## GROUNDFISH MANAGEMENT TEAM REPORT ON CONSIDERATION OF CHANGES TO THE TRAWL ROCKFISH CONSERVATION AREA BOUNDARY MODIFICATIONS

The Groundfish Management Team (GMT) heard a brief presentation from National Marine Fisheries Service (NMFS) Northwest Region staff on the environmental assessment (EA) (Agenda Item G.6.b, Draft EA) for trawl rockfish conservation area (RCA) boundary modifications. We offer the following considerations.

The GMT thinks that it is useful to consider the risk of RCA boundary modifications in terms of possible impacts both individually and cumulatively. Most of these impacts cannot be quantified, but we list the following thoughts to try to put them in context. Below are some of the relevant categories of impacts from the EA:

- Essential fish habitat (EFH). It appears from the available information that the effect of permanent actions taken in 2005 to "freeze" the trawl footprint likely overwhelm any protections provided by the trawl RCA. While there is no quantitative measure of significance, from a National Environmental Policy Act (NEPA) standpoint, the protections put in place under Amendment 19 to the Groundfish Fishery Management Plan (FMP) protect some 130,000 square miles of EFH from fishing impacts. Alternative 1 would open approximately 740 square miles more than Alternative 2, which is a very small percentage of the designated EFH and the existing protections. This type of back-of-the-envelope comparison does not account for habitat by type, or its impact on groundfish productivity, and only covers areal extent (i.e. this may underestimate rugose or highly sloped habitats and doesn't compare the amount of rocky, mixed or mud habitat that is protected).
- Recovery time. The recovery index referenced in the EA is based on the original risk assessment used to inform Amendment 19. The index is informed by a great deal of expert opinion on relative impact comparing gears but is based on relatively few studies (most cells are the result of few studies). So, while they may provide some guidance on relative recovery times by habitat type, the use of point estimates for recovery times should carry the understanding that they may be highly uncertain for the habitats affected by the proposed action.
- Bycatch and possibility of exceeding annual catch limits (ACLs). The RCAs were established because the available survey and logbook data indicated that closing the depths of greatest interaction would lead to significantly lower bycatch rates for overfished species. There has been concern expressed that allowing trawling in the areas of highest overfished species density could result in "lightning strike" tows. The GMT notes that the individual accountability and other incentives in the Individual Fishing Quota (IFQ) program greatly decrease the likelihood that a vessel will catch enough of an overfished species to exceed the ACL or severely disrupt the fishery. This is true under both Alternative 1 and Alternative 2 RCA boundaries. Catches from the rationalized fishery show very low attainment of all overfished species' ACLs in the first 2 ½ years of the program (https://www.webapps.nwfsc.noaa.gov/ifq/).

• Gear conflicts. One issue not addressed in the EA is the possibility of gear conflicts by having grounds that previously excluded trawl now open to both fixed gear and trawl. This could be a consideration under both Alternative 1 and Alternative 2. We did not have time to analyze this in detail, but we have heard anecdotally that communication among vessels on the grounds can largely prevent such gear conflicts.

The following table (Table 1) provides a summary comparison of some potential impacts. It is important to note that for brevity we list those impacts as "higher" or "highest" or "less than Alternative 1" in the table; however, we cannot know that target species catch and revenue will increase by opening more RCA. Likewise, we don't know that impacts to overfished species will be higher. Increasing access to areas previously closed by the RCA is expected to provide increased flexibility for fishing operations (e.g. a vessel could get the same targets with the same bycatch but closer to home port), could increase harvest of target species where catch has been below the allocation, and may result in the relative change in impacts listed.

Table 1. Relative potential impacts by Alternative for groundfish and Essential Fish Habitat.

	No Action	Alternative 1	Alternative 2
	See Table 2-1 of		100 fm line - modified
RCA boundaries	the Draft EA	100 fm line - 150 fm line	200 fm line
Relative Impacts to:			
Target Groundfish			
Increase in estimated revenue	No change	Highest	Higher
Increase access to nearshore/shelf species	No change	Yes	Yes
Increase access to slope species	No change	Yes	Yes, but less than Alt. 1
Overfished Groundfish			
Qualitiative estimates for impacts to nearshore and shelf OFS	No change	Higher impacts	Higher impacts
			Higher impacts; but less
Qualitiative estimates for impacts to slope OFS	No change	Higher impacts	than Alt. 1
Groundfish EFH			
		Yes (between 45°03' N.	
Opens any areas closed to groundfish bottom trawling for >9 years	No	lat. and 40°10′ N. )	No
		Yes (between 45°46' N.	
Opens any areas closed to groundfish bottom trawling for >6 years	No	lat. and 45°03' N. lat. )	No