

possible to determine how reductions in fishing mortality may affect future SSB and the value of directed fisheries on those larger fish.

4.2 Inter-cooperative agreements and incentive programs

As described in Section 3.1, above, cooperatives exist for trawl fisheries in the BS. Some of the cooperatives have inter-cooperative agreements and incentive plan agreements (IPAs) to help the cooperatives manage bycatch for Chinook and chum salmon. They also track data for in-season catch rates for other bycatch or prohibited species like halibut, herring, and have recently begun tracking sablefish bycatch rates (J. Gruver, Pers. Comm.). The inter-cooperative agreements and incentive programs were carefully crafted to meet specific objectives, and are adjusted as conservation goals change. Readers are directed to the IPA reports⁶ from the April 2021 Council meeting for more detailed information on the development and activities of the salmon IPA groups.

If the Council were to consider inter-cooperative agreements and incentive programs to manage the bycatch of sablefish in trawl fisheries, it is likely that a specific set of objectives would be necessary in order to identify mechanisms that the cooperatives could employ. Importantly, the current salmon IPAs contain incentives to offset the potentially increased costs of avoiding species that the Council wishes to protect. Some of the species for which inter-cooperative agreements or incentive programs exist have conservation concerns. That is in contrast with sablefish, for which Goethel et al. (2020) suggest, despite concerns with the assessment that warrant a reduction in ABC from ABC_{max} , is not subject to significant conservation concern.

4.3 Maximum Retainable Amounts

Maximum retainable amounts, as described in Section 2.3, are the maximum amount of a species closed to directed fishing that may be retained onboard a vessel. MRAs are calculated as a percentage of the weight of catch of each species or species group open to directed fishing (basis species) that is retained onboard the vessel. The percentage of a species or species group closed to directed fishing retained in relation to the basis species must not exceed the MRA.

Maximum retainable amounts are the primary tool used by NMFS to reduce or slow the catch of groundfish species when directed fishing for that species is closed. Previous analysis⁷ has evaluated the effects of lower MRAs on catch of species for which directed fishing is closed. That analysis identified the “intrinsic catch rate” as the rate that would occur if there were no market for the closed species, or if there is no value to be obtained from catching the closed species. If the intrinsic rate of catch is less than the MRA, then lowering the MRA may reduce the rate of catch. If the intrinsic rate of catch is equal to or greater than the MRA, then there would be little effect of lowering the MRA, other than increasing the amount of regulatory discards.

Maximum retainable amounts can provide opportunity for the prosecution of low value fish by allowing higher value fish to be retained up to the MRA. In the GOA, fisheries for arrowtooth flounder may be subsidized by a 7% MRA for sablefish, based on the arrowtooth flounder basis species. The intrinsic rate of sablefish catch in the arrowtooth flounder fishery is not known. If the intrinsic rate is lower than the 7% MRA, reducing the MRA may result in lower overall sablefish catch, but at some cost to the arrowtooth fishery participants. If the intrinsic rate is higher than the 7% MRA, lowering the MRA would have little effect on the overall sablefish catch, but a greater proportion of the catch would be subject to regulatory discards, again at a cost to the arrowtooth fishery participants.

⁶ <https://meetings.npfmc.org/Meeting/Details/1945>

⁷ <https://meetings.npfmc.org/CommentReview/DownloadFile?p=ec5bca06-dc24-47e4-bcf0-c9918837a450.pdf&fileName=C3%20GOA%20Skate%20MRA.pdf>

