EXECUTIVE SUMMARY

This Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) evaluates the environmental impacts, costs and benefits, and small entity impacts of a proposed regulatory amendment. The proposed amendment would increase the maximum retainable amounts (MRAs) of groundfish in the arrowtooth flounder fishery in the Bering Sea and Aleutian Islands (BSAI). This EA/RIR/IRFA addresses the requirements of the National Environmental Policy Act, Presidential Executive Order 12866, and the Regulatory Flexibility Act.

The proposed action is a regulatory amendment to increase the MRAs of selected groundfish in the arrowtooth flounder fishery in the BSAI. The purpose of the proposed action is to reduce the amount of regulatory discards of otherwise marketable groundfish in the arrowtooth flounder fishery. The reduction in groundfish discards in the arrowtooth fishery would also improve the ability of the Amendment 80 fleet in meeting the groundfish retention standards (GRS).

In 1994, the Council set most of the groundfish MRAs at zero, relative to retained amounts of arrowtooth flounder, to prevent vessels from using arrowtooth flounder (a species for which no market existed) as a basis species for retention of more readily marketable species. At that time, there were concerns that fishing vessel operators would target arrowtooth flounder to increase the retainable amounts of valuable species, closed to directed fishing, resulting in increased bycatch amounts of Pacific halibut, salmon, and crab. Increased halibut bycatch rates could have resulted in reaching halibut bycatch limits before the total allowable catches (TACs) established for other trawl target fisheries were harvested. However, since 1997, markets for arrowtooth flounder have developed and this species now supports a viable target fishery.

In June 2008, the Council approved increasing the MRAs for the Gulf of Alaska arrowtooth flounder fishery. With the exception of a few specific species to prevent "topping off," the MRAs were set at 20 percent. In a similar fashion the Council in December 2009 initiated an analysis to consider changes to the MRAs of groundfish in the arrowtooth flounder fishery in the BSAI. The MRAs for incidental caught species in the BSAI arrowtooth fishery range from 20 percent to 30 percent. At its June 2010 meeting, the Council developed a problem statement, which is provided below:

When the MRAs for the directed BSAI arrowtooth flounder fishery were set in regulations in 1994, the Council chose to set incidental catch allowance at zero for a wide group of species, to prevent vessels from using arrowtooth flounder as a basis species for retention, since there was no market for arrowtooth flounder. Arrowtooth flounder is now a viable target fishery, and efforts to improve retention of many groundfish species utilized by the trawl sectors are constrained by MRAs in the directed BSAI arrowtooth flounder fishery. MRAs are a widely used groundfish management tool to reduce targeting on a species and slow harvest rates, as an allocation approach. MRAs forces regulatory discards of some species that might otherwise be retained, without undermining the intent of the MRA as a tool to reduce overall harvest rates. In addition, the regulatory discard of these species could also potentially hamper Amendment 80 vessels trying to meet the increasingly challenging groundfish retention standard. Currently, the GRS is 80 percent, but in 2011, the GRS will increase to 85 percent.

This regulatory amendment would evaluate raising the MRAs for most species in the directed BSAI arrowtooth flounder fishery, to provide increased opportunity for retention of species harvested by the trawl sectors, reduce overall discards in this sector, and help improved the ability of the Amendment 80

fleet in meeting the mandatory 85 percent GRS that will be implemented in 2011, while not subjecting incidentally caught species to increased allocation concerns.

This analysis considers three alternatives. Alternative 1 (no action) would leave the MRAs for groundfish in the arrowtooth fishery unchanged from those in current regulations. Alternative 2 would set the MRAs for incidental catch species, relative to arrowtooth flounder as a basis species, at the same level as when using Pacific cod as a basis species. Alternative 3, would set the MRAs for incidental catch species, relative to arrowtooth flounder as a basis species, at the same level as when using flathead sole as a basis species.

Regulatory Effects of the Alternatives

Under Alternative 1, the MRAs would not be revised for groundfish species in the BSAI directed arrowtooth flounder fishery. Maintaining the existing MRAs would continue to require vessels to discard incidental catches of any groundfish species that have a zero MRA, if those fisheries were closed to directed fishing. Overall, the status quo alternative is likely to result in the continuation of existing practices and patterns. However, in the future, if the price of arrowtooth flounders continues to increase, the economic incentive for vessels to target arrowtooth will likely increase. Under Alternative 1, this potentially could result in higher regulatory discards of valuable incidental catch species. In addition, when retention of groundfish species are prohibited in the arrowtooth flounder fishery, the discarded groundfish would contribute to a lower retention rate, making it more difficult to meet the GRS.

Under Alternatives 2 and 3, vessels targeting BSAI arrowtooth flounder could retain a higher percentage of incidentally caught groundfish, when the target fisheries for those groundfish species are closed to directed fishing. Increasing the MRAs could be a factor in a decision to participate in the arrowtooth flounder fishery. The economic characteristics of the trawl catcher processor and catcher vessel sectors vary widely. It is possible that some participants will take into consideration the economic value of the non-target species in the directed arrowtooth flounder fishery to estimate the benefit of targeting arrowtooth flounder. Under Alternative 1, groundfish species with an MRA set at zero and closed to directed fishing, must be discarded, regardless of the value of the species. This is, of course, precisely the purpose and intent of "closing" directed fishing and strictly controlling incidental catch.

Despite the increased success of the arrowtooth flounder fishery in recent years, many of the MRA species still command a higher price in the market (Table 3-12). As a result, under Alternatives 2 and 3, increased retention, perhaps reflecting covert targeting, of some MRA species is likely, compared to the status quo alternative. In general, the development of a "top off" fishery is dependent upon a number of issues, including, but not limited to, the price of the MRA species, whether there is a potential buyer, accessibility of the species, storage availability, the ability to process the species, and the risk of exceeding the GRS. In addition, the potential for a vessel to "top off" on a specific species varies across vessels. A vessel with the ability to limit incidental catch or the ability to discard low valued fish and not exceed the GRS, all while targeting arrowtooth flounder, likely has more discretion when it comes to "topping off" on specific species.

Given their high market price, two species in particular that could be a target for a "top off" fishery are sablefish and Greenland turbot. Under Alternative 3, the MRA for sablefish under this alternative would be 7 percent and for Greenland turbot the MRA would be 35 percent, whereas under Alternative 2 the MRAs for these species are 1 percent. While developing the MRAs for the GOA arrowtooth fishery, the Council was concerned enough about "topping off" on high valued species, that they set the MRAs for sablefish at 1 percent and aggregated rockfish at 5 percent. Some of those same concerns the Council had

in the GOA arrowtooth fishery MRAs may be applicable in the BSAI arrowtooth fishery MRAs under Alternative 3, given there is likely a strong economic incentive to "top off" with these two species.

The relationship between AI arrowtooth flounder and AI Greenland turbot could create a potential management concern under Alternative 3. Under this alternative, the MRA for Greenland turbot would be 35 percent. Currently, participants target AI Greenland turbot first before switching to AI arrowtooth flounder after the Greenland turbot directed fishery closes, typically in two or three weeks. Once closed, vessels move off the turbot rich grounds, to areas of lower turbot incidental catch. One of the prime motivations for this behavior is the "zero" MRAs in the arrowtooth flounder fishery and the increasing difficulty in meeting the GRS. However, with a MRA of 35 percent under Alternative 3, vessels would be less likely to move to cleaner fishing grounds, given the relative value of turbot. This could contribute to higher incidental catches of the AI species. In this scenario, it is likely NOAA Fisheries would place AI Greenland turbot on PSC status (i.e., precisely analogous to the status quo "zero" MRA), in order to prevent the species from exceeding the OFL. To limit incidental catch of Greenland turbot under Alternative 3, the Council could include an option that would set an MRA for Greenland turbot at or near the average incidental catch rate of 7 percent.

In June 2010, the Council, concerned the MRA for Greenland turbot under Alternative 3 could result in a top off fishery included a suboption that would set the MRA at 15 percent. At the same time, the Council also recognized that an MRA of 1 percent for Greenland turbot under Alternative 2 could result in unnecessarily high regulatory discards, so the Council included a suboption under Alternative 2 that would set the MRA at 15 percent. The average incidental catch rate for Greenland turbot during the 2003 to 2009 period was approximately 8 percent. Based on this date, a 15 percent MRA for Greenland turbot would dampen the potential for a top off fishery under Alternative 3, while at the same time reduce unnecessary regulatory discards that is likely under Alternative 2.

Halibut PSC is apportioned between the Amendment 80 cooperatives and seasonally released to seven target fishery categories with the more valuable fisheries receiving more halibut PSC, while other less valuable fishery categories are allowed little or no halibut PSC. For this reason, these poorly funded fisheries have rarely opened for directed trawl fishing in the past. If arrowtooth flounder gains in value relative to other flatfish fisheries, the Council when setting final specifications could shift halibut PSC from another fishery category to fund the arrowtooth fishery category. As for halibut PSC allowance to the Amendment 80 cooperatives, each cooperative determines how it will apportion its halibut PSC between the different target fisheries. Once the cooperative reaches its halibut PSC limit, it is restricted from fishing in the BSAI for the remainder of that year.

With Amendment 80 cooperatives managing their own halibut PSC, and assuming funding of halibut PSC for a trawl LLP or Amendment 80 limited access Greenland turbot/arrowtooth flounder/sablefish fishery will come from other trawl fishery categories, there would likely be little or no impact to the BSAI halibut resource from increasing the arrowtooth flounder fishery MRAs, as proposed under Alternatives 2 and 3.

Environmental Effects of the Alternatives

This action would have no impacts on non-specified species, forage species, seabirds, habitat, or the ecosystem likely previously considered in the harvest specification EIS (NMFS 2007a). Therefore, this analysis will focus on the environmental components that could potentially be affected by this action; stocks of targeted groundfish, and prohibited species. The effect of the alternatives on social and economic conditions is analyzed in Chapters 4.

Alternative 1, the status quo or no action alternative, would not revise the MRAs for groundfish species in the arrowtooth flounder fishery. Overall, the full harvest of the TACs established for the groundfish species have been found to have no adverse effects on groundfish species or prohibited species (NMFS 2007a). For these reasons, Alternative 1 would likely have no impacts on groundfish stocks or prohibited species beyond those analyzed in the Groundfish Harvest EIS (NMFS 2007a). The effect of arrowtooth flounder fishery on groundfish species is limited primarily by the TAC established for arrowtooth flounder, the length of open seasons, and the amount of the PSC allowed in the trawl arrowtooth flounder fishery.

Under Alternatives 2 and 3, the MRAs for groundfish in the arrowtooth flounder fishery would be increased from current levels. Increased MRAs would allow increased retention in the arrowtooth flounder fishery of groundfish species closed to directed fishing. Increased retention of these incidentally caught groundfish would reduce discards. The opportunity for increasing retention may result in an increased catch of these incidental catch species in the arrowtooth flounder fishery. For fisheries like Greenland turbot, where the TAC is frequently fully utilized, management would likely increase estimates of potential incidental catch and, therefore, reduce the amount of TAC available to the directed fishery. Overall, even if the amounts of groundfish retained in the arrowtooth flounder fishery increased, total removals of each species would be maintained within the TACs for each species established through the harvest specifications process.