

GROUND FISH MANAGEMENT TEAM REPORT ON HARVEST SPECIFICATIONS AND MANAGEMENT MEASURES FOR THE 2015-2016 GROUND FISH FISHERY

Introduction

The preliminary draft management measure analyses shown in the Groundfish Management Team (GMT) report ([Agenda Item C.4.b. REVISED GMT Report](#)) were discussed by the GMT. This report provides a summary of the GMT review of each management measure, including recommendations and guidance regarding (a) the completeness of the analyses and (b) thoughts on whether the management measure should move forward for final analysis in June, be delayed until the off-year cycle (called the Omnibus Package), or be discontinued altogether. If a measure is moved forward for analysis in the 2015-2016 and beyond package, the GMT requests that the Council provide guidance regarding alternatives (i.e., additions and deletions) and metrics they wish to have analyzed.

This document is organized consistently with the Action Checklist ([Agenda Item C.4.a Attachment 1](#)) and then by management measure, in the same order as shown in the GMT Report Appendix B ([Agenda Item C.4.b. REVISED GMT Report](#)).

Adopt Preliminary Preferred Nearshore Rockfish Allocations

Under Agenda Item C.4, the Council provided guidance on allocation alternatives including a) utilizing the miles of coastline north of 40°10' N. latitude, b) the recent historical catch from 2004-2012 ([Agenda Item C.4.b, Supplemental GMT Report 2](#)), and c) a hybrid allocation method, which uses miles of coastline for copper, China, and quillback rockfishes and historical catch from 2004-2012 for the remainder. In both alternatives (b) and (c), blue rockfish apportionment was initially based on stock assessment lines (California vs. Washington-Oregon assessment), with subsequent allocation between Oregon and Washington based historical catch from 2004-2012.

The GMT recommends that the Council postpone further action on selecting a nearshore rockfish harvest guidelines (HG) until June when the complete analyses of the final preferred annual catch limits (ACLs, discussed in detail in Agenda Item C.9.b Supplemental GMT Report), and the analysis of the nearshore rockfish HGs are presented. The Council could choose to narrow the range for analyses; however the GMT believes this is a reasonable range for analysis and can be completed in time for the June Briefing Book.

The projected mortality and landings for each state and sector under the Preferred Preliminary Alternative (PPA, Alternative 3) from November 2013 and the HG alternatives are provided in Table 1. There are no projection models for the trawl and non-nearshore fishery, but based on historical data, mortality of nearshore rockfish in these fisheries is expected to be trace ([Agenda Item C.4.a, Attachment 3, Table 4-13](#)). The commercial nearshore model projects mortality of overfished species based on the expected landings of nearshore species (e.g., nearshore rockfish, black rockfish, kelp greenling, cabezon, lingcod, and California scorpionfish south of 40°10' N. latitude). There is no nearshore model that projects landings of target species under the various season or depth structures. Mortality (landings and discard) data for the

nearshore fishery from the West Coast Groundfish Observer Program (WCGOP) under the action alternatives can be explored for June to provide a mortality estimate for the nearshore fishery. The Washington recreational model relies on historical catch to project landings of nearshore rockfish species. Projections of nearshore rockfish are estimated using the average catch for the recent 10 year period (2004-2012). Table 1 displays the results of the Oregon recreational model projections of nearshore rockfish mortality under Alternative 3. Three options are available for the season structure for the California recreational fishery and the projected mortality (15.6 mt, 15.4 mt and 6.7 mt, respectively) with the highest projected mortality of the Nearshore Rockfish complex north of 40°10' N. latitude displayed in Table 1. At present, the coastwide approximation of projected mortality of the Nearshore Rockfish complex across all states and sectors north of 40°10' N. latitude is 83 mt, but as noted above, the value is expected to be higher when mortality for the nearshore commercial fishery is estimated in June. **The current estimated projected impacts under the PPA (Alternative 3) exceed the ACL of 69 mt, indicating that management measures are likely to be needed to reduce aggregate mortality. The analysis of the Other Fish complex, nearshore rockfish HGs, and associated management measures by fishery sector, which will be included in the June Briefing Book, should be sufficient to keep mortality within the Nearshore Rockfish complex ACL N. of 40°10' N. latitude.**

Table 1. Projected Nearshore Rockfish complex mortality under the preliminary preferred alternative in each state and sector and HG alternatives by state.

State	Sector	Projected Impacts under PPA	HG Opt. 1 Miles of Coastline	HG Opt. 2 Historical Catch	HG Opt. 3 Hybrid
Washington	Recreational Groundfish	10.2			
	Directed OA: Nearshore ^{1/}	NA			
	Washington Total	10.2	15.7	6.6	7.7
Oregon	Recreational Groundfish	30.5			
	Directed OA: Nearshore	15			
	Oregon Total	45.5	29.9	36.8	36.3
California	Recreational Groundfish	15.6			
	Directed OA: Nearshore ^{2/}	11.6			
	California Total	27.2	23.2	25.3	24.8
Coastwide Total		82.9	68.8	68.8	68.8

^{1/} Washington does not have a commercial nearshore sector (from 1995 to present).

^{2/} Values provided reflect recent Nearshore Rockfish complex landings used as inputs in the nearshore overfished species projection model; discards are not included, but can be provided in June.

Review of Proposed Management Measures

Attachment 1 contains a summary of the management measures by sector, completeness, and GMT recommendation. The following section describes in detail the measures and rationale for the recommendations.

B.1 Rockfish Conservation Area Boundary Adjustments

Beginning on January 1, 2013, the 200 fathom (fm) rockfish conservation areas (RCA) line was adjusted to better align with depth contours (see 2013-2014 EIS). Unfortunately, the 200 fm modified RCA, which contains cut-outs to provide greater access to petrale sole, was not simultaneously adjusted. This resulted in the closure of areas near Heceta Bank, where the petrale cut-outs were seaward of the 200 fm RCA. This area is very small and potential impacts to overfished species and non-overfished species (e.g., roughey rockfish) would also be small. This measure would re-open this area that was kept closed unintentionally starting in 2013 (i.e., these areas were open prior to January 1, 2013). **In addition to these recommended RCA corrections, if the Council wishes to consider a range of RCA lines seaward of 250 fm to potentially reduce roughey rockfish bycatch, the GMT could complete this analysis by June.**

B.11 Off-the-top deductions to cover carryover if trawl allocation is exceeded

In November 2013, the Council requested the GMT evaluate projections for the off-the-top deductions from the ACL when evaluating the risk of exceeding the ACL/ABC/OFL for species eligible for carryover in the shorebased IFQ fishery. We began an analysis of this issue, yet were unable to complete it. **The GMT would therefore recommend moving consideration of the shorebased IFQ carryover analyses under the omnibus management measures discussion (i.e., not included in the 2015-16 EIS), which includes Amendment 20 trawl trailing actions.** In addition to the specific proposal to consider the set-asides and their likelihood of being taken, the analysis we have started could also explore some of the long-term, broader modifications to how risk is evaluated and the carryover program is implemented.

B.6 Other Trip Limit Adjustments

For the 2015-2016 biennial management cycle, the Council is considering trip limit increases for the following non-trawl fixed-gear fishery sectors: lingcod north of 40°10' N. latitude (limited entry and open access), shortspine thornyhead north of 34°27' N latitude (limited entry), and bocaccio and the minor shelf rockfish complex south of 34°27' N latitude (limited entry and open access for both fishery sectors). Reference to the associated trip limit tables for these sectors (that includes the fishery sector trip limit options and the projected mortality for each option) is found in [Agenda Item C.4.b. REVISED GMT Report](#). **The GMT recommends consideration of this matter in June or during the biennium through routine inseason actions.**

B.13 Retain groundfish, lingcod only, or flatfish only during the Pacific halibut fisheries

The GMT and Council staff believes that Council action on this item is not required under this or other groundfish biennial harvest specifications agenda items now or in June. The decision on whether to allow groundfish retention during Pacific halibut all-depth dates will happen during the annual Pacific halibut Catch Sharing Plan process (i.e., the September and November Council meetings). The analysis is included in this groundfish process and EIS due to the

potential impacts on yelloweye and canary rockfishes, and is included so it is available for reference in future halibut processes. **The GMT recommends the Council consider the impact analysis contained in the DEIS when making recommendations for the Pacific halibut CSP.**

Due to the regional variability in encounters with all groundfish species, including overfished species and regional differences in the length of the recreational halibut season, consideration for allowing groundfish retention during recreational halibut fishing should be evaluated on a management area basis. In general, lingcod habitat overlaps with that of rockfish, while that of other flatfish (flounders and soles) tends to be over softer bottoms. Therefore, potential impacts to overfished rockfish species are projected to be lower when allowing retention of other flatfish relative to retention of lingcod.

B.2 Groundfish Closure Areas for Rougheye Rockfish and Spiny Dogfish

Groundfish closure areas (GCAs) are a management tool that are being considered for the 2015-2016 biennium and may be useful for limiting catch of rougheye rockfish or spiny dogfish if inseason catch levels are high. More detail about our proposed methodology, as well as examples of “hot spot” maps that resulted from this preliminary analysis, are provided in Section B.2.3 in [Agenda Item C.4.b, REVISED 2 GMT Report](#). Please note that the maps in that report were not intended as final maps for proposing or establishing GCAs; they were provided to help facilitate discussion of our analysis approach.

At this meeting, the team had an opportunity to discuss our preliminary “hot spot” analysis with industry representatives, the Scientific and Statistical Committee (SSC), and the Groundfish Advisory Subpanel (GAP). These discussions were very productive. In particular, we would like to thank Mr. Dave Fraser for his informative presentation of the near real-time bycatch tracking, spatial analysis, and intrasector communication capabilities available to the at-sea and shoreside whiting sectors. Industry representatives and the SSC shared some concerns, such as how confidentiality restrictions relative to using observer data were being applied in our analysis and how this affected the level of location precision in our resulting maps. We appreciate these concerns and have received feedback from the SSC as to how we might better use observer data given confidentiality limitations.

The SSC also voiced concern about estimating discards when haul “bleeding” occurs (when discards unintentionally fall out of a net before being brought onto a vessel), and how observer sampling may contribute to biased estimates of tow-level bycatch ([Agenda Item C.4.b, Supplemental SSC Report](#)). Relative to this concern, the GMT notes that Mr. Dave Colpo’s (Pacific States Marine Fisheries Commission (PSMFC)) presentation to the Council at this meeting (relative to electronic monitoring experimental fishing permits) indicates that discards are approximately half of one percent of the catch. Despite these concerns, the SSC recommended further development of this approach ([Agenda Item C.4.b, Supplemental SSC Report](#)).

GMT discussion to date does not include an analysis of socioeconomic impacts. This would include estimating, in economic or fishing behavioral terms, the degree to which fishing effort is displaced as a result of GCA placement. Similarly, we do not yet include a discussion of

enforcement considerations. Both considerations are important when identifying GCA locations, their effectiveness, and feasibility.

The GMT recommends that if GCAs for either spiny dogfish or rougheye rockfish are desired, that they are forwarded for consideration in June 2014 under the omnibus management measures discussion. If tasked by the Council, the GMT can continue to refine our methodology for identifying these areas. As mentioned, refinement of our current methodology can be completed by the June meeting. As for the SSC's suggestion to consider developing a spatial Generalized Additive Mixed Model (GAMM) for identifying bycatch hot spots, we do not think we will have time to do this before the June meeting. However, we would continue development of such a modeling approach in the future, if the measure is recommended under the omnibus process. Also, more time is needed to interpret maps resulting from this refined approach and propose alternatives; these activities would likely be enhanced with industry participation (e.g., from the GAP or a GAP subgroup). Then an evaluation of socioeconomic and enforcement impacts relative to these GCA alternatives must be proposed.

B.10 Use of excluder devices to reduce catch of rougheye rockfish in non-tribal at-sea and shoreside Pacific whiting fisheries

This analysis evaluates the mandatory use of excluder devices for reducing the catch of rougheye rockfish in the non-tribal Pacific whiting fisheries (i.e., shorebased IFQ, catcher-processors, and motherships). Alternatives ranged from mandatory use for all trips north of 40°10' N. latitude to mandatory use only within limited areas (e.g., areas with highest rougheye rockfish catches). Specific alternatives, assumptions, and more detail can be found in [Agenda Item C.4.b. REVISED GMT Report](#). This analysis shows that use of excluder devices on midwater gears targeting Pacific whiting may reduce the catch of rougheye rockfish. Discussions with individuals from the industry and discussions among GMT members, resulted in numerous suggested changes to the assumptions, as well as comments and suggestions regarding (1) the advantages of allowing voluntary use instead of mandatory use, (2) the need for additional research, (3) questions regarding whether current regulations would allow or prevent voluntary use, and (4) impacts of clogging in front of excluders. **The GMT would therefore recommend moving consideration of this measure to the omnibus management measures discussion and removing it from the 2015-2016 package.**

B.7 Analysis of lingcod retention in the nearshore and non-nearshore fixed gear fisheries in Periods 1, 2, and 6

Lingcod retention is prohibited in Periods 1, 2, and part of 6 for both limited entry and open access fixed gears under the status quo regulations. The request was made to retain and land lingcod that are incidentally caught and discarded, with the suggestion that trip limits might be set low enough to prevent changes in fishermen's behavior (i.e., prevent targeting). The proposed change would allow lingcod retention during Periods 1, 2 and 6 in the restricted access state permitted nearshore fisheries in California and Oregon, the open access fixed gear fishery in Oregon, and the limited-entry and open access non-nearshore fixed gear fisheries in California, Oregon and Washington.

Lingcod mortality has been far below the non-trawl allocation (less than 35 percent) and conversion of discards to landings is only expected to increase mortality from the commercial

fixed gear fishery by 47 percent (from 79.9 mt to 117 mt) leaving a large residual to buffer against uncertainty from increased targeting in the open access fleet. In addition the Council should also consider the impacts of lingcod season date changes to co-occurring overfished species. Projections of additional mortality of overfished species in the fixed gear fisheries result in an estimated increase in mortality in the nearshore fishery of 6.9 percent (0.08 mt) for yelloweye rockfish, 6.1 percent (0.43 mt) for canary rockfish, 6.5 percent (0.03 mt) for bocaccio, and no increase in cowcod with the current 400 lb per month open access and 800 lb limited entry trip limits during the period in question.

The latent capacity in the open access fishery (i.e., the sector contains participants who are fishing at low levels or who are inactive) presents an uncertainty in overfished species mortality projections. The Council could consider aligning the lingcod and nearshore rockfish seasons south of 40°10 N. latitude to prevent bycatch and discard mortality on nearshore rockfish encountered while pursuing lingcod during the closed season for nearshore rockfish in period 2. This can be achieved by either opening the nearshore rockfish season in period 2, which is closed to fishing under status quo regulation, or by keeping lingcod closed during this period to prevent rockfish bycatch.

One last consideration discussed by the GMT is the potential impact on lingcod reproductive output, which can be further addressed between now and June, though it has been discussed in past analyses, i.e., eliminating the spawning closure in the recreational fishery. **The GMT recommends forwarding this for further refinement and consideration in June, as part of the 2015-16 package.**

B.8 Analysis of removing gear restriction for Pacific sanddabs and Other Flatfish in various GCAs for the California non-trawl commercial fishery.

Current regulations prohibit fishing in various GCAs with non-trawl gear for groundfish. One general exception to these closures is for vessels fishing with hook-and-line gear that meets specific requirements (e.g., no more than 12 hooks per line, using hooks no larger than "Number 2" hooks, which measure 11 mm (0.44 inches)). This analysis explores ways to allow continued targeting of the Other Flatfish complex within the GCAs while removing or reducing the current gear restrictions to increase efficiency and thus attainment of the non-trawl allocation of the Other Flatfish complex.

Pacific sanddabs are the primary target within the Other Flatfish complex. They are found over soft bottom habitat where rockfish are rarely encountered and are primarily distributed in shallower depths than petrale sole. The historical landings data for trips targeting Pacific sanddabs (composing greater than 50 percent of landings) from 1994-1999 prior to gear restrictions and GCAs provided proxy bycatch rates for overfished species. Projected impacts assuming attainment of the non-trawl allocation of Pacific sanddabs resulted in nearly negligible overfished species mortality. Thus liberalization of gear restrictions to increase the likelihood of attainment is not expected to affect other fishing opportunities constrained by overfished species impacts.

B.12 Allow Retention of canary rockfish in the recreational fisheries

The GMT analyzed the retention of canary rockfish in recreational fisheries in Washington, Oregon, and California on a state by state basis. The GMT notes that all three states would not need to implement this management measure concurrently, allowing each state to consider it now or in a later cycle as appropriate. Any decisions regarding allowing the retention of canary rockfish may require an examination of trade-offs with other management measures to maintain current season structures and bag limits. The overarching uncertainty across each state's analysis is that angler behavior is difficult to predict and may result in an increase in mortality beyond what is projected in this analysis. **The GMT recommends this continue for consideration in June as part of the 2015-16 package, with further refinement by June.**

B.14 Modify depth restriction for the Oregon recreational fishery

Currently, the Oregon recreational fishery line is 40 fathoms. In March, the Council chose new mortality rates for recreationally-caught yelloweye and canary rockfishes when released with descending devices. One depth bin within the new rates was 30-50 fathoms. Given the new mortality rates, there will be no difference in the mortality rate of released yelloweye and canary rockfish if the management line is moved from 40 to 50 fathoms. However, the encounter rate may differ. Oregon is requesting to have the 50 fathom line available for use for inseason management, not as part of the preferred season structure, in the event yelloweye rockfish impacts are lower than previously projected. There was no data available for analysis because the recreational fishery in Oregon has not been open outside of 40 fathoms during the peak April to September fishing period since before both stocks were declared overfished. **The GMT recommends removing this management measure for consideration in the 2015-2016 package and forward for consideration in omnibus management measures discussion.**

B.3 Two-Year Trawl and Non-Trawl Allocation of Petrale Sole

The GMT has no further comment.

B.4 Overfished Species Impacts on Trips Targeting Bocaccio Rockfish South of 36° N. Latitude

Harvest for bocaccio for the management areas south of 36° N. latitude has been minimal from 2008 to 2012 with an overall five-year average annual mortality of 1.1 mt for the non-nearshore fixed gear fishery. As a result, industry requested trip limit increases in 2012 and 2013 for the limited entry sector south of 34° 27' N latitude with minimal mortality increases for overfished species (OFS). As part of the 2015-2016 biennial management cycle, the Council is considering modest trip limit adjustments for both sectors (LE and OA) south of 34° 27' N latitude. To better inform the Council's decision, the GMT was tasked with analyzing potential mortality increases for other OFS on trips targeting bocaccio. This analysis covers the areas south of 36° N latitude, which includes the Morro Bay port complex area as well as the area south of 34° 27' N latitude.

WCGOP data were examined for the area south of 36° N latitude to estimate mortality of co-occurring overfished species (canary, darkblotched, and yelloweye rockfishes) that may occur as a result of increases to the bocaccio rockfish trip limits in the LE and OA sectors. From 2002 to 2012, a total of 33 hauls was observed where bocaccio was taken. Examination of these haul data revealed that no OFS were encountered on the observed trips. Given the small sample size of 33 hauls over this 11 year period, it is reasonable to assume that some OFS were probably

encountered as bycatch on other trips, albeit in very small and unquantifiable amounts. Given this, it is also reasonable to assume that any possible OFS mortality increases associated with modest trip limit increases would be very minimal.

The GMT recommends the Council consider the impacts described above when adjusting the bocaccio rockfish trip limits in June or during the biennium through routine inseason actions.

B.5 Coastwide Sablefish Trip Limits

The GMT recommends sablefish trip limits proposed under Alternative 3 to align with the FPA sablefish ACLs (Tables B-20 and B-22 in [Agenda Item C.4.b. REVISED GMT Report](#) and outlined in Agenda Item C.9.b Supplemental GAP Report). Further, the GMT notes that sablefish trip limits will be reviewed at the November 2014 Council meeting and recommendations for adjustments may be made based on fishery performance.

B.9 At-Sea Set-Asides: Spiny Dogfish Shark

The new ACL adopted under Agenda Item C.4 raised the 2015 spiny dogfish ACL from 1,912 mt to 2,101 mt, and 2016 ACL from 1,897 mt to 2,085 mt. **In brief, the GMT believes it would be reasonable for the Council to forgo establishing at-sea set-asides in this cycle because of the relatively low probability of exceeding the dogfish ACL suggested by Appendix B in [Agenda Item C.4.b. REVISED GMT Report](#).**

We updated the Appendix B analysis with (1) the newly set 2014 Total Allowable Catch (TAC) for Pacific whiting, which is 17 percent higher than last year's TAC; and (2) the 2016 ACL for dogfish. We only focus on 2016 to simplify the results and because it is lower than the 2015 ACL.

The new results are shown in Table 2. We also added a third simulation — “Simulation 3” — to explore the effect of targeting in the fixed gear sectors. Nothing in regulation prohibits resuming targeting in those sectors to the levels prior to 2009. This third simulation updates Simulation 2 by calculating the fixed gear sectors lognormal mean and standard deviation from 2003-2008 catches instead of 2009-2012.

The full GMT reviewed the analysis. If the Council were to take a risk-based approach to prioritizing management measures, the chance of catch exceeding the ACL more than one time in four years would be one standard to focus on. The simulation results suggest that failing that standard for dogfish is low across all three scenarios. As we have raised in Agenda Item C.8 regarding the binomial probability of an ACL overage (i.e., a simple yes/no look at overages), the annual probability of an ACL overage has to be greater than 38 percent before it becomes more likely than not that we will experience more than one overage in a four-year period. The highest annual percentage of an ACL overage is less than half that. If the 2008-2012 period is more reflective of what we will experience in the near term, then we would expect annual overages less than 10 percent of the time. Looking at a four year period, we would only expect more than one overage less than 5 percent of the time. As stated in Appendix B ([Agenda Item C.4.b. REVISED GMT Report](#)), we recommend these percentages as rough guides rather than

precise predictions. Likewise, changed dynamics in the fisheries could make these past patterns unreflective of what we would see in 2015-2016 and beyond.

On the issue of choosing an at-sea set-aside, this analysis takes an approach the GMT has wished to make progress towards over the past couple of management cycles. Our goal is to better understand and characterize the uncertainty in our catch projections. The at-sea dogfish set-aside choice is one where variability and uncertainty are important. The variability makes the choice of set-asides and harvest guidelines challenging. The simulation results suggest that at-sea set-asides could reduce the likelihood of an ACL overage because of large catch years in the catcher-processor sector to cause overages. The bottom trawl sector appears to be the other major potential source of overages. Yet to elaborate on the challenge, establishing set-asides or HGs that would accommodate most years of catch in both sectors would take up most of the ACL. At the same time, such high set-aside or harvest guideline levels would not be needed in the majority of years.

We omit much of the larger discussion we have in mind for this issue. In brief, some see the circumstances presented for dogfish as calling for a system where the sum of HGs, set-asides, ACTs, etc. established across sectors could add up to an amount greater than the ACL. We see this as a possible beneficial and rational fishery policy where catch is highly variable catch in multiple sectors and low probability that catch in each sector would reach their specific levels in the same year. At this time, we do not expect that the FMP or even the Magnuson-Stevens Act would allow for formal specification of set-asides, HGs, ACTs, etc. that summed to more than the ACL. Yet we do think the approach could be explored in the future for addressing highly variable bycatch species like dogfish.

To reiterate, the GMT believes it would be reasonable for the Council to forgo establishing at-sea set-asides in this cycle because of the relatively low probability of exceeding the dogfish ACL suggested by Appendix B in [Agenda Item C.4.b. REVISED GMT Report](#).

Table 2. Spiny Dogfish Shark: Updated simulation results (detailed in Appendix B) for Simulations 1 and 2 with an additional Simulation 3. See below for explanation of the metrics reported.

#	Whiting TAC	Avg. mt	Over %	Avg. Over. mt	At Sea Avg. mt	Set Aside Scenarios							
						725 mt		500 mt		300 mt		163 mt	
						Over. %	At Sea over. %	Over. %	At Sea over. %	Over. %	At Sea over. %	Over. %	At Sea over. %
1	2014	1,646	18%	409	710	14%	11%	12%	17%	9%	29%	8%	50%
	2013	1,561	14%	389	692	11%	9%	9%	14%	7%	25%	6%	44%
2	2014	1,312	7%	238	1,247	0%	11%	0%	17%	0%	29%	0%	50%
	2013	1,210	5%	200	1,265	0%	9%	0%	14%	0%	25%	0%	44%
3	2014	1,529	7%	238	1,247	3%	11%	1%	17%	0%	29%	0%	50%
	2013	1,425	7%	238	1,247	2%	9%	1%	14%	0%	25%	0%	44%

Performance metrics reported in Table 2.

- *Avg. mt*: the average annual total catch over all simulation runs
- *Over. %*: the percentage of simulation runs where the annual total catch was greater than 2,085 mt
- *Avg. Over. mt*: the average size of overages in metric tons.
- *At Sea Avg. mt*: the average total catch from the At Sea sectors in runs where there was an overage.
- *% of overages if Set Aside = ###* : the percentage of runs with a total catch greater than 2,085 mt if the At Sea sector was capped the set aside amount (e.g., 163 mt, 300 mt, 500 mt, 725 mt)

GMT Recommendations

1. The GMT recommends that the Council postpone further action on selecting a nearshore rockfish harvest HG until June when the complete analyses of the final preferred annual catch limits (ACLs, discussed in detail in Agenda Item C.9.b Supplemental GMT Report) and the analysis of the nearshore rockfish HGs are presented.
2. In addition to the recommended RCA corrections for the 200 fm modified line in Oregon (described in B.1), consider analyzing a range of RCA lines seaward of 250 fm to potentially reduce rougheye rockfish bycatch.
3. Forward consideration of the shorebased IFQ carryover analyses into the new management measures process (i.e., the omnibus package), which includes Amendment 20 trawl trailing actions.
4. The GMT recommends consideration of the trip limit adjustments for lingcod north of 40°10' N. latitude (limited entry and open access), shortspine thornyhead north of 34°27' N latitude (limited entry), and bocaccio and the minor shelf rockfish complex south of 34°27' N latitude (limited entry and open access for both fishery sectors) in June or during the biennium through routine inseason actions.
5. The GMT recommends the Council consider the impact analysis contained in the DEIS when making recommendations for the Pacific halibut CSP (i.e., no action is needed at this meeting or in June).
6. The GMT recommends that if GCAs for either spiny dogfish or rougheye rockfish are desired, that they are forwarded for consideration in June 2014 under the omnibus management measures package (i.e., not included in the 2015-16 EIS).
7. The GMT recommends removing the 50 fm management line analysis for the Oregon recreational fisheries for consideration in the 2015-2016 package and forward for consideration in Omnibus Package.
8. The GMT recommends sablefish trip limits proposed under Alternative 3 to align with the FPA sablefish ACLs (Tables B-20 and B-22 in [Agenda Item C.4.b. REVISED GMT Report](#) and outlined in the Agenda Item C.9.b Supplemental GAP Report).
9. The GMT recommends the Council consider the impacts described above when adjusting the bocaccio rockfish trip limits in June or during the biennium through routine inseason actions.
10. The GMT believes it would be reasonable for the Council to forgo establishing at-sea set-asides for spiny dogfish because of the relatively low probability of exceeding the dogfish ACL (see [Agenda Item C.4.b. REVISED GMT Report](#)).

11. The GMT recommends allowing lingcod retention in Periods 1, 2, and 6 management measure continue for consideration in June as part of the 2015-16 package, with further refinement in time for the June Council meeting
12. The GMT recommends the management measure allowing retention of canary rockfish in the recreational fisheries continue for consideration as part of the 2015-16 package, with further refinement for the June Council meeting.

References

King J.R. and R.E. Withler. 2005. Male nest site fidelity and female serial polyandry in lingcod (*Ophiodon elongatus*, Hexagrammidae). [*Molecular Ecology*](#), 14(2): 653-660.

Attachment 1. Summary of Management Measures by Sector, Completeness, and GMT Recommendation.

Management Measure	Sector	Overview	Substantially Complete?	Can be finished by June?	Retain, Postpone, or End Analysis
B.1 Rockfish Conservation Area boundary adjustments	Trawl	Adjustments to the 200 fm modified line near Heceta Bank to correct coordinates for the petrale cut-outs.	Yes	Yes	Retain
B.1.a New RCA lines seaward of 250 fm	Trawl	The Council may want to consider new RCA fathom contours for the area seaward of 250 fathoms	New	Yes	Consider for inclusion in 15-16 package
B.11 Off-the-top deductions to cover carryover if trawl allocation exceeded	Trawl	Evaluate projections for the off-the-top deductions from the ACL when evaluating the risk of exceeding the ACL/ABC/OFL for species eligible for carry-over in the shorebased IFQ fishery	No	No	Remove from 15-16 and forward for consideration in the omnibus package
B.6 Other trip limit adjustments	Non-Trawl	Consider modest trip limit increases for lingcod N. of 40°10' N. lat., shortspine thornyhead N. of 34° 27' N. lat, and bocaccio and shelf rockfish S. of 34° 27' N. lat.	Yes	Yes	Retain for consideration in June or future inseason adjustments
B.13 Retain groundfish in recreational halibut fisheries	Non-Trawl Rec	Analysis to support modifications to groundfish regulations considered during development of the Catch Sharing Plan (CSP)	Yes	Yes	Retain for consideration in the CSP process
B.2.1 Rougheye	Trawl/		Yes, but	No	Remove for implementation in 15-

Management Measure	Sector	Overview	Substantially Complete?	Can be finished by June?	Retain, Postpone, or End Analysis
rockfish conservation area	Non-Trawl	Groundfish closure areas (GCAs) may be useful for limiting catch of rougheye rockfish if inseason catch levels are high.	substantially more work needed		16 regulation package and forward for consideration in the omnibus package
B.2.2 Spiny dogfish conservation Area	Trawl/ Non-Trawl	GCAs might not work for dogfish. Risk analysis shows low risk but note that may change with increased whiting	Yes, but substantially more work needed	No	Remove for implementation in 15-16 regulation package and forward for consideration in the omnibus package
B.10 Use of excluder devices to reduce catch of rougheye rockfish for the at sea and shoreside Pacific whiting fisheries	Trawl	Continued industry research and experimentation will help improve the effectiveness of excluder devices.	Yes, but more research needed	No	Remove for implementation in 15-16 regulation package and forward for consideration in the omnibus package
B.7 Allow lingcod retention in Periods 1, 2 and 6	Non-Trawl	Lingcod mortality has been below the non-trawl allocation. This would convert discarded catch into landed catch during the winter. Catch of OFS may increase. Trip limits could be set low enough to prevent changes in fishermen's behavior. Potential impacts on lingcod reproductive output can be further addressed between now and June	Yes and the GMT can continue to refine analysis	Yes	Retain
B.8 Remove or modify	Non-Trawl	Needs more team discussion, consider narrowing the range of alternatives	No	Yes	Retain

Management Measure	Sector	Overview	Substantially Complete?	Can be finished by June?	Retain, Postpone, or End Analysis
commercial gear restrictions for targeting flatfish in California					
B.12 Allow canary rockfish retention in recreational fisheries	Rec.	Projected impacts assume no changes in angler behavior, overarching uncertainty across the three states. Trade-offs with current management measures will need to be considered (CA shortened season)	Yes with some revisions to the description of the analysis	Yes	Retain
B.14 Modify Depth restriction for the Oregon Rec. fishery	Rec.	A 50 fathom depth restriction would address new mortality rates reflecting the use of descending devices and would expand inseason management options if yelloweye HGs are higher than projected	No. More work is needed	No	Remove from 15-16 and forward for consideration in the omnibus package

Appendix 1. Nearshore Rockfish Complex alternatives calculations by species

Option 1 Miles of Coastline							
Species	Contribution	WA%	OR%	CA%	WA mt	OR mt	CA mt
<i>Black and yellow</i>	0.01	0.26	0.49	0.25	0.00	0.01	0.00
<i>Blue (CA)</i>	17.00	0.00	0.00	1.00	0.00	0.00	17.00
<i>Blue (OR & WA)</i>	26.94	0.34	0.66	0.00	9.26	17.68	0.00
<i>Brown</i>	1.75	0.26	0.49	0.25	0.45	0.86	0.43
<i>Calico</i>	0.00	0.26	0.49	0.25	0.00	0.00	0.00
<i>China</i>	6.20	0.26	0.49	0.25	1.60	3.06	1.54
<i>Copper</i>	9.71	0.26	0.49	0.25	2.51	4.79	2.41
<i>Gopher</i>	0.00	0.26	0.49	0.25	0.00	0.00	0.00
<i>Grass</i>	0.55	0.26	0.49	0.25	0.14	0.27	0.14
<i>Kelp</i>	0.01	0.26	0.49	0.25	0.00	0.00	0.00
<i>Olive</i>	0.26	0.26	0.49	0.25	0.07	0.13	0.07
<i>Quillback</i>	6.15	0.26	0.49	0.25	1.59	3.04	1.52
<i>Treefish</i>	0.18	0.26	0.49	0.25	0.05	0.09	0.04
Sum Total	68.76				15.68	29.93	23.15
							68.76
Option 2 Historical Catch							
Species	Contribution	WA%	OR%	CA%	WA mt	OR mt	CA mt
<i>Black and yellow</i>	0.01	0.00	0.21	0.79	0.00	0.00	0.01
<i>Blue (CA)</i>	17.00	NA	NA	1.00	0.00	0.00	17.00
<i>Blue (OR & WA)</i>	26.94	0.07	0.93	NA	1.96	24.98	0.00
<i>Brown</i>	1.75	0.00	0.08	0.92	0.00	0.14	1.61
<i>Calico</i>	0.00	NA	NA	NA	0.00	0.00	0.00
<i>China</i>	6.20	0.22	0.65	0.13	1.36	4.02	0.82
<i>Copper</i>	9.71	0.20	0.48	0.32	1.94	4.71	3.06
<i>Gopher</i>	0.00	0.00	0.29	0.71	0.00	0.00	0.00
<i>Grass</i>	0.55	0.00	0.49	0.51	0.00	0.27	0.28
<i>Kelp</i>	0.01	NA	NA	NA	0.00	0.00	0.00
<i>Olive</i>	0.26	0.00	0.03	0.97	0.00	0.01	0.25
<i>Quillback</i>	6.15	0.22	0.44	0.34	1.35	2.72	2.08
<i>Treefish</i>	0.18	0.00	0.00	1.00	0.00	0.00	0.18
Sum Total					6.61	36.84	25.30
							68.75
Option 3 Hybrid							
Species	Contribution	WA%	OR%	CA%	WA mt	OR mt	CA mt
<i>Black and yellow</i>	0.01	0.00	0.21	0.79	0.00	0.00	0.01
<i>Blue (CA)</i>	17.00	NA	NA	1.00	0.00	0.00	17.00
<i>Blue (OR & WA)</i>	26.94	0.07	0.93	NA	1.96	24.98	0.00
<i>Brown</i>	1.75	0.00	0.08	0.92	0.00	0.14	1.61
<i>Calico</i>	0.00	NA	NA	NA	0.00	0.00	0.00
<i>China</i>	6.20	0.26	0.49	0.25	1.60	3.06	1.54
<i>Copper</i>	9.71	0.26	0.49	0.25	2.51	4.79	2.41
<i>Gopher</i>	0.00	0.00	0.29	0.71	0.00	0.00	0.00
<i>Grass</i>	0.55	0.00	0.49	0.51	0.00	0.27	0.28
<i>Kelp</i>	0.01	NA	NA	NA	0.00	0.00	0.00
<i>Olive</i>	0.26	0.00	0.03	0.97	0.00	0.01	0.25
<i>Quillback</i>	6.15	0.26	0.49	0.25	1.59	3.04	1.52
<i>Treefish</i>	0.18	0.00	0.00	1.00	0.00	0.00	0.18
Sum Total					7.66	36.29	24.80
							68.75