

Yelloweye Rockfish Catch Report for 2015-2020

This catch report updates the status of the yelloweye rockfish (*Sebastes ruberrimus*) resource off the coast of the United States from Southern California to the U.S.-Canadian border using data through 2020. The last full assessment was performed in 2017 (Gertseva and Cope, 2017) using data thru 2016. The resource is modeled as a single stock, but with two explicit spatial areas of California and Oregon-Washington. The modeling was done with the most up-to-date version of Stock Synthesis available at the time.

Fishing mortality for 2015 - 2019 was collated and estimated in West Coast Groundfish Observer Program (WCGOP) Groundfish Expanded Mortality Multiyear (GEMM) data (GEMM, 2019) which is published in coordination with the National Oceanic and Atmospheric Administration (NOAA) West Coast Groundfish Mortality Reports (NOAA Fisheries Observers, 2019). Observed discard rates for each species were directly expanded to a fleet-wide level of discard mortality through a deterministic approach. This discard mortality is added to landings data to give an estimate of total mortality.

The GMT's scorecard aggregates research, state, and tribal in-season catch estimates to track overfished species totals against current harvest specifications. From the GMT's end of year scorecard projections for 2020 (PFMC, 2020), the research catch of 1.6 mt that didn't occur due to COVID-19 was removed. The directed halibut fishery catch in area 2A (WA, OR, and CA) was 338.8 mt in 2020, down from 372.8 mt in 2019 (IPHC, 2020) when 7.4 mt bycatch of yelloweye was taken. Adjusting by the ratio yelloweye bycatch per mt of halibut caught gives 6.72 mt of yelloweye bycatch in 2020. So that difference of 0.68 mt was also deducted, for an adjusted value of 22.83 mt for 2020. With the Pacific halibut allocation for area 2A increasing significantly in 2019, this source of yelloweye bycatch has only recently been of significance with the 7.4 mt taken in 2019 representing 25.5% of the yearly total bycatch. The estimated 6.72 mt of bycatch taken in 2020 represents 29.4% of that year's estimated total bycatch.

The fishing mortalities for 2015-2020 (Table 1) are all estimated to be under the annual catch limits (ACLs) as set by the Pacific Fishery Management Council and approved by the National Marine Fishery Service (PFMC, 2014; PFMC, 2016; PFMC, 2018).

The probability of rebuilding the yelloweye rockfish stock by the current T_{TARGET} year of 2074 is 67% (Gertseva and Cope, 2018).

Table 1. Estimated fishing mortality and management reference points for yelloweye rockfish in 2012-14.

Year	Estimated Total Mortality (mt)	ACL (mt)	Estimated mortality (% of ACL)	ABC (mt)	Estimated mortality (% of ABC)	OFL (mt)	Estimated mortality (% of OFL)
2015	12.0	18.00	66.67	43.00	27.91	52.00	23.08
2016	10.0	19.00	52.63	43.00	23.26	52.00	19.23
2017	18.7	20.00	93.50	47.40	39.45	56.90	32.86
2018	17.6	20.00	88.00	47.90	36.74	57.50	30.61
2019	29.1	48.00	60.62	74.41	39.11	81.50	35.71
2020	22.8	49.00	46.59	76.87	29.70	84.20	27.11

References

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