GROUNDFISH MANAGEMENT TEAM REPORT ON PHASE 2 STOCK DEFINITIONS: FINAL PREFERRED ALTERNATIVE

Executive Summary

The Groundfish Management Team (GMT) provides recommendations on stocks that are or are not in need of conservation and management in the Pacific Coast Groundfish Fishery Management Plan (FMP), based on the 10-Factor analysis and considerations of catch distribution between federal and state waters. **For four stocks (Washington stocks of black and quillback rockfish, as well as coastwide stocks of stripetail and rosethorn rockfishes) the GMT recommends Alternative 1 as the Final Preferred Alternative (FPA). The GMT recommends Alternative 2 as FPA for all species outlined in Table 1,** and provides specific rationale for California and Oregon stocks of quillback rockfish; the Washington/Oregon stock of copper rockfish; and Washington stocks of blue and deacon rockfishes, cabezon, and kelp greenling. Additionally, the GMT highlights the importance of some of these species to Coastal Treaty Tribes, and encourages the Council to consider Tribal priorities despite Federal jurisdictional limitations. **The GMT continues to recommend their Preliminary Preferred alternative (PPA) recommendation as FPA for Alternative 3 ecosystem component (EC) species, detailed in Table 2. Additionally, the GMT recommends future periodic review of these species' mortality for monitoring and potential reclassification if needed.** For the Oregon delineations of black, blue, and deacon rockfishes, the GMT could not reach consensus on recommendations. In the absence of consensus, the GMT elected to provide an objective overview of the available rationale under Alternative 1 and Alternative 2 for each of these species.

Finally, the GMT raises overarching points which are relevant to the Council's discussion, but arguably not immediately applicable to the analysis of the alternatives. There are two general categories which these points fall under: the impact of the existing Council framework on management, and the forward-looking concerns surrounding long-standing management measures. Removal of species from the FMP could reduce conformity to the best scientific information available (BSIA) standards currently employed by the Council, and may weaken existing collaborative management frameworks for species no longer in the FMP. Long-standing management measures such as rockfish conservation areas (RCAs) influence catch distribution to an unknown degree, and future management changes could change mortality levels within the fishery in Federal waters for various species. Improved monitoring to consistently distinguish catches across jurisdictions will therefore be essential. **The GMT recommends that the Council work with states, Tribes, and the Pacific States Marine Fisheries Commission to strengthen sampling programs, regardless of the outcome of this agenda item**

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Alternative 1 Species, with Recommended Stock Definitions as Appropriate

Quillback rockfish (Washington) and black rockfish (Washington)
The GMT continues to recommend Alternative 1 as FPA for Washington black rockfish and Washington quillback rockfish, for the reasons outlined in Table 2 of Agenda Item E.6.a, Supplemental GMT Report 2, June 2025.

Stripetail and rosethorn rockfishes
The GMT continues to recommend Alternative 1 as FPA for stripetail rockfish and rosethorn rockfish. For both species, the GMT recommends Option 1 (Coastwide) as the FPA stock definition. At the June 2025 Council meeting, the Council recommended the 10-Factor analysis (Agenda Item G.2, Attachment 1) be applied to two additional species previously identified under Alternative 1 as PPA in March, rosethorn rockfish and stripetail rockfish.

These species are principally caught by the fishery in the exclusive economic zone (EEZ) (Factor ii) and therefore the Pacific Coast Groundfish Fishery Management Plan (FMP) could improve or maintain the condition of the stock (Factor iii). Factors (iv) through (vii) are not met because these species are not a target to the fishery, nor important to the commercial and recreational fishery, nor important to the regional economy.

As documented in the Groundfish Mortality Report (Agenda Item G1b, NWFSC Reports 1 and 2, September 2025; Somers et al., 2024, 2025), coastwide mortality has increased in recent years, though has been variable across those years, possibly indicating opportunity to the fishery. Recent landings are comparable with other Alternative 1 species proposed as final preferred alternative (FPA) from June and higher than other Alternative 3 species proposed as PPA in June, though the mortality of rosethorn rockfish is lower than mortality for stripetail rockfish, and it comes primarily from a single year (2019).

Alternative 2 Species

The GMT recommends Alternative 2 as FPA for those species outlined in Table 1 below. This table summarizes the GMT recommendations for Alternative 2 as FPA, by species and area as needed. The rationale for this determination based on the 10-Factor Analysis can be found in Table 2 of the Agenda Item E.6.a, Supplemental GMT Report 2, June 2025, except for those species where our PPA has changed. The rationale for those species (quillback rockfish off Oregon, copper rockfish off Washington and Oregon, and blue and deacon rockfishes off Washington) follows.

Quillback rockfish (California)
The GMT continues to recommend California quillback rockfish as FPA as Alt 2 for the reasons outlined in Table 2 of Agenda Item E.6.a, Supplemental GMT Report 2, June 2025.

Quillback rockfish (Oregon)
The 10-Factor analysis concluded that quillback rockfish off of Oregon is primarily caught in state waters, and therefore not in need of conservation and management within the EEZ. The analysis concluded that Factors (ii) and (iii) are not met, because the species is not principally caught in the groundfish fishery within the EEZ, and therefore, it is unlikely that the Groundfish FMP can improve or maintain the condition of the stock. Factors (iv) through (ix) are also not met. Additionally, Factor (x) is partially met by the state-issued commercial limited entry nearshore endorsed permit. The GMT initially recommended Alternative 1, though after further discussion

and guidance, **the GMT recommends Alternative 2 as FPA for quillback rockfish off of Oregon**.

Copper rockfish (Washington/Oregon)
While the GMT initially recommended Alt 1 as PPA for this species off of Washington and Oregon in June, further consideration of the available analysis resulted in a change in recommendation for FPA. As adopted by the Council in the Range of Alternatives (ROA) framework in March of 2025 (Agenda Item H.6 Supplemental REVISED Attachment 1, March 2025), a precautionary threshold of 25 percent was applied to assist in the determination of whether a stock is "caught by the fishery". The analysis shows that the combined Oregon and Washington stock has 10 percent mortality in the EEZ, which is below the 25 percent threshold. Although copper rockfish off Washington are principally caught in federal waters, Washington catch is a smaller component of the Washington/Oregon stock. Thus, **the GMT recommends Alternative 2 as FPA for copper rockfish off of Washington and Oregon,** similar to other nearshore species like china, gopher, and brown rockfishes.

Blue and deacon rockfishes (Washington)
For blue and deacon rockfishes, their stocks are currently undefined but were proposed under PPA as separate Washington & Oregon stocks for both species. This section speaks to the Washington stocks of blue and deacon rockfishes, as the Oregon stocks are addressed later in this report. In June, the GMT recommended Alt 1 as PPA, noting the economic importance of these species and the potential for their mortality in federal waters to be influenced by long-term closures related to yelloweye rockfish. However, the influence of these long-term closures cannot be answered with the information available for analysis. Considering Washington-only stocks, the analysis demonstrated that overall recreational catches are principally in state waters (about 93 percent). Additionally, these species are not managed within a complex including black rockfish - as they are in Oregon. This indicates that blue and deacon rockfishes off the coast of Washington are not principally caught by the Federal fishery and, thereby, and are not in need of conservation and management in the EEZ. Accordingly, **the GMT recommends Alternative 2 as FPA for blue and deacon rockfishes off Washington.**

Despite this conclusion, the GMT would like to highlight that the Coastal Treaty Tribes have indicated that this species is of high importance to Tribal fisheries, and that they warrant conservation and management attention off Washington. The GMT is not positioned to resolve questions about NMFS' federal trust responsibility in state waters, highlighting the unique Treaty considerations in Washington under this agenda item. The GMT encourages the Council to carefully consider the priorities and concerns identified by the Coastal Treaty Tribes for these species.

Cabezon and kelp greenling (Washington)
The GMT continues to recommend Alternative 2 as FPA for cabezon and kelp greenling off Washginton, as it did in June for PPA. However, as with blue and deacon rockfishes, the GMT would like to highlight that the Coastal Treaty Tribes include cabezon and kelp greenling among species of high importance to Tribal fisheries. The GMT encourages the Council to apply the same considerations when determining FPA.

Table 1. GMT recommendations for FPA selection of Alternative 2 species. If the GMT recommendation differs from the GMT's June PPA, those will be in italics.

Species	GMT FPA (GMT PPA)
Black and yellow rockfish	Alt 2
Black rockfish (CA)	Alt 2
Blue rockfish (CA)	Alt 2
Blue rockfish (WA)	*Alt 2 (GMT PPA Alt 1)*
Brown rockfish	Alt 2
Cabezon (OR)	Alt 2
Cabezon (CA)	Alt 2
Cabezon (WA)	Alt 2
Calico rockfish	Alt 2
Chameleon rockfish	Alt 2
China rockfish	Alt 2
Copper rockfish (WA/OR)	*Alt 2 (GMT PPA Alt 1)*
Copper rockfish (CA)	Alt 2
Deacon rockfish (WA)	*Alt 2 (GMT PPA Alt 1)*
Dwarf red rockfish	Alt 2
Freckled rockfish	Alt 2
Gopher rockfish	Alt 2
Grass rockfish	Alt 2
Half-banded rockfish	Alt 2
Harlequin rockfish	Alt 2
Honeycomb rockfish	Alt 2
Kelp greenling (WA)	Alt 2
Kelp greenling (OR)	Alt 2
Kelp greenling (CA)	Alt 2
Kelp rockfish	Alt 2
Leopard shark	Alt 2
Light dusky rockfish	Alt 2
Olive rockfish	Alt 2
Pink rockfish	Alt 2
Pinkrose rockfish	Alt 2

Pygmy rockfish	Alt 2
Quillback Rockfish (OR)	*Alt 2 (GMT PPA Alt 1)*
Quillback Rockfish (CA)	Alt 2
Swordspine rockfish	Alt 2
Treefish	Alt 2

Alternative 3 Species

The GMT continues to support the Council's adoption of Alternative 3 as PPA for bronzespotted rockfish, flag rockfish, greenblotched rockfish, rosy rockfish, speckled rockfish, tiger rockfish, Mexican rockfish, butter sole, curlfin sole, rock sole, sand sole, and starry flounder. **The GMT recommends PPA Alternative 3 be adopted as FPA for these species as outlined in Table 2 below.**

The GMT would like to see mortality of all species designated as ecosystem component (EC) species be periodically reviewed for potential return or removal from conservation and management in the federal waters. For example, the Council could consider conducting a regular, holistic review of EC species similar to what was done in E.6.a GMT Report 1 from June 2025. If the Council is interested in this idea, they could assign Council staff to consider and draft a process and timeline for the review of EC species periodically to be presented for review and advisory body consideration at a later date. The GMT has already begun building a framework for automatically generating EC species metrics and could work with Council staff on process integration. In light of concerns highlighted in this process surrounding the Council's management of EC species, and the uncertainty as to how timely any action to change management of a species could be, it would be prudent for the Council to continue to consider management and monitoring strategies for EC species in order to achieve ecosystem objectives.

Table 2. GMT recommendations for FPA selection of Alternative 3 species.

Species	GMT PPA = FPA
Bronzespotted rockfish	Alt 3
Flag rockfish	Alt 3
Greenblotched rockfish	Alt 3
Rosy rockfish	Alt 3
Speckled rockfish	Alt 3
Tiger rockfish	Alt 3
Mexican Rockfish	Alt 3
Butter sole	Alt 3
Curlfin sole	Alt 3
Rock sole	Alt 3
Sand sole	Alt 3
Starry flounder	Alt 3

Species without a GMT Recommendation

After considerable discussion of the available analyses and individual perspectives, the GMT reached the conclusion that consensus was not possible for three of the species being considered for FPA under this agenda item. Specifically, the team could not come to consensus on a recommendation for the Oregon delineations of black, blue and deacon rockfishes. The GMT concluded that, in the absence of a consensus recommendation, the most productive contribution the team could bring to the Council on this topic would be an objective overview of each of the possible alternatives for each of these species, rather than a split report.

The GMT also considered a number of high level and forward-looking points which were not incorporated in the original analysis, largely due to their speculative nature. Those aspects of our discussion are captured at the end of this report. Some of the high-level points considered at the end of this report could also apply to species that the team was able to reach consensus on. However, as these points have bearing on how the fishery could look in the absence of existing management measures, as opposed to how the fishery currently operates, the team concluded that they did not belong in the team's deliberations surrounding the current fishery.

Black rockfish (Oregon)
The GMT could not come to consensus on Oregon black rockfish, though the team widely agreed that Alternative 3 was not an appropriate option for this species. This conclusion is centrally related to the fact that the species is a primary target of a fishery with consistent and considerable mortality, whether that fishery occurs in state or federal waters, and provides substantial economic benefits to Oregon coastal communities as a result of that fishery.

Rationale for finding black rockfish off Oregon as in need of conservation and management in the EEZ (Alternative 1):
Black rockfish is highly important to fishery participants in the Oregon recreational fisheries and in the Oregon commercial nearshore fishery. Black rockfish scored "High" on the Relative Ecosystem Importance scale [Factor (i)] in the analytical document (Agenda Item E.2 Attachment 2, June 2025, Table 1-2). While considering Factor (iv), it was also noted as "highly important for recreational anglers and charter boats" and, regarding Factor (v), as a "species of highest importance across sectors". Additionally, when considering Factors (vi-ix), black rockfish are consistently ranked or mentioned at or near the top, especially when compared to other "Deeper Nearshore Bin" species.

Rationale for finding black rockfish off Oregon as not in need conservation and management in the EEZ and removing from the FMP (Alternative 2):
The 10 Factor analysis considers the Federal "fishery" as the fishery operating primarily within the EEZ. If a species has principal mortality in the EEZ, it is considered "caught by the fishery." The 10 Factor analysis concluded that the mortality of black rockfish off Oregon is principally in state waters. As detailed in Agenda Item G.2, Appendix to Attachment 1, September 2025, Table 2-2, black rockfish off Oregon have 2.6 percent of their mortality within the EEZ. This indicates that per Factor (ii), the species is not principally caught by the fishery and, per Factor (iii), management of the species by the Council/NMFS is limited due to the jurisdictional limitations of Federal management and, thus, the FMP's ability to maintain or improve the condition of the stock is negligible. Although black rockfish off of Oregon is considered "highly" important to fishery participants as mentioned above, from a management perspective, even a complete closure of all Federal waters to their fishing mortality may have minimal impact on the condition of the stock.

Blue and deacon rockfishes (Oregon)
Blue and deacon rockfishes are managed as a complex with black rockfish off of Oregon, since they are frequently caught together, occasionally mis-identified as each other, and have similar life history characteristics. They are known to school with black rockfish, though with a deeper (farther offshore) range (Agenda Item G.2, Attachment 1, September 2025). As they frequently co-occur with black rockfish and are known to be an important economic component of fisheries, whether they occur in federal or state waters, the GMT concluded that Alternative 3 would not be a reasonable alternative for these species.

Rationale for finding blue and deacon rockfishes off Oregon as in need of conservation and management in the EEZ (Alternative 1):
Given the co-occurrence of blue and deacon rockfishes with black rockfish in both state and federal waters, and the current targeting of blue, deacon, and black rockfishes as a complex in the recreational and commercial nearshore fishery, much of the above rationale for black rockfish off Oregon also applies to blue and deacon rockfishes. Though to a lesser degree, since black rockfish are caught at a higher rate in both the recreational and commercial fisheries.

Rationale for finding blue and deacon rockfishes off Oregon as not in need of conservation and management in the EEZ and remove from the FMP (Alternative 2):
As detailed above for black rockfish, the crux of the 10 Factor analysis is a consideration of the Council and NMFS' ability to manage the mortality of a species within their jurisdictional authority. The 10 Factor analysis considers the Federal "fishery" as all fishing activity that operates primarily within the EEZ. If a species has principal mortality in the EEZ, the Council and NMFS would be able to manage the mortality of that species within their jurisdictional authority. Mortality of blue and deacon rockfishes off Oregon is principally in state waters, where they are targeted in a complex with black rockfish. Thus, the FMP's ability to maintain or improve the condition of the stock in Federal waters is negligible.

Additional Considerations
During the GMT's extensive review of, and discussions regarding, the analytical material brought forward under this agenda item, some salient points came to the fore which the GMT was uncertain how to address or capture in our analysis. There are two general categories which these points fall under; the impact of the existing Council framework on management, and the forward-looking concerns surrounding long-standing management measures.

Firstly, the FMP provides a framework for the entire range of a species to be assessed under the same best scientific information available (BSIA) standards along with a peer review process. If species are removed from the FMP, the species will be managed by the state, and stock assessments of this species will likely fall to the state. BSIA standards currently employed by the Council may not transfer to future stock assessments under state oversight. Furthermore, the Council process allows for Federal/Tribal/interstate management to ensure the resource is utilized in a sustainable manner. For example, conflicts may surface when resource users believe they are at a disadvantage when compared to other resource users, with respect to higher trip or bag limits, period closures, and area closures outside of their fishing area. These allocation discussions are currently addressed through the Council and FMP process. Without the FMP, avenues for resolution among resource users may be more difficult. While similar processes do exist outside of the Council process, removal of nearshore species from Federal management has the potential to disrupt the nexus to a multi-state and multi-user collaborative approach to management of a shared resource (Factor vii).

Secondly, the GMT would like to highlight the potential impact of long-standing management measures meant to constrain impacts on yelloweye rockfish and other previously-rebuilt species. The GMT understands that the 10-Factor analysis intrinsically focuses on answering the question "Is a species in need of conservation and management in the EEZ" from a current-conditions viewpoint. It is logical that the analysis focuses on what is known to occur in the fishery, as opposed to what may occur in the fishery. Despite this, the GMT agreed that given the recent stock assessments for yelloweye rockfish and California quillback rockfish, there may be significant changes to existing fishery dynamics in the next several years. In large part, the team highlighted that management measures in place for as long as 23 years have had impacts on the distribution of fishery mortality for many of these species and stocks. Should the Yelloweye Rockfish Conservation Areas, Trawl and Non-Trawl Rockfish Conservation Areas, Essential Fish Habitat Conservation Areas, or other large-scale management area boundaries change in response to these rebuilt statuses, the GMT would expect the mortality distribution for stocks caught within the fishery to change.

For example, off of Oregon, some areas like Stonewall and Heceta Banks will likely remain closed once the rockfish conservation areas (RCAs) are opened, but the surrounding areas are currently open for recreational fishing and would be open to commercial non-trawl fishing with the removal of the Non-Trawl RCA. Blue and deacon rockfishes are known to live in deeper waters and offshore reefs (such as Stonewall and Heceta bank), which extend into the EEZ (Rasmuson et al., 2021, Vaux et al., 2019). A study has shown that management quantities differed significantly based on the inclusion of offshore data into an assessment model for blue/deacon rockfish. Offshore populations lacked young fish, potentially suggesting an ontogenetic cross-shelf migration (Rasmuson et al., 2021). While this study is specific to blue and deacon rockfishes off of Oregon, one could infer from their co-occurrence habits with black rockfish that black rockfish as well as potentially other nearshore species off Oregon and other states may exhibit a similar distribution.

It is unclear if any of the potential changes to fisheries based on the points raised would result in a stock being predominantly caught in federal waters or otherwise identified as in need of conservation and management in the EEZ. If evidence is presented in the future indicating a species should return to active management, the FMP and MSA have mechanisms for returning a stock to active fisheries management if it is found to be in need of conservation and management in the EEZ. Going forward, in order to ensure that species are correctly classified in the FMP as species in need of conservation and management, there is a need for sufficient data on mortality of all species caught in state and federal waters. The Council, Treaty Tribes, and states may want to consider what monitoring needs to be in place to ensure this, and what ongoing analyses would need to be done to check our assumptions/knowledge of these species. The GMT suggests the Council work with the states, Tribes, PacFIN, and RecFIN to evaluate modifications to sampling programs that would allow catch to be delineated by state/federal waters in a consistent manner.

Taken together, these points highlight that while flexibility exists to adjust species classifications, doing so without sufficient data or without mechanisms to preserve collaborative, science-based oversight could erode both the rigor and inclusivity of the management process. Maintaining strong monitoring and preserving connections to BSIA will be critical to ensuring sustainability for any species that shifts in or out of the FMP.

References

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