Considerations of Modifying the LAGC IFQ Possession Limit

The following section outlines potential considerations of changing the LAGC IFQ trip limit. This document uses a framework of valued ecosystem components (VECs) as a way to qualitatively discuss how modifying trip limits could impact the scallop resource, essential fish habitat, protected resources, and non-target species. This document is intended only to support discussion by the Scallop PDT and Scallop Committee and should not be interpreted as a final impact analysis for a Council document.

1.0 AREAS FOR CONSIDERATION

1.1 Biological

LAGC IFQ vessels may fish quota in open areas or available access areas, at a possession limit of 600 lbs per trip. Unlike the LA component, LAGC access area trips are not allocated at the individual vessel level, meaning LAGC vessels may elect to fish their quota in access areas but are not required to do so. A fixed number of access area trips are allocated to the LAGC fishery each year; when in-season monitoring efforts estimate that the allocated number of trips to an access area have been taken, that access area closes to all LAGC vessels for the remainder of the fishing year.

Increasing the LAGC IFQ possession limit would not substantially impact the scallop resource because available allocation to LAGC vessels and overall landings by the LAGC IFQ component would not change. Therefore, the overall fishing mortality from LAGC IFQ harvest would not substantially change compared to what could be expected under the 600-pound possession limit.

Increasing the possession limit reduces the number of trips required for a vessel to harvest its quota and increases the 'catch potential' for individual trips. It is therefore possible that an increased possession limit could incentivize vessels to fish quota in open areas farther offshore with higher LPUE, meaning fishing pressure would be relieved on inshore aggregations of scallops that have typically been targeted by LAGC IFQ vessels. Under these circumstances, increasing the possession limit could have slightly positive impacts on the resource relative to the 600-pound limit.

Allocating a total number of access area trips to the LAGC IFQ fleet creates potential for 'derby fishing' when an area becomes available that is expected to have favorable fishing conditions because there are finite opportunities for vessels to harvest quota from said area. This was the case in FY 2016 and FY2017 in the Nantucket Lightship, and FY2018 in Closed Area I. In these circumstances, effort was concentrated in months immediately following the opening, which do not necessarily align with the time of year with highest meat yield. Examples of this have been observed in the past; however, this may be less of a concern now that the start of the fishing year has shifted to April 1st, meaning any 'ramping up' of effort would align closer to prime fishing months (i.e. May and June) than in past years. Regardless, under this scenario, an increased possession limit would likely translate to an increased rate of harvest in access areas. It is difficult to estimate how this might impact the resource, although it is possible that an increased harvest rate on concentrated sets of scallops could result in a localized increase of incidental and

discard mortality; if this was the case, somewhat negative impacts could be expected if the possession limit were increased relative to the current 600-pound limit.

The overall impacts of increasing the possession limit on the resource are expected to be neutral because: 1) the principles of rotational management ensure that LAGC access area trips would be allocated to areas with high exploitable biomass which could be expected to sustain any marginal increase in incidental and(or) discard mortality; and 2) the LAGC IFQ component represents 5.5% of the fishery, meaning impacts on the resource from this fleet are not expected to be significant relative to impacts of the fishery as a whole.

1.2 Essential Fish Habitat

The Scallop FMP describes fishery impacts on EFH in terms of the amount of fishing proposed, the location of fishing relative to habitat type, and projections of swept area expected from fishing estimated using the SAMS model.

Increasing the possession limit would allow LAGC IFQ vessels to harvest quota in fewer trips but would not change the level of allocation or landings expected from the LAGC IFQ component, meaning overall effort and respective area swept is not expected to change relative to status quo. In light of this and considering other fishery regulations which prohibit fishing in areas that are sensitive to habitat degradation and dictate dredge size and gear characteristics for LAGC IFQ vessels, it is unlikely that an increase in the possession limit would have any impact of EFH relative to the 600-pound limit.

It is possible that a higher possession limit could incentivize vessels to fish quota in open areas farther offshore that have not been typically targeted by LAGC IFQ vessels in the past. Though the LAGC IFQ fleet could expand the range of open area trips beyond what has typically been focused on inshore areas, it is highly unlikely that it would introduce fishing effort or expand area swept in places where the limited access component does not already operate. Therefore, it is unlikely that expanding the range of the LAGC IFQ fleet as a result of an increased possession limit would have any impact on EFH relative to what could be expected under the 600-pound limit.

1.3 Protected Resources

Impacts of scallop fishing on protected resources are typically gauged by the level of scallop effort that overlaps with regions where protected resource species are typically observed and is measured by projected area swept. Specifically, interaction risks with protected species, such as sea turtles and Atlantic sturgeon, are strongly associated with amount of time and location of gear in the water, with vulnerability of an interaction increasing with increases of any or all of these factors.

Observed interactions with protected species (specifically sea turtles) have been more common in the Mid-Atlantic relative to other parts of the resource area (i.e., GB, GOM, and SNE). As such, management measures have been included in the Scallop FMP to reduce the risk of interactions in this region, primarily in the form of a seasonal gear requirement (i.e. the use of a turtle chain mat and deflector dredge west of 71°W from May 1st through November 30th). This gear requirement applies to all LA and LAGC IFQ vessels that fish a combined dredge width of 10.5 ft or greater.

It is possible that increasing the trip limit could make it economically feasible for LAGC IFQ vessels to fish open trips farther offshore (i.e. due to reduced trip costs) to areas with higher catch rates and meat sizes. In this scenario, it could be expected that improved fishing conditions would reduce the overall time gear is deployed in the water, thereby reducing the potential for interactions with protected species. If this shift of effort was focused in the Mid-Atlantic region, LAGC IFQ vessels would still be subject to the seasonal gear restrictions described previously that reduce the potential for interactions with sea turtles, meaning the risk of an interaction with protected resource species would not be any greater than expected under the 600-pound possession limit.

Increasing the possession limit would allow LAGC IFQ vessels to harvest quota in fewer trips but would not change the level of allocation or landings expected from the LAGC IFQ component, meaning overall effort is not expected to change relative to the 600-pound trip limit. This means that increasing the possession limit is not expected to increase area swept; however, if area swept did increase due to an increased possession limit, the potential for interactions with protected resource species would likely increase relative to the 600-pound possession limit. Under this unlikely scenario, increasing the possession limit could have slightly negative impacts on protected species relative to the 600-pound limit. Despite this, and due to the LAGC IFQ component representing 5.5% of the scallop fishery, any increased risk for interactions would likely be unnoticeable relative to what is expected under the 600-lb possession limit, and insignificant relative to the entire fishery.

1.4 Non-Target Species

The impacts of scallop fishing on non-target species are focused on the four flatfish stocks that the fishery is allocated a sub-ACL for: Georges Bank yellowtail flounder, Southern New England/Mid Atlantic yellowtail flounder, Southern windowpane flounder, and Northern windowpane flounder. If scallop fishery catches of these flatfish stocks exceed the sub-ACL, it may be subject to reactive accountability measures (AMs) in order to reduce bycatch in the future. The Scallop FMP also has many measures in place which aim to proactively mitigate bycatch of these flatfish stocks, such as the requirement for a minimum 10" twine top and maximum 7-row dredge apron, and a seasonal closure in Closed Area II access area from August 15th – November 15th to avoid GB yellowtail. Both the reactive AMs and proactive measures in place to mitigate bycatch of non-target species apply to the LAGC IFQ component.

The LAGC IFQ harvest represents a small portion of overall landings, and therefore contributes proportionally to bycatch estimates of non-target species. This is still expected to be the case if the possession limit were increased because the level of allocation and landings from the LAGC IFQ component will not change. For these reasons, impacts of increasing the possession limit on non-target flatfish stocks are expected to be minimal overall, and neutral relative what would be anticipated under the 600-pound trip limit.

It is possible that increasing the trip limit could make it economically feasible for LAGC IFQ vessels to fish open trips farther offshore (i.e. due to reduced trip costs), in areas with higher catch rates and meat sizes. In this scenario, it could be expected that improved fishing conditions would reduce the overall time gear is deployed in the water, thereby reducing the potential for interactions with non-target flatfish stocks.

The GB yellowtail sub-ACL for the scallop fishery has been decreasing in recent years, meaning there is potential that even minimal catch of this stock by the LAGC IFQ component could increase the risk of the sub-ACL being exceeded. However, the potential for this happening is slight as LAGC IFQ vessels are currently limited to fishing open trips within Scallop Dredge Exemption Areas, meaning if the range of the fishery expanded under an increased possession limit, vessels would still be prohibited from fishing in the GB yellowtail stock area. Furthermore, the Council has not allocated Closed Area II access area trips to the LAGC IFQ fleet in the past due to vessels typically being smaller and not designed to fish so far offshore. If this trend were to continue, increasing the possession limit would have no impact on bycatch of GB yellowtail relative to the 600-pound limit because LAGC IFQ vessels would not be able to fish open or access area trips within the GB yellowtail stock area.

It is worth noting, however, that the NMFS is currently considering expanding or removing Scallop Dredge Exemption Areas. If this resulted in LAGC IFQ vessels being able to fish in the GB yellowtail stock area, it is possible that additional effort in this part of the resource could have negative impacts on this non-target flatfish stock. Regardless, any change in management boundaries would be done independent of modifying the possession limit, meaning the potential impact of increasing the possession limit under this scenario would be neutral relative to the 600-pound limit. Also, the LAGC component is generally comprised of smaller vessels (approximately 55 ft on average) that operate within 50 nmi of shore. It is therefore reasonable to assume that the possible expansion of where the fishery can operate does not necessarily mean that most vessels will have the ability to do so. If these circumstances did occur and vessels did elect to fish in the GB yellowtail stock area, it is highly likely that they would be targeting areas with high LPUE meaning the amount of time gear was deployed would be minimal, as would the potential for interactions with GB yellowtail.