OREGON DEPARTMENT OF FISH AND WILDLIFE REPORT ON INSEASON ADJUSTMENTS

The Oregon Department of Fish and Wildlife (ODFW) provides the following updates on 2017 year-end total mortality estimates relative to harvest specifications for several nearshore species, and information on the state's recreational groundfish management in 2018.

Annual Catch Limits (ACLs), harvest guidelines (HGs), or shares for Oregon impacts to nearshore species are set by the Pacific Fishery Management Council (Council) and the National Marine Fisheries Service in the biennial harvest specifications process. The Oregon Fish & Wildlife Commission establishes sector-specific annual HGs and management measures in state rule for the recreational and commercial nearshore groundfish fisheries off Oregon. ODFW monitors and manages the fisheries inseason with a goal of meeting, but not exceeding, these catch limits.

2017 Fisheries

Recreational

As outlined in our September (<u>Agenda Item E.10.a</u>, <u>Supplemental REVISED ODFW Report 1</u>, <u>September 2017</u>) and November (<u>Agenda Item F.13.a</u>, <u>Supplemental ODFW Report 1</u>, <u>November 2017</u>) 2017 reports, recreational bottomfish effort in 2017 was much higher than anticipated through August and into September. This led to impacts projected to be over state recreational HGs for several species, and ODFW closed the recreational groundfish fishery on September 18 in order to prevent additional mortality. Very limited opportunities (flatfish, lingcod by spear, and longleader gear outside of 40 fathoms only) were allowed between October 1 and December 31. Oregon's recreational bottomfish fishery has traditionally occurred over a 12-month season, and the early closure was extremely disruptive to many coastal businesses and anglers.

Commercial Nearshore

The Oregon limited entry commercial nearshore fishery had a successful year in 2017, approaching full attainment of the state commercial HGs for black rockfish, the nearshore rockfish north complex, and cabezon. In the open access nearshore fishery, lingcod landings were higher than in recent years, due in part to inseason trip limit increases in July. The 2017 nearshore fishery was still projected to be well within the federal HG/share of yelloweye rockfish; final estimates are expected from the West Coast Groundfish Observer Program (WCGOP) later in 2018.

2017 Total Impacts

Black Rockfish

With combined recreational and commercial impacts, the 2017 Oregon black rockfish ACL was exceeded by 3.1 percent (16.1 mt) (**Error! Reference source not found.**). This was due to the recreational fishery exceeding its state HG, as the commercial fishery was within its HG. Actions to prevent future overages are discussed below.

Table 1. Oregon black rockfish impacts (in mt) by sector, Total Mortality, ACL, and OFL, by year (2013-2017).

Year	Commercial Landings	Commercial Discard Mortality b/	Rec. Impacts (landings + discard mortality)	Total Mortality	HG (2013-2016) or ACL (2017) ^{d/}	OFL
2013	106.4	1.6	329.4	437.3	580	NA
2014	122.5	1.8	363.3	487.6	580	NA
2015	121.3	1.8	476.6	599.7	580	NA
2016	105.2	1.6	430.9	537.6	580	NA
2017 a/	124.0	1.9	417.3 ^{c/}	543.1	527	577

a/ Preliminary projection. Final estimates to be provided by WCGOP in late summer 2018.

Cabezon

The 2017 Oregon cabezon ACL (47 mt) was exceeded by 5.1 mt (11 percent) and the OFL (49 mt) was exceeded by 3.1 mt (6.3 percent) (Table 2). This was primarily due to the unexpected recreational overage (estimated recreational impacts were 133 percent of the state recreational HG, whereas commercial impacts were within the commercial HG). However, it was compounded by a significant and unprecedented surge in commercial landings in mid- and late December. December commercial cabezon landings, which are often trace amounts in the tenths of a metric ton, were more than 12 times higher than average in 2017, and more than three times higher than peak summer month catches. This uptick may have been due to unusual factors including a delayed commercial crab season start and exceptionally favorable weather and ocean conditions.

Table 2. Oregon cabezon impacts (in mt) by sector, total mortality, ACL, and OFL by year, 2013-2017.

Year	Commercial Landings	Commercial Discard Mortality ^{b/}	Rec. Impacts (landings + discard mortality)	Total Mortality	ACL	OFL
2013	19.8	0.8	13.8	34.4	47.0	49.0
2014	15.4	0.9	10.5	26.8	47.0	49.0
2015	16.3	2.3	11.7	30.3	47.0	49.0
2016	15.9	1.2	12.8	29.9	47.0	49.0
2017 a/	28.5	1.3	22.3 ^{c/}	52.1	47.0	49.0

a/ Preliminary projection. Final estimates to be provided by WCGOP in late summer 2018.

A review of recent catch history and the 2009 stock assessment, which informed harvest specifications through 2020, suggests that there is little conservation concern associated with the 2017 overage. The assessment found the stock to be at 52 percent depletion, and included 12-year forward projections of yield and depletion. These projections assumed that the full OFL would be caught in each year, under the base case catch scenario. From 2009 through 2017, this would have resulted in cumulative total mortality of 441 mt, with the depletion level gradually coming down to the target reference point of 40 percent at the end of 2017.

b/ Nearshore model estimate based on WCGOP observed hauls; not an official WCGOP estimate.

c/ Represents 4.3% over the black rockfish state recreational HG set by the OFWC.

d/ Prior to 2017, the federal Oregon black rockfish limit was an HG, as part of an ACL shared with California.

b/ Nearshore model estimate based on WCGOP observed hauls; not an official WCGOP estimate.

c/ Represents 33% over the cabezon state recreational HG set by the OFWC.

However, actual cabezon catches in Oregon over this time period have been much lower, totaling 346.1 mt (cumulative), which is closer to the alternative low-catch scenario in the 2009 assessment's decision table (Figure 1). This has left 94.9 mt more biomass in the water than was anticipated by the 2009 assessment, despite the 5.1 mt ACL overage in 2017. In theory, this would put the stock at a higher depletion level today than 40 percent; for reference, under the low-catch scenario, depletion was projected to be 54 percent at the end of 2017.

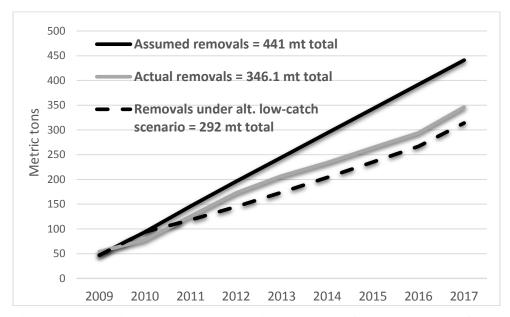


Figure 1. Theoretical and actual cumulative removals of Oregon cabezon from 2009 through 2017: 1) <u>assumed</u> in the 2009 assessment base case projections (black); 2) <u>actual</u> removals (grey); and 3) <u>assumed</u> removals in the alternative low catch stream scenario in the 2009 assessment decision table (dashed).

ODFW notes the age of the last Oregon cabezon assessment and the fact that uncertainty in projections likely increases with time. We support consideration of cabezon for assessment in 2019 under H.4, Initial Stock Assessment Plan. We also note that a multi-year approach for stock status determination has gained recent attention at national and regional levels. ODFW agrees that this may be an improved method for evaluating fishery dynamics and conservation risks compared to the current single-year approach, and look forward to future discussion of its potential application on the west coast.

Although there may not be a conservation concern with the overage, ODFW acknowledges that our inseason management of the recreational groundfish fishery was not successful in keeping impacts under harvest specifications in 2017. Many in Oregon's recreational fishing community have characterized the circumstances of the 2017 fishery as a rare "perfect storm"; however, given the variability in recreational fishery dynamics and environmental conditions, similarly high effort could occur again. We recognize our responsibility to the resource, the public, and our partners in the Council process to ensure that our management is effective in meeting conservation mandates and providing for stable fisheries. Improvements are described below.

2018 Fisheries

Recreational

Several noteworthy changes have been made to state rules and procedures for the recreational groundfish fishery in 2018 that are expected to reduce impacts to stocks and prevent exceeding catch limits. These measures include:

- 1. The Oregon Fish and Wildlife Commission adopted new HGs based on the federal harvest specifications for 2018, and lowered the marine fish daily bag limit from seven to five fish.
 - Black rockfish, which is the primary target species in Oregon's recreational groundfish fishery, is now also a major constraint on this fishery. After public input on the trade-offs between season duration and bag limits, a full-year season goal was maintained for 2018. The five fish bag does not eliminate the risk of approaching the recreational HG for black rockfish or other species before the end of the year, which would trigger inseason restrictions and/or early closure by state action. This depends heavily on effort levels in this fishery in 2018.
- 2. ODFW revised our projection models to use only the high 2017 effort levels (resulting in higher projections than the previous model, which used a 3-year average) and to better represent the uncertainty and wide range of potential impacts. The updated model emphasizes risk and supports more conservative preseason and inseason management.
- 3. Data processing and catch estimation/projection procedures have been modified to enable quicker detection of high catches and more responsive inseason management. In 2017, preliminary monthly catch estimates and projections were available for use by ODFW fishery managers monthly, approximately 10 days after the end of each month. Results will be available to state fishery managers at more frequent intervals in 2018.
- 4. ODFW has committed to consulting with its public Sportfishing Advisory Committee at least monthly, and biweekly if needed during the summer. This can help provide early warning of high effort or unforeseen circumstances sooner than sampling data would show.

In addition to the lower daily bag limit for the traditional bottomfish fishery in 2018, the new midwater offshore ("longleader") rockfish fishery may relieve some pressure on nearshore species such as black rockfish, cabezon, and minor nearshore rockfish. To encourage participation in this fishery, the OFWC established a separate bag limit of 10 fish, for eight select species only (yellowtail, widow, canary, greenstriped, redstripe, bocaccio, chilipepper, and silvergray rockfish). Anglers must fish outside of the 40 fathom line, and may not retain lingcod, flatfish, or any other groundfish species. Longleader trips may not be combined with a traditional bottomfish trip or a halibut trip. This fishery began in 2018 on January 1, and federal authorization allowing fishing outside of the 40 fathom line with longleader gear during the April-September period is anticipated prior to April 1 (effectively making it a year-round opportunity).

Commercial Nearshore

For 2018, commercial nearshore fishery impacts are projected to be within all of the state commercial HGs and the federal HGs/shares of canary rockfish and yelloweye rockfish. The OFWC sets bimonthly trip limits for the state limited entry commercial nearshore fishery, and

made minor adjustments to the trip limits for 2018. Commercial impacts are estimated inseason from a combination of state fish ticket data plus discard mortality projections from the nearshore model. The 2018 federal limited entry fixed gear and open access trip limit increases for lingcod should provide more opportunity, increasing lingcod catch and helping to stabilize markets, while still meeting conservation objectives for other species.