

GROUND FISH MANAGEMENT TEAM REPORT ON FINAL STOCK ASSESSMENT
PLANS AND TERMS OF REFERENCE

The Groundfish Management Team (GMT) reviewed the documents in the advanced briefing book and received an overview from Dr. Jim Hastie of the National Marine Fisheries Service (NMFS) Northwest Fisheries Science Center (NWFSC) during a joint session with the Groundfish Advisory Subpanel (GAP). We offer the following comments:

Stock assessments for 2019 and initial 2021 preferences

The GMT recommendations for stock assessments in 2019 and 2021 are shown in Table 1 and Table 2, respectively. These recommendations are based on the Council's Preliminary Preferred Alternatives (PPAs) selected in March 2018, the National Marine Fisheries Service (NMFS) report in the briefing book ([Agenda Item E.3., Attachment 1, June 2018](#)), and some additions from the GMT given recent year's catch trends, and needs of the fisheries. Below, the GMT discusses those stocks for which we have differing recommendations from the Council's PPA or NMFS recommendations.

For 2019, we agree with NMFS on delaying Dover sole until 2021 due to age-reading incapacity, and since removals are currently less than ten percent of the overfishing limit (OFL). However, we do not recommend that Pacific cod or southern yellowtail rockfish have a full assessment in 2019 as is currently being considered by the Council, and suggested as possible by NMFS. The GMT recommends the Council consider Pacific cod for an assessment in 2021 given that this would allow additional time for ongoing genetic studies to be completed and to age an additional 7,000 otoliths.

Additionally, the GMT believes it would be beneficial to delay any full assessment of southern yellowtail rockfish to 2021, and use that extra capacity to conduct updates for both petrale sole and widow rockfish in 2019. Age reading incapacity was the reason why NMFS and the Scientific and Statistical Committee (SSC) suggested only one update if a full assessment was done for southern yellowtail or another stock. The GMT concludes there would be more benefits to updating petrale sole over a full for southern yellowtail, and because we in general support more frequent updates of key high attainment stocks such as petrale sole to better monitor stock status in light of dynamic recruitments.

For 2021, we agree with adding lingcod (coastwide) as a full assessment as suggested by NMFS, although it was not on the Council's initial list; this would allow incorporation of ages that can be highly influential to assessment results. While black rockfish was on the Council's initial list for a full assessment, the GMT is not aware of any new information that would warrant a structural change in the models for each state. Updates for black rockfish would therefore be recommended until new data becomes available such as the Oregon hydroacoustic survey, which is expected to be ready in 2023. During our joint discussion with the GAP, Dr. Hastie mentioned that there would not be enough capacity to assess vermilion/sunset, copper, and brown rockfish all with full assessments since each could require several area models. As such, the GMT would recommend the Council prioritize vermilion rockfish, as it is an important stock to California non-trawl

fisheries, and copper rockfish, which is important to coastwide non-trawl fisheries. While brown rockfish is also an important contributor to California fisheries, the GMT suggests the Council delay consideration of an assessment until the 2023 cycle.

In addition to the full and update assessment recommendations, the GMT has added our recommendations for catch-only projections for 2019 and 2021. The primary purpose of these catch-only projection requests would be to more accurately reflect the current status of the stock as assessments assume full ACL removals when actual removals are often lower. Therefore, higher ACLs would be available in future years due to lower catches in the past. As a reminder, catch-only projections maintain all the parameters of the most recent assessment and simply update mortality estimates, while an update assessment can incorporate a select set of updates (e.g. mortality, recruitment deviations, age/lengths, and changes to priors) into the old model structure.

Catch-only projections are important for maintaining opportunity for moderate-to-high attainment stocks that have some unused catch to rollover. Two of the most important stocks for catch-only updates would be southern lingcod (south of 40° 10' N. latitude) in 2019, to maintain opportunity for non-trawl sectors; and arrowtooth flounder in 2021 for the individual fishing quota (IFQ) fishery.

Draft Terms of Reference (TOR) for the Groundfish and Coastal Pelagic Species Stock Assessment Review Process for 2019-2020

The GMT reviewed the draft of this document in the advanced briefing book ([Agenda item E.3. Attachment 3](#)). The two main issues the GMT wanted to have addressed have been, see below.

We agree with the language in Section 5.2. which states that:

All groundfish assessments not going to a mop-panel review that have been endorsed by the SSC and adopted by the Council need to be finalized and posted on the Council's web site by the November briefing book deadline. Those assessments requiring subsequent review at a mop-up panel need to have most substance complete (especially the 10-year projections of harvest specifications under default and, if requested by the Council, alternative harvest control rules) by the November briefing book deadline to facilitate a final SSC review in November. These assessments, if endorsed by the SSC and adopted by the Council, need to be finalized and posted on the Council's web site as soon after the November Council meeting as practicable.

We also agree with the language added in Section 5.6. which states that:

The GMT representative will also collaborate with Council staff and the STAT regarding removal assumptions and resulting catch streams, particularly for the initial two years for which there are approved harvest specifications, which should be made when developing projections.

The GMT does not have any other comments or edits on this or the other TOR documents at this time. The GMT agrees with the SSC request for additional time to consider comments and provide subsequent revisions to the stock assessment TORs.

Table 1. GMT recommendations for 2019 stock assessments.

| 2019 | | | |
|--|---------------------------------------|--|--|
| Stock | Council PPA | NMFS Comment | GMT recommendation |
| Sablefish | Full 2019 | Full in 2019 | Full in 2019 |
| Cowcod | Full 2019 | Full in 2019 | Full in 2019 |
| Cabazon (OR - CA) | Full 2019 | Full in 2019 | Full in 2019 |
| Longnose skate | Full 2019 | Full in 2019 | Full in 2019 |
| Big skate | Full 2019 | Full in 2019 | Full in 2019 |
| Gopher (or complex with black yellow) | Full 2019 | Full in 2019 | Full in 2019 |
| Dover sole | Full 2019 | Not enough age readers. Wait until 2021 | Full in 2021 |
| Yellowtail South of 40° 10' N lat. | Not a PPA - NMFS added to list | Pick one for 2019, other for 2021 | Neither full in 2019; delay until 2021 |
| Pacific cod | Full 2021 | | |
| Petrals Sole | Update 2019 | Pick one 2019, Petrale good for full in 2021 | Updates for both in 2019; Petrale full in 2021 |
| Widow rockfish | Update 2019 | | |
| Lingcod - <u>especially S 42°</u> | --- | --- | Catch-only projection in 2019 (GMT request) |
| Canary rockfish | --- | --- | Catch-only projection in 2019 (GMT request) |
| Black rockfish | --- | --- | Catch-only projection in 2019 (GMT request) |

Table 2. GMT recommendations for 2021 stock assessments.

| 2021 | | | |
|--|-----------------------------------|--|--|
| Stock | Council initial (not PPAs yet) | NMFS Comment | GMT |
| Dover sole | Full 2019 | Full in 2021: enough age reading by then | Full in 2021 |
| Vermilion rockfish (or complex with sunset) | Full in 2021 | Full in 2021 | Can likely only pick 2 full assessments for labor intensive nearshore stocks GMT ranks: #1 vermilion (important CA stocks), #2 copper (coastwide), #3 brown |
| Brown rockfish | Full 2021 | Full in 2021 | |
| Copper rockfish | Full 2021 | Full in 2021 | |
| Black rockfish | PPA Full 2021 | Full in 2021 | Black high on list for full if new info. warrants model change. As now, appears update best |
| Bank rockfish | Full 2021 | Full in 2021 | Full in 2021 |
| Yellowtail South of 40° 10' N lat. | --- | Pick one as a full in 2019, and then other in 2021 | Full for yellowtail; TBD type for Pacific cod noting transboundary ideal and poor or moderate could be used in interim (see SSC report) |
| Pacific cod | PPA Full 2021 | | |
| Petrale sole | PPA Update 2019 | Do a full: possible ecosystem recruitment predictors | Full in 2021 |
| Lingcod | Not a PPA | Full in 2021 to rectify exclusion of ages issue | Full in 2021 |
| Sablefish | --- | --- | Update in 2021 to validate recruitments |
| Arrowtooth Flounder | --- | --- | Catch-only projection in 2021 (GMT request) |
| Yellowtail rockfish North of 40° 10' N lat. | --- | --- | Catch-only projection in 2021 (GMT request) |
| Canary rockfish | --- | --- | Catch-only projection in 2021 (GMT request) |