

## GROUND FISH ADVISORY SUBPANEL REPORT ON BIENNIAL HARVEST SPECIFICATIONS FOR 2015-2016 AND BEYOND GROUND FISH FISHERIES

The Groundfish Advisory Subpanel (GAP) heard a presentation by Mr. John DeVore regarding overfishing levels (OFLs) for cowcod, kelp greenling, and cabezon. He also provided the GAP with the most recent data regarding China, copper, and brown rockfish/nearshore complex and the roughey/major slope complex restructuring.

### **Cowcod South of 40°10' N lat.**

The GAP recommends adopting the OFLs as put forth by the Scientific and Statistical Committee (SSC), noting the potential range of options for corresponding acceptable biological catches in Attachment 1 under this agenda item.

The GAP notes OFLs for cowcod are encouraging and looks forward to the availability of more fish for research and reducing the pressure on the fleets in California.

### **Kelp greenling in Oregon, kelp greenling in Washington and cabezon in Washington**

Like cowcod, the GAP recommends adopting the OFLs as put forth by the SSC in Attachment 1 for kelp greenling and cabezon. Members acknowledge the differences in potential OFLs and ABCs depending on which P\* is chosen, but anticipate delving into this issue in greater detail at the April meeting.

### **Other issues: complexes**

The GAP spent considerable time discussing issues regarding two groundfish complexes: nearshore and minor slope rockfish in the north. Two species, China rockfish in the nearshore complex and roughey in the minor slope complex in the north, are of particular concern. The GAP will provide detailed comments on this issue at the April meeting.

GAP members would like to remind the Council that the legal requirement to determine whether overfishing is occurring is not when a component OFL value for a component stock is exceeded, but when a *complex* OFL is exceeded. Managing to an OFL on individual species within a complex is a policy decision that the Council can make, but is not required. Determining OFLs for individual species within a complex and managing to those levels can result in no fishing activity whatsoever without any particular savings to overall complexes.

The National Standard 1 Guidelines envisioned the use of complexes; the Council has used complexes to effectively manage the groundfish fishery. Given this background, the GAP addresses issues relating to specific complexes below.

### Nearshore complex

The GAP notes several issues regarding the nearshore complex, primarily with the status of China rockfish. The data-moderate stock assessment shows the species is caught primarily in state waters and resulting OFLs and annual catch limits will be prohibitively low. Therefore, China rockfish could be a very constraining stock in the open access fishery and, to an extent, limited entry fixed gear and sport fisheries.

At this point, the GAP recommends not worrying about an OFL for China rockfish and dealing solely with the nearshore complex during the 2015/16 harvest specifications cycle. It may be appropriate to recommend a full assessment of China rockfish in the next stock assessment cycle to better inform future decisions regarding this stock and the nearshore complex.

Alternatively, the GAP discussion also referenced the letter from all three states ([Agenda Item D.5.b, Supplemental WDFW/ODFW/CDFW report](#)), and may support the states' recommendation to remove from the fishery management plan (FMP) China rockfish and other nearshore species as may be appropriate in Oregon and Washington *only* with a target implementation date of 2016 (Note: The GAP suggests a change in the date of implementation to allow full analysis in a timely manner). The existing management relationship for these nearshore species between National Marine Fisheries Service/Council and California would remain the same.

The GAP believes the stock structure and management of China make it a reasonable candidate for removal from the Fishery Management Plan in the waters off Oregon and Washington.

### Rougheye out of minor slope north of 40°10'

The issue presented to the GAP was how best to approach the removal of rougheye and shortraker rockfish from the minor slope rockfish category north of 40°10'. The need to make this change is a result of an earlier decision to set a separate OFL for rougheye based upon the recent stock assessment.

The GAP notes that removing rougheye rockfish from the complex will cause tremendous disruption to the commercial groundfish fleets. Rougheye rockfish is caught incidentally in the longline, whiting, and bottom trawl fisheries. Therefore, it would be necessary to provide an amount of rougheye rockfish to these fishery sectors in a way that is as least disruptive as possible. Unfortunately, there does not appear to be an easy solution to this situation.

For longline and whiting, area restrictions may reduce impacts, but would come at a very high cost of loss of fishing opportunity in those areas. For the trawl IFQ fishery, the amount that potentially could be allocated would likely be so low that rougheye rockfish would become a new constraining species in the fishery and cause a significant amount of harm, much like yelloweye and canary rockfish already have. For example, quota share allocations to individual fishermen would be too small to accommodate fishing opportunity.

These impacts are cumulative on the entire industry.

Moreover, constraining species in the traditional trawl fishery have largely already pushed trawlers off of the shelf to the slope. With rougheye becoming a new constraining species -- this time on the slope -- the only area left to fish will be in very deep water.

The GAP reviewed information in the rougheye stock assessment that indicates the stock is currently above the population target and, under status quo harvest, would remain well above B<sub>40</sub> for the next 10 years (See Table h., page xiii from the [executive summary in the rougheye stock assessment from the September 2013 PFMC meeting](#), attached). Even harvest levels 80 mt higher than the proposed 184 metric tons would maintain the stock at or above 49 percent through 2023. Therefore, the GAP questions the need to remove rougheye rockfish from the complex at this time.

The GAP requests a presentation at its April meeting that shows the results of the stock assessment and the various steps that have occurred that have resulted in the current OFL option for rougheye. The GAP would also like to have a time series of catch data presented that shows the various sectors' take of rougheye.

The GAP requests Council staff explore the need of an additional day at the April meeting to fully discuss management options of allocating rougheye rockfish in the short and long term.

**Table h. Summary table of 12-year projections beginning in 2015 for alternate states of nature based on the axis of uncertainty. Columns range over low, mid, and high state of nature, and rows range over different assumptions of total catch levels (discards + retained). Catches in 2013 and 2014 are determined from 5 year averages of the landings for each fleet (trawl, hook & line, and at-sea), and are also used as status quo catches.**

			State of nature					
			Low $M = 0.037$		Base case $M$ estimated at 0.042		High $M = 0.047$	
Relative probability of ln(SB_2013)			0.25		0.5		0.25	
Management decision	Year	Catch (mt)	Spawning biomass (mt)	Depletion	Spawning biomass (mt)	Depletion	Spawning biomass (mt)	Depletion
ABC assuming $\sigma = 0.36$	2015	194	1,855	39%	2,653	49%	3,779	60%
	2016	198	1,886	39%	2,704	50%	3,857	61%
	2017	202	1,914	40%	2,751	51%	3,928	62%
	2018	206	1,936	40%	2,791	52%	3,987	63%
	2019	209	1,952	41%	2,821	52%	4,034	64%
	2020	212	1,959	41%	2,841	53%	4,068	64%
	2021	213	1,960	41%	2,852	53%	4,088	65%
	2022	214	1,954	41%	2,855	53%	4,098	65%
	2023	214	1,943	41%	2,850	53%	4,097	65%
	2024	214	1,928	40%	2,840	53%	4,090	65%
Recent 5-year average of catches	2015	189	1,855	39%	2,653	49%	3,779	60%
	2016	189	1,888	39%	2,706	50%	3,859	61%
	2017	189	1,919	40%	2,756	51%	3,933	62%
	2018	189	1,946	41%	2,801	52%	3,997	63%
	2019	189	1,968	41%	2,837	53%	4,051	64%
	2020	189	1,983	41%	2,865	53%	4,091	65%
	2021	189	1,992	42%	2,884	53%	4,120	65%
	2022	189	1,995	42%	2,895	54%	4,138	65%
	2023	189	1,993	42%	2,900	54%	4,147	65%
	2024	189	1,987	41%	2,899	54%	4,148	65%
Catch that stabilizes equilibrium depletion at 40% in the base model	2015	258	1,855	39%	2,653	49%	3,779	60%
	2016	261	1,862	39%	2,680	50%	3,833	61%
	2017	265	1,867	39%	2,704	50%	3,880	61%
	2018	267	1,866	39%	2,720	50%	3,917	62%
	2019	269	1,859	39%	2,728	51%	3,942	62%
	2020	270	1,844	38%	2,726	51%	3,954	62%
	2021	270	1,823	38%	2,715	50%	3,953	62%
	2022	269	1,796	37%	2,697	50%	3,942	62%
	2023	267	1,764	37%	2,673	50%	3,923	62%
	2024	264	1,730	36%	2,644	49%	3,897	62%