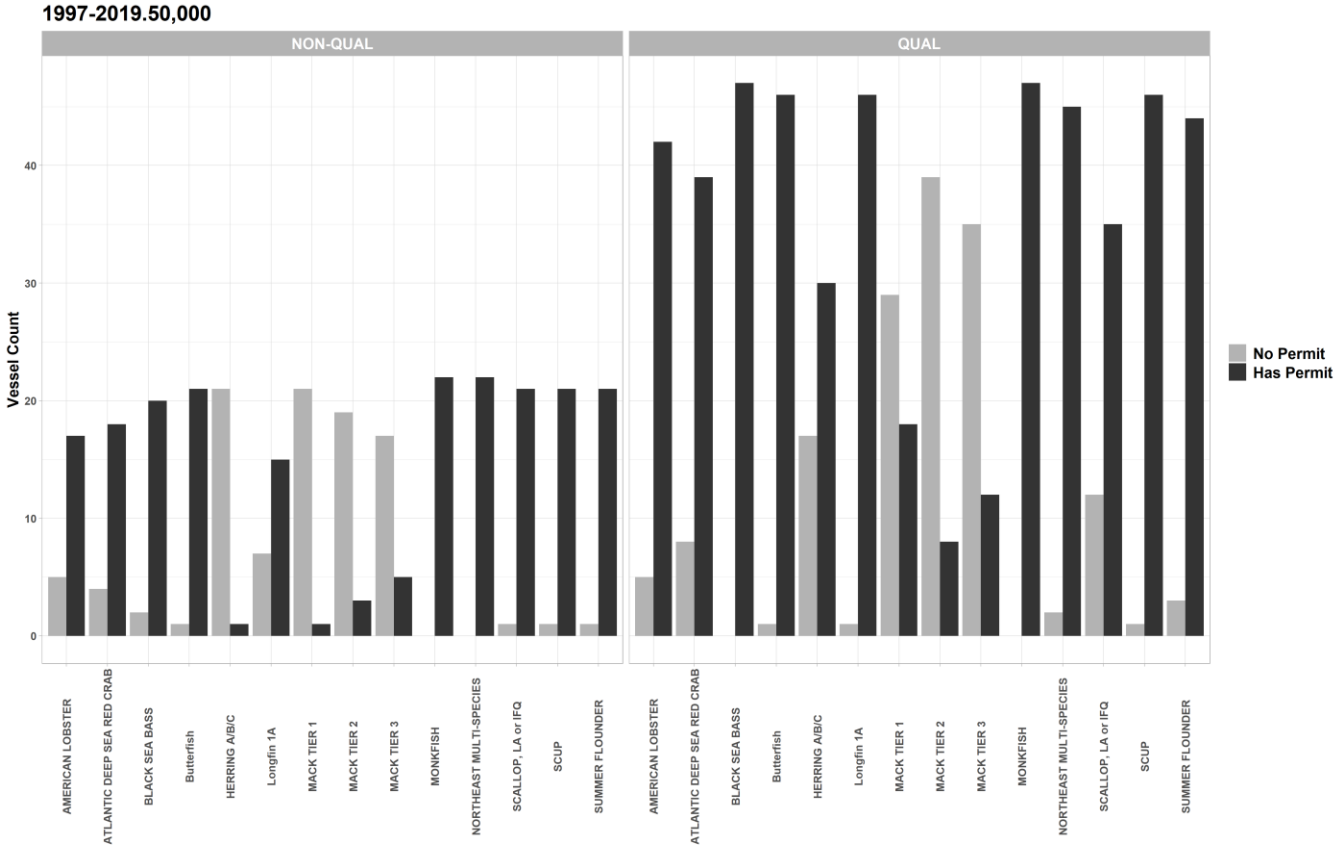
Figure C20. 1997-2013 plus 2014-2019/1,000,000 Option Revenues



Total species revenues, by year. Species in the top 10 for any year are included. Non-requalifiers are on the left, requalifiers are on the right.

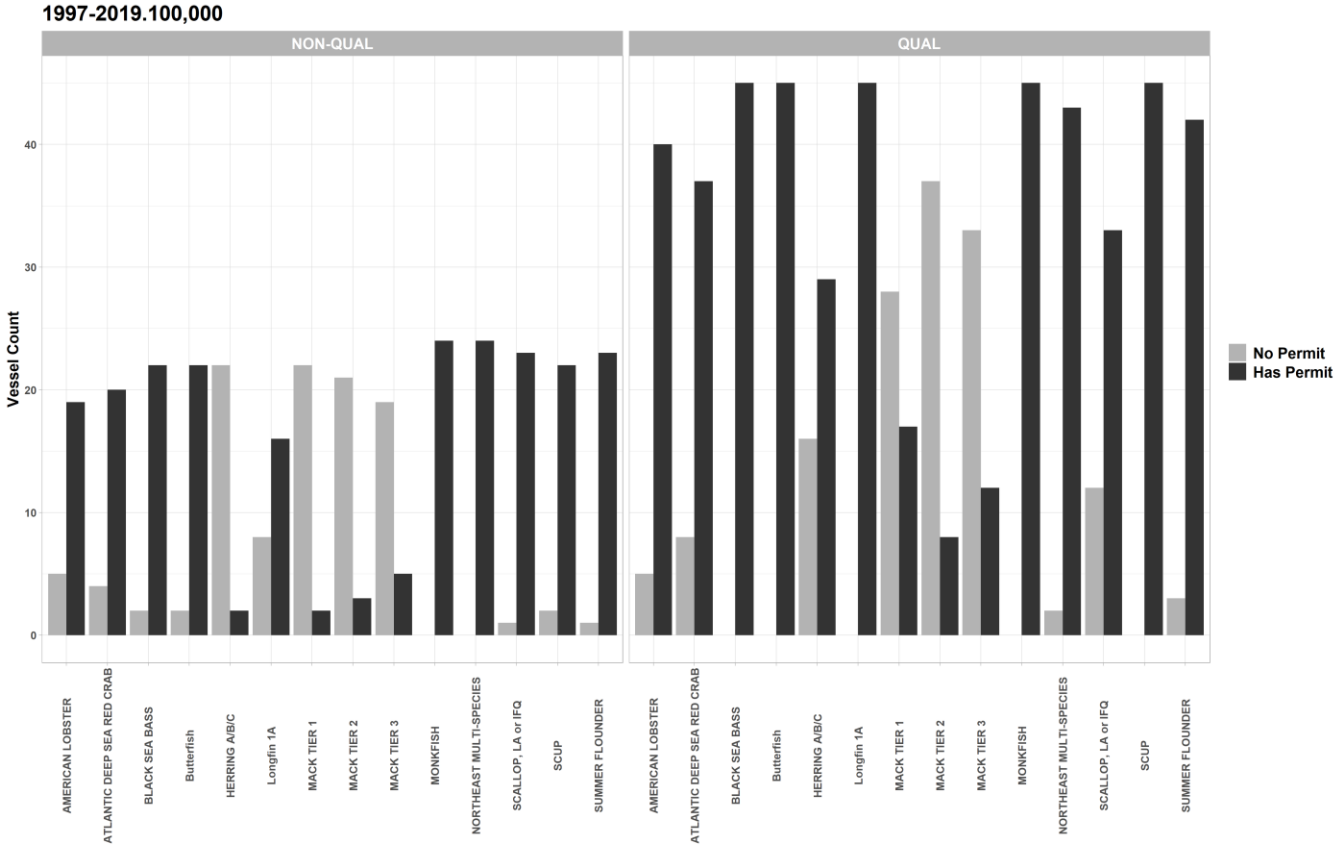
Appendix D. Permits held by Non-Requalifiers and Requalifiers

Figure D1. 1997-2019/50K Option Permits.



Non-requalifiers' current permits are on the left, requalifiers' are on the right.

Figure D2. 1997-2019/100K Option Permits.



Non-requalifiers' current permits are on the left, requalifiers' are on the right.

Figure D3. 1997-2019/300K Option Permits.

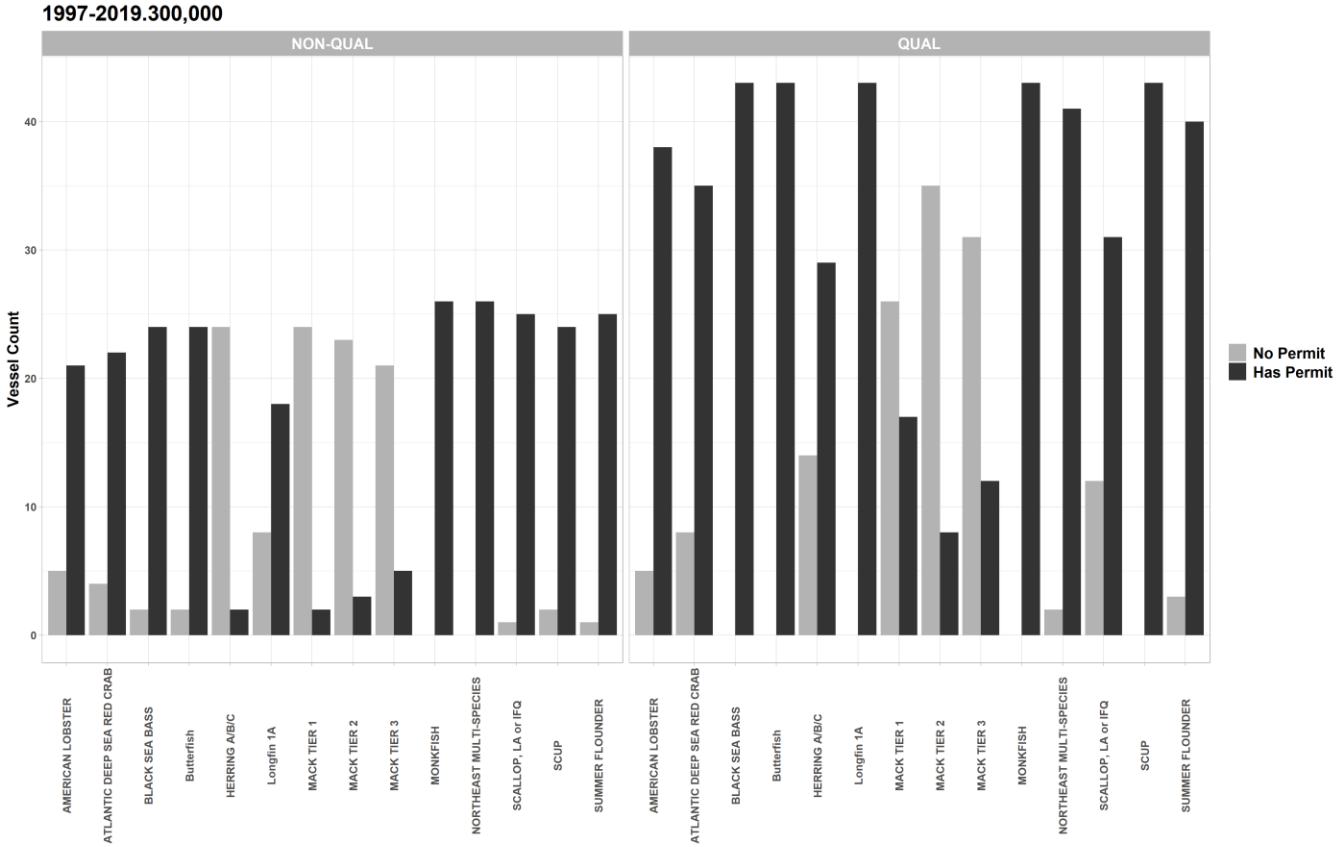


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Figure D4. 1997-2019/500K Option Permits.

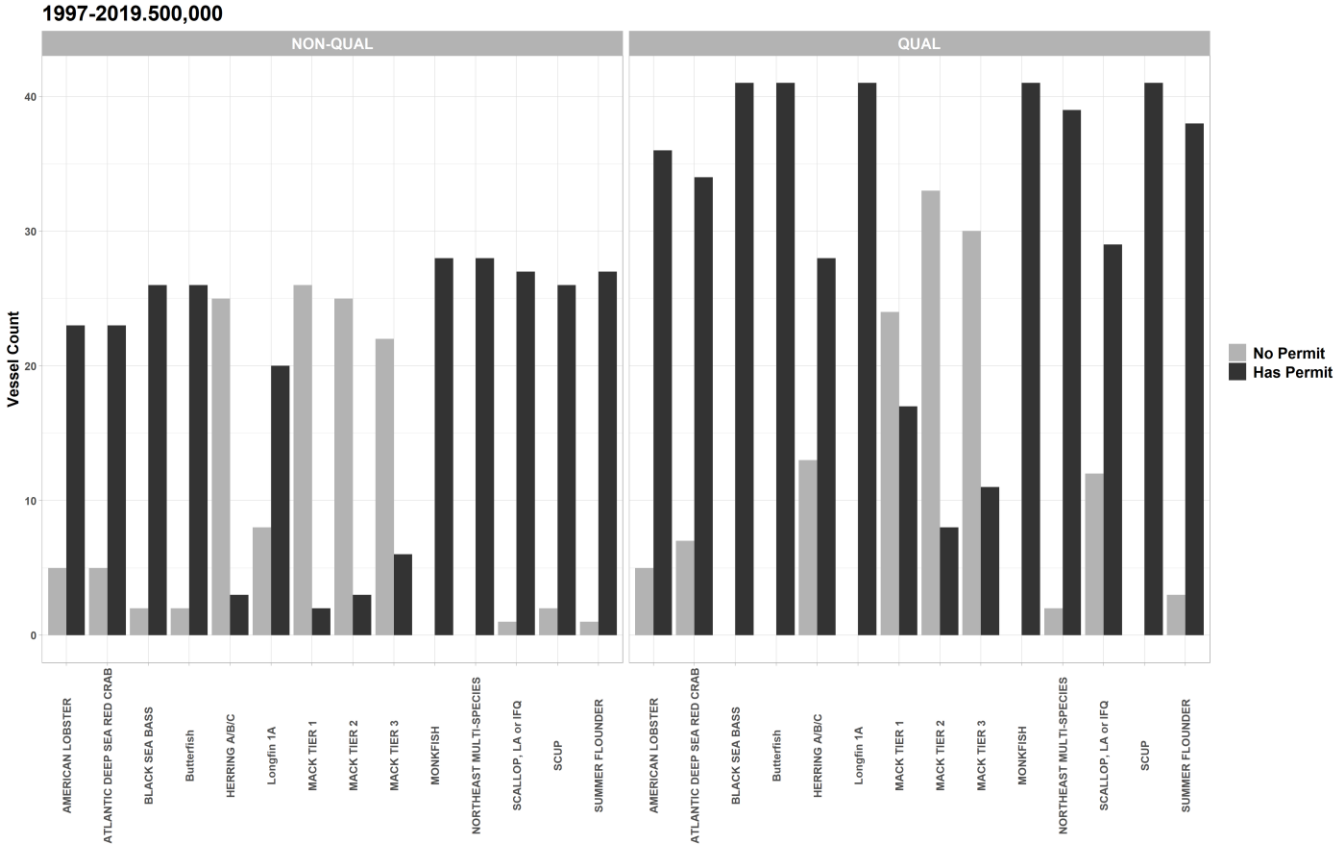

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Figure D5. 1997-2019/1,000,000 Option Permits.

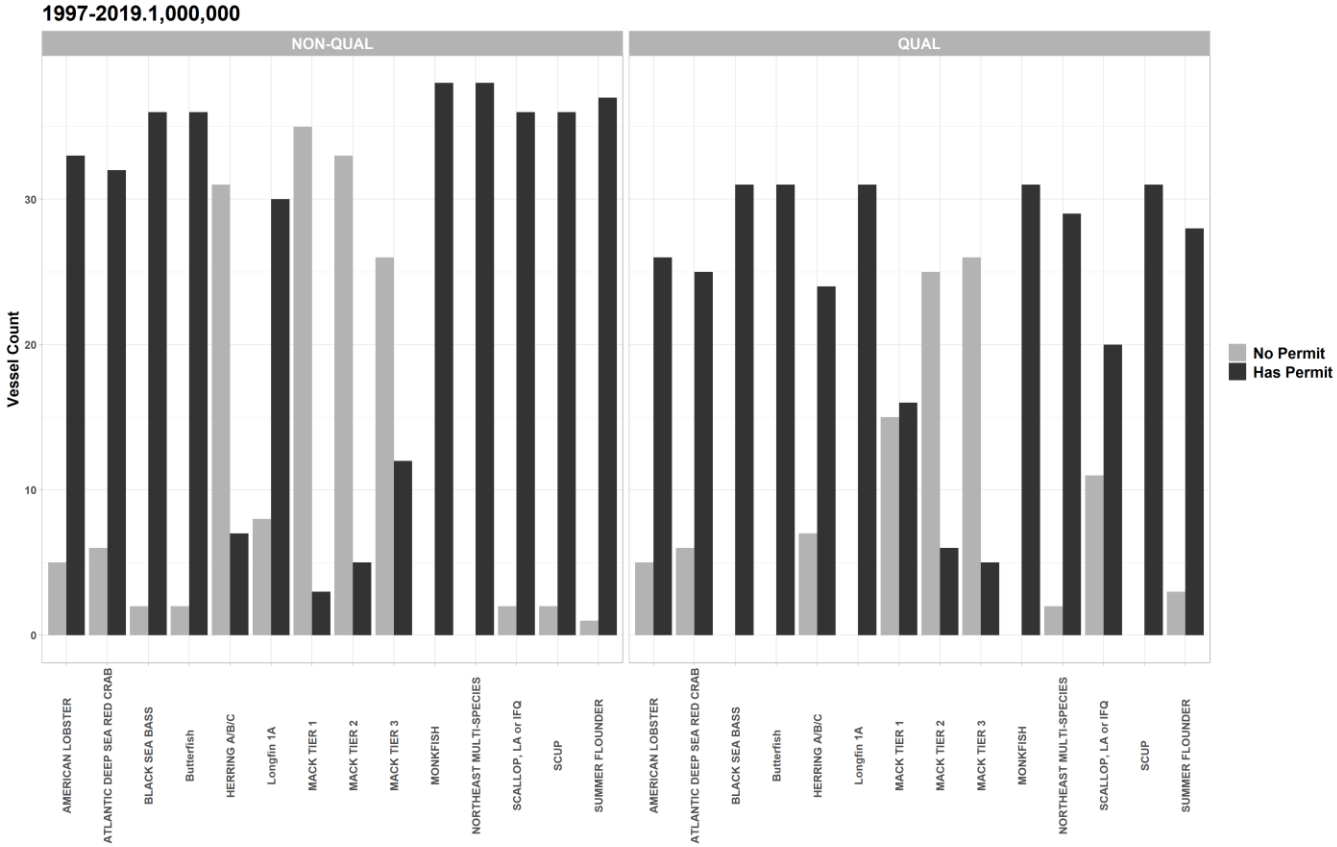

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Figure D6. 1997-2018/50K Option Permits.

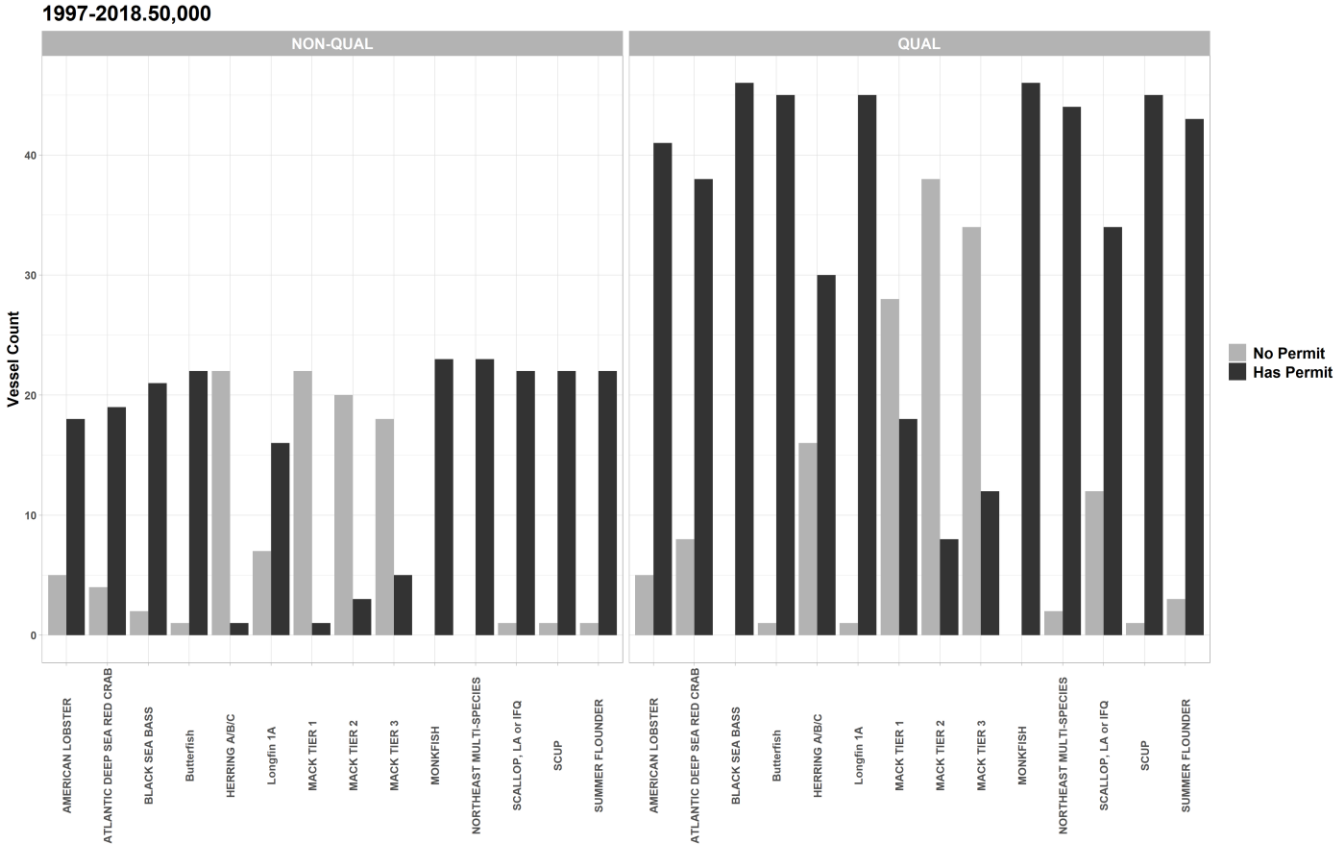

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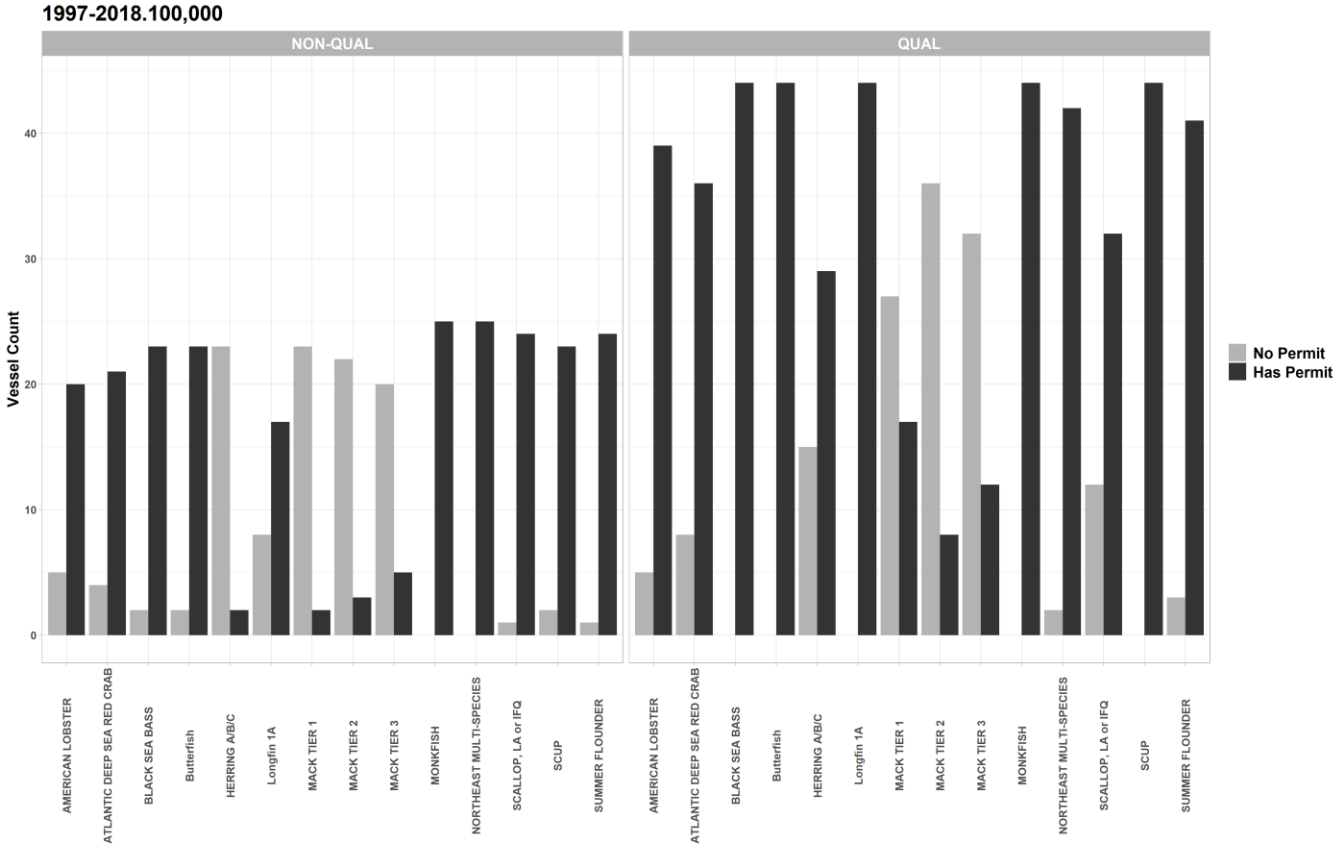
Figure D7. 1997-2018/100K Option Permits.



Non-requalifiers' current permits are on the left, requalifiers' are on the right.

Figure D8. 1997-2018/300K Trip Option Permits.

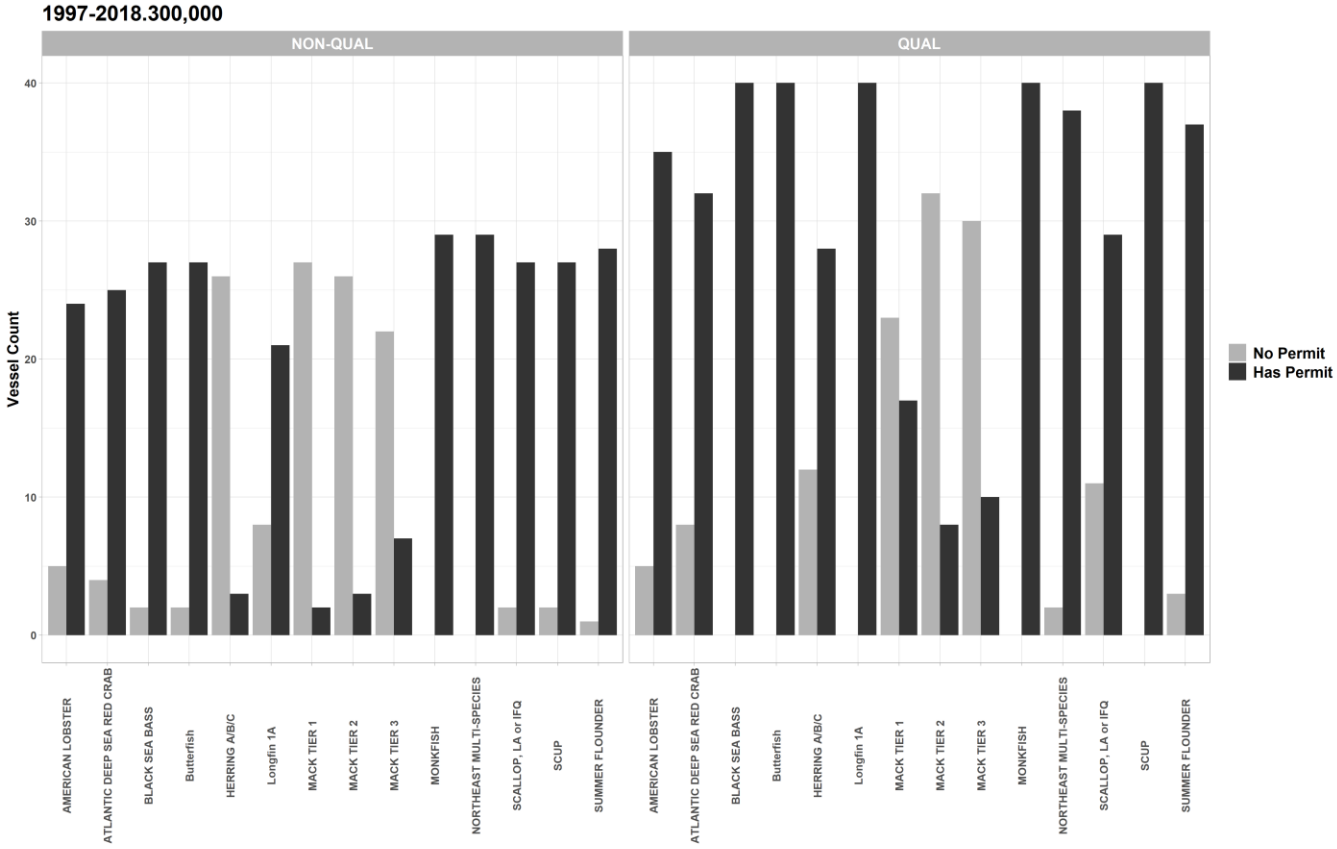


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Figure D9. 1997-2018/500K Option Permits.

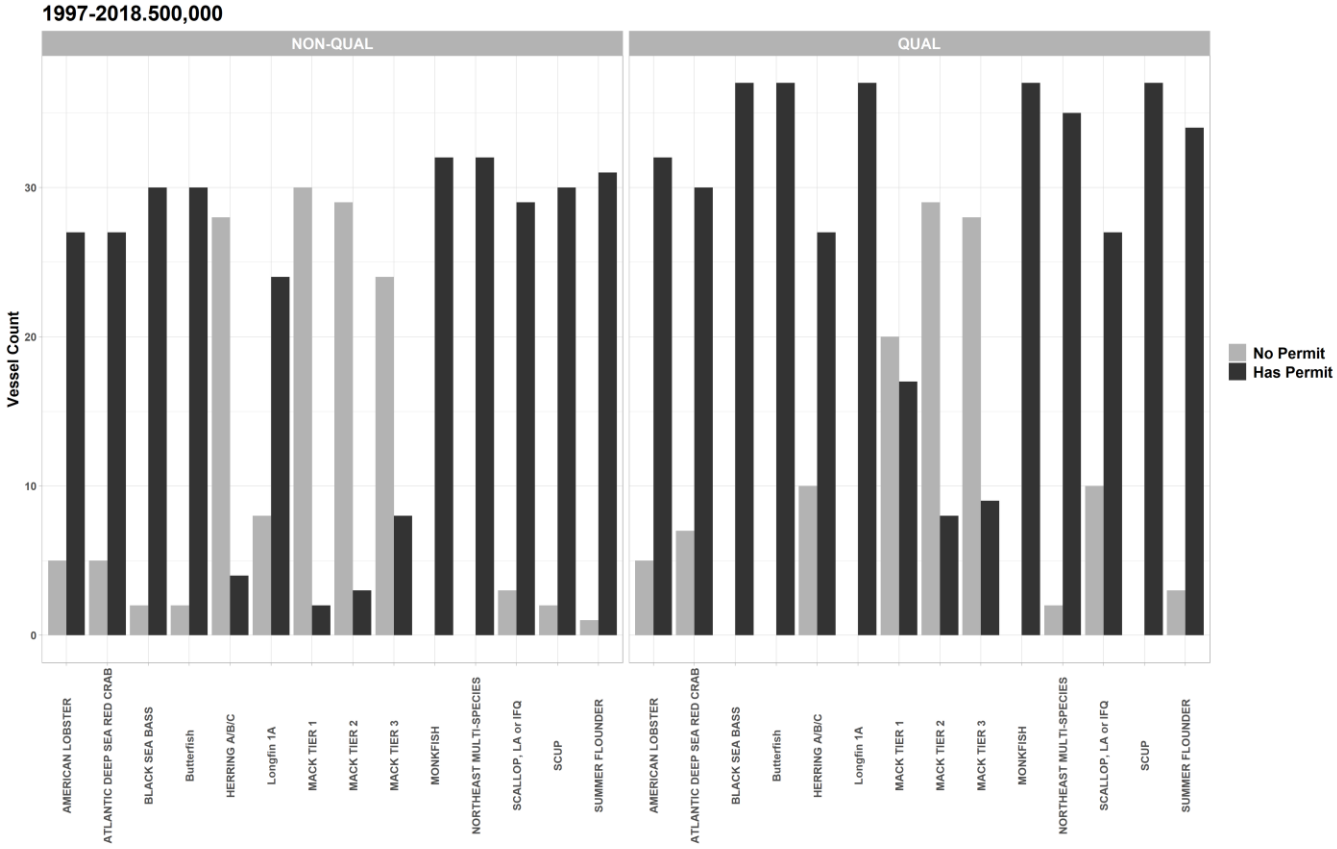

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Figure D10. 1997-2018/1,000,000 Option Permits.

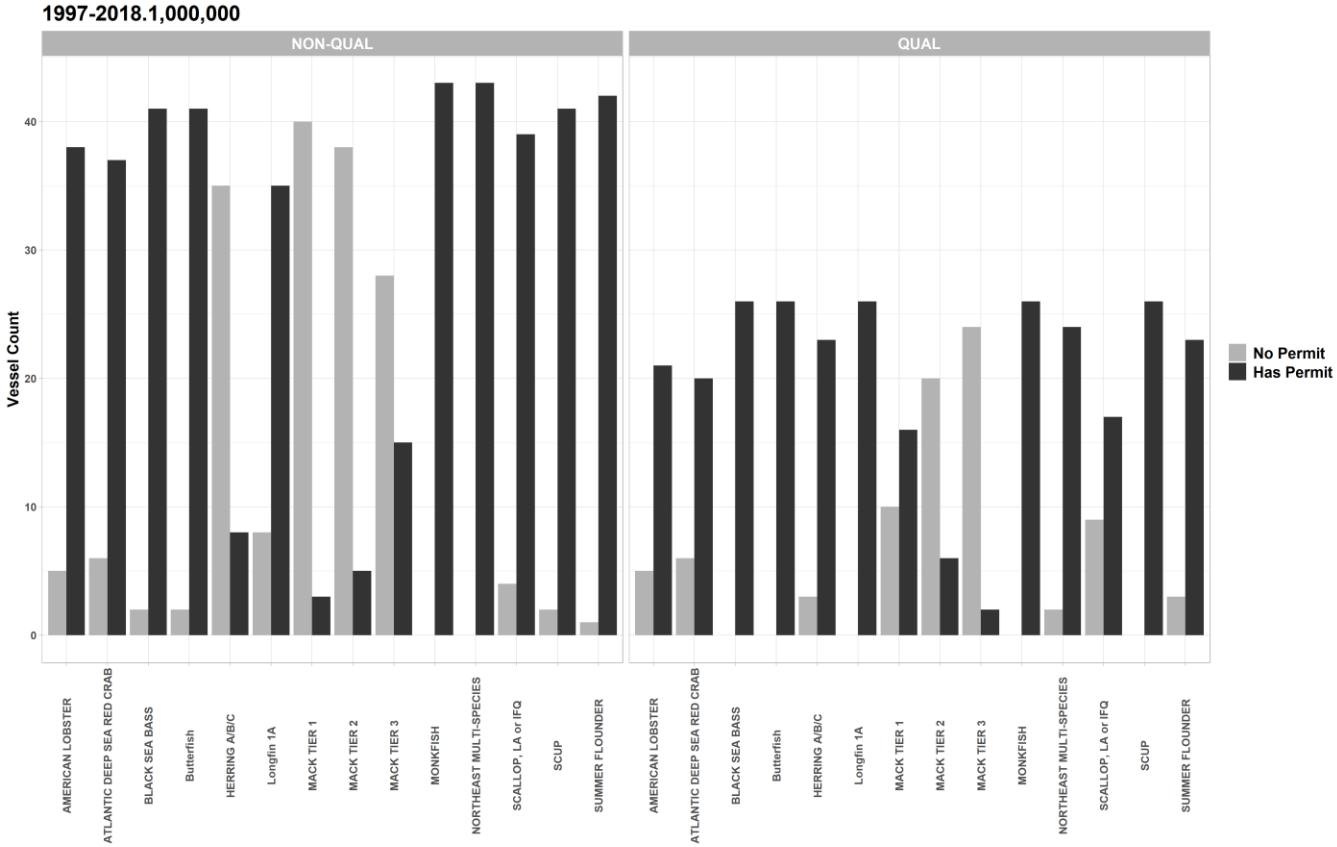

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Figure D11. 1997-2013/50K Option Permits.

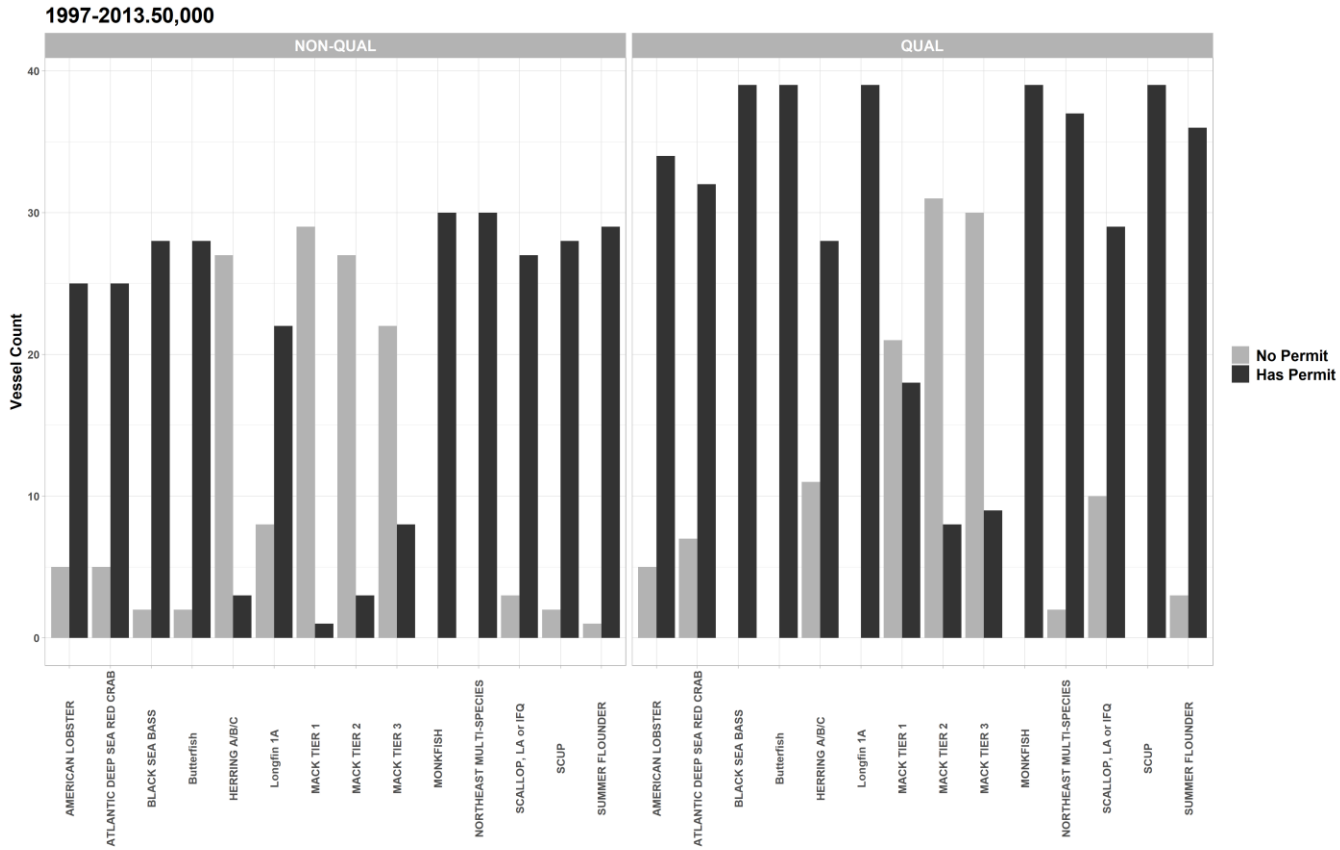

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Figure D12. 1997-2013/100K Option Permits.

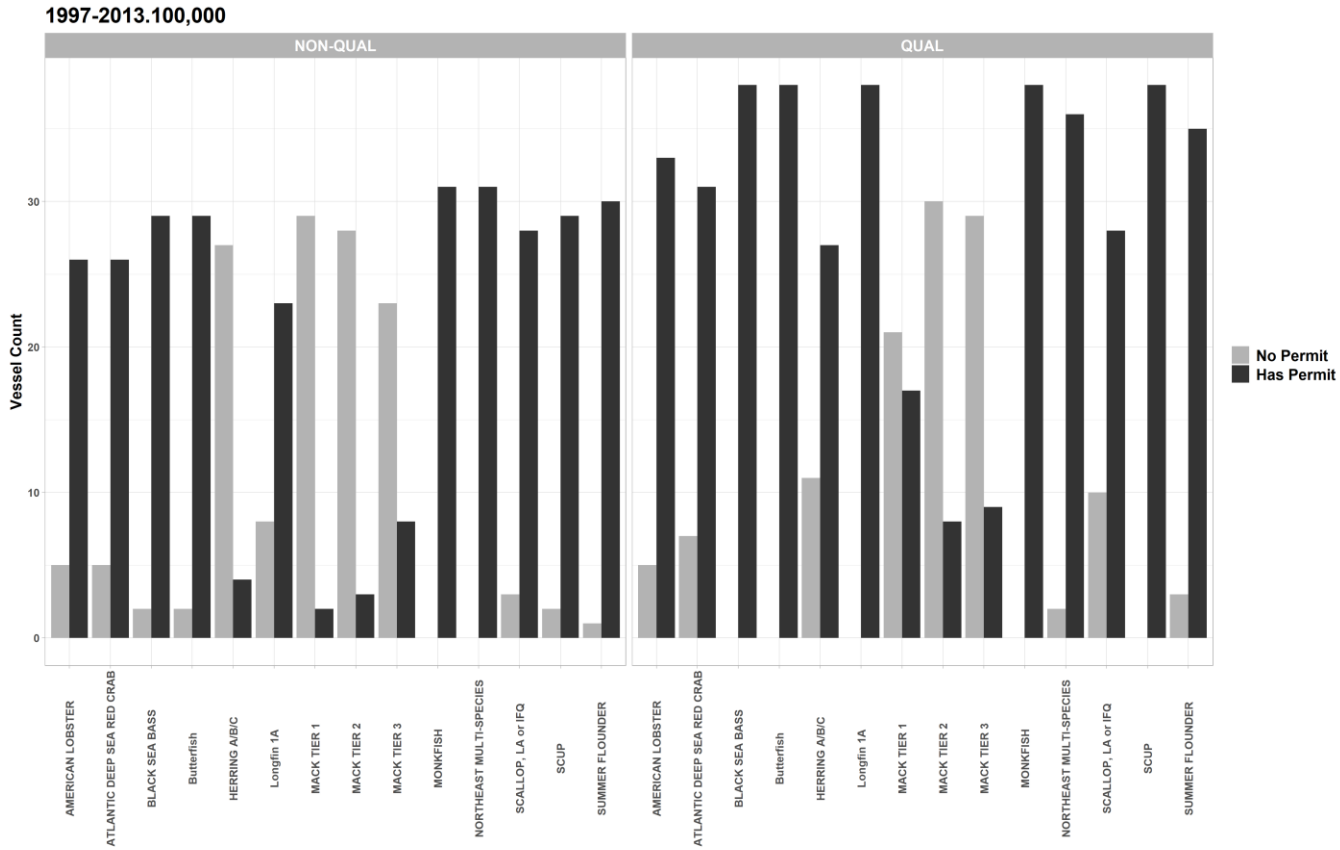

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Figure D13. 1997-2013/300K Option Permits.

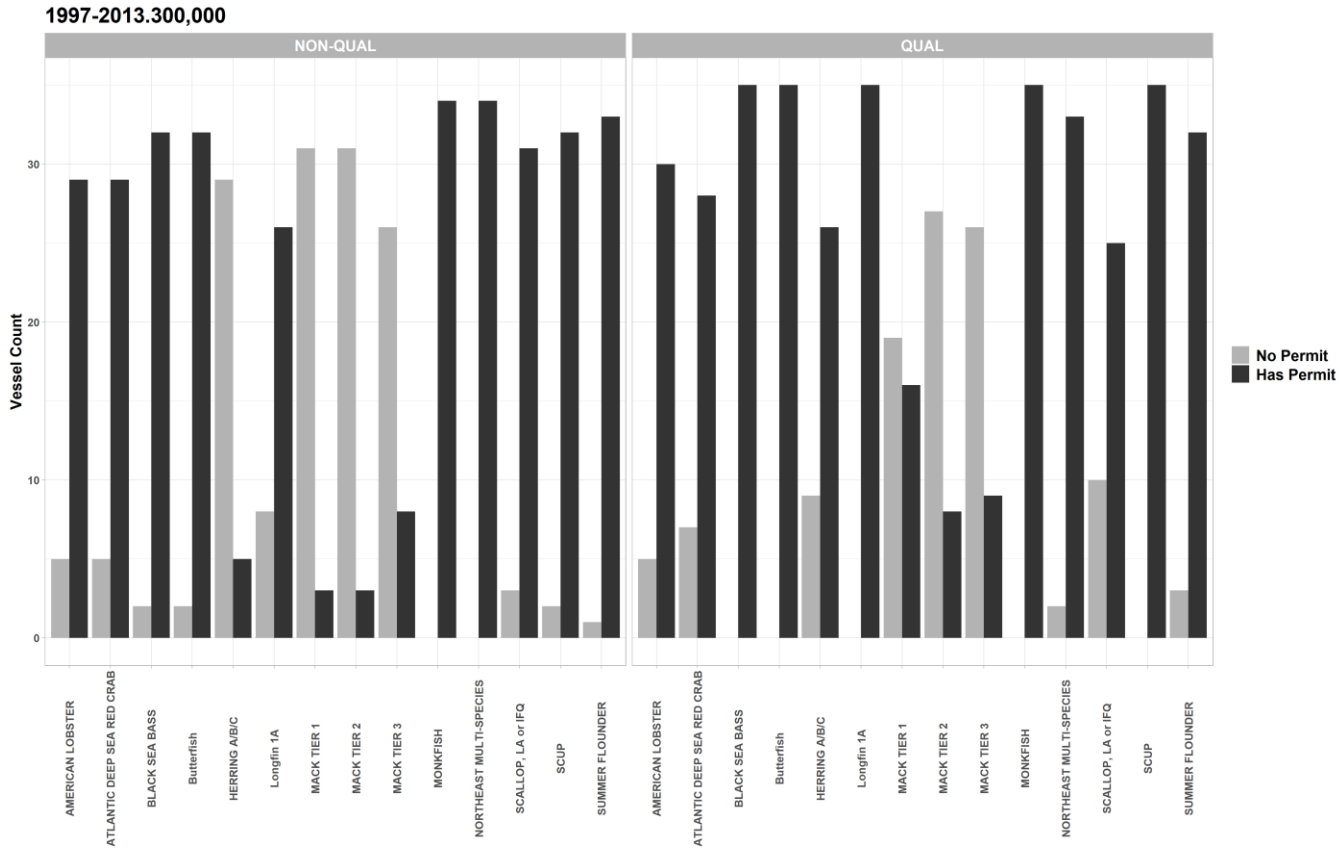

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Figure D14. 1997-2013/500K Option Permits.

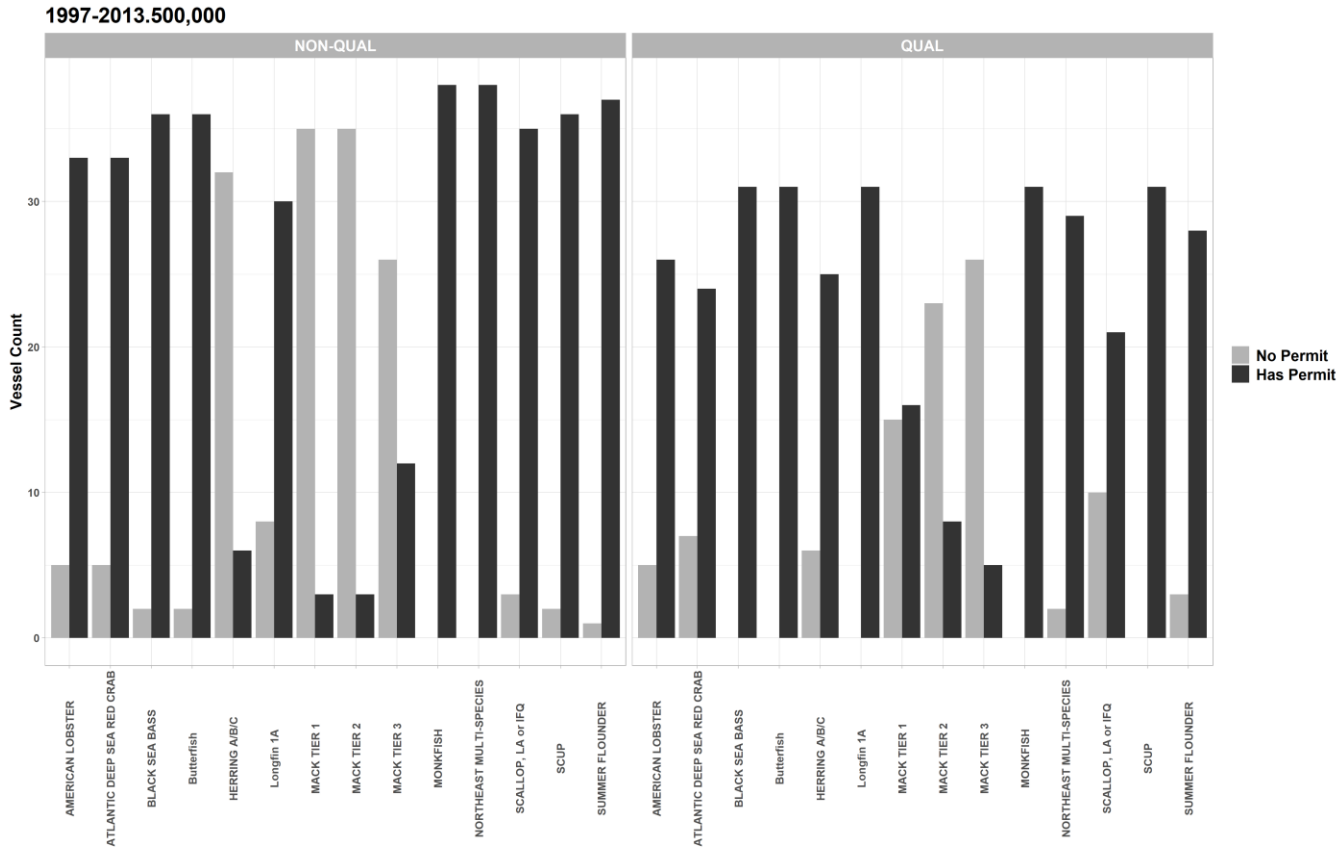

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Figure D15. 1997-2013/1,000,000 Option Permits.

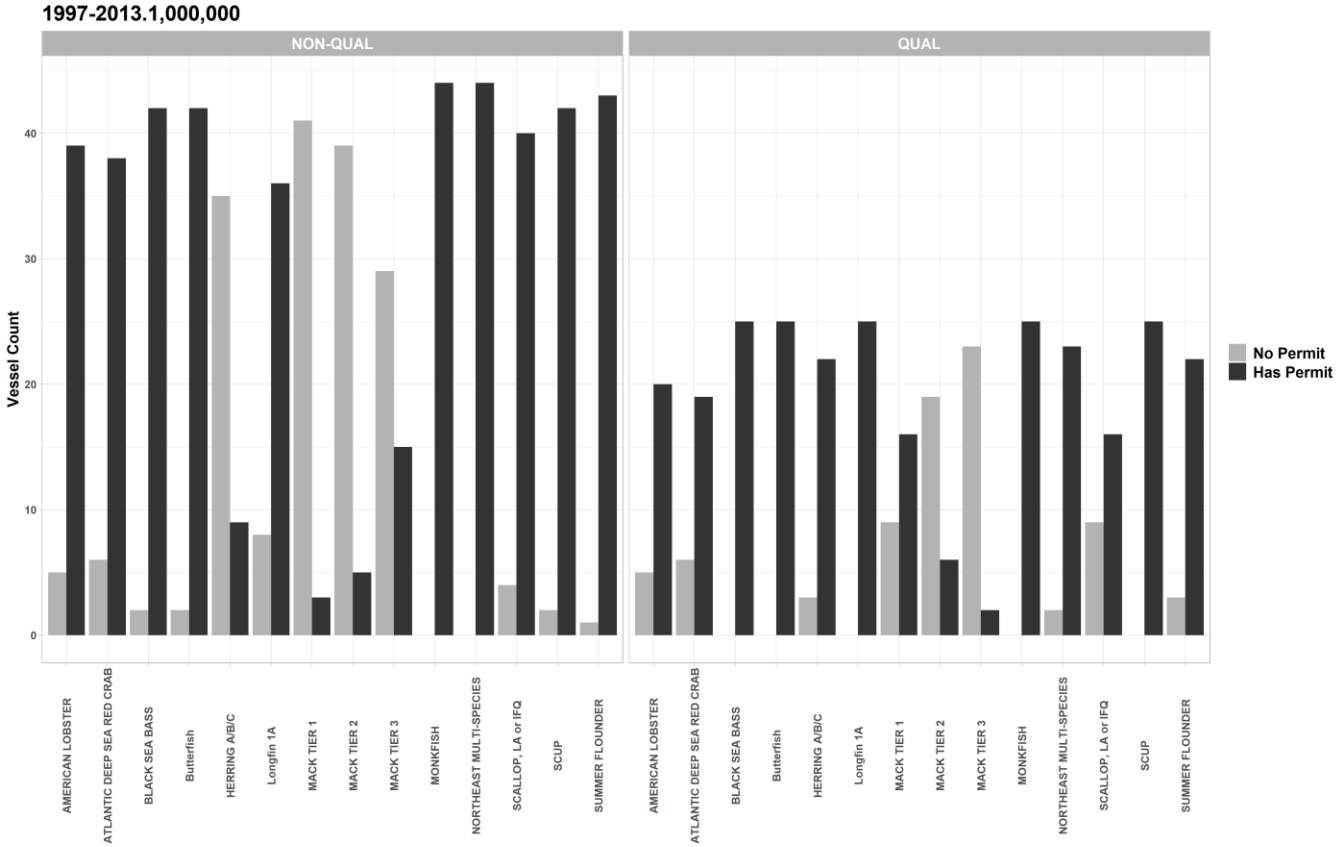

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Figure D16. 1997-2013 plus 2014-2019/50K Option Permits

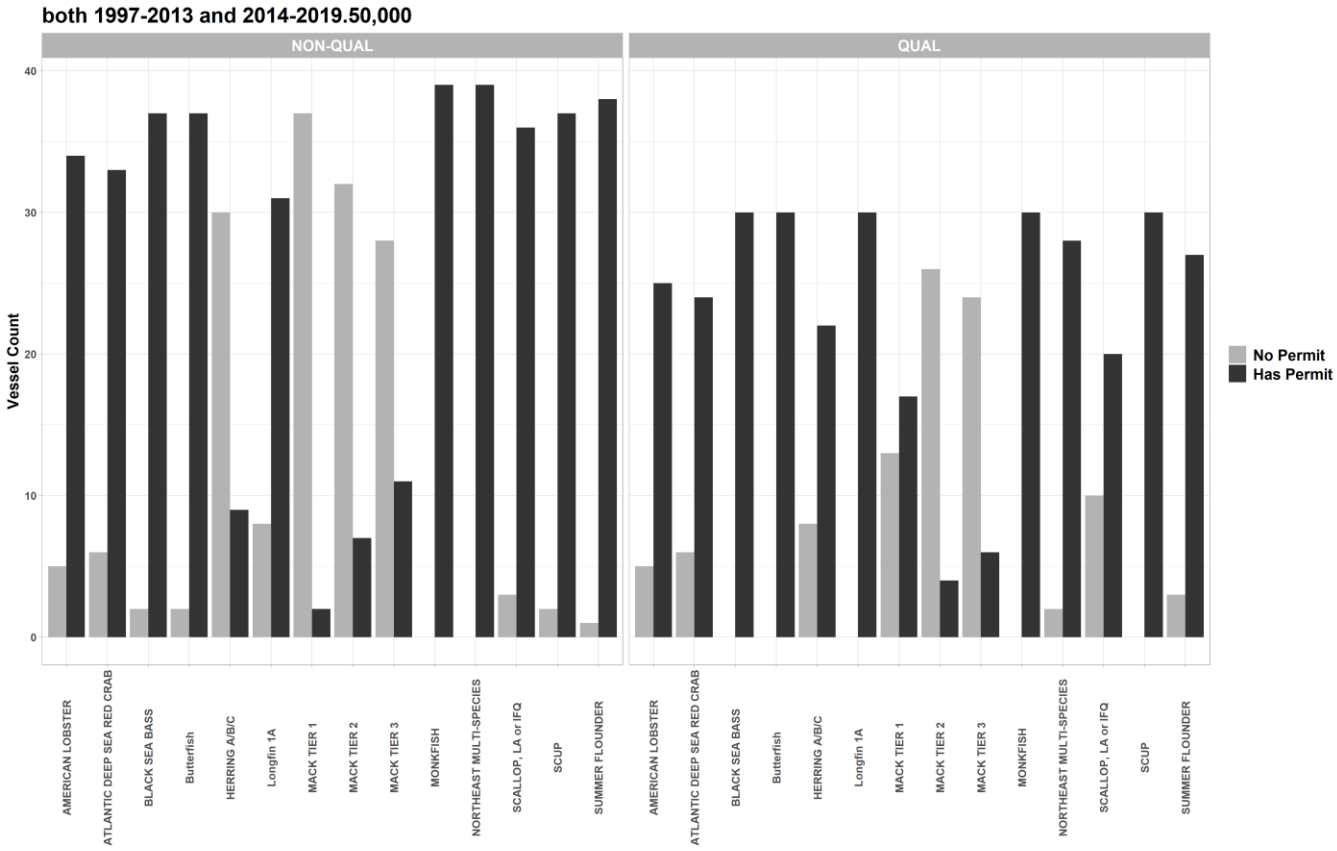

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Figure D17. 1997-2013 plus 2014-2019/100K Option Permits

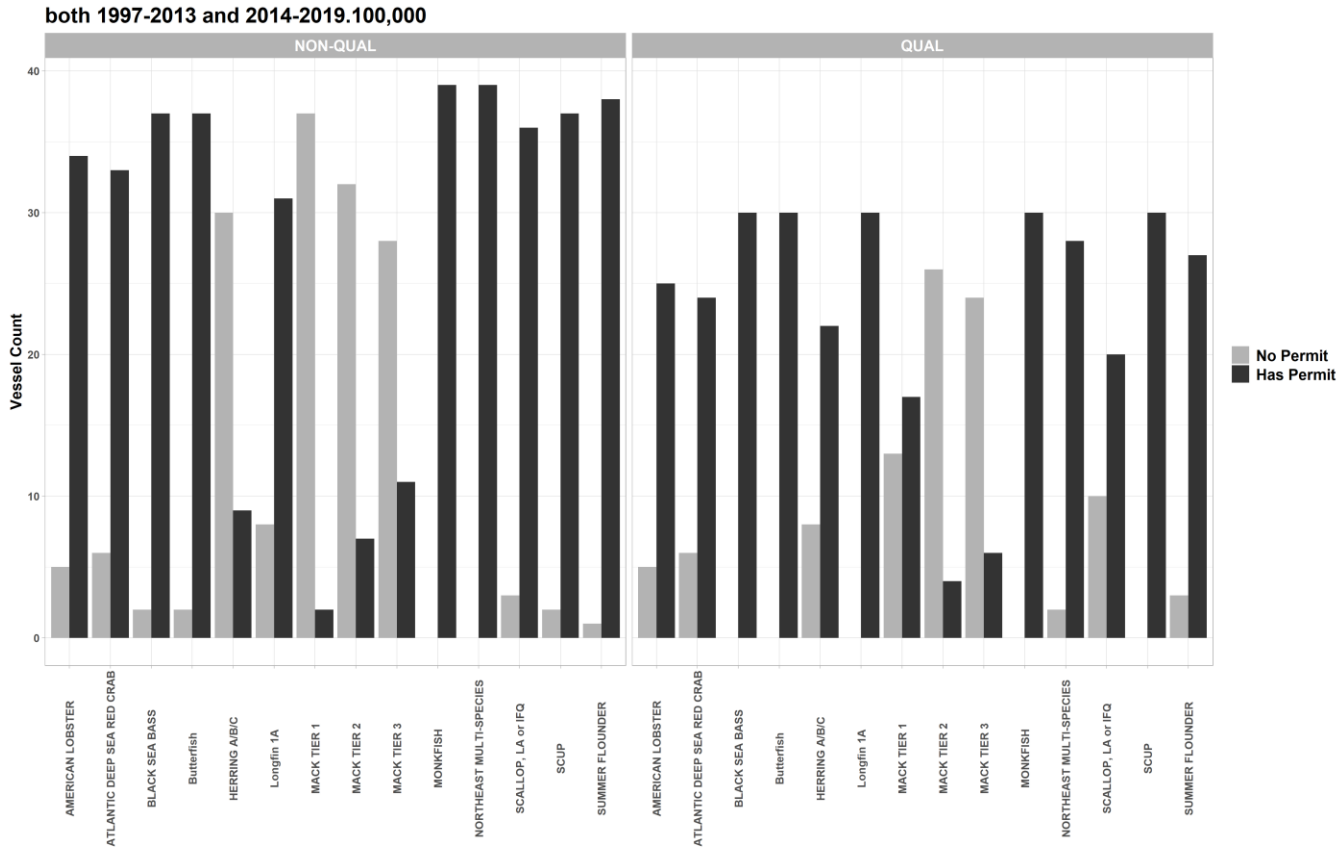

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Figure D18. 1997-2013 plus 2014-2019/300K Option Permits

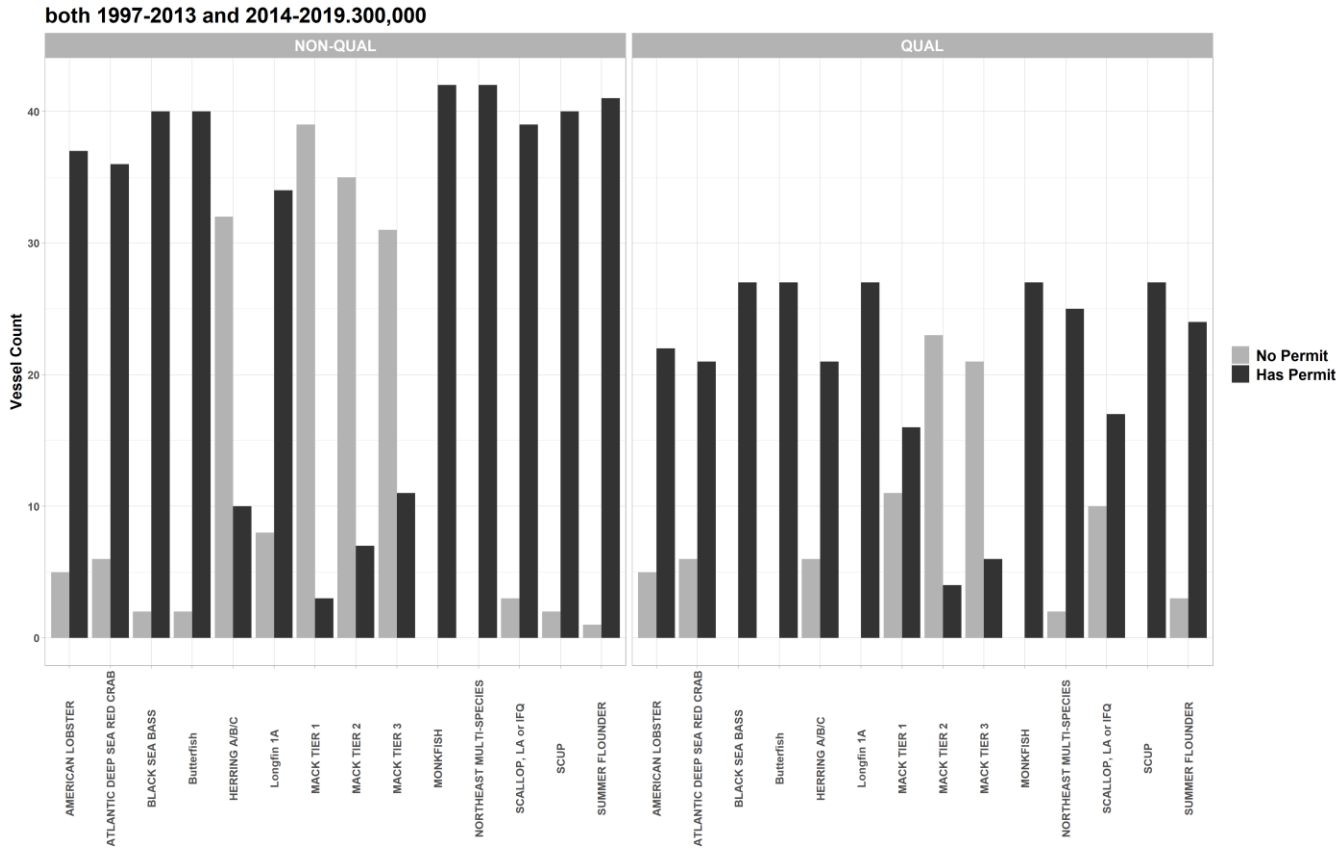

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Figure D19. 1997-2013 plus 2014-2019/500K Option Permits

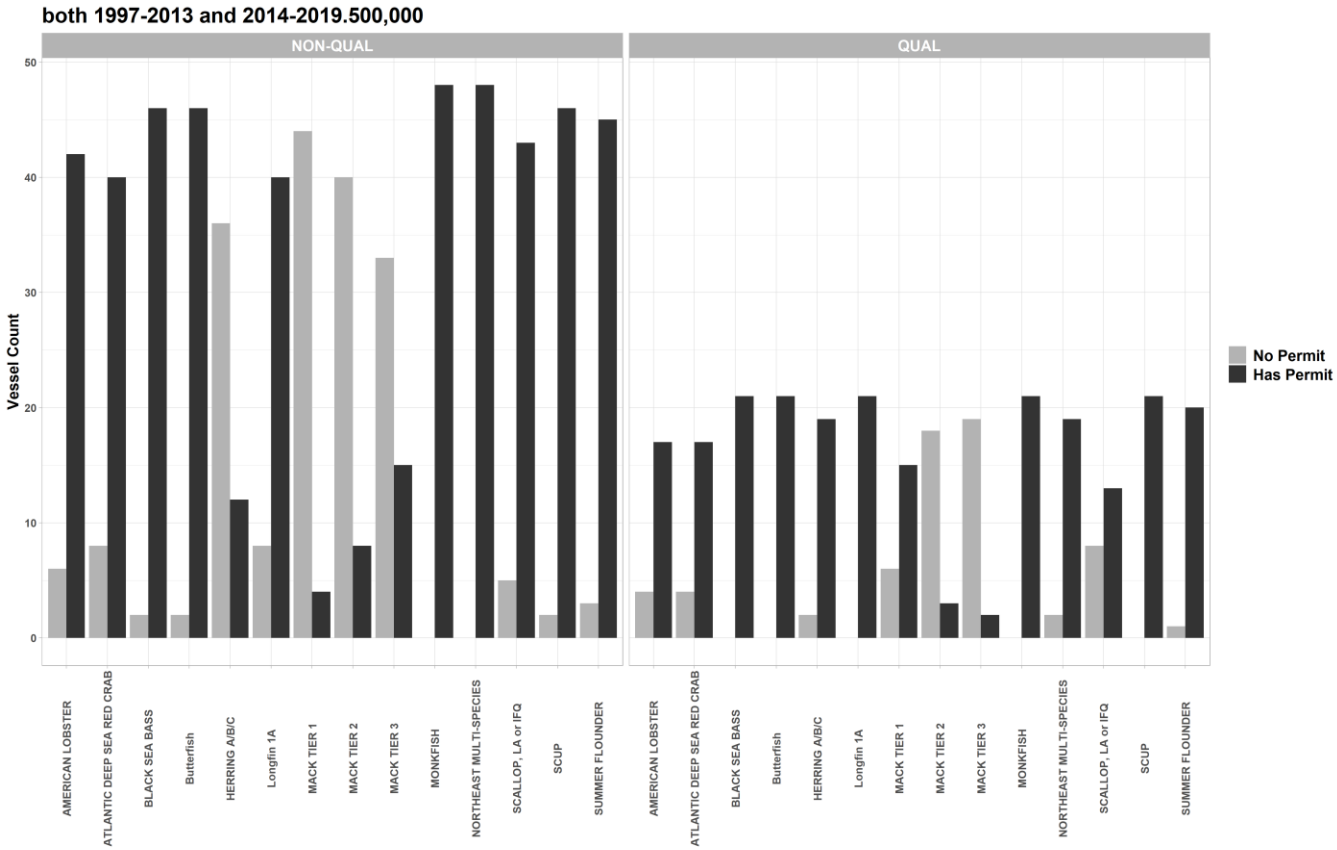

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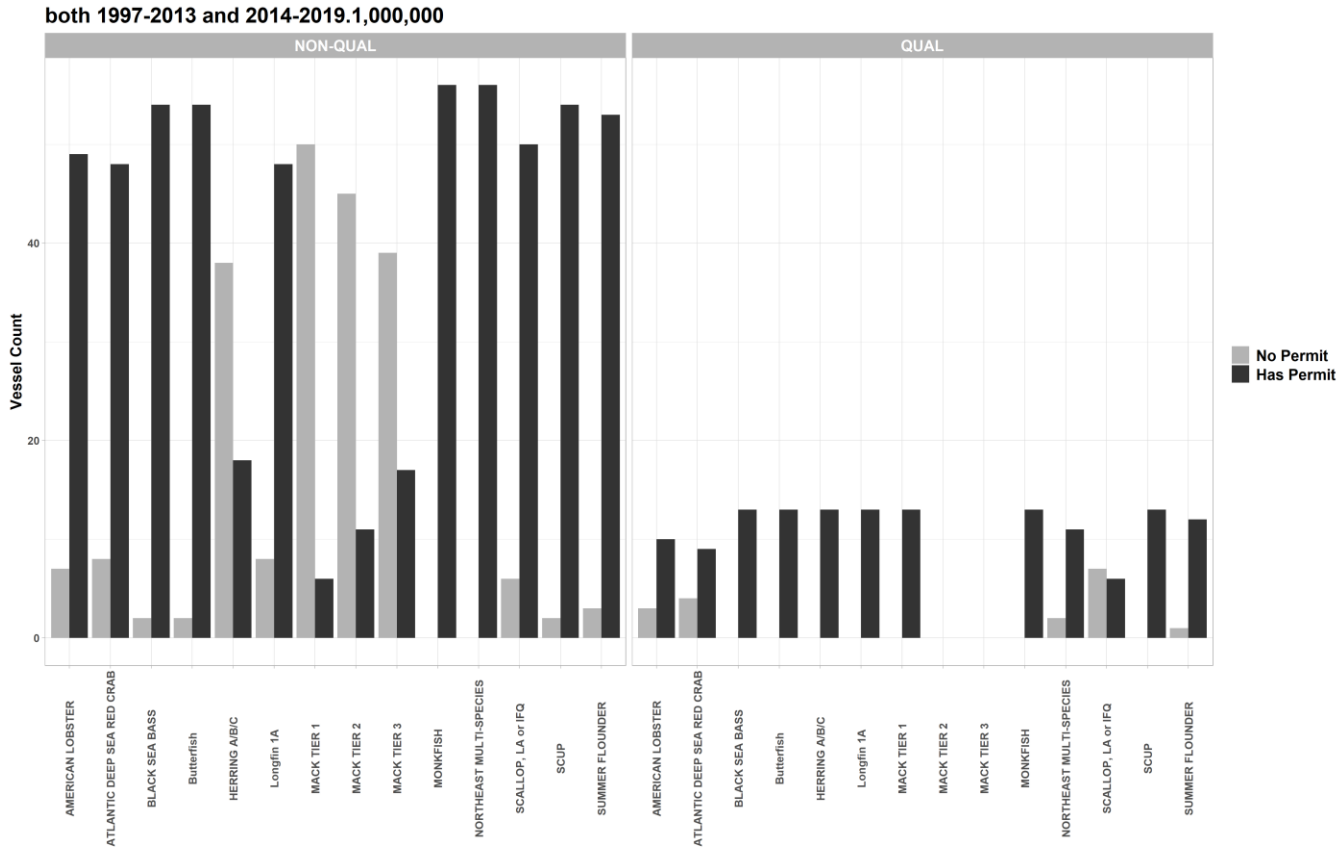
Figure D20. 1997-2013 plus 2014-2019/1,000,000 Option Permits



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← BACK TO ALL EVENTS

EVENT INFORMATION

Mackerel, Squid, Butterfish Committee Webinar

WHEN:

Wednesday, April 29, 2020

9:00 AM – 6:00 PM

Google Calendar · ICS

The Council's Atlantic Mackerel, Squid, and Butterfish Committee will meet via webinar on Wednesday April 29, 2020 from 9:00 a.m. to 6:00 p.m. The purpose of the meeting is to develop committee recommendations regarding the Mackerel, Squid, Butterfish FMP Goals/Objectives and Illex Permits Amendment. This amendment to the MSB fishery management plan could modify the plan's goals and objectives as well as the permitting system and associated management measures for *Illex* squid.

Webinar Details

The meeting will be held via webinar with a telephone-only audio connection: http://mafmc.adobeconnect.com/msbc2020illex/. Telephone instructions are provided upon connecting, or the public can call direct: 800-832-0736, Rm: *7833942#.

- MAFMC Webinar Guide - general instructions for connecting to and participating in Council webinars

Meeting Materials

- Agenda
- Written Public Comments Part A
- Written Public Comments Part B
- Late Comments, SquidLandingSheet
- AP Summary
- Hearings 1-3 Summaries
- Hearings 4-5 Summaries
- NMFS GARFO Letter

Questions? Contact Jason Didden - jdidden@mafmc.org, (302) 526-5254.

Mid-Atlantic Fishery Management Council
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Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Michael P. Luisi, Chairman | G. Warren Elliott, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: June 4, 2020

To: Council

From: J. Didden

Subject: May 27, 2020 MSB Monitoring Committee Summary and Staff Recommendations

The Mackerel, Squid, and Butterfish (MSB) Monitoring Committee (MC) met to make recommendations for *Illex* specifications based on the Scientific and Statistical Committee's (SSC) recommendation of a 30,000 metric ton (MT) Acceptable Biological Catch for both 2020 and 2021.

MC members attending included Jason Didden, Doug Christel, Lisa Hendrickson, and Ben Galuardi. Others attending included: Drew Minkiewicz, Kara G, Katie Almeida, Peter Hughes, Kate Wilke, Alissa Wilson, Jeff Kaelin, Eric Reid, Greg DiDomenico, Aly Pitts, Pam Lyons Gromen, James Fletcher, and Dan Farnham Jr.

J. Didden provided an overview of the regulatory charge to the MC: to make recommendations from a list of measures (see §648.22) to ensure that the specifications are not exceeded. Quotas were exceeded by about 5% in 2018 and 10% in 2019. GARFO staff indicated that the causes of the 2019 overage included higher prediction error associated with higher volumes, and incomplete data at the time closure projections are made (due to typical reporting lags).

The MC noted that for 2020, measures to change closure thresholds, discards, and/or reporting are not feasible. The best route forward for 2020 would be for GARFO to make an in-season adjustment after consulting with the Council in June 2020. Council staff will create the necessary NEPA documents, and staff recommends that the Council should request that *Illex* processors voluntarily decrease the time lag between vessel landing and dealer reporting to not more than 48 hours, especially after 50% of the quota is landed.

Subsequent examination of reporting lag by GARFO staff indicates that there was generally consistent and meaningful (but often legal) lag in 2019, and GARFO can use that information and data from 2020/21 to improve their forecasting in 2020/21 by correcting projections for reporting lag. This will reduce the likelihood of exceeding the specifications, especially if the main processors adhere to 48-hour (or less) reporting.

The MC discussed several aspects of potential 2021 specifications. Expected discards are deducted from the ABC, and currently the Council sets aside 4.52% (mean plus one standard deviation of most recent 10 years of observed discard rates in the last assessment: 1994-2004). 2016 and 2017

SBRM-year (July-June) discard rates were very similar to the current set-aside. The preliminary July 2018-June 2019 rate was about double however. The upcoming assessment will estimate typical calendar-year estimates and explore seasonal trends. If the assessment confirms consistently higher discard rates, additional quota may need to be set aside for discards.

The MC discussed whether changes to closure thresholds or reporting requirements may help ensure that the 2021 specifications are not exceeded. Reporting requirements are technically outside the scope of the MC's regulatory direction, but the MSB Committee and Council could make such recommendations. Subsequent analysis by GARFO staff (attached) indicates that a substantial number of trips and amount of landings are reported more than 4 days after a vessel lands (4 days is still often within current requirements). This suggests to staff that moving to requiring reporting within 48 hours of landing could improve GARFO's ability to monitor this fishery. Pending clarification that daily catch VMS reporting by vessels is required (in the *Illex* Amendment) should also improve monitoring, but will be most effective if coupled with faster dealer reporting.

The MC recommended that the Council consider some lower closure threshold depending on reporting changes the Council might also recommend, informed by the additional analysis by GARFO (attached below). Staff reached out to several dealers, and a 48-hour reporting requirement after July 15 for landings over 50,000 pounds (50,000-pound trips covered 95% of August 2019 landings) appears practicable. Public comments on the call were generally supportive of investigating reporting options rather than measures that would decrease available quota.

The MC discussed that lowering the closure threshold from 95% would reduce the likelihood of overages, but could lead to under-harvest. Staff noted the fishery was catching near 10% of the quota per week before increasing to near 15% of the quota per week just before the 2019 closure. If partnered with reporting improvements (e.g. 48-hour reporting), and a commitment from GARFO to continue exploring projection improvements, staff currently recommends a system where the closure threshold is tied to the rate of landings from the most recently-available week (so it may change week to week), with some closure thresholds slightly more cautionary than current when the fishery is most active:

- Closure threshold 95% if catching less than 5% of quota/week
- Closure threshold of 94% if catching 5-10%/week
- Closure threshold of 93% if catching >10%/week

GARFO would continue to attempt to close the fishery on the day landings are projected to hit the threshold in effect at the time.

While there will be some uncertainty until tested, staff believes that the combination of improved reporting, improved projecting, and incrementally-lowered closure thresholds during high-volume periods will likely result in the specifications not being exceeded. Monitoring performance will be evaluated on an ongoing basis, and it is likely that additional modifications (more or less restrictive) may be appropriate to consider in the future. Staff believes that consistent adherence to more rapid reporting may be critical to avoid overages and additionally-restrictive future closure thresholds. Likewise, if there is **not** hastening of reporting planned for 2021, staff currently

recommends the following reduced closure thresholds to ensure avoid exceeding the specifications:

- Closure threshold 95% if catching less than 5% of quota/week
- Closure threshold of 91% if catching 5-10%/week
- Closure threshold of 87% if catching >10%/week

The resulting specifications for the option **with** reporting modification would be:

2020: ABC of 30,000 MT and IOY = DAH = DAP = 28,644 MT. Other measures would stay the same. The Council could write a letter to the relevant processors encouraging voluntary rapid reporting.

2021: ABC of 30,000 MT and IOY = DAH = DAP = 28,644 MT.

- Closure threshold 95% if catching less than 5% of quota/week
- Closure threshold of 94% if catching 5-10%/week
- Closure threshold of 93% if catching >10%/week

Require a 48-hour reporting requirement after July 15 for landings over 50,000 pounds.

The MC is meeting for a second time June 15, 2020 and may provide some additional input for the Council meeting. Staff will produce a follow-up memo highlighting any substantial findings.

Other Included Briefing Materials:

SSC Report – see Tab 9

Supplemental GARFO reporting analyses

Staff ABC Memo

2020 Advisory Panel Fishery Performance Report

2020 Fishery Information Document

May 2020 *Illex* Working Group Summary

Public Comments received for inclusion in the briefing book

For a deep dive, see the *Illex* Working Group materials for the May 2020 SSC meeting: https://www.mafmc.org/ssc-meetings/2020/may-12-13.

Illex 2019 Landings Dates vs. Dealer Reporting Dates

Benjamin Galuardi (NOAA/NMFS/GARFO/APSD)

2020-05-29

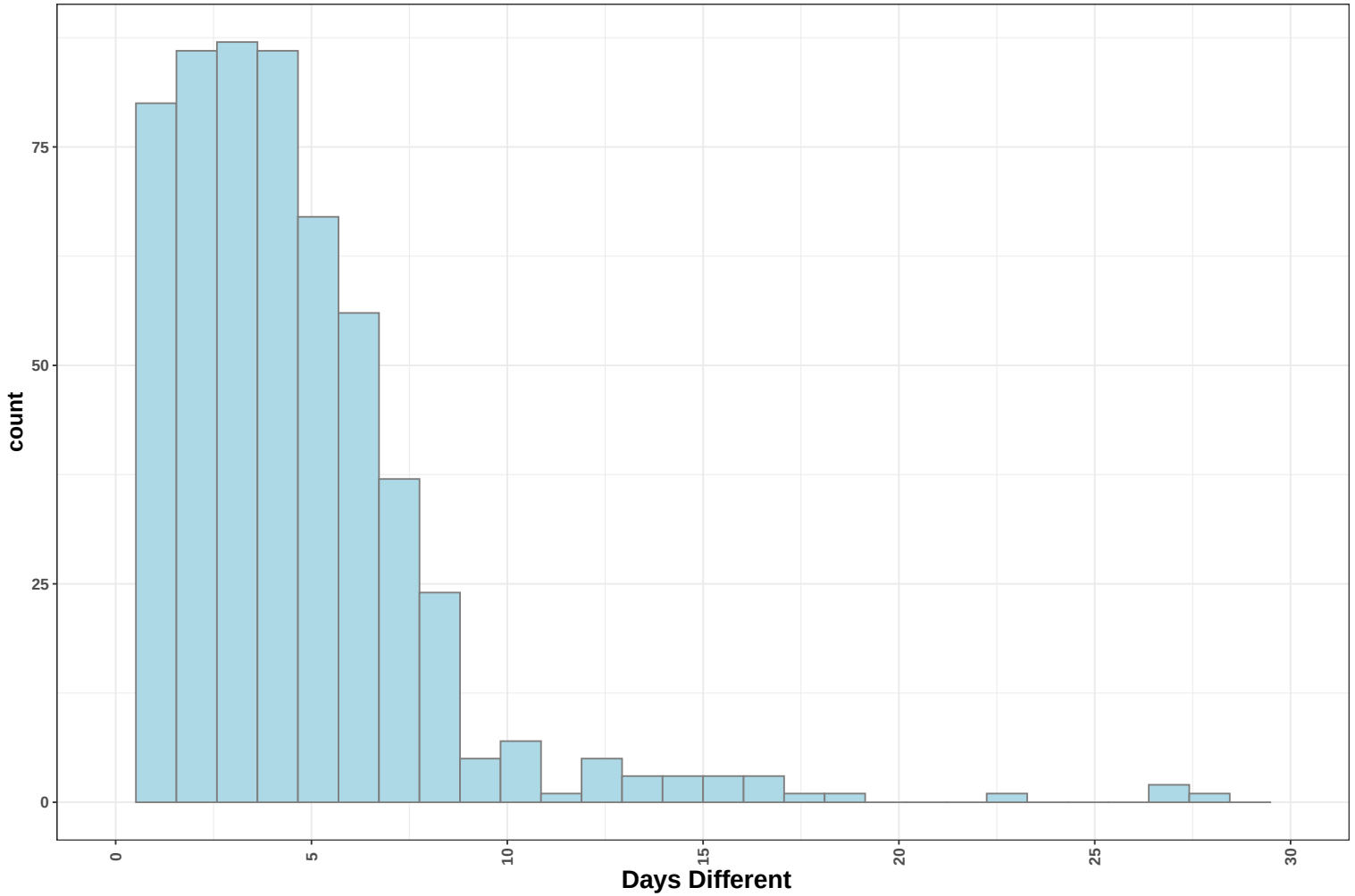

Figure 1: Lag, in days, between date sold and date recorded

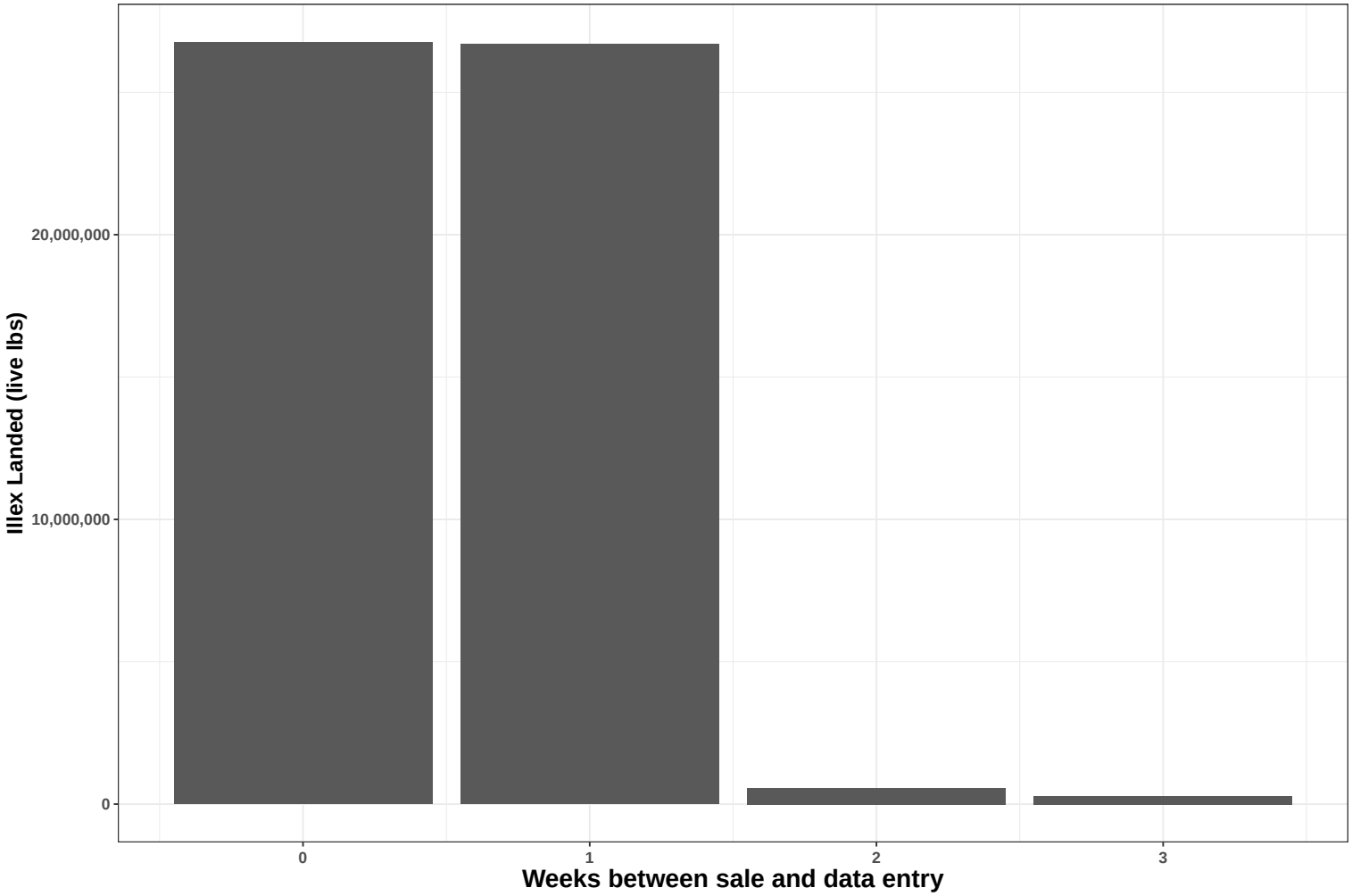

Figure 2: Week Difference between Sale and Report. Week begins on Sunday

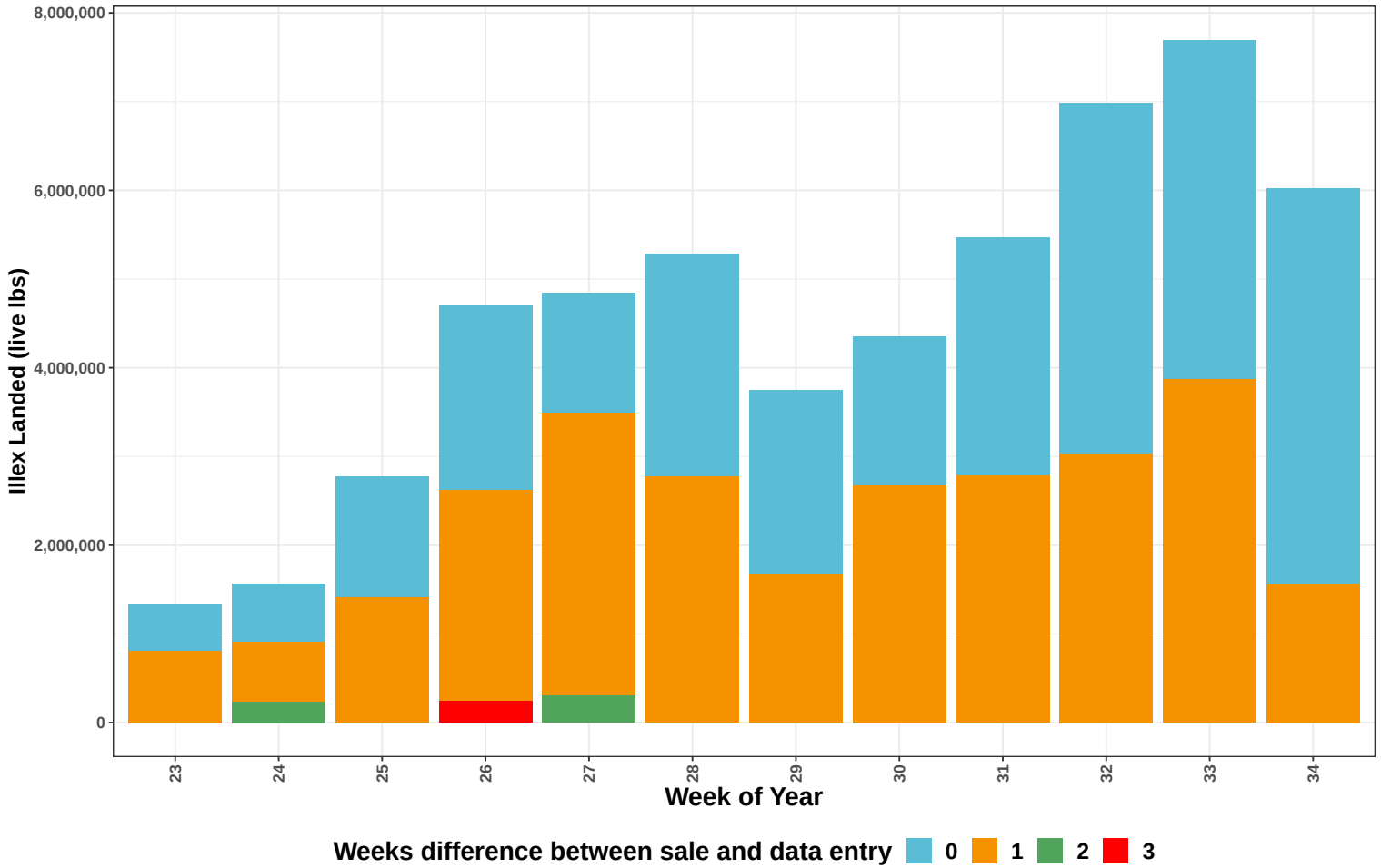

Figure 3: Difference in weeks, by week, between date sold and and date entered

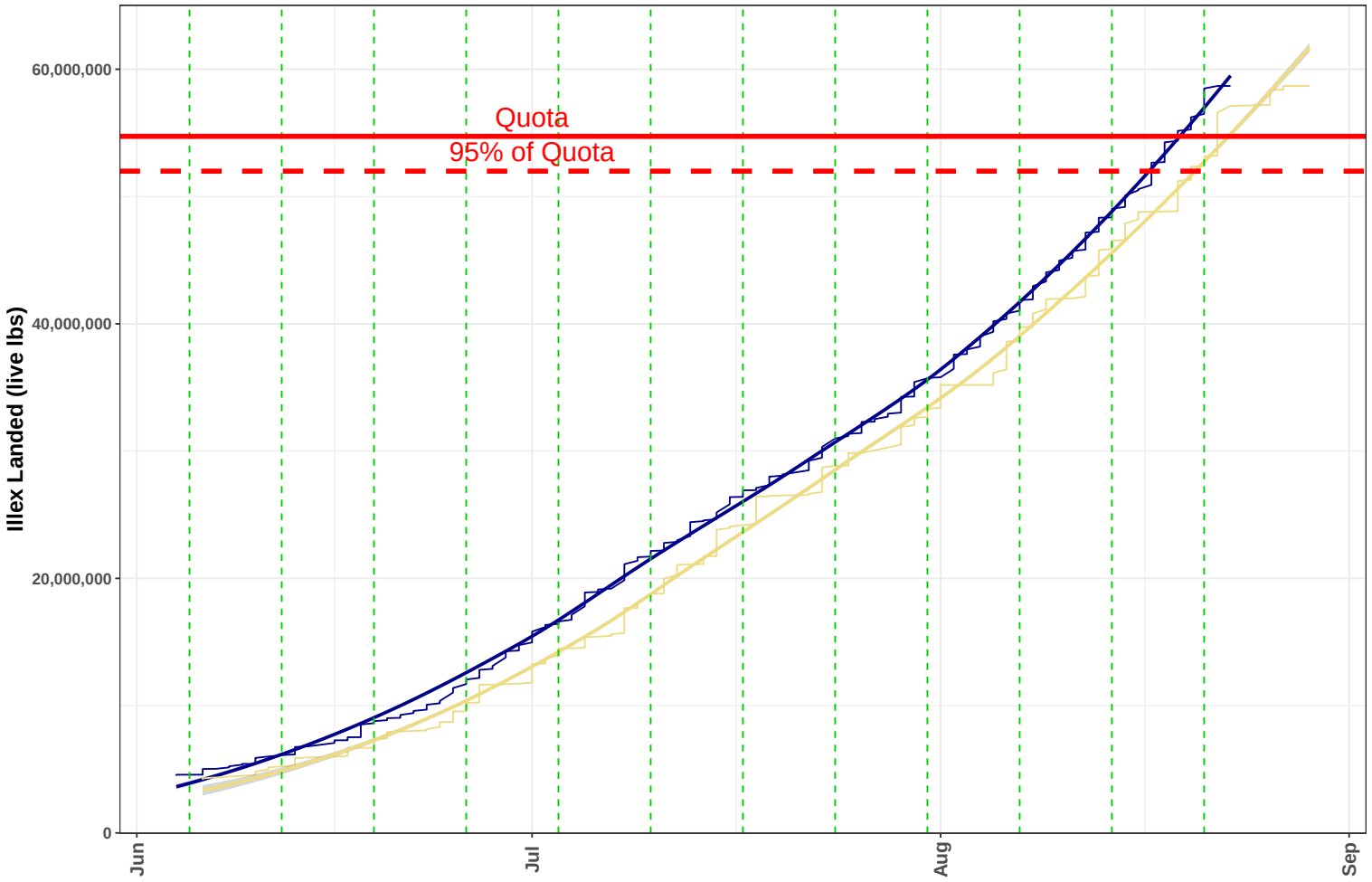

Figure 4: Illex 2019: Daily comparison of date sold (blue) vs. date entered (yellow). Green lines represent the Wednesday of each week

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Michael P. Luisi, Chairman | G. Warren Elliott, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: May 5, 2020

To: SSC, Council

From: J. Didden, staff

Subject: *Illex* Squid ABC

The current *Illex* acceptable biological catch (ABC) of 26,000 MT is based on the SSC's 2018 finding that landings of 24,000-26,000 MT (the highest catches in the time series to that point) do not appear to have caused harm to the *Illex* stock. The SSC judged that *Illex* has been lightly exploited historically given the relatively small portion of its range within which the commercial fishery operates.

2019 *Illex* landings totaled 27,163.5 metric tons. Given the assumed 4.52% discard rate (the mean plus one standard deviation of the most recent 10 years of observed discard rates in the last assessment), this would translate into a 2019 catch of 28,449.4 MT. Recent SBRM discard rates have been similar.

Given the fall 2019 NMFS NEFSC survey was within the range of typical variability, and the *Illex* working group materials generally support that recent landings are still unlikely to have caused harm to the *Illex* stock, an ABC of 28,449.4 MT for 2020 appears justifiable. Staff understands that there is some danger of catch "creep" if NMFS continues to have difficulty closing the fishery on time, but approaches to mitigate monitoring challenges can be addressed from the management perspective, separately from the setting of ABC.

Staff recommends that the SSC also authorize a conditional 2020 in-season increase to 30,000 MT based on a trigger from the Cusum approaches developed through the *Illex* working group. The exact trigger would be determined by the SSC after reviewing and discussing the materials from the *Illex* working group. If the 3-4 primary *Illex* processors can produce sample data voluntarily in an electronic format provided by NMFS to allow rapid analysis, NMFS already has the authority to make in-season adjustments to the *Illex* quota.

Staff recommends that the SSC also provide an identical preliminary ABC recommendation for 2021. Staff will build in additional alternatives into relevant 2021 NEPA documents, so that flexibility would be available for 2021 if a modification to the preliminary recommendation became warranted (after reviewing the 2020 season and any related future analyses).

Illex Fishery Performance Report

March 2020

The Mid-Atlantic Fishery Management Council's (Council) Mackerel-Squid-Butterfish (MSB) Advisory Panel (AP) met via webinar on March 31, 2020 to review the *Illex* Fishery Information Document and develop the following Fishery Performance Report. The purpose of this report is to contextualize catch histories for the Scientific and Statistical Committee (SSC) by providing information about fishing effort, market trends, environmental changes, and other factors. Fishery Performance Reports for the other MSB species will be developed later in the year. Trigger questions noted below were posed to the AP to generate discussion. Please note: the advisor comments described below are not necessarily consensus or majority statements.

Advisory Panel members present: Katie Almeida (MA -Towndock (RI)), Howard King (MD), Eleanor Bochenek (NJ - Rutgers), Gerry O'Neil (MA - Cape Seafoods), Jeff Kaelin (NJ - Lund's Fisheries), Meghan Lapp (RI - Seafreeze), Pete Kaizer (MA - Althea K Sportfishing), Hank Lackner (NY - FV Jason and Danielle), Pam Lyons Gromen (Wild Oceans), and Greg DiDominico (NJ - GSSA).

Others present: Jason Didden, Alissa Wilson, Andy Jones, Anna Mercer, Ben Galuardi, Brooke Wright, Chris Batsavage, Kim Hyde, Lisa Hendrickson, John Manderson, Paul Rago, Sarah Gaichas, Sonny Gwin, and Doug Christel.

Trigger questions:

The AP was presented with the following trigger questions:

1. What factors have influenced recent catch (markets/economy, environment, regulations, other factors)?
2. Are the current fishery regulations appropriate? How could they be improved?
3. What would you recommend as research priorities?
4. What else is important for the Council to know?

General

It has been previously requested that the NEFSC data updates include information on what is known and not known about ecosystem relationships for MSB species and how the various assessments already account for natural mortality/forage needs. Some AP members believe that consumption of forage stocks by marine mammals likely dwarfs mortality from fishing. There are both concerns that natural mortality may be over or under considered, and some AP members think the Council should direct the SSC to consider forage needs though a forage-based ABC control rule and further implement the policy goals of the Ecosystem Approaches to Fishery Management (EAFM) Guidance Document (http://www.mafmc.org/eafm). See 2018 FPR for additional details on this point http://www.mafmc.org/ssc-meetings/2018/may-8-9).

Staff mentioned that a new process is being developed for assessment and data updates.

A request was made previously for more information on the size distribution of landings and discards, and/or more information regarding the numbers of various fish species discarded (staff note: these are not traditionally part of the MSB FPR process but could be requested from NMFS).

AP members continued to note that several factors could be negatively impacting catches for all MSB species. Spiny Dogfish can create interference (loading nets), and/or be an ecological barrier (e.g. maybe mackerel won't go into areas with high dogfish concentrations). High dogfish populations seem to be associated with other species declining and this issue should be an important component of ecosystem management. Existing regulations, including the Northeast Canyons and Seamounts Marine Monument reduce fishing opportunities. There is strong concern that the size and breadth of all wind energy areas need consideration in terms of not just fishing but also related to loss of survey access, which could then in turn impact uncertainty/ABCs/quotas. Also, the various opportunities in the entire suite of fisheries in the area can drive effort into and out of particular fisheries in a given year.

Market/Economic Conditions

Demand drives the *Illex* fishery and participation. Price/demand are mostly dependent on the international market, which drives world trade prices and/or demand for U.S. *Illex*. Annual variability and price combine to drive interest in fishing for *Illex*. A strong dollar may also impact demand and effort. Market demand for *Illex* was robust in 2016-2019 and new markets are opening up (bait and food). MSC certification should help open new markets and increase prices. Meghan Lapp followed up after the call that SeaFreeze's sales personnel noted that combined world production of Japanese flying squid, Argentine shortfin squid, our *Illex*, and Jumbo flying squid has been down, and these species fill similar product niches, contributing to higher prices for our *Illex*.

Environmental Conditions

Availability changes quickly even in a year (waves of squid "come up onto the bank"). Quota levels have not hurt the stock and are unnecessarily impacting catches in some years; we need to think out of the box regarding quotas. Understanding migration is key and we don't understand the migration behavior and only access a small portion of the population. Real-time

assessment would be optimal to avoid leaving excess *Illex* (and revenues) in the water without a conservation purpose during natural peaks. We need to research ways to take advantage of boom years, including considering the size of squid (taking large squid means harvesting fewer animals). Current management is not sensitive to actual *Illex* productivity or the impact of the fishery. The fishing community should be an integral part of any effort; make changes carefully but don't just get stuck where we are.

Abundance generally and of large squid was unprecedented in 2017-2018, especially near the closures (300-400 grams). One industry representative reported slightly smaller squid in 2018 but noted the early closure prevented access to larger squid later in the year as they grow. In a follow-up email exchange, multiple AP members reported they saw very good size near the end of the 2019 season, and that landing rates improved right up to the end of the 2019 season.

Some have noted the decline in survey indices (individual weight) and high variability of *Illex* should give the SSC pause for concern.

There is also interest in learning more about spawning habitat and timing, and NEFSC staff noted that they have been discussing with the observer program about getting more data on spawning condition from samples.

Management Issues

In the future, deep-sea coral closures may impact the ability of vessels to operate depending on where squid are in a given year – this may become an issue especially in slower years that last longer – *Illex* patterns are changing like other fish – they seem to be deeper in recent years.

Reduced herring quotas may increase participation in the *Illex* fishery.

A higher incidental longfin limit for *Illex* vessels during longfin closures or a more gradual slowing of longfin fishing could avoid regulatory longfin discarding. The new (since 2014) higher limit (15,000 pounds for Tier 1 longfin permit, 5,000 pounds for Tier 2 when on an offshore *Illex* trip and having more than 10,000 pounds of *Illex*) may not totally solve this problem. There is also interest in seeing commercial size data included annually for review by the AP (this is being used by the working group). Staff notes that some public comments for the *Illex* Amendment also recommended for the primary *Illex* vessels an incidental possession limit increase to 20,000 pounds when possessing 10,000 pounds or more of longfin squid, after the *Illex* fishery closes, to allow for bycatch of *Illex* in the longfin squid fishery to be turned into landings.

Advisors noted ongoing Lobster/RGA issues and were interested in a better way to transition gears/area. (the Council tried to engage the ASMFC a number of years ago but there was not much interest). Fixed/mobile gear "gentlemen agreements" are used inshore and may be a solution, but might not be practicable for *Illex* given the patchiness of fish and the amount of gear out in the depth where *Illex* is fished. GARFO did have incidents of lobster gear interactions in 2020.

Jonah crab fixed gear is also an issue – boats are seeing more of this gear and it's becoming a problem.

Other Issues

For refrigerated sea water vessels to participate, they need high densities to drive participation because they have to return to the dock within two days of starting to put *Illex* onboard due to spoilage issues. The fleet is changing from freezers to RSW, increasing catch rates. 3 boats in last 18 months have been converted from freezers to RSW. Some new mackerel/herring boats (besides the ones that have typically participated in *Illex*) have jumped in with more efficient pumping technology, increasing landing rates.

2019 was another really good season but did not unfold as similar to 2018 as the quota line suggests. Catches were low the first few weeks and started later in the southern areas. The quota would have been caught even faster if the southern areas had started strong at more recently typical (higher) catch rates. One of primary Sea Freeze vessels was out of the fishery early for a few weeks but we didn't see overall slower landings due to more vessels participating.

Passing of vessels is getting more difficult with the amount of vessels in the fishing areas given the length of tow line (500 fathoms of wire) out in deep water.

Research Priorities noted included:

Real-time management with cooperative research.

Spawning information.

Illex Fishery Information Document

March 2020

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for *Illex* squid with an emphasis on 2019. Data sources for Fishery Information Documents include unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit http://www.mafmc.org/msb.

Key Facts

- 2019 was the third banner year in a row for *Illex*, with the quota being harvested on a similar timeline as 2018. 2017-2019 represent the first sequence in the history of the fishery of three consecutive boom *Illex* years.
- Substantial variability is to be expected with any squid species.

Basic Biology

Illex squid is a semi-pelagic/semi-demersal schooling cephalopod species distributed between Newfoundland and the Florida Straits, and lives less than one year. *Illex* is a semelparous, terminal spawner whereby spawning and death occur within several days of mating. The northern stock component, located north of the USA-Canada border in NAFO Subareas 3 and 4, is assessed annually and is managed by the Northwest Atlantic Fisheries Organization (NAFO), though landings have been low in recent years. The NAFO assessment is not based on recent data. The southern/U.S. stock component is located in NAFO Subareas 5 and 6 between the Gulf of Maine and Cape Hatteras, NC and is managed by the Mid-Atlantic Fishery Management Council (the Council or MAFMC). Additional life history information is detailed in the EFH document for the species, located at: http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

Status of the Stock

The status of *Illex* is unknown with respect to being overfished or not, and unknown with respect to experiencing overfishing or not. Results from the NEFSC Trawl surveys are highly variable and without apparent long-term trend. The Council has established a working group (http://www.mafmc.org/actions/illex-working-group) to investigate if current information

suggests that adjustments to the *Illex* quota are appropriate, and if there are ways to make the quota more responsive to real-time conditions. There is also a benchmark *Illex* assessment planned for 2021. At this time, the outcome of these endeavors is uncertain. Some short-term results of the workgroup will be known by June 2020 and may influence SSC discussions regarding short-term ABCs, but there are also longer-term tasks that may be in progress beyond 2020.

Management System and Fishery Performance

Management

The Council established management of *Illex* in 1978 and the management unit includes all federal East Coast waters.

Access is limited with moratorium permits. Trip limits are triggered when the quota is approached. Incidental permits are limited to 10,000 pounds per trip. Additional summary regulatory information is available at https://www.fisheries.noaa.gov/new-england-mid-atlantic/resources-fishing/resources-fishing-greater-atlantic-region. An ongoing action may change *Illex* permitting – see https://www.mafmc.org/newsfeed/2020/msb-illex-public-hearing-webinars.

The current quota is 24,825 MT[1], based on a 26,000 MT Acceptable Biological Catch (ABC) and a 4.52% discard rate (the mean plus one standard deviation of the most recent 10 years of observed discard rates in the last assessment). Recent SBRM discard rates have been similar.

Recreational catch of *Illex* is believed to be negligible. There are no recreational regulations except for party/charter vessel permits and reporting.

Commercial Fishery

Figure 1 describes *Illex* catch 1963-2019 and highlights the early foreign fishery and then domestication of the fishery. Figures 2-3 describe domestic landings, ex-vessel revenues (nominal), and prices (inflation adjusted) since 1982. Figure 4 illustrates preliminary 2018 (yellow-orange) and 2019 (blue) landings through the year.

Table 1 describes 2019 *Illex* landings by state, and Table 2 describes 2019 *Illex* landings by gear type. Figure 5 describes the location of 2018 *Illex* landings. Table 3 provides preliminary information on *Illex* landings by statistical area for 2019.

[1] 1 metric ton = approximately 2,204.62 pounds

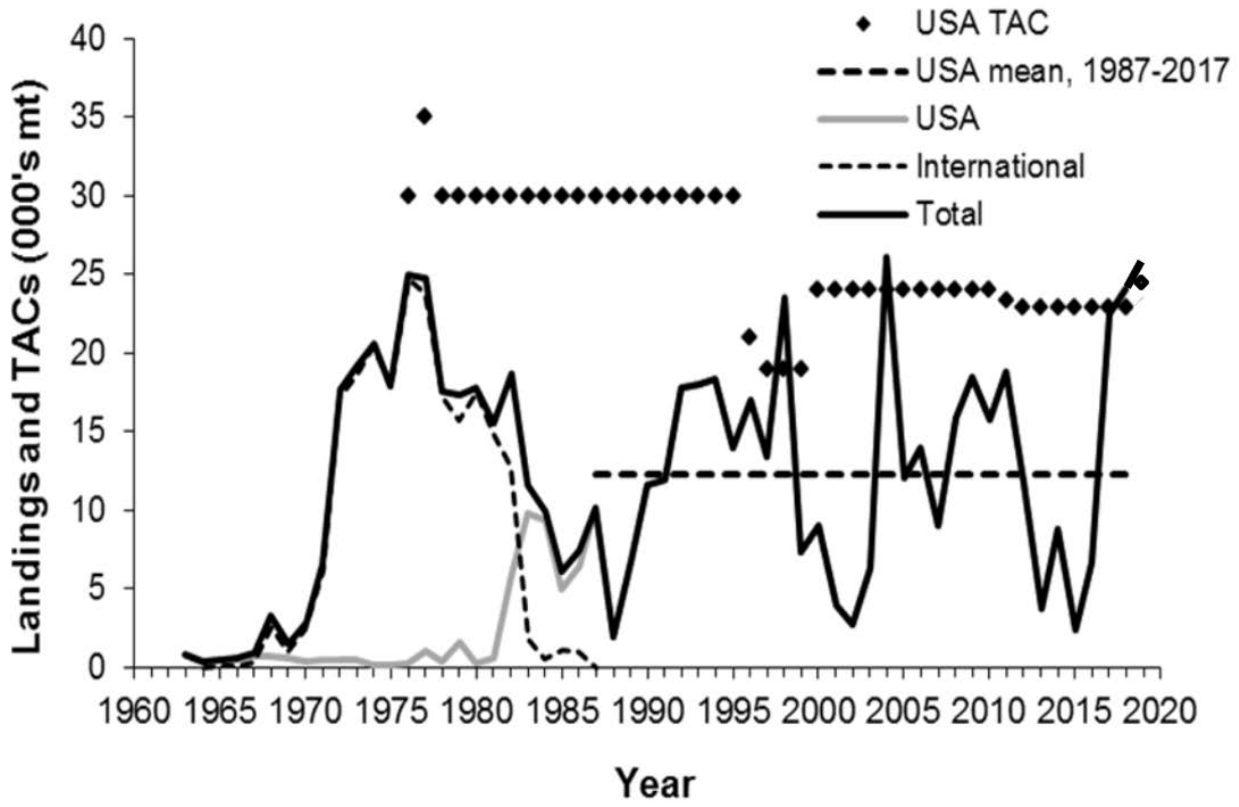

Figure 1. Total annual *Illex* landings (mt) by the U.S. and other countries for 1963-2019. Sources: NEFSC *Illex* Data update, available at http://www.mafmc.org/ssc-meetings/2018/may-8-9 and NMFS unpublished dealer data.

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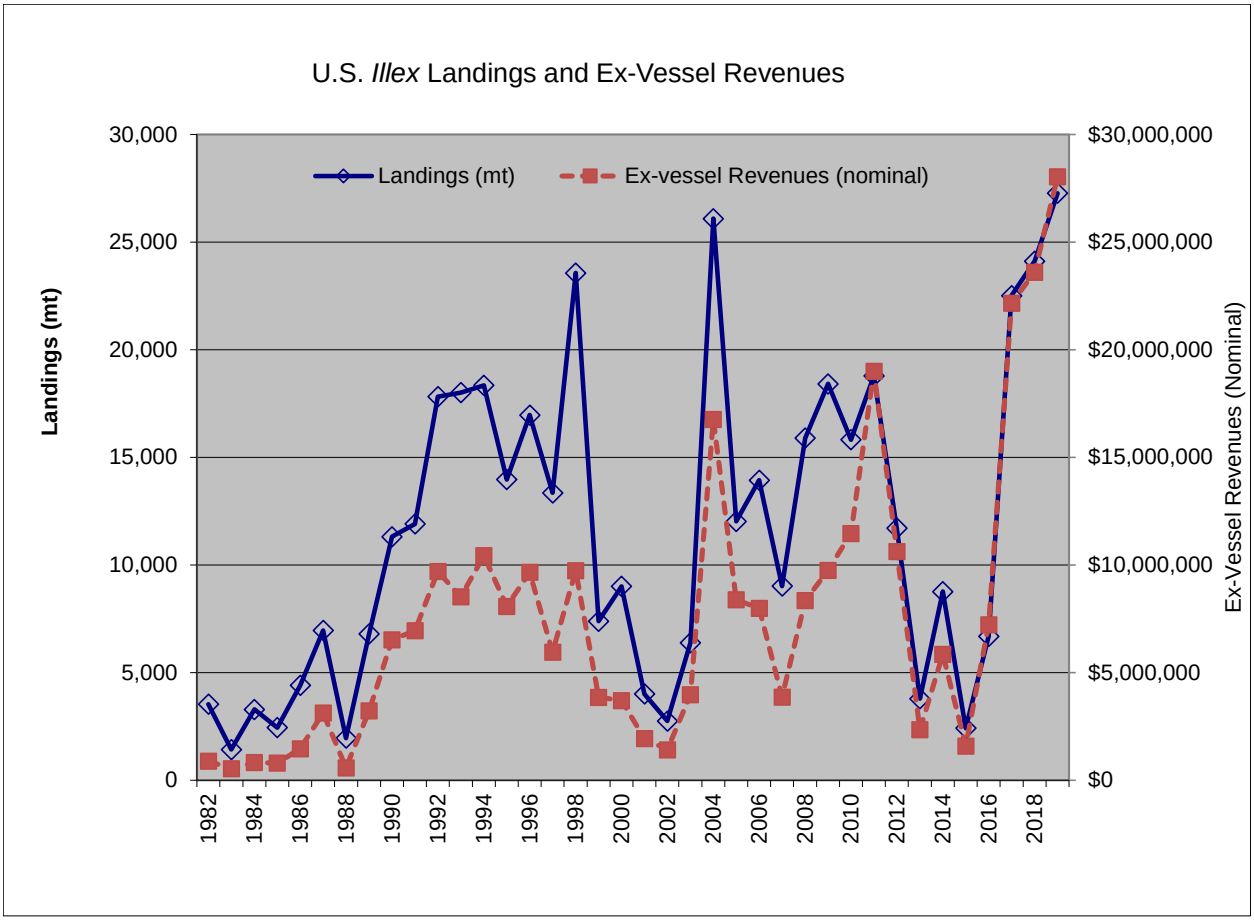

Figure 2. U.S. *Illex* Landings and Nominal *Illex* Ex-Vessel Values 1982-2019. Source: NMFS unpublished dealer data.

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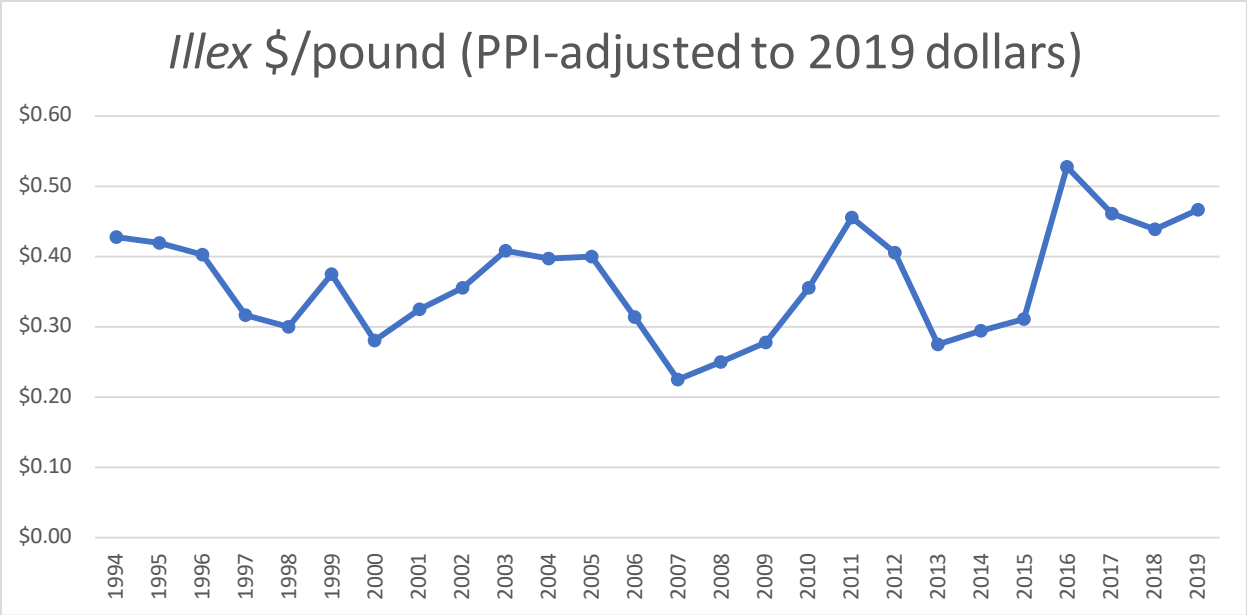

Figure 3. Ex-Vessel *Illex* Prices 1994-2019 Adjusted to 2019 Dollars Based on Producer Price Index (PPI). Source: NMFS unpublished dealer data.

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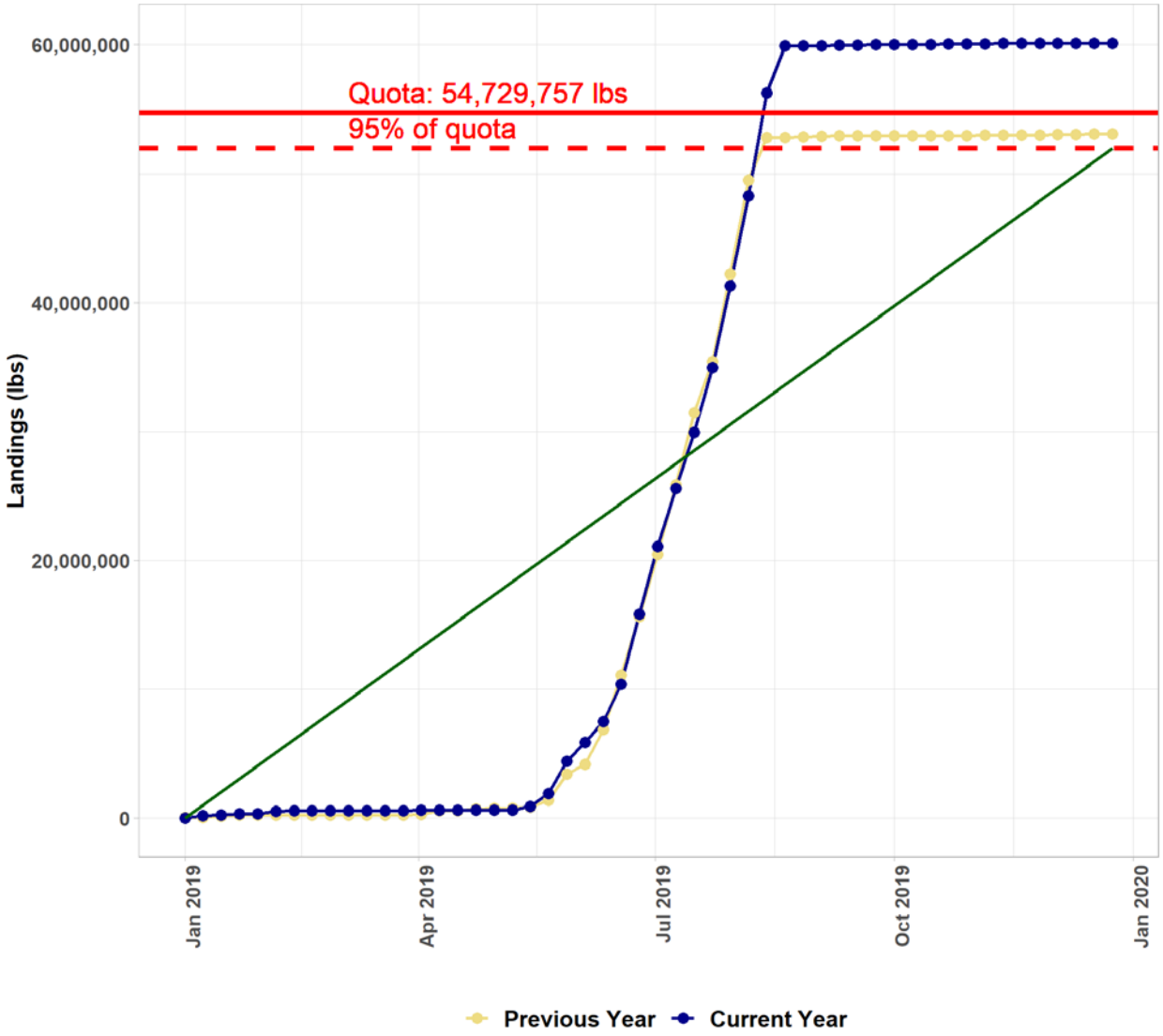

Figure 4. U.S. Preliminary *Illex* landings; 2019 in blue, 2018 in yellow-orange. Source: https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region.

Table 1. Commercial *Illex* landings (live weight) by state in 2019. Source: NMFS unpublished dealer data.

State	Metric Tons	Percent of Total
NJ	9,910	36%
RI	8,480	31%
MA	8,146	30%
Other	740	3%
Total	27,276	100%

Table 2. Commercial *Illex* landings (live weight) by gear in 2019. Source: NMFS unpublished dealer data.

GEAR	Metric Tons	Percent
TRAWL,OTTER,BOTTOM,FISH	24,276	89%
TRAWL,OTTER,MIDWATER PAIRED	1,213	4%
TRAWL,OTTER,MIDWATER	488	2%
Other/Unknown	1,300	5%
Total	27,276	100%

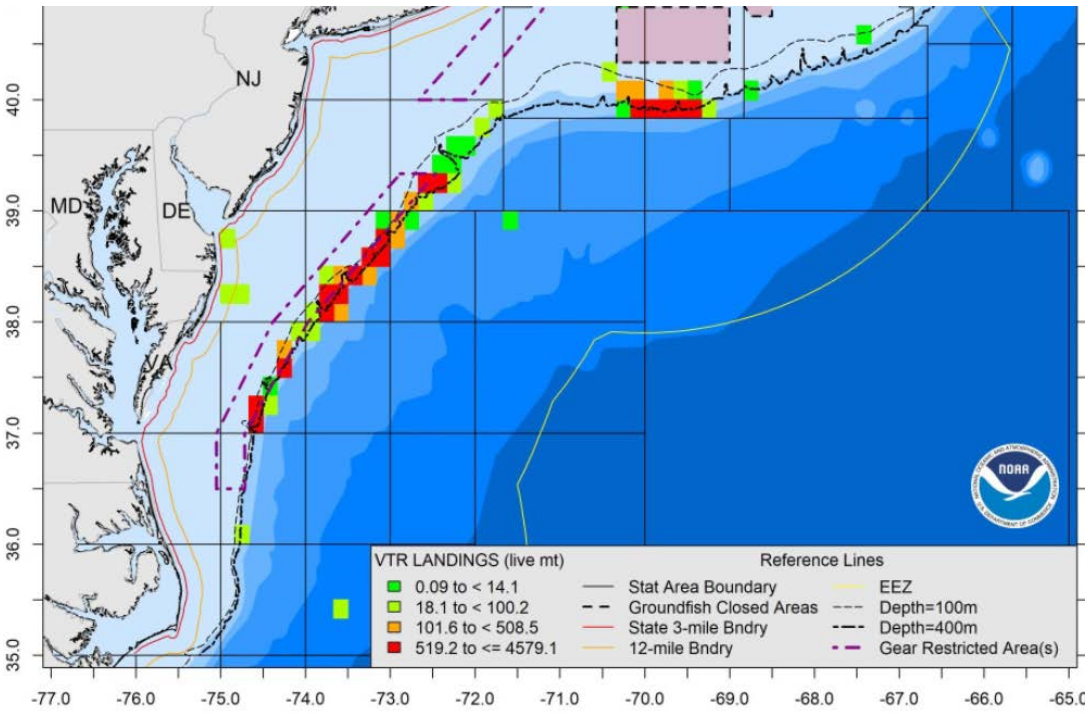

Figure 5. Approximate Primary 2018 *Illex* Catch Locations (from dealer and VTR data)

Table 3. Commercial *Illex* landings by statistical area in 2019. Source: NMFS unpublished VTR data.

Stat Area	Metric Tons 2019	Percent
622	12,474	47%
526	8,801	33%
537	2,135	8%
525	1,211	5%
616	985	4%
Other	1,161	4%
Total	26,766	100%

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Mid-Atlantic Fishery Management Council
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Michael P. Luisi, Chairman | G. Warren Elliott, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: May 5, 2020

To: SSC

From: J. Didden, P. Rago

Subject: Co-Chairs' *Illex* Working Group Update/Short Term Tasks Results Summary

Since May 2019, the *Illex* working group (WG) has been meeting and working to explore options for alternative *Illex* ABCs and/or ABC-setting processes. Efforts were divided into short, medium, and long-term terms of reference (TORs) (https://www.mafmc.org/s/2019-10-*Illex*-WG.pdf).

Short-term TORs included reviewing squid management approaches, listing key data sources, summarizing growth/industry sampling data, initiating analysis of growth and age from 2019 samples provided by industry, conducting CPUE analyses, and exploring implications of the NAFO assessment. The goal was to address these to the extent possible for the May 2020 Scientific and Statistical Committee (SSC) meeting. All of these tasks have been initiated and most have produced some results.

Medium-term TORs include considering additional surveys, developing details on in-season dynamics, and incorporating environmental parameters into analyses of CPUE. Even longer-term tasks include exploring acoustics, developing alternative processes for in-year quota adjustments, considering the influence of harvesting on stock dynamics, identifying cohorts in-season, developing other real-time management approaches, determining the persistence of linkages (CPUE, environmental) to abundance, and developing a prototype model of *Illex* immigration/emigration dynamics. Work on short-term TORs has started to at least inform possible explorations of some medium and longer-term TORs.

Documents were prepared by the WG to address the short-term terms of reference. They should be considered preliminary analyses unless otherwise noted. In addition, a summary document from the *Illex* Summit [S1], held in November 2019, was influential in guiding various investigations of the WG. Many of the WG members participated in the Summit, which reflected on perspectives of harvesters, processors, scientists, and managers. Collectively the working papers represent a broad overview of the current state of the *Illex* fishery, its management, and either underlying or developing science. The methodologies described in these papers may prove useful for addressing future needs related to real-time management of the *Illex* resource and/or ABC-setting in the meantime. Integration of industry-based information is a common theme throughout the reports. The Mackerel, Squid, and Butterfish (MSB) Advisory Panel (AP) was incorporated at the initiation of the WG, and asked for input periodically in 2019. Beginning in 2020 the MSB AP was formally

convened when the workgroup met. There is also an MSB AP meeting scheduled for May 11 for a final round of input from the AP after they had a chance to review the working group documents.

As a starting point, five papers (3,4,5,6,7) address either current conditions in the U.S. fishery and/or other assessment/management approaches. All assessment approaches identify the difficulties of dealing with short-lived species. These difficulties have been addressed using a variety of approaches whose utility seems to depend on the magnitude and value of the fishery which in turn affects the availability and timing of information for updating current harvest recommendations. Few assessment or monitoring approaches seem to exist that have proven track records of accurately predicting outcomes.

Available data include survey data from both federal and NEAMAP bottom trawl surveys [6] , comprehensive Vessel Trip Reports [17, 9, 10, 13, 8, 6] and Vessel Monitoring Systems [11]. Quota monitoring data collected by GARFO was used to examine its use for real-time monitoring [16a]. Industry-sponsored data include biological samples from harvesters [6, 10, 13, 14, 16b] and information from study fleets [8]. A research project on aging of *Illex* [15] is ongoing but incomplete.

The process of providing information for real-time management of *Illex* can be conceptualized as three distinct steps: Identification, Estimation and Detection. First is identifying the relative status of the fishery and the resource in a given year (Identification). “Status” can be determined on an ordinal or ratio scale and can be done on a post hoc basis. Catch per unit effort from the commercial fleet was investigated in paper [10] and for a subset of study fleet data in paper [8]. Both [10] and [8] used advanced state of the art generalized linear models to account for differences associated with year, season, vessel type and permit. Further comparisons of the results in [10] and [8] would be useful to evaluate the representativeness of the study fleet data. Crude rates of CPUE estimation were combined with other metrics of fishery performance, average weight, price, and survey data to examine the potential utility of multivariate methods for identifying system state [13]. Survey data from several sources were combined with information from VTRs to estimate probability of occurrence over the entire resource area and measures of overlap with the fishing fleet [9]. The model-based survey estimation methodology could be valuable for refining the overall distribution of *Illex*.

One of the central tenets of current management is that the fishery has had a modest or low effect on stock dynamics (Estimation). Nothing produced by the WG has suggested otherwise. Under this premise, upward adjustments to the quota are assumed to have a low effect on the potential for overfishing if “good years” can be identified. Depletion models are used in many squid fisheries around the world and have been applied to *Illex* in earlier NEFSC assessments. The Leslie-Davis version of the depletion model was applied to 1997 to 2018 data base in [14]. Results suggested a high degree of indeterminacy owing to failures to satisfy many of the underlying model assumptions. An alternative approach, using assumptions about minimum and maximum values of assumed fishing mortality and trawl capture efficiency was used to develop an “envelope” of potential biomass levels that are constrained by the extremes of each assumption [12]. A similar range of potential fishing mortality rates can then be compared to a suite of possible biological reference points for fishing mortality. Additional confirmation of the low potential mortality rates for *Illex* was obtained by examining VMS records for 2017-2019 [11]. VMS reveals that overall fishing effort is highly concentrated along the shelf break. The consequences for the magnitude of

fishing mortality were investigated in terms of necessary replenishment of squid from adjacent areas and exploration of overlap with the total resource area as estimated in working paper [9].

Detection is the third essential component for real-time management of *Illex*. Currently, there are no accepted procedures for estimating or projecting pre-season abundance of *Illex*. Post hoc determination of system state {poor, average, good} is not useful if real time measures are desired. A methodology developed for statistical process control, known as Cusum was modified to test whether the system state could be determined within the year. This approach was tested by applying it to weekly landings data collected by GARFO for the period 1996-2019 [16a]. Fishermen and processors reported that changes in average size of landed squid were also important factors in characterizing the season. The Cusum method was also applied to the industry-supplied weekly average weight data for 1997-2019 [16b]. The Cusum approach appears promising for identification of system state using either approach and may serve as a basis for testing in the 2020 fishing year. The process for collecting weekly landings data is already in place. If the weekly changes in average weight in the fishery were judged acceptable, rapid processing of representative biological samples by industry would be necessary.

2019 landings totaled 27,163.5 metric tons. In order to facilitate the same landings, an ABC of 28,449.4 MT would be needed (4.52% of the ABC is set aside for expected discards). Given A) the current approach of setting the ABC around the highest observed catch as long as no ill effects have been observed, B) the WG results, and C) that the fall 2019 survey was within the range of typical variability, 28,449.4 MT could be an option for a 2020/2021 ABC. The only other option that appears close to shelf-ready would be to use the Cusum approach for average weight per landed squid, total landing by week, or both variables to modify the quota in-season. Given the generally early detection of non-poor and above average status in good years (weeks 22, 20, 28, 22, 22), data through July 1 (week 26) could potentially be used to determine the existence of a “non-poor and above average” year, and a quota modification be made. This would by nature be experimental to some degree, and an incremental approach might be warranted. The only way for such an experiment to run in 2020 would be for the three major processors to supply weight data on a voluntary basis in an electronic format supplied by GARFO. GARFO already has the authority to make in-season adjustments to the *Illex* quota, in consultation with the MAFMC, during the fishing year by publishing notification in the Federal Register. A particular weight-based statistical trigger criterion would need to be identified. A combined approach, starting at 28,449.4 MT, and followed by a potential modification based on the weight-based Cusum approach could also be utilized. Given timing and regulatory issues, the most that that 2020 ABC could practically be increased to is 30,000 MT. There is substantially more flexibility for 2021, and the results of any 2020 processes could be evaluated post-season and integrated into final 2021 specifications through GARFO’s in-season adjustment authority or expedited regulatory measures, if appropriate.

45 STATE STREET | PO BOX 608
NARRAGANSETT, RI 02882

June 2, 2020

Dr. Chris Moore
800 North State Street
Suite 201
Dover, DE 19901

Dear Dr. Moore,

As an active AP Member and participant on the Council's *Illex Working Group*, I am writing to support the recent actions and suggestions by the SSC, Council staff, and Monitoring Committee. Last month, the SSC approved the Council staff's recommendation of an ABC of 30,000 MT for Illex for FY 2020 and 2021. This is an increase from 2019's ABC of 26,000 MT. During the two-day SSC meeting the group delivered and discussed many positive findings from the Illex Working Group regarding the Illex stock.

These positive findings include:

- The stock is still considered "lightly exploited"
- Only a very small portion of the Illex Biomass is exposed to fishing activity each season
- Illex are not vulnerable to the fishery at a single chokepoint
- The mortality rate is low
- There are multiple cohorts thought the year
- Along with many other positive findings with this stock

These reasons, in addition to many others, contributed to the SSC's decision to increase the ABC by 4000 tons (8.8 million pounds). After reading through the many working group documents and listening to the SSC's discussion we were pleased to hear the conclusions and ultimately their show of support to increase the ABC.

We are in support of both the Monitoring and S/M/B Committee looking into possibly revising Illex reporting requirements and in-season adjustments to prevent future quota overages. *"Monitoring Difficulties"* is mentioned in the Illex Amendment as a reason to move forward with reducing participation and effort for some permit holders. In our public comments and conversations with Council members we have stated that this issue can be resolved though other management measures, rather than a reduction of permits and access to the fishery. In recent correspondence, it seems that the Council Staff and the RO also agree. We

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are pleased to see a solution to the problem that does not take the drastic step of reducing permits or fishing effort.

Sincerely,

Katie Almeida
Fishery Policy Analyst

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June 2020 Council Meeting Report

The following summary highlights actions taken and issues considered at the Mid-Atlantic Fishery Management Council's meeting June 16-18, 2020. This meeting was conducted by webinar due to the ongoing COVID-19 pandemic. Presentations, briefing materials, and webinar recordings are available at http://www.mafmc.org/briefing/june-2020.

During this meeting, the Council:

- Reviewed scoping comments and provided input on draft alternatives for the Black Sea Bass Commercial State Allocation Amendment*
- Received preliminary results of an updated summer flounder commercial/recreational allocation model*
- Provided input on the range of alternatives to be considered in the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment*
- Reviewed a draft outline of topics under consideration through the Recreational Reform Initiative and directed staff to determine which items could be addressed through a framework/addendum and which would require an amendment*
- Revised the range of alternatives to be considered in the Bluefish Allocation and Rebuilding Amendment and directed the Fishery Management Action Team to incorporate alternatives that would allow states to have a minimum default allocation*
- Adopted *Illex* squid specifications for 2021, including an Acceptable Biological Catch of 30,000 metric tons and a quota of 28,644 metric tons, and recommended additional measures to help avoid overages
- Received four presentations on habitat-related updates and activities within the region
- Reviewed a report on commercial landings of unmanaged species from Maine through North Carolina and commercial landings of the species managed through the Council's Unmanaged Forage Omnibus Amendment
- Approved changes to the Overfishing Limit Coefficient of Variation guidance document as recommended by the Scientific and Statistical Committee
- Received an update on planning for a Research Set-Aside Workshop and discussed the feasibility of holding an in-person workshop in the fall
- Directed staff to draft a letter expressing concern about the redeployment of observers and at-sea monitors on fishing vessels beginning July 1 during the ongoing COVID-19 pandemic
- Reviewed several hybrid meeting options and agreed to continue meeting via webinar for the near term to minimize the risk of exposure to COVID-19
- Reviewed Executive Order 13921 on Promoting American Seafood Competitiveness and Economic Growth and briefly discussed next steps for developing a response

** Items denoted with an asterisk (*) were undertaken during joint meetings with the Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Management Board and Bluefish Management Board.*

Black Sea Bass Commercial State Allocation Amendment

The Council met jointly with the Atlantic States Marine Fisheries Commission's (ASMFC) Summer Flounder, Scup, and Black Sea Bass Management Board (Board) to review scoping comments and draft management alternatives for a joint amendment and addendum which will consider changes to the allocations of the black sea bass commercial quota among states. This action will also consider whether these allocations should be added to the Council's fishery management plan (FMP) or if they should remain only in the Commission's FMP. The Council and Board agreed to remove hybrid approaches from further consideration in this action. They

also modified the range of sub-options considered under the trigger approach and added an alternative to consider federal in-season closures when the coastwide quota plus an additional buffer is projected to be reached. The appropriate buffer will be further considered during the next joint meeting. They agreed to continue development of all other management approaches presented. The Council and Board will consider approval of a final range of management alternatives and a draft document for public comment during a joint meeting in August, which would allow public hearings to take place in the fall.

Summer Flounder Commercial/Recreational Allocation Study Model Update

The Council and Board received preliminary results of an updated economic model, developed by Dr. Kurt Schnier (University of California, Merced) and Dr. Rob Hicks (College of William & Mary), to evaluate the allocation of total allowable landings between the commercial and recreational summer flounder fisheries. The model, first developed in 2016, was updated to include revised Marine Recreational Information Program (MRIP) data as well as revised commercial data through 2018. The model evaluates the marginal economic benefits of various allocation levels to the commercial and recreational sectors. A final report on the update is still in development, but preliminary results suggest that changes in allocations between sectors in either direction could potentially be supported due to the large overlap of uncertainty bounds for the marginal willingness to pay for each sector. The model developers found that it is likely, but not statistically significant, that increasing the recreational allocation from the current 40% allocation of landings would increase overall benefits from the fisheries. The Council and Board will consider the final results when developing and analyzing potential summer flounder allocation changes through the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment.

Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment

The Council and Board reviewed recommendations from the Fishery Management Action Team (FMAT) on the range of alternatives to be considered in the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment. This amendment will review and potentially modify the allocations of total allowable catch or landings between the commercial and recreational sectors for summer flounder, scup, and black sea bass. The Council and Board agreed to move forward with the FMAT's recommendation for a refined range of management alternatives. Approaches retained for further consideration include:

- Updating existing base years with revised data
- Options for revised base years
- An alternative that aims to maintain approximately status quo harvest by sector from 2018-2019 under the current ABCs
- Approaches with different allocations above and below a specified trigger
- Options for averaging several different allocation options
- Recreational sector separation between the for-hire and private/shore recreational modes
- Allocation transfers
- Options for future allocation changes to be made through a framework or addendum process.

The Council and Board expect to approve a final range of alternatives during a joint meeting in August. Additional information regarding the amendment process and timeline is available at: https://www.mafmc.org/actions/sfsbsb-allocation-amendment.

The Council and Board agreed that three of the issues removed from this amendment warrant further consideration through a separate process. These items are briefly described below.

- **"Harvest control rule" based approaches:** This conceptual approach was submitted by six recreational organizations during the scoping process. After reviewing a number of concerns raised by the FMAT, including possible inconsistency with Magnuson-Stevens Act requirements as currently configured, the Council and Board agreed that the concepts in this proposal would be more appropriate to explore through a separate action such as the Recreational Reform Initiative (see the following section).
- **Recreational accountability alternatives:** The Council and Board agreed that recreational accountability could be addressed within the other management alternatives being considered and that major changes to the system of accountability measures are beyond current scope of this action.
- **Recreational catch accounting alternatives**: The Council and Board agreed that this is an important issue, especially in terms of reducing uncertainty in the recreational data, but concluded that it falls outside the scope of this allocation action. It was also noted that recreational catch accounting may be more appropriate to pursue for all recreationally managed species, including those under other FMPs, outside of this amendment.

After discussing how to best address these issues, the Council and Board agreed to consider initiating a joint action by the end of 2020 to consider recreational accountability and catch accounting. As described below, some of these topics may be addressed through a management action associated with the Recreational Reform Initiative.

Recreational Reform Initiative

The Council and Board reviewed a draft outline of topics under consideration through the Recreational Reform Initiative. This initiative addresses summer flounder, scup, black sea bass, and bluefish, all of which are managed jointly by the Council and Commission. After considering the topics currently under consideration in this initiative, as well as items removed from further consideration through the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment (see above), the Council and Board tasked staff with determining which items could be addressed through a joint framework/addendum and which changes would require an amendment. The Council and Board plan to further consider all potential recreational management approaches discussed through this action to date and will consider initiating a joint management action to address priority topics before the end of 2020.

Bluefish Allocation and Rebuilding Amendment

The Council met jointly with the ASMFC's Bluefish Management Board to review recommendations from the FMAT on the range of alternatives to be considered in the Bluefish Allocation and Rebuilding Amendment. The Council and Board voted to remove several alternatives which would use the Northeast Fishery Science Center's recreational discard estimation method for developing allocations. The Council and Board also requested that the FMAT include a new set of alternatives to explore the ability for states to have a minimum default allocation. The following issues will continue to be further developed and will be presented to the Council and Board at a joint meeting in August:

- Fishery management plan goals and objectives
- Recreational/commercial sector allocations
- Commercial allocations to the states (including minimum default allocations)
- Regional commercial quotas
- Commercial state-to-state quota transfers
- Recreational/commercial sector transfers
- Rebuilding plan
- Sector specific management uncertainty
- Recreational sector separation between the for-hire and private/shore recreational modes

- *De minimis* provision to relieve states from having to adopt fishery regulations

The Council and Board expect to approve a final range of alternatives at the joint December meeting, with the goal of submitting the final environmental assessment to NOAA fisheries by September 2021 (which is within the rebuilding timeline). For more detailed information regarding the amendment process and timeline visit https://www.mafmc.org/actions/bluefish-allocation-amendment.

Illex 2020-2021 Specifications

The Council adopted 2021 *Illex* squid specifications of a 30,000 MT (66.1 million pounds) Acceptable Biological Catch (ABC) and a 28,644 MT (63.1 million pounds) quota (the lower quota accounts for discards). This represents a 15% increase. The Council also adopted a 48-hour *Illex* reporting requirement for dealers after July 15 until a directed fishery closure, and a lowered directed fishery closure threshold of 94%, both to help avoid overages in 2021. The Council also requested NOAA Fisheries use its in-season adjustment authority to raise the 2020 quota in the same manner and will request that dealers voluntarily report 2020 *Illex* landings within 48-hours. Improved projection approaches by NOAA Fisheries will also help avoid overages in 2020 and 2021.

Update on Habitat Activities

The Council received presentations on two projects occurring within the region that support work related to the Councils habitat and ecosystem priorities as identified in its Strategic Plan. Victoria Kentner (NOAA Fisheries Northeast Fisheries Science Center) and Chris Haak (NOAA Fisheries NEFSC/Monmouth University) presented on the Northeast Regional Habitat Assessment and Emily Farr (NOAA Fisheries) presented on the recently completed Northeast Habitat Climate Vulnerability Assessment. In addition, NOAA Fisheries Habitat Conservation Division Staff (Karen Green and Sue Tuxbury) provided the Council with a bi-annual update on projects of interest occurring in the Northeast region. This update included topics such as the status of offshore wind development projects, oil and gas exploratory surveys, and noted the new Presidential Executive Order as it relates to aquaculture. Finally, the Executive Director of the Responsible Offshore Science Alliance, Lyndie Hice-Dunton, provided the Council with an update on their work to date.

Unmanaged Landings Update

The Council reviewed a report on commercial landings from Maine through North Carolina of species that are not managed at the state or federal level, as well as commercial landings of the species managed through the Council's Unmanaged Forage Omnibus Amendment as Ecosystem Components. The goal of this report is to look for signs of developing unmanaged commercial fisheries in the northeast region. The Council agreed that this report did not show any noteworthy increases in unmanaged commercial landings, or landings of Ecosystem Component species, over the past 5 years. They agreed that this report is useful and will continue to receive annual updates of this information.

Committee Reports

SSC Report

Dr. Paul Rago, SSC chair, provided a summary of the SSC's meeting on May 12-13, 2020. Dr. Michael Wilberg, University of Maryland, was elected vice-chair of the SSC and replaces Dr. Tom Miller who served as SSC vice-chair for over 10 years. The SSC also reviewed and made suggested revisions of the Overfishing Limit (OFL) Coefficient of Variation (CV) guidance document that was initially approved by the Council in 2019. This document is used by the SSC when considering scientific uncertainty when making ABC recommendations. The changes made to the document help clarify and provide additional rationale when evaluating nine different decision criteria used to determine the appropriate OFL CV. The Council approved the revised OFL CV guidance document with the suggested revisions from the SSC.

Research Steering Committee

The Council reviewed a summary of the Research Steering Committee's meeting on April 28 to discuss redevelopment of the RSA program and a possible workshop later this fall. Following the committee report, the Council discussed the feasibility of holding an in-person workshop this fall given the continued health risks associated with COVID-19. After some discussion, the Council tasked staff to continuing exploring venues and dates that may be able to accommodate an in-person workshop. If an in-person workshop is not feasible this fall due to social distancing protocols, the Council recommended waiting to host the workshop until 2021. A decision on whether to postpone will be made by Council/Committee leadership within the next few months.

Other Business

Redeployment of Observers and At-Sea Monitors on July 1

The Council received an update from the NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO) on plans to redeploy observers and at-sea monitors on July 1 for vessels with Greater Atlantic Region fishing permits. Observer requirements have been waived since March 20 due to the COVID-19 pandemic. Council members and members of the public voiced concern that this action will threaten the health of fishing crews as well as observers. It was noted that the risk of transmission is particularly high given the close quarters on most vessels and the transience of observers who travel around the region. The Council tasked staff with writing a letter to communicate these concerns. This letter was sent on June 23 and is available at https://www.mafmc.org/correspondence.

2020 Meeting Planning

The Council discussed how and when to resume in-person meetings and considered several options for holding "hybrid" meetings, which could allow a combination of in-person and remote participation. Given the continued public health risk posed by COVID-19, the Council plans to continue meeting via webinar for the near future.

Executive Order on Promoting American Seafood Competitiveness and Economic Growth

Last month, the President signed Executive Order 13921 on Promoting American Seafood Competitiveness and Economic Growth and tasked the regional fishery management councils with developing prioritized lists of recommended actions to reduce burdens on domestic fishing and to increase production within sustainable fisheries. The Council briefly discussed next steps for generating a list of recommendations. Council staff will be circulating feedback forms for Council members and members of the public within the coming weeks.

Next Meeting

The next meeting of the full Council will be held via webinar on **July 16, 2020**. The purpose of this meeting is to take final action on the Mackerel, Squid, Butterfish FMP Goals/Objectives and *Illex* Permits Amendment. Details will be posted at: https://www.mafmc.org/council-events/2020/july16-council-meeting-webinar. A complete list of upcoming meetings can be found at https://www.mafmc.org/council-events.