

## OREGON DEPARTMENT OF FISH AND WILDLIFE REPORT ON INSEASON ADJUSTMENTS TO THE LONGLEADER GEAR FISHERY

Based on requests from anglers and Pacific Fishery Management Council (Council) discussion in September 2022, the Oregon Department of Fish and Wildlife (ODFW) is providing this report with some information and analysis on potentially increasing the daily bag limit to 15 fish per day in the longleader gear fishery off Oregon. The intent of this report is to provide the Groundfish Management Team, Council, and National Marine Fisheries Service (NMFS) information to help determine if this requested change can happen via the inseason process, or if it will instead need to go through an alternative process.

Oregon experienced record bottomfish effort in 2022 continuing the trend of high effort since 2015 (averaging approximately 103,000 trips annually). Increasing the daily bag limit is intended to entice additional anglers to participate in the longleader gear fishery to help reduce effort on the nearshore reefs and the more nearshore stocks such as black, China, copper, and quillback rockfishes. The 2023-24 harvest limits for some of the nearshore rockfish stocks are very small, even with non-retention and updated discard mortality estimates for fish released with descending devices, additional restrictions could be necessary. Shifting effort and catches off the nearshore reefs towards the more plentiful offshore species could help reduce the potential for further restrictions and/or closure of the regular bottomfish fishery.

### **A. Previous Analysis**

The Exempted Fishing Permit (EFP) testing the longleader gear concept was conducted with a fifteen fish daily bag limit. The higher bag limit was used to help entice anglers to participate in testing this new gear type and have a larger sample size of possible catches.

The Environmental Assessment (EA; [NMFS 2017](#)) conducted on the authorization of the longleader gear fishery utilized the data from the EFP to analyze impacts of the potential new fishery. However, it did not propose any new or different bag limits from what was in state or federal regulations for the Oregon bottomfish fishery (10 fish in federal limits for the last several cycles). Additionally, the EA only examined having the longleader gear fishery open seasonally (April-September; July-September, and August), not year-round. The EA did use an estimate of up to 15,000 longleader gear fishery angler trips per year when determining impacts to rebuilding species and endangered species.

Table 4-3 (copied below) from the EA provides a summary of the cumulative effects of the action proposed in the EA.

**Table 4-3.** Summary of the cumulative effects of the proposed actions.

<b>Affected Resources</b>	<b>Past, Present, and Reasonably Foreseeable Future Actions</b>	<b>Proposed Action</b>	<b>Cumulative Effects</b>
Groundfish species	Positive	Neutral	Positive
Non-groundfish species	Neutral	Neutral	Neutral
Protected Species	Positive	Neutral	Positive
Oregon Recreational Fisheries and Communities	Neutral/mixed	Positive	Positive

Analyses conducted during the two previous biennial harvest specifications and management measures process evaluated a ten fish bag limit for the longleader gear fishery off Oregon, of ten midwater rockfish species (Section 2.10 in [Agenda Item F.4, Attachment 2, April 2022](#) and Section 2.8.3 in [Agenda Item G.6, Attachment 2, April 2020](#)). In those analyses with a ten fish bag limit, impacts to target species were estimated to be well within the non-trawl sector share of yellowtail and widow rockfishes and within the Oregon recreational harvest guideline or share of yelloweye and canary rockfishes. Additional bycatch impacts of Chinook and coho salmon were also estimated to be minor.

### **B. Current Longleader Gear Fishery**

Currently, the longleader gear fishery is restricted to outside of the 40-fathom regulatory line with a ten-fish bag limit of ten midwater rockfish species. Other species of bottomfish, including lingcod, are prohibited on longleader gear trips. In 2021 and 2022, longleader gear fishing could be combined with all-depth Pacific halibut fishing during months when the regular bottomfish fishery was depth restricted (June-Aug in 2021 and July-Aug in 2022).

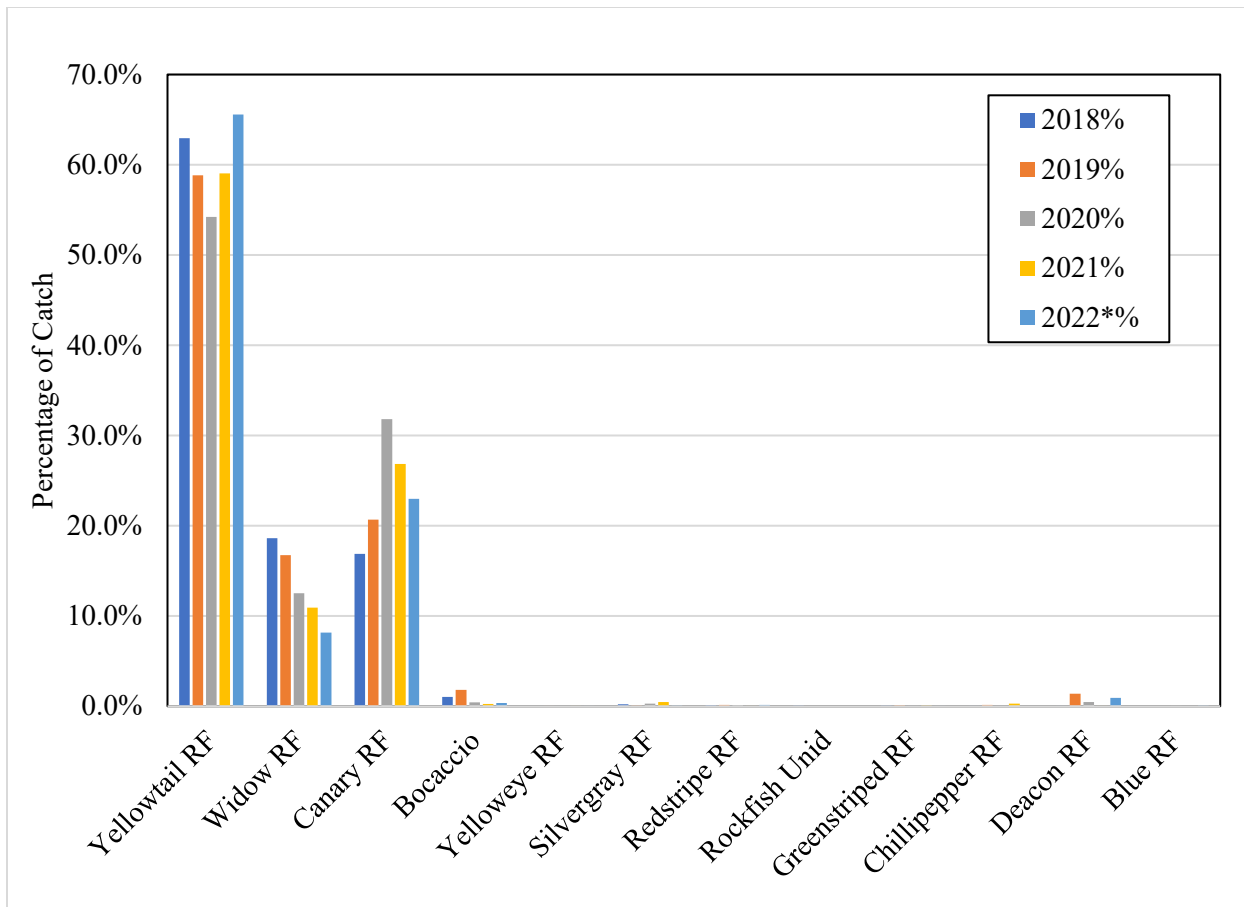
The first year of the fishery, 2018, had the highest effort (5,286 trips), likely due to excitement over a new opportunity and in response to the early closure of the regular bottomfish fishery in 2017. Over the last four years effort has ranged from approximately 1,700 trips to 2,400 trips (Table 1). The average number of trips has been 2,780 longleader gear trips.

**Table 1. Annual number of bottomfish and longleader gear angler trips in 2018-2022.**

<b>Year</b>	<b>Bottomfish Trips</b>	<b>Longleader Trips</b>	<b>Total</b>
2018	109,768	5,286	115,054
2019	99,136	2,141	101,277
2020	103,418	2,406	105,824
2021	98,775	1,712	100,487
2022*	89,299	2,354	91,653
5-yr AVG.	100,079	2,780	102,859

\*2022 data is only through September 4

Catches from the longleader gear fishery consist primarily of yellowtail, widow, and canary rockfishes, which make up 95-98 percent of the total annual catch (Figure 1). Annual catches of yellowtail rockfish have ranged from 9.5 mt to 26.6 mt with an average of 15.72 mt (Table 2). Widow rockfish catches ranged from 1.5 mt to 6.8 mt with an average of 3.0 mt. Catches of canary rockfish ranged from 5.3 mt to 11.42 mt with an average of 8.6 mt. Yelloweye rockfish bycatch discard mortality has ranged from 0.09 mt to 0.19 mt with an average of 0.13 mt (Table 2).



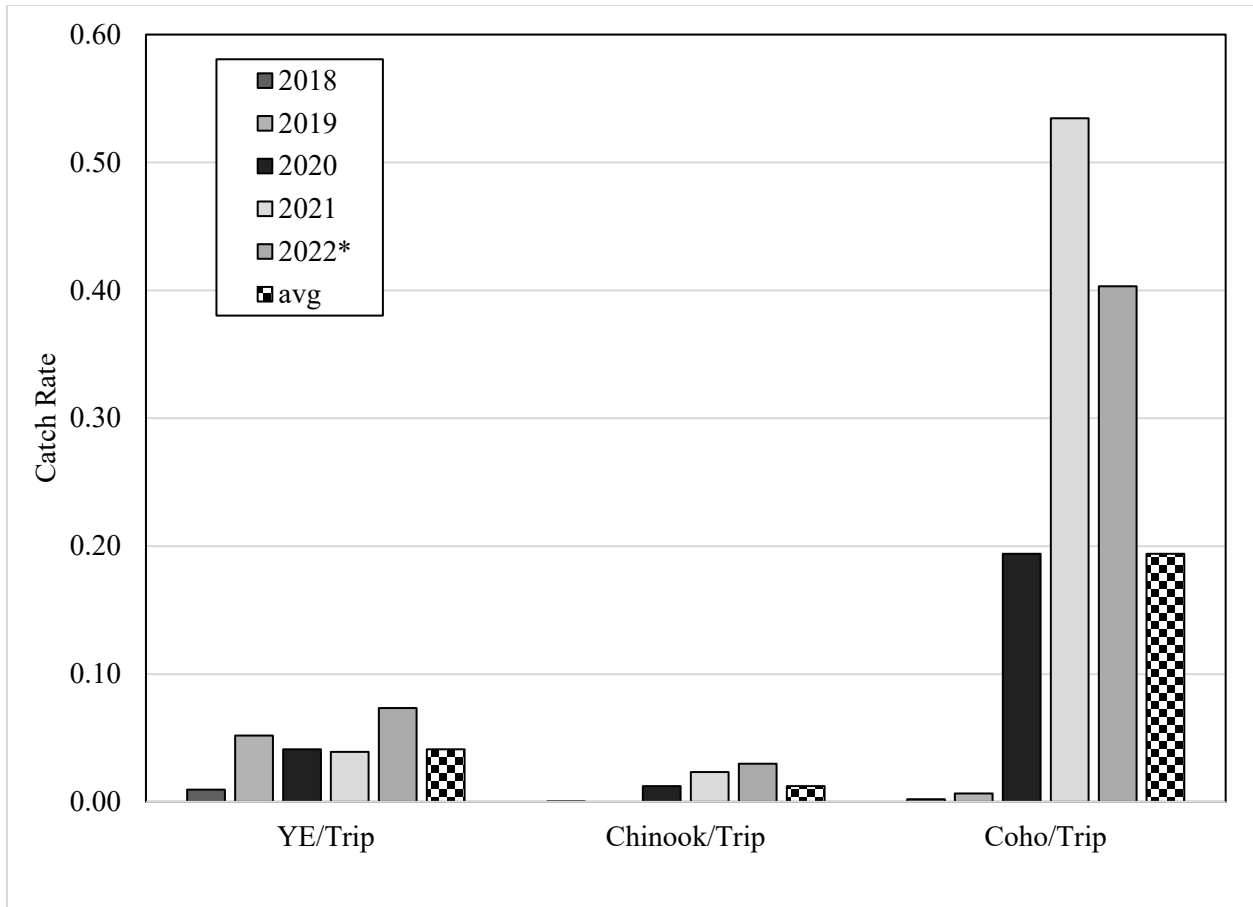
**Figure 1. Annual percent of total fish landed by species in the Oregon longleader gear fishery, 2018-2022. Note 2022 data is only through September 4.**

Both Chinook and coho salmon may be retained on the same trip with longleader gear fishing, in times and areas open for salmon. Catches of salmon on longleader gear trips has varied greatly, depending on the salmon season. There was zero catch of either Chinook or coho salmon in 2018 and 2019 on longleader gear trips, as both years were poor salmon years. However, 2021 and 2022 have been very good coho salmon fishing years, with high quotas and effort. This has led to higher salmon catches on longleader gear-identified trips of 345 and 374 coho salmon in 2021 and 2022 respectively, and 28 and 64 Chinook salmon in 2021 and 2022 respectively (Table 2).

**Table 2. Annual catches (in mt, except for salmon which are in numbers of fish) in the longleader gear fishery in 2018-2022. Note 2022 data is only through September 4.**

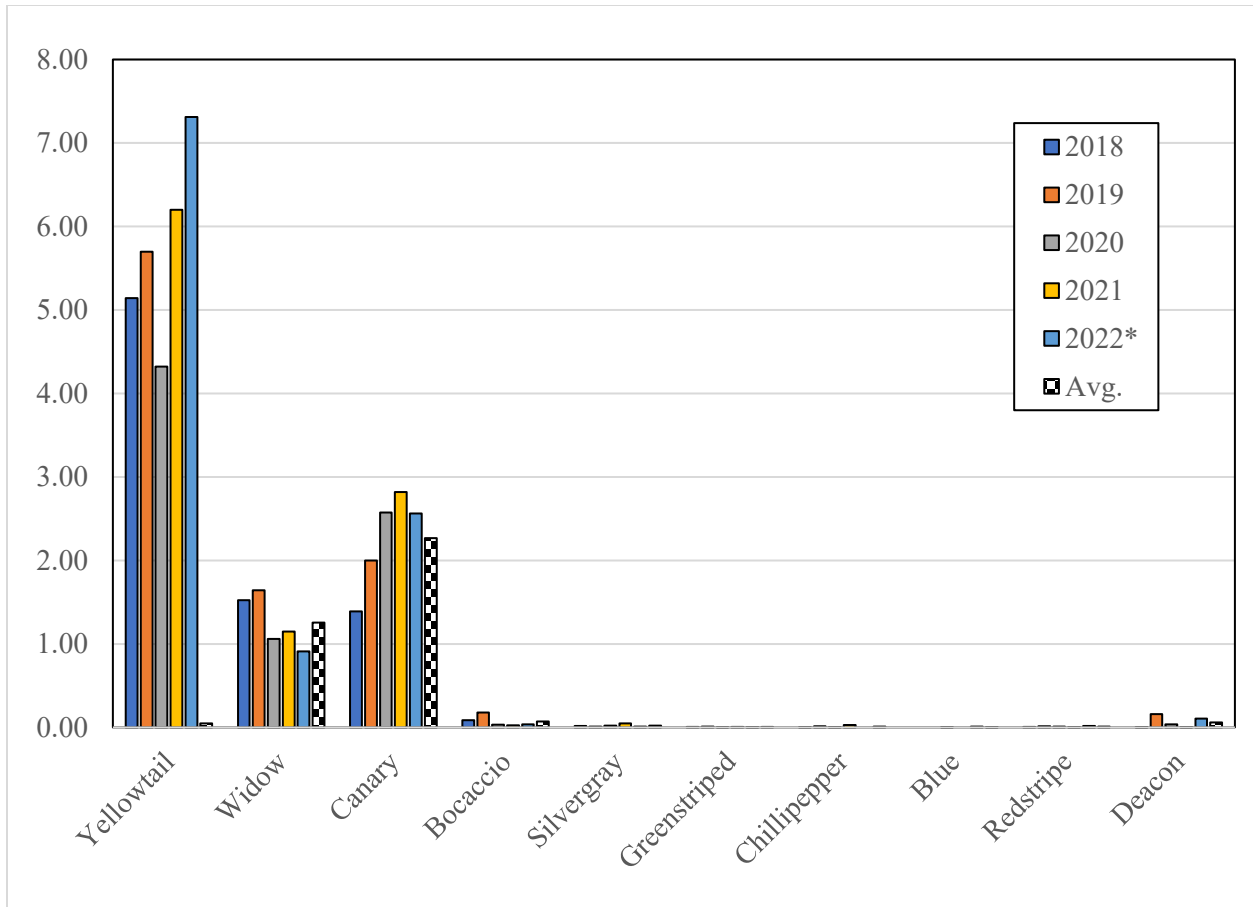
Species	2018	2019	2020	2021	2022*	5-year Avg.	Max
Yellowtail RF	26.58	14.57	10.27	9.47	17.71	15.72	26.58
Widow RF	6.82	2.86	1.90	1.53	1.79	2.98	6.82
Canary RF	11.42	7.53	10.91	5.34	7.58	8.56	11.42
Silvergray RF	0.12	0.02	0.07	0.15	0.04	0.08	0.15
Redstripe RF	0.01	0.01	0.01	0.00	0.02	0.01	0.02
Greenstriped RF	0.01	0.01	0.00	0.00	0.00	0.01	0.01
Chillipepper RF	0.00	0.01	0.00	0.06	0.00	0.02	0.06
Deacon RF	0.01	0.22	0.06	0.00	0.16	0.09	0.22
Black RF	0.00	0.02	0.00	0.00	0.01	0.01	0.02
Blue RF	0.00	0.02	0.00	0.00	0.01	0.01	0.02
Yelloweye RF (discard mortality)	0.09	0.19	0.09	0.13	0.15	0.13	0.19
Quillback RF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bocaccio	2.74	2.65	0.58	0.11	0.21	1.26	2.74
Vermilion RF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Copper RF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chinook Salmon	0	0	14	28	64	21	64
Coho Salmon	0	0	5	345	374	145	374

The catch rate of yelloweye rockfish, Chinook salmon, and coho salmon were also examined (Figure 2). Catch rates of yelloweye rockfish averaged 0.04 fish per longleader trip, or one yelloweye rockfish encountered for every 39 longleader trips. At highest catch rate was 0.07 fish per trip, or one yelloweye rockfish encountered for every fourteen trips. Chinook salmon averaged 0.01 fish per trip with a high of 0.03 fish per trip. That would equate to one Chinook salmon for every 710 trips on average, with a high of one Chinook salmon per for every 34 longleader trips. Coho salmon were encountered much more often in 2021 and 2022 than in the previous 3 years, driving up both the average and maximum. Based on that data, the average catch rate of coho salmon was 0.19 fish per trip, with a maximum of 0.53 fish per trip, equaling one coho salmon caught for every 136 longleader gear trips, on average, and a maximum of one fish for every two longleader gear trips.



**Figure 2. Catch rates in numbers of fish encountered per longleader gear trip by year, 2018-2022. 2022 data is only through September 4.**

The catch rates of target species per angler trip are shown in Figure 3. Yellowtail rockfish averaged 5.7 fish per trip with a maximum of 7.3 fish per trip. Widow rockfish averaged 1.3 fish per trip, with a maximum of 1.6 fish per trip. Catches of canary rockfish averaged 2.3 fish per trip, with a maximum of 2.8 fish per trip. All other species averaged less than 0.1 fish per angler trip.



**Figure 3. Catch rates of target species per angler trip from longleader gear trips 2018-2022. 2022 data is only through September 4.**

### C. Potential Impacts of Increasing the Daily Bag Limit

The request from anglers is to increase the daily bag limit for the longleader gear fishery to something higher than the current ten fish limit. ODFW staff have focused the analysis below on a fifteen fish limit.

The original EA analysis was based on an estimate of 15,000 annual angler trips. Since the fishery began in 2018 annual trips have been less than 5,000 per year. Even doubling the annual number of angler trips would still be below 10,000 angler trips. While the proposed action is intended to increase effort in this fishery, it is doubtful that it will increase three-fold to the 15,000 trips and impacts analyzed in the EA. Some anglers are hesitant to try this fishery due to concerns a using the gear and preventing tangles, as well as having to be outside of the 40-fathom regulatory line.

To try to address what the actual impacts might be from increasing the daily bag limit, ODFW took a very simplistic approach to estimate impacts of a fifteen fish bag limit. We used the current data from the ten fish limit and multiplied by 1.5 times, since fifteen is 1.5 times ten. This very simple estimate would assume that species-specific catch rates would remain the same with the increased bag limit. It would also assume that the same percentage of anglers that attain the ten fish limit would also attain the fifteen fish limit. Both assumptions are likely overestimates of what will happen on the water with the increased bag limit but seem like a good starting place.

Additionally, overestimating the potential impacts provides some measure of buffering in case of any unforeseen events or circumstance.

Using the values in Table 2 as the starting point, multiplying the average and maximum columns by 1.5 results in the values in Table 3. Again, these values are likely overestimates, but are intended to provide a high estimate on the potential impacts of increasing the longleader gear fishery daily bag limit. For all species except yellowtail, widow, canary, and bocaccio rockfishes, the estimated maximum impacts with a 15-fish bag limit are less than 0.3 mt and therefore excluded from subsequent tables and discussion.

**Table 3. Projected annual impacts in mt (salmon are in numbers of fish) based on a 15-fish longleader gear daily bag limit using the 5-year average and 2018-2022 maximum to show a range. 2018-2022 average impacts with a 10-fish bag limit and the difference between the 15 fish max and 10 fish average are also included for comparison.**

Species	5 year avg.	Maximum	2018-2022 avg. with 10 fish	Potential Max additional impacts
Yellowtail RF	23.58	39.87	15.72	24.15
Widow RF	4.47	10.24	2.98	7.26
Canary RF	12.84	17.13	8.56	8.58
Silvergray RF	0.12	0.22	0.08	0.14
Redstripe RF	0.02	0.03	0.01	0.01
Greenstriped RF	0.01	0.02	0.01	0.01
Chillipepper RF	0.02	0.09	0.02	0.08
Deacon RF	0.14	0.33	0.09	0.24
Black RF	0.01	0.03	0.01	0.03
Blue RF	0.01	0.03	0.01	0.03
Yelloweye RF (discard mortality)	0.20	0.29	0.13	0.16
Quillback RF	0.00	0.00	0.00	0.00
Bocaccio	1.89	4.11	1.26	2.85
Vermilion RF	0.00	0.00	0.00	0.00
Copper RF	0.00	0.00	0.00	0.00
Chinook Salmon	32	96	21	75
Coho Salmon	217	561	145	416

Table 4 provides information on the 2021 harvest specifications, allocations and mortality for yellowtail, widow, canary, yelloweye, and bocaccio rockfishes (the most recent year with mortality information) along with the potential maximum impacts for those species from Table 3.



**Table 4. 2021 harvest specifications, sector-specific allocations, and mortality estimates (in mt) for yellowtail, widow, canary, yelloweye, and bocaccio rockfishes. Mortality data from [Agenda Item G.1.b, NMFSC Report 2, September 2022](#). Harvest specification data from the Harvest Specifications Database [Report GMT015](#).**

Species	ACL	Total Mort.	Percent of ACL Attain.	Non-trawl allocation	Non-trawl mort.	Percent of non-trawl allocation	OR Rec HG	OR Rec. Mort.	Potential Add. Mort. From Action
Yellowtail	6,050	2,931	48%	601.5	96	16%	N/A	28	<b>24.2</b>
Widow	14,725	10,880	74%	400	11.5	3%	N/A	3.6	<b>7.3</b>
Canary	1,338	562	42%	351.6	178.3	51%	65.06	38.5	<b>8.6</b>
Yelloweye	50	18	36%	37.9	16.7	44%	6.9	3.3	<b>0.16</b>
Bocaccio north of 40° 10' N lat.	221	89	40%	N/A	N/A	N/A	N/A	0.5	<b>2.9</b>

N/A = not applicable

Based on the data in Table 3 and Table 4 it appears that there is enough room between the recent mortality and harvest specifications (ACL and/or sector specific harvest guidelines) to accommodate the potential maximum additional impacts that might arise from increasing the daily bag limit.

For yellowtail and widow rockfishes there is no Oregon recreational sector-specific limit or allocation. There is a non-trawl allocation for each species. In 2021 total mortality from all non-trawl sectors was 16 and three percent of the non-trawl allocation for yellowtail and widow rockfish respectively. Mortality was approximately 500 mt less than the non-trawl allocation for yellowtail rockfish and 390 mt less for widow rockfish. Therefore, there appears to be room to absorb an additional 24.2 mt of yellowtail rockfish and 7.3 mt of widow rockfish with minimal danger of exceeding the non-trawl allocation or impacting other non-trawl sectors. Additionally, there is even less of a risk of exceeding the ACL for either species.

Bocaccio north of 40° 10' N lat. is part of the shelf rockfish complex, sector specific allocations are done at the complex level, not the species level. The species-specific ACL contribution to the complex for bocaccio in 2021 was 221 mt. Total mortality from all sectors was 89 mt or 40 percent of the ACL contribution, leaving 132 mt unharvested. Therefore, an additional 2.9 mt from the longleader gear fishery bag limit increase would pose very little risk to exceeding the species-specific ACL contribution to the shelf north complex.

Yelloweye and canary rockfishes both have Oregon recreational sector-specific harvest guidelines or shares. In 2021 the Oregon recreational harvest guideline for yelloweye rockfish was 6.9 mt while total mortality was 3.3 mt, a difference of 3.6 mt. The Oregon recreational harvest guideline for 2023 and 2024 goes up to 9.2 mt in 2023 and 2024. Even without that increase, it appears that there is room to accommodate the projected 0.16 additional mt of discard mortality impacts without exceeding the Oregon recreational harvest guideline. There would be even less risk to the overall yelloweye rockfish ACL.

In 2021 the Oregon recreational share of the non-trawl canary rockfish allocation was 65.06 mt with mortality of 38.5 mt. In 2023 and 2024 the Oregon recreational share of the canary rockfish ACL will be decreasing to 62.3 and 61.4 mt respectively. Current end of the year projections for canary rockfish in 2022 are 53.1 mt. The difference between the 2024 share and 2022 mortality is only 8.3 mt. The projected additional impacts from a 15-fish bag limit are 8.6 mt, which would put total impacts right at the Oregon recreational share for canary rockfish. Therefore, canary rockfish impacts from both the regular bottomfish fishery and the longleader gear fishery, under either bag limit, will need to be closely monitored inseason to ensure that Oregon recreational share of the non-trawl allocation is not exceeded.

Projected impacts to Chinook and coho salmon would be tracked against the inseason Oregon recreational salmon quotas (from the salmon process), since the two targets can be legally done on the same trip. Annual catches of salmon will vary widely depending on the salmon abundance and season. At high salmon abundance there will likely be more salmon catch on longleader gear trips. The opposite would be true that there would be lower encounters at lower salmon abundance levels.

#### **D. Process Moving Forward**

Given the above information, **ODFW requests guidance from the Council and NMFS as to the requested action of increasing the federal longleader gear fishery bag limit to 15 fish being eligible for the regular groundfish inseason process. Or would this need to go through a stand-alone process, or be included in the next biennial harvest specifications process.**

#### **E. Use of Natural Bait**

During the discussion on increasing the bag limit, and several times since the final federal rule went into place, there has been some interest from anglers in removing the prohibition of the use of natural bait when participating in the longleader gear fishery. Some work by ODFW researchers in the mid-2000s, while developing the longleader gear concept, indicated that natural bait increased the catch rate of canary rockfish. At the time of that research and the EFP to inform the longleader gear fishery, canary rockfish was a rebuilding species with very small bycatch limits. Therefore, to reduce impacts to canary rockfish natural bait was not allowed under the terms of the EFP and was not used on any of the EFP trips.

The publication of the final rule allowing the longleader gear fishery ([83 FR 13428; March 29, 2018](#)) indicated that there were 16 comments concerning the prohibition of natural bait.

“NMFS received sixteen comments on the proposed prohibition on natural bait. One charter operator, two EFP participants, and one recreational angler commented in support of the bait prohibition, stating that bait was unnecessary to produce good catches. One boat owner, one recreational fishing organizations, one tackle shop, one charter operator, seven recreational anglers, and one private citizen commented in opposition to the natural bait prohibition. Of these, one charter operator and one recreational angler commented that natural bait was prohibited during the EFP test fishing to avoid bycatch of canary rockfish.

Because the canary rockfish stock is rebuilt, and can now be retained, they commented that the bait prohibition is no longer necessary.”<sup>1</sup>

*NMFS Response:*

“As noted above in the background section, NMFS will not remove the prohibition on the use of live bait for this fishery at this time. The prohibition on the use of live bait was included in the terms and conditions of the EFPs used to test this fishery as a means to protect the overfished canary rockfish by reducing interactions with the canary rockfish. Since then, canary rockfish has been declared rebuilt. However, NMFS is maintaining the prohibition because NMFS does not know the impacts to canary rockfish that could occur if this prohibition were removed. Those impacts were not tested or evaluated in the EFP test fishing and associated analysis. Additionally, because canary rockfish has only recently been rebuilt, NMFS believes it is important to take a precautionary approach in developing fisheries that could impact this newly rebuilt species. However, starting that discussion with the Council now would interfere with NMFS's goal to have this rule in place for the 2018 fishing season. April 1 is the start of the fishing season, ensuring that this rule is effective on April 1 will allow fishermen to access areas previously subject to depth restrictions for the entire season. If desired, NMFS and the Council could choose to work towards removing the prohibition in the future.”<sup>2</sup>

With canary rockfish being declared rebuilt based on the 2015 assessment, limiting impacts to canary rockfish may not be as necessary as they were at the time of the EFP. ODFW staff is unaware of any additional work having been conducted examining the use of natural bait with recreational midwater-type gears and what potential impacts to canary rockfish, and other species, might be since the publication of that final rule. The Council has approved a commercial EFP for 2023-2024 using similar gear to the recreational longleader gear that will allow the use of natural bait. The data from that EFP might be able to be used as a proxy to help inform the use of natural bait in the recreational longleader gear fishery. Regardless of the outcome of the commercial EFP, **ODFW is requesting NMFS provide guidance on how to move forward to pursue allowing the consideration of natural bait in the recreational longleader gear fishery.**

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<sup>1</sup> <https://www.federalregister.gov/d/2018-06316/p-17>

<sup>2</sup> <https://www.federalregister.gov/d/2018-06316/p-18>