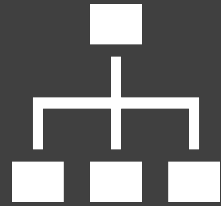


Preliminary Preferred Alternatives for the 2023-2024 Biennial Harvest Specifications

[GMT Report 1](#)

Council Action:



PPA on Harvest Specifications

1. Default Harvest Control Rules

2. Alternative HCRs

Default HCRs include:

Overfishing Limit (OFL)

Stock Category

Sigma and P^* (OFL \rightarrow ABC)

Acceptable Biological Catch (ABC)

Annual Catch Limit (ACL)

Tables 1 (2023) & 2 (2024) in
[Attachment 1](#)

Default Harvest Control Rules

Tables 1 (2023) & 2 (2024) in
[Attachment 1](#)



**GMT recommendation:
adopt default HCRs for
all stocks,**

Except:

1. Sablefish
2. Lingcod north of 40° 10' N. lat.
3. Lingcod south of 40° 10' N. lat.
4. Oregon black rockfish
5. Pacific spiny dogfish
6. Vermilion north of 40° 10' N. lat.
7. Vermilion south of 40° 10' N. lat.

Alternative Harvest Control Rules

Table 1 in [GMT Report 1](#)

1. Sablefish (Coastwide)

2. Lingcod N

3. Lingcod S

4. Black rockfish Oregon

5. Pacific spiny dogfish

6. Vermilion/sunset rockfish N

7. Vermilion/sunset rockfish S

1. Sablefish (Coastwide)

No Action: ACL = ABC, $P^* = 0.45$
ABCs = 10,825 mt (2023) & 9,923 mt (2024)



Alternative 1: ACL = ABC, $P^* = 0.40$
ABCs = 10,107 mt (2023) & 9,252 mt (2024)



Alternative 2: ACL = ABC, $P^* = 0.35$
ABCs = 9,412 mt (2023) & 8,608 mt (2024)

1. Sablefish (Coastwide)

Recent Sablefish Removals

| Year | Coastwide ACL (mt) | Removals (mt) | Attainment (%) |
|------|--------------------|---------------|----------------|
| 2016 | 7,121 | 5,576 | 82 |
| 2017 | 7,117 | 5,833 | 82 |
| 2018 | 7,419 | 5,497 | 79 |
| 2019 | 7,750 | 5,565 | 75 |
| 2020 | 7,896 | 4,131 | 74 |

1. Sablefish (Coastwide)

Background/ Rationale

- update assessment in 2021 indicated that the stock is at 58% of unfished spawning biomass
 - suggesting a more optimistic status than was estimated in 2019 full assessment projection of 46%
- the risk to the stock is similar under the low state of nature for the default P* of 0.45 and the two alternative harvest strategies
 - 49% under P* of 0.45, 51% under P* of 0.40, and 53% under P* of 0.35

| Alternative | ABC (mt) | Change in ABC from No Action (mt) | Potential Lost Revenue | Potential Lost Income | Potential Lost Jobs |
|----------------------------|----------|-----------------------------------|------------------------|-----------------------|---------------------|
| P* 0.45 (No Action) | 10,825 | | | | |
| P* 0.40 (Alternative 1) | 10,107 | -718 | \$2.9 million | \$5.9 million | 83 |
| P* 0.35 (Alternative 2) | 9,412 | -1,413 | \$5.7 million | \$11.6 million | 161 |

1. Sablefish (Coastwide)

GMT Recommendation:

**No Action: ACL = ABC,
 $P^* = 0.45$**

or

**Alternative 1: ACL = ABC,
 $P^* = 0.40$**

No Action: ACL = ABC, $P^* = 0.45$
ABCs = 10,825 mt (2023) & 9,923 mt (2024)



Alternative 1: ACL = ABC, $P^* = 0.40$
ABCs = 10,107 mt (2023) & 9,252 mt (2024)



Alternative 2: ACL = ABC, $P^* = 0.35$
ABCs = 9,412 mt (2023) & 8,608 mt (2024)

2. Lingcod north of 40° 10' N. lat.

The GMT does not have a recommendation on PPA at this time & sees it as primarily a Council risk tolerance decision.

No Action: ACL = ABC, $P^* = 0.45$

ACLs = 4,378 mt (2023) & 3,854 mt (2024)

Alternative 1: ACL = ABC, $P^* = 0.40$

ACLs = 3,817 mt (2023) & 3,418 mt (2024)

2. Lingcod north 40° 10' N. lat.

Background/Rationale

- 2021 stock assessment for lingcod north of 40° 10' N lat. was highly uncertain around the estimates of stock size
 - designated Cat 2 assessment with a sigma value of 1.0
 - previous assessment in 2017 was designated Cat 1 with a sigma value of 0.50.
 - During the STAR panel, a P* of 0.40 catch projection was conducted as a possible management option to account for the large uncertainty in the assessment
- Recent estimated total mortality has been approximately 1,000 mt,
 - much less than the No Action ACL and the Alt 1 ACL,
 - the GMT does not foresee any notable economic implications to lingcod north of 40° 10' N. lat. under either alternative

| Year | ACL with P* 0.45 (No Action) | ACL with P*0.40 (Alt. 1) |
|------|---------------------------------|-----------------------------|
| 2023 | 4,378.4 | 3,817.3 |
| 2024 | 3,853.8 | 3,328.0 |

3. Lingcod south of 40° 10' N. lat.

The GMT does not have a recommendation on PPA at this time & sees it as primarily a Council risk tolerance decision.

No Action: ACL (40-10 adj.) < ABC, P* = 0.45
ACLs = 726 mt (2023) & 722 mt (2024)

Alternative 1: ACL (40-10 adj.) < ABC, P* = 0.40
ACLs = 633 mt (2023) & 634 mt (2024)

3. Lingcod south of 40° 10' N. lat.

Background/Rationale

- designated a Category 2 stock accounting for the uncertainty around the estimated spawning biomass and fraction unfished
- Also similar to lingcod north, the STAR Panel applied a P* of 0.40 as a means to address the uncertainty in the assessment
- Recent estimated total mortality has been approximately 290-450 mt
 - less than the No Action ACL and the Alt 1 ACL
- Given that recent estimated total mortality has been declining and is much less than the No Action ACL and the Alternative 1 ACL, the GMT does not foresee any notable economic implications to lingcod south of 40° 10' N lat under these alternatives.

| Year | ACL with P* 0.45 (No Action) | ACL with P* 0.40 (Alt. 1) |
|------|---------------------------------|------------------------------|
| 2023 | 726 | 633 |
| 2024 | 722 | 634 |

4. Oregon Black Rockfish

No Action: $ACL = ABC$, $P^* = 0.45$
ACLs = 477 mt (2023) & 471 mt (2024)

Alternative 1: $ACL =$ “Case-by-case” ABC, set
at 2021-2022 ACL
ACLs = 512 mt (2023 & 2024)

4. Oregon Black Rockfish

Background/Rationale

- 2015 assessment was approved for management but there were some issues identified by reviewers
 - SSC designated the 2015 assessment as Cat. 2 due to the large overall level of uncertainty around stock size and status
 - 60% of unfished spawning biomass at the beginning of 2015
- Similar long-term results for both alternatives:
 - 54.4% under No Action and 54.1% under Alternative 1
- Alt 1 provides short-term benefit
 - More time to incorporate survey into new assessment
 - Stabilizes fisheries

| Year | Rec Mortality (mt) | Comm. Nearshore Mortality (mt) | Total Mortality (mt) | OR ACL or HG (mt) |
|------|--------------------|--------------------------------|----------------------|-------------------|
| 2015 | 479 | 121 | 601 | 580 |
| 2016 | 423 | 106 | 530 | 580 |
| 2017 | 417 | 123 | 543 | 527 |
| 2018 | 295 | 123 | 419 | 520 |
| 2019 | 319 | 120 | 440 | 513 |
| 2020 | 334 | 102 | 437 | 512 |
| 2021 | 349 | 104 | 453 | 512 |

4. Oregon Black Rockfish

GMT Recommendation:
Alternative 1: ACL = 512 mt (same as 2022 ACL)

No Action: ACL = ABC, $P^* = 0.45$
ACLs = 477 mt (2023) & 471 mt (2024)

Alternative 1: ACL = “Case-by-case”
ABC, set at 2021-2022 ACL
ACLs = 512 mt (2023 & 2024)



5. Pacific Spiny Dogfish

The GMT does not have a recommendation on PPA at this time & sees it as primarily a Council risk tolerance decision.

No Action: ACL = ABC, $P^* = 0.40$
ABC = 1,456 mt (2023) & 1,407 mt (2024)

New Alternative 1: ACL = 1,075 mt for 2023-2024, then ACL = ABC, P^* of 0.40 thereafter under the middle state of nature model ($q = 0.43$)

5. Pacific Spiny Dogfish

Background/Rationale

- New middle state of nature model ($q = 0.43$) projects a more optimistic status of the stock compared to the low state of nature model (“old base”, $q = 0.59$)
 - based on the uncertainty around q , the Council may wish to take a precautionary approach
- For this reason, the GMT proposes a New Alternative 1, which would set an ACL of 1,075 mt for 2023 and 2024, then use the default HCR of $ACL = ABC P^*$ 0.40 thereafter.
 - would allow the Council to move forward with precaution without unnecessarily constraining groundfish sectors
- New Alternative 1 is similar in catch projection levels for 2023-24 to the middle row of the decision table for this species (i.e., full ACL for 2021- 22, P^* of 0.40 with 100% of ACL from the old base model after that).
 - Spiny dogfish catch is variable across all sectors and years, and a difference of 74 to 105 mt could constrain some sectors
- primarily caught as bycatch in all sectors
 - Since not targeted & approximately 60% is discarded, the GMT does not anticipate any direct economic impacts from reduced ACLs
 - aside from effects in which the fishery is required to alter their operations to minimize bycatch if it becomes a constraint

6. Vermilion/sunset rockfish north of 40° 10' N. lat.

The GMT does not have a recommendation on PPA at this time & sees it as primarily a Council risk tolerance decision.

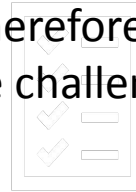
No Action: ACL = ABC, $P^* = 0.45$
ABCs = 19.6 mt (2023) & 19.6 mt (2024)

Alternative 1: ACL = ABC, $P^* = 0.35$
ABCs = 18.3 mt (2023) & 18.1 mt (2024)

6. Vermilion/ sunset rockfish north of 40° 10' N. lat.

Background/Rationale

- With recent overages of the OFL contribution to the complex, the Council may want to consider being more precautionary & apply a P* of 0.40.
- Even under P* of 0.45, management actions may be necessary to keep the total mortality below the ACL contribution.
- Not a targeted species in the recreational fisheries off of WA & OR nor are they targeted by commercial nearshore & non-nearshore fisheries.
 - Therefore designing management measures to reduce impacts will be challenging



| Year | Total Mortality (mt) |
|------|----------------------|
| 2018 | 22.9 |
| 2019 | 25.7 |
| 2020 | 20.2 |

6. Vermilion/ sunset rockfish north of 40° 10' N. lat.

Background/Rationale

| Year | Area | ACL Contribution with P* 0.45 (No Action) | ACL Contribution with P*0.40 (Alt. 1) |
|-------------|-----------------------|---|---|
| 2023 | WA | 0.72 | 0.63 |
| | OR | 12.54 | 11.71 |
| | 40° 10' to 42° N lat. | 6.3 | 5.9 |
| | Combined | 19.6 | 18.3 |
| 2024 | WA | 0.70 | 0.61 |
| | OR | 11.71 | 11.48 |
| | 40° 10' to 42° N lat. | 6.5 | 6.0 |
| | Combined | 19.6 | 18.1 |

7. Vermilion/ sunset rockfish south of 40° 10' N. lat.

The GMT does not have a recommendation on PPA at this time & sees it as primarily a Council risk tolerance decision.

No Action: ACL = ABC, $P^* = 0.45$
ABCs = 277.2 mt (2023) & 277.3 mt (2024)

Alternative 1: ACL = ABC, $P^* = 0.40$
ABCs = 267.7 mt (2023) & 266.2 mt (2024)

7. Vermilion/ sunset rockfish south

Background/Rationale

- Alternatives are the same as for vermilion/sunset rockfish north of 40° 10' N lat. and for the same reasons
- With the recent overages of the OFL contribution to the complex, the Council may want to consider being more precautionary & apply a P* of 0.40.
- Decision tables provided for California vermilion/sunset rockfish with ACLs for a P* of 0.45 and 0.40 are for the assessment areas rather than management areas.

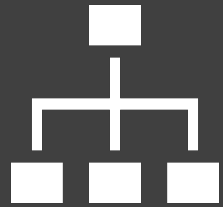


| Year | Assessment Area | ACL Contribution with P* 0.45 (No Action) | ACL Contribution with P* 0.40 (Alt. 1) |
|------|-----------------|---|--|
| 2023 | 34-27 to 40-10 | 150.9 | 140.9 |
| | South of 34-27 | 145.4 | 126.8 |
| | Total | 296.3 | 267.7 |
| 2024 | 34-27 to 40-10 | 153.2 | 142.4 |
| | South of 34-27 | 143.4 | 123.8 |
| | Total | 296.6 | 266.2 |

Summary of GMT Recommendations (bolded):

| # | Stock | Default HCR | Alternative 1 | Alternative 2 |
|----|---|--|--|---------------|
| 1 | Sablefish | ABC P* 0.45 | ABC P* 0.40 | ABC P* 0.35 |
| 2 | Lingcod north of 40° 10' N lat. | ABC P* 0.45 | ABC P* 0.40 | N/A |
| 3 | Lingcod south of 40° 10' N lat. | ABC P* 0.45 | ABC P* 0.40 | N/A |
| 4 | Black rockfish Oregon | ABC P* 0.45 | ABC set = 2020 ABC of 512 mt | N/A |
| 5 | Pacific spiny dogfish | ABC P* 0.40 | ACL=1,075 mt for 2023-2024, then ACL=ABC P* of 0.40 thereafter under the middle state of nature model (q = 0.43) | N/A |
| 7 | Vermilion/sunset rockfish north of 40° 10' N lat. | ABC P* 0.45 | ABC P* 0.40 | N/A |
| 8 | Vermilion/sunset rockfish south of 40° 10' N lat. | ABC P* 0.45 | ABC P* 0.40 | N/A |
| 9 | Quillback rockfish California | Place holders depending on outcome of stock assessment council action at the November meeting and the rebuilding plan(s) | | |
| 10 | Copper rockfish California | | | |

Goals for today



Questions?

FPA on Harvest Specifications



1. Default HCRs



2. Alternative HCRs