

NATIONAL MARINE FISHERIES SERVICE REPORT ON GROUND FISH WORKLOAD AND NEW MANAGEMENT MEASURES

This report provides information on the availability of data necessary to consider implementation of the new management measures related to the “trawl gear EFP”:

B.2 Removal of Selective Flatfish Trawl (SFFT) requirement between 40°10' and 42° N. lat.

B.4 Remove Certain Time and Area-Management Restrictions for Midwater Trawl Gear Targeting Non-whiting

In [F.8.a NMFS Report 1, March 2023](#), the National Marine Fisheries Service (NMFS) advised the Pacific Fishery Management Council (Council) that in order to evaluate this EFP, we would need to determine the Evolutionarily Significant Unit (ESU) impacts on Chinook salmon and evaluate whether they are different from those previously considered.

At this time, NMFS West Coast Region and Northwest Fisheries Science Center anticipate that results of this evaluation will be available by November, 2025. Therefore, NMFS finds that these two groundfish new management measures are ready for prioritization at this meeting if the Council so chooses. Further detail on the requirement and data available to understand ESU impacts is provided below.

Background

2017 Biological Opinion

The most recent Biological Opinion resulting from Endangered Species Act (ESA) Section 7 consultation on the effects of the groundfish fishery on ESA-listed stocks of Chinook and coho salmon¹ (2017 BiOp) required evaluation of the potential salmon bycatch through Exempted Fishing Permits (EFPs) before implementing the changes in Items B.2 and B.4 in regulation. Non-discretionary terms and conditions in [Section 2.9.4 \(p. 2-189\) of the 2017 BiOp](#) specified that (emphasis added):

4b. As discussed in the effects analysis, there is significant uncertainty regarding the bycatch effects on individual listed Evolutionarily Significant Units (ESUs) in the non-whiting midwater fishery and bottom trawl fishery; particularly in areas south of 42° N. latitude. Data on the status of Chinook and coho ESUs from this area are very limited and what is available indicate they are in critical status.

Prior to allowing additional non-whiting trawling south of 42° N. latitude, NMFS will implement one or more EFPs designed to collect information about Chinook and coho bycatch levels and stock composition from fishing in those areas or at those times for a minimum of three years

¹ Endangered Species Act (ESA) Section 7(a)(2) Biological Opinion - Reinitiation of Section 7 Consultation Regarding the Pacific Fisheries Management Council's Groundfish Fishery Management Plan, NMFS Consultation Number: F/WCR-2017-7552. National Marine Fisheries Service West Coast Region, 12/11/2017. <https://media.fisheries.noaa.gov/dam-migration/s7-groundfish-biop-121117.pdf>

4.c. A coastwide, year around non-whiting midwater trawl fishing is part of the proposed action, i.e., “midwater yellowtail/widow rockfish fishery is conducted in a manner similar to historical patterns when such a fishery took place”. However, as discussed in the effects analysis there is significant uncertainty regarding the effects of bycatch during January through mid-May on individual listed ESUs since a nonwhiting midwater trawl fishery has not occurred in that time since routine data collection began. Chinook ESUs with spring-run type life histories are more prevalent during this time than at times later in the year. Therefore, NMFS and the Council should proceed cautiously and include measures to ensure the impacts are consistent with the analysis in this opinion.

Prior to allowing additional open non-whiting trawling from January through mid-May, NMFS shall implement EFPs designed to collect information about Chinook and coho bycatch levels and stock composition from fishing during that time for a minimum of three years.

In doing so, NMFS should take into account relevant information from existing EFPs. Information from the EFPs will be used to inform measures the Council may adopt to ensure the impacts are consistent with the analysis in this opinion.

Exempted Fishing Permits (EFPs)

NMFS has issued annual EFPs exempting participating vessels in the shorebased trawl individual fishing quota (IFQ) program from certain gear, time, and area restrictions in order to test whether and how the removal impacts the nature and extent of bycatch of prohibited species (e.g., Chinook salmon). The EFPs have allowed greater operational flexibility in targeting abundant groundfish species, subject to the EFP conditions, and enabled the collection of data on the nature and extent of salmon bycatch. Several different types of exemptions have been combined in a single EFP (the “trawl gear EFP”).

Bottom trawl gear exemptions

Beginning in 2017, EFP participants have been exempted from regulations² specifying that selective flatfish trawl (SFFT) is the only type of trawl gear allowed to be used shoreward of the trawl rockfish conservation area (RCA) or (after the trawl RCA off California and Oregon was removed in 2020), the management line approximating the 100 fathom (fm) depth contour. This exemption allows the use of any legal small-footrope bottom trawl gear in the specified area.

In 2017 and 2018, the exemption only applied north of 42° N. latitude (i.e., off Oregon and Washington). Effective January 1, 2019, the SFFT restriction was removed from regulation for the area north of 42° N. lat., and in 2019 and subsequent years this exemption applied between 42° N. lat. and 40°10' N. lat. (California north of Cape Mendocino).

² §660.130(c)(2)(i) and §660.130(c)(2)(ii)

Midwater trawl closed time and area exemptions

Time - Beginning in 2018, EFP participants have been exempt from regulations³ that prohibit the use of midwater trawl gear targeting non-whiting groundfish outside of (i.e., before) the Pacific whiting primary season dates for the shorebased IFQ fishery⁴.

Area - Beginning in 2018, EFP participants were exempt from regulations that prohibited the use of midwater trawl gear in the trawl RCA. Beginning in 2020 when the trawl RCA off California and Oregon was removed, this EFP exempted participating vessels from the prohibition on using midwater trawl gear south of 40°10' N. latitude and shoreward of the 150 fm management line.

EFP salmon bycatch data

Relevant data from trawl EFP fish tickets are summarized in Tables 1 and 2 (sources = PSMFC Catch Monitor Program, and PacFIN), which reveal the bulk of EFP effort, groundfish catch, and salmon bycatch have occurred with midwater non-whiting trawl gear, in the area north of 42° N. latitude, between 2018 and 2024. Additional relevant data for the analysis include haul-level observer and electronic monitoring program (EM) which include fine location, annual fishing mortality and salmon bycatch reports from the Northwest Fisheries Science Center's (NWFSC's) Fisheries Observation Science/West Coast Groundfish Observer Program (FOS/WCGOP), and NWFSC genetic data. Coded wire tag (CWT) data will also be investigated. Sufficient genetic samples have been initially identified thus far to estimate coarse annual ESU compositions using GSI for midwater rockfish trawl in years 2022 and 2023. Work is currently underway to identify additional samples.

Table 1. Counts of fish tickets, groundfish catch, and counts of bycaught Chinook and Coho salmon in the trawl EFP from 2018 through 2024 (preliminary data).

Gear	Region	Year	Fish ticket count	Groundfish catch (lb)	Chinook count	Coho count
Bottom Trawl	N. of 42° N. lat.	2018	69	3,102,723	11	0
		2019	6	259,861	0	0
		2024	18	1,028,098	0	0
	S. of 42° N. lat.	2018	15	573,636	174	0
		2019	27	757,017	24	0
		2020	10	337,213	0	0
		2021	1	46,328	0	0
		2022	36	962,319	7	0
		2023	52	1,148,449	13	0
		2024	40	1,166,974	0	0
Non-whiting Midwater Trawl	N. of 42° N. lat.	2018	132	10,366,304	9	0
		2019	173	15,788,203	80	0
		2020	126	11,276,389	30	1
		2021	199	23,428,137	40	4
		2022	110	10,014,077	135	1

³ §660.112(b)(1)(x)

⁴ §660.131(b)(2)(iii)(C)

Gear	Region	Year	Fish ticket count	Groundfish catch (lb)	Chinook count	Coho count
		2023	77	7,433,389	117	2
		2024	98	8,847,709	148	1
	S. of 42° N. lat.	2018	13	626,119	4	0
		2019	12	481,894	9	0
		2020	4	143,810	3	0
		2021	4	140,085	1	0
		2022	29	1,108,015	4	0
		2023	37	1,116,265	2	0

Table 2. Counts of participating vessels among years, gear type, and area for the trawl EFP, 2018 through 2024 (preliminary data).

Gear	Year	N of 42° N.	S of 42° N.	Sum
Bottom Trawl	2018	7	2	9
	2019	4	4	8
	2020	0	3	3
	2021	0	1	1
	2022	0	4	4
	2023	0	4	4
	2024	6	3	9
Non-whiting Midwater Trawl	2018	11	2	13
	2019	15	2	17
	2020	15	1	16
	2021	15	1	16
	2022	18	2	20
	2023	12	1	13
	2024	13	0	13

Planned analysis

NMFS plans to project Chinook bycatch impacts of the action (as total count distributions) and analyze the ESU composition of those projected Chinook impacts over the summer, prioritizing 1) year-round non-whiting midwater trawl fishing, 2) use of any legal small footrope trawl gear between 40°10' N. lat. and 42° N. lat. by bottom trawl vessels (not only SFFT) and 3) fishing south of 40°10' N. lat. and shoreward of the 150 fm management line by participating midwater trawl vessels.

The analysis will proceed in two parts, as in the salmon biological opinion (NMFS, 2017). It will first follow a similar approach to Matson and Erickson (2018), employing model-based projections of total Chinook bycatch counts under varying levels of fishing effort (as landings), temporal, and spatial distribution among alternatives, for each of the three exemptions examined for potential transfer to regulation. ESU-specific impacts will then be estimated by applying ESU compositions

informed by analysis using genetic stock identification (GSI) techniques of fishery samples, as in Moran et al. (2021), and NMFS (2017).

Estimation of impacts for coho salmon will be based on recent historical bycatch patterns, as was done for the biological opinion (NMFS 2017).

Conclusion

At this time, NMFS anticipates that the information required by the 2017 BiOp will be available by November 2025. Therefore, NMFS supports consideration of prioritizing the trawl gear EFP items relative to other groundfish new management measures at this meeting, if the Council wishes to do so.