## GROUNDFISH MANAGEMENT TEAM REPORT ON SCIENCE IMPROVEMENTS AND METHODOLOGY REVIEW UPDATE

An expanded list of catch-only updates can be conducted in 2019 for the 2021-2022 harvest specifications. The Groundfish Management Team (GMT) worked with the Scientific and Statistical Committee (SSC) to recommend the list of additional catch-only stocks shown in Table 1. Given that the data deadline is in two weeks, we do not recommend any changes to the list at this time.

Table 1. List of 2019 stock assessments, including the new catch-only requests, which are bolded.

Stock	Туре
Big skate	Full
Cowcod	Full (data limited in SS)
Cabezon	Full OR and CA, limited in WA
Gopher/black and yellow	Full
Longnose skate	Full
Sablefish	Full
Petrale	Update
Widow RF	Update
Black RF	Catch-only
Canary RF	Catch-only
Lingcod	Catch-only
Blackgill RF	Catch-only: NEW
CA blue/deacon N Concept.	Catch-only: NEW
Brown RF	Catch-only: NEW
China RF	Catch-only: NEW
Darkblotched RF	Catch-only: NEW
Dover*	Catch-only: NEW
Longspine thornyhead*	Catch-only: NEW
Rougheye/blackspotted RF	Catch-only: NEW
Shortspine thornyhead	Catch-only: NEW
Yelloweye RF	Catch report

<sup>\*</sup>Lower priority stocks, if insufficient capacity to do them all

Catch-only projections better reflect current stock status and provide the flexibility to consider greater harvest opportunities. For medium or low attainment stocks where the stock assessments overestimated the amount of removals that have occurred, these updates will increase Overfishing Limits (OFLs).

Catch-only projections, however, do not reset the new sigma "staleness penalty" nor do they provide benefit to Category III stocks (e.g., vermilion rockfish), which use constant OFLs regardless of catch. Catch-only updates also provide limited benefit for high attainment stocks, so the Pacific Fishery Management Council may wish to consider other approaches for these stocks in June, such as raising the P\* or three-year phased-in allowable biological catch (ABCs).

Shortspine and longspine thornyheads are the species most impacted by the new sigmas, with 32 and 33 percent OFL to ABC reductions for 2021-2022, respectively, because of three main factors: (1) they have Category II assessments that have two times higher sigma deductions than Category I; (2) the assessments are stale (2013) and have close to the highest staleness penalties; and (3) they have a  $P^* = 0.40$ , which results in a two times higher overall OFL to ABC deduction than the maximum  $P^* = 0.45$ . The GMT is requesting  $P^* = 0.40$  and  $P^* = 0.45$  runs for thornyheads that would provide No Action and Alternative 1 ACLs, respectively, for the 2021-2022 harvest specifications, as we believe this change to  $P^*$  should be considered in September 2019.

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