GROUNDFISH MANAGEMENT TEAM REPORT – PROPOSED ALTERNATIVES FOR CLASSIFYING STOCKS IN THE GROUNDFISH FISHERY MANAGEMENT PLAN

This report follows up on an earlier report, Agenda Item G.8.b Report 2 ("Report 2"), and further narrows the candidates for potential classification as "in the fishery" or ecosystem component (EC) species in the FMP. Here we also arrange this proposed candidate list into a set of three alternatives. We envision that the Council would adopt these alternatives for review and additional analysis. We describe the approach in more detail below.

Changes from Report 2

First, the PSA score for Brown Cat Shark were incorrectly reported in Report 2. The overall score has been corrected here.

Second, we filtered out a number of species in Report 2 because they are thought to occur chiefly in state waters. Here we identified additional species that should have been filtered out on that same reasoning: Bat Ray, Shovelnose Guitarfish, Brown Smoothhound Shark, and Gray Smoothhound Shark.

Also, Leopard Shark was the one FMP species that has been proposed for possible removal of the FMP on the same reasoning that it is caught in state waters. Here we add Kelp Greenling and Cabezon to the candidate list because they too are caught mainly in state waters to a similar degree as those that have been filtered out.

The Criteria for Identifying Candidates

Following the approach from Report 2, our intent was to identify candidates for classification by applying basic criteria of total catch over 2007-2011, retention/discard percentages, and Productivity-Susceptibility Analysis (PSA) scores. The proposed candidates are displayed in Table 1.

For FMP species, we first included species with less than 1 mt of average catch over 2007-11. Then for species with more than 1 mt of average catch we included species that were retained less than 50 percent of the time and had PSA scores of ~2.0 or lower. We chose the PSA score range because a score of 1.8, as explained in Report 2, has been identified as signaling a relatively low concern of overfishing. We included stocks with scores higher than that because the PSA scores provide only a general indication of risk and because the scores for each stock could be scrutinized further.

The reason we focused on 50 percent retention is that the National Standard 1 Guidelines recommend that the Council classify target stocks and valuable/desired non-target stocks as "in the fishery." As shown in Table 2 of Report 2, there is somewhat of a natural break in the FMP

stocks with stocks either being retained well above or below 50 percent. More scrutiny can be given to each stock in the next stage of the analysis.

Lastly, to get a comparable list of non-FMP species we included every species or species group with at least 1 mt of average catch. We do not have PSA scores for several of these species because we only had time to calculate scores for stocks with an average catch of at least 10 mt (Filetail Cat Shark is the exception: it is assumed to have a score similar to Brown Cat Shark).

Organization of the Alternatives

We have arranged the proposed candidate species into three alternatives (Table 1). Their current FMP status is displayed under the No Action alternative.

In essence, the Council's recommendation focused on each candidate stock individually. There are three basic choices for each: (1) in the fishery ("in"); (2) EC Species ("EC"); or (3) removal or continued exclusion from the FMP ("out"). As discussed in Report 2, the main factor to compare and contrast in classifying a stock as in the fishery is the stock's risk of overfishing or overfished status. EC species are those for which that risk is non-concerning yet for which there may be other conservation and management interest (e.g. minimizing bycatch, monitoring for changes in catch or susceptibility to the fishery). And lastly, a recommendation to remove a stock, as NMFS advised the Council with Amendment 24, equates to a determination that conservation and management is not necessary.

As explained in Report 2, the core logic that we are following is the idea that species facing similar conservation and management needs should be similarly classified in the FMP. The three action alternatives we propose here follow slightly different approaches toward achieving that consistency:

- *Alternative 1*: this alternative is intended to provide an inclusive option where we look to catch and PSA scores and propose classifying close cases as "in the fishery" and low vulnerability stocks as EC species.
- *Alternative 2*: in this intermediate approach we propose classifying more of the close cases and low vulnerability stocks as EC species.
- *Alternative 3*: in this narrow or exclusive option, the close cases and the non-target stocks not thought to face a concerning risk of overfishing are removed from the FMP. No EC species are proposed under this option.

If the Council adopts this approach, the GMT would give additional scrutiny to and provide more reasoning for each candidate species or species group.

Potential Consequences of the EC species Classification

Before presenting the Alternatives, we imagine there may be some question about the value of an EC species classification or what it might entail. In general, the team has considered them largely

as “monitored species”, a classification the Council had used in some other FMPs. As Report 2 discussed, the data used here and in the evaluation of the stock complexes allows monitoring of hundreds of species—not just those included on the candidate list. So the capability could be there to continue regular reporting regardless of any reclassification. Generally, the EC species classification could help guide and prioritize monitoring and reporting efforts by the Science Centers, states, tribes, and others. The team has also discussed the possibility of grouping EC species into complexes to facilitate monitoring and reporting. It would also clearly delineate which species are not thought to be vulnerable to overfishing in this fishery. Lastly, we understand that other rules might apply to EC species (e.g. caps on landing) but the team has not had time to discuss the need or appropriateness of such measures. The team could provide further discussion in November.

Recommendation

- **Adopt the alternatives for review and direct the GMT to provide further analysis in November.**

Table 1. GMT Proposed Alternatives for Classifying Stocks in the FMP

Table overview: Stocks are grouped for ease of comparison and do not indicate proposed stock complexes. Within each group, stocks are presented in alphabetical order. The groupings are arranged in no particular order. "Other" refers to any other species within the general taxonomic order not reported to species. Abbreviations: in the fishery ("in"), EC Species ("EC"), not in the FMP ("out").

	Species	PSA score	Catch (avg.)	No Action	Alt. 1	Alt. 2	Alt. 3	Notes
Skates & Rays	Aleutian Skate	1.71	3	Out	EC	EC	Out	
	Bering/Sandpaper Skate	1.80	70	Out	In	EC	Out	
	Big Skate	1.99	95	In	In	EC	EC	
	Black/Roughtail Skate	1.68	44	Out	In	EC	Out	
	California Skate	2.12	14*	In	In	EC	EC	*Only 29% from FMP sectors
	Deepsea Skate	--	1	Out	EC	EC	Out	
	Other Skates	--	725*	Out	EC	EC	Out	*Unidentified catch
	Thornback Skate	--	2	Out	EC	EC	Out	
Other Sharks	Leopard Shark	2.00	35*	In	In	EC	Out	*Only 3% from FMP sectors (other than CA Recreational = 82%).
	Pacific Black Dogfish	--	1	Out	EC	EC	Out	
	Pacific Sleeper Shark	--	8	Out	EC	EC	Out	
	Salmon Shark	--	1	Out	EC	EC	Out	
	Soupfln Shark	2.02	8*	In	In	EC	Out	*Only 16% from FMP sectors
Slickheads	California Slickhead	1.10	28	Out	EC	EC	Out	
	Threadfln Slickhead	--	1	Out	EC	EC	Out	
	Other (incl. Tubeshoulders)	--	1	Out	EC	EC	Out	
Grenadiers	California Grenadiers	--	4	Out	EC	EC	Out	
	Giant Grenadiers	1.87	170	Out	In	EC	Out	
	Other Grenadiers	--	135*	Out	EC	EC	Out	*135 mt of unidentified catch. Other species in data all < 1 mt per year.
	Pacific Grenadier	1.82	131	In	In	EC	Out	

	Species	PSA score	Catch (avg.)	No Action	Alt. 1	Alt. 2	Alt. 3	Notes
Eelpouts	BigfIn Eelpout	--	3	Out	EC	EC	Out	
	Twoline Eelpout	--	3	Out	EC	EC	Out	
	Other Eelpouts	1.51	43	Out	EC	EC	Out	
Cat Sharks	Brown Cat Shark	1.84	90	Out	In	EC	Out	
	Filetail Cat Shark	--	11	Out	In	EC	Out	
	Longnose Cat Shark	--	3	Out	EC	EC	Out	
Flatfish	Butter Sole	1.18	1*	In	In	EC	Out	
	CurlfIn Sole/Turbot	1.23	5*	In	In	EC	Out	*51% from FMP. Has exceeded current OFL/ABC contrib. 2002-2007.
	Deepsea Sole	1.22	32	Out	In	EC	Out	
	Flathead Sole	1.26	6*	In	In	EC	Out	*Also exceeded current OFL/ABC levels prior to 2008.
	Other Sanddabs	--	22*	Out	EC	EC	Out	*Unidentified Sanddab.
	Slender Sole	1.14	149*	Out	In	EC	Out	*Only 14% from FMP sectors
Rockfish	Bronzespotted Rockfish	2.12	0	In	In	EC	Out	
	Calico Rockfish	1.46	1	In	In	EC	Out	
	Chameleon Rockfish	2.03	0	In	In	EC	Out	
	Dusky Rockfish	1.72	0	In	EC	EC	Out	
	Dwarf Red Rockfish	1.17	0	In	EC	EC	Out	
	Freckled Rockfish	1.44	0	In	In	EC	Out	
	HarlequIn Rockfish	1.94	0	In	In	EC	Out	
	Mexican Rockfish	1.80	0	In	In	EC	Out	
	Pink Rockfish	2.02	0	In	In	EC	Out	
	Pinkrose Rockfish	1.82	0	In	In	EC	Out	
	Pygmy Rockfish	1.42	0	In	In	EC	Out	
	Rosethorn Rockfish	2.09	4	In	In	EC	Out	
	SharpchIn Rockfish	2.05	8	In	In	EC	Out	
	Shortbelly Rockfish	1.13	6	In	In	EC	Out	
	Swordspine Rockfish	1.94	0	In	In	EC	Out	

	Species	PSA score	Catch (avg.)	No Action	Alt. 1	Alt. 2	Alt. 3	Notes
Misc. Fish	Cabezon*	1.68	101	In	In	In	Out	*Included b/c they're potentially distributed Instate waters
	Duckbill Barracudina	--	1	Out	EC	EC	Out	
	Finescale Codling/Pacific Flatnose	1.48	13	In	EC	EC	Out	
	Kelp Greenling*	1.59	43	In	In	In	Out	*Included b/c they're potentially distributed Instate waters
	King of the Salmon	--	6	Out	EC	EC	Out	
	Longnose Lancetfish	--	1	Out	EC	EC	Out	
	Ragfish	1.80	43	Out	EC	EC	Out	
	Snailfish spp.	--	5	Out	EC	EC	Out	
	Walleye Pollock	--	4	Out	EC	EC	Out	*Prior to 2007, catch has reached 1,000s of metric tons Insome years