

Initial Consideration of Proposed Changes to Pacific Halibut Allocation for Bycatch and Catch Sharing in the Groundfish Fisheries

In 2006, the Port Orford Ocean Resource Team (POORT) asked the Pacific Fisheries Management Council (PFMC) to consider changing the halibut catch sharing plan (CSP), to allow all or a portion of the 2A commercial Pacific halibut quota to be retained as bycatch in the sablefish longline fishery (Agenda Item G.1.d, Supplemental Public Comment, September 2006). The Oregon Department of Fish and Wildlife has since received additional requests to explore this proposed change to the halibut CSP for the fixed-gear sablefish fishery north of 36° N lat and south of Pt. Chehalis, WA. Currently, vessels authorized to participate in the primary sablefish fishery north of Pt. Chehalis are allowed to retain halibut bycatch within certain limitations (see below).

The purpose of this report is to provide the Council with information to determine whether this proposed change to the halibut CSP south of Pt. Chehalis should move forward for further analysis and consideration. Herein, we provide some background on the commercial directed halibut and fixed-gear sablefish fisheries. We seek guidance from the Council to determine whether this proposed measure can and should be pursued.

Directed Commercial Pacific Halibut Fishery

The directed commercial halibut fishery has been reduced to less than five-fishing days per year in Area 2A, since 2002. Figure 1 shows Area 2A directed commercial halibut fishery harvest in pounds and the number of days open to directed commercial halibut fishing from 1980-2010. In 1990, there were four 12-hour openings, rather than 24-hour openings. Beginning in 1991, the fishery was restricted to bi-weekly 10-hour openings. Since 2000, the number of 10-hour openings per year has ranged from one to six with an average of 3.5 openings per year. There were two 10-hour openings in 2009 and only one 10-hour opening in 2010. This directed commercial fishery is annually allocated 31.7% of the non-tribal Pacific halibut quota. The commercial fishery allocation is then split with 85% provided to the directed commercial fishery, and 15% to the salmon troll incidental fishery (Table 1).

Table 1. Area 2A Total Allowable Catch (TAC) and commercial allocations 2000-2010.

Year	2A TAC (lbs)	Allocations (lbs)				
		Non-Tribal (65% of TAC)	Commercial (31.7% of Non-Tribal)	Directed (85% of Commercial)	Salmon Troll (15% of Commercial)	Incidental Sablefish N of Pt. Chehalis ¹
2000	830,000	514,500	163,097	138,632	24,464	
2001	1,140,000	716,000	226,972	192,926	34,046	47,946
2002	1,310,000	826,500	262,001	222,700	39,300	88,389
2003	1,310,000	826,500	262,001	222,700	39,300	70,000
2004	1,480,000	937,000	297,029	252,475	44,554	70,000
2005	1,330,000	839,500	266,122	226,203	39,918	70,000
2006	1,380,000	872,000	276,424	234,960	41,464	70,000
2007	1,340,000	846,000	268,182	227,955	40,227	70,000
2008	1,220,000	793,000	251,381	213,674	37,707	70,000
2009	950,000	617,500	195,748	166,385	29,362	11,895
2010	810,000	526,500	166,901	141,865	25,035	0

¹ If the Area 2A TAC is greater than 900,000 lbs, the primary directed sablefish fishery north of Pt. Chahalis will be allocated the WA sport allocation that is in excess of 214,110 lbs, provided a minimum of 10,000 lbs is available; up to 70,000 lbs.

Incidental halibut North of Point Chehalis

The current halibut CSP contains a provision for retention of incidental halibut catch in the fixed-gear sablefish fishery north of Pt. Chehalis. If the Area 2A total allowable catch (TAC) is greater than 900,000 pounds, the primary directed sablefish fishery north of Point Chehalis will be allocated a portion of the Washington sport allocation (Table 1). The PFMC recommends landing restrictions at its spring public meeting each year to control the amount of halibut caught incidentally in this fishery (Table 2). *WDFW will be submitting an additional report with background and history of how this fishery came about.*

Table 2. The allocation, total harvest, landing restrictions, and season dates for the incidental halibut catch in the fixed-gear sablefish fishery north of Point Chehalis, 2001-2009 (Agenda Item F.2.a. Attachment 1, March 2009). Pacific halibut landings were restricted to 100 pounds per trip for this sablefish fishery during 2009.

Incidental Halibut Management in the Area 2A Sablefish Fishery North of Point Chehalis, Washington				
Pounds of Halibut			Restrictions	
Year	Allocation	Total Harvest	Halibut per Sablefish (dressed weight)	Season Dates
2001	47,946	26,945	2+80 lb per 1,000 lb	Aug.15-Oct.31
2002	88,389	66,599	2+150 lb per 1,000 lb	May 1-Oct.31
2003	70,000	65,325	2+150 lb per 1,000 lb	May 1-Oct.31
2004	70,000	67,837	2+100 lb per 1,000 lb	May 1-Oct.31
2005	70,000	68,013	2+100 lb per 1,000 lb	May 1-Oct.23
2006	70,000	64,624	2+100 lb per 1,000 lb	May 1-Oct.31
2007	70,000	45,780	2+100 lb per 1,000 lb	May 1-Oct.31
2008	70,000	39,729	2+100 lb per 1,000 lb	May 1-Oct.31
2009	11,895	6,154	100 lb per trip	May 1-Oct.31
2010	N/A	-	-	-

Limited Entry and Open Access Fixed Gear Sablefish Fishery (North of 36° N latitude and South of Pt. Chehalis)

The limited entry sablefish fishery north of 36° N latitude consists of the limited entry fixed gear vessels with or without fixed gear sablefish endorsements. Those vessels that hold a sablefish endorsement are allowed to fish in the primary sablefish fishery to attain their tier-limit beginning April 1 and ending October 31. When fishing outside of the primary season, or once a vessel catches its tier limit, then that vessel is subject to restrictions under the limited entry fixed gear “daily trip limit” (DTL) regulations. Limited entry fixed gear vessels without sablefish endorsements may only fish sablefish under the limited entry fixed gear “daily trip limit” landing restrictions. Finally, open access vessels are also permitted to land sablefish under open access fixed gear “daily trip limit” landing restrictions.

Even though the limited entry fixed gear fishery is managed as a unit north of 36° N latitude, only catches north of 40° 10' will likely contain appreciable quantities of halibut. Hence, we describe the fixed gear fishery north of 40° 10' N latitude (Tables 3, 4, and 5). Eighty fixed-gear vessels fished sablefish during 2009 with sablefish endorsements, whereas 156 open-access fixed gear vessels targeted sablefish (Table 3). Note that north of 40° 10', almost all limited entry vessels that targeted sablefish carried sablefish endorsements; only 17-sablefish landings were

identified for limited entry vessels that did not carry sablefish endorsements (Table 4), representing three vessels (Table 3).

Sablefish landings for fixed gear vessels are shown for the entire year of 2009 (Table 4) and for the period of the primary season (April 1 – October 31; Table 5). North of 40° 10', approximately 90% of the sablefish landings by LEFG-permitted vessels occurred during the primary season, whereas approximately 2/3 of the OAFG landings occurred during the primary season (Tables 4 and 5). Most LEFG-sablefish landings occurred in Port Orford (N = 289), Newport (N = 189), and Eureka (N = 134); appreciable sablefish landings were also observed in other ports such as Neah Bay, La Push, and Crescent City for LEFG-sablefish vessels. For the OAFG-sablefish DTL fishery, most landings occurred in Port Orford (N = 357), Coos Bay (N = 317), Eureka (N = 148) and Newport (N = 125).

Table 3. Number of commercial-permitted vessels that made landings during January 1 – December 31, 2009 for Pacific halibut, limited entry fixed gear (LEFG) with sablefish endorsement (LEFG-sable endorsed), LEFG – sable without endorsement (LEFG-not endorsed) and open access fixed gear sablefish (OAFG-sable) north of 40° 10' N lat. Halibut represents number of permits. The three sablefish categories represent permitted vessels that made sablefish landings.

	Halibut	LEFG-sable_endorsed ^a	LEFG-not sable endorsed	OAFG-sable	Total
Halibut	106	18		73	197
LEFG-sable endorsed		62			62
LEFG-not endorsed			3		3
OAFG-sable				83	83
Total	106	80	3	156	

^aVessels that were reported to hold both OAFG-sable and LEFG-sable permits were tallied under the LEFG-sable_endorsed column.

Table 4. Number of sablefish landings by port during January 1 – December 31 2009 for limited entry fixed gear (LEFG) vessels with sablefish endorsements (LEFG-sable endorsed), LEFG vessels without sablefish endorsements (LEFG-not endorsed) and open access fixed gear vessels (OAFG-sable). Only landings north of 40° 10' N latitude are shown. Only 17 landings were made for LEFG without sablefish endorsements, and are therefore not shown in the table.

Port	LEFG-sable_endorsed^a	LEFG-not sable endorsed^b	OAFG-sable
Bellingham Bay	47		--
Neah Bay / Port Angeles	86		13
La Push	65		37
Westport	53		26
Illwaco / Willapa Bay	49		120
Astoria / Tilamook	49		55
Newport / Winchester Bay / Florence	189		125
Coos Bay	49		317
Port Orford	289		357
Brookings	24		20
Crescent City/Trinidad	63		68
Eureka	134		148
Total	1,097	17	1,519

^aVessels that were reported to hold both OAFG-sable and LEFG-sable permits were tallied under the LEFG-sable_endorsed column.

^bLandings by LEFG vessels that were not endorsed are not shown by port because of confidentiality reasons (i.e., fewer than 3 vessels per port).

Table 5. Number of sablefish landings by port during April 1 – October 31 2009 for limited entry fixed gear (LEFG) vessels with sablefish endorsements (LEFG-sable endorsed), LEFG vessels without sablefish endorsements (LEFG-not endorsed) and open access fixed gear vessels (OAFG-sable). Only landings north of 40° 10' N latitude are shown. No landings were made for LEFG without sablefish endorsements.

Port	LEFG-sable_endorsed^a	LEFG-not sable endorsed	OAFG-sable
Bellingham Bay	46		--
Neah Bay / Port Angeles	61		13
La Push	51		23
Westport	48		23
Illwaco / Willapa Bay	47		120
Astoria / Tillamook	46		51
Newport / Winchester Bay / Florence	177		110
Coos Bay	49		252
Port Orford	196		255
Brookings	23		20
Crescent City/Trinidad	62		64
Eureka	97		123
Total	903		1,054

^aVessels that were reported to hold both OAFG-sable and LEFG-sable permits were tallied under the LEFG-sable_endorsed column.

Directed Commercial Pacific Halibut Fleet Characteristics

A total of 197 vessels were permitted for the Pacific halibut directed commercial fishery during 2009 (Table 3). Only 18 of those vessels also carried LEFG-sablefish endorsements. Seventy three of the 197 halibut-permitted vessels fished in the OAFG-DTL fishery. Most vessels that carried permits for the directed commercial Pacific halibut fishery did not participate in any sablefish fishery during 2009 (N = 106).

Halibut Discards in the Fixed Gear Fisheries

The West Coast Groundfish Observer Program (WCGOP) was established in 2001 and requires all commercial vessels that land groundfish caught in the United States exclusive economic zone (EEZ) to carry an observer when instructed by NMFS. When Pacific halibut are encountered by an observer, a random sample is selected and length and viability are recorded (NWFSC, 2008). A report by Heery and Bellman (2009) estimated the total discard mortality of Pacific halibut in the 2002-2008 non-nearshore fixed gear fisheries ranged from 51,000 to 236,000 pounds annually (Table 6). Most halibut bycatch was shown for the LE sablefish primary fishery. Discard in the LE non-primary sector was low relative to the primary fishery; the largest annual gross discard estimate of 2.6 mt occurred in 2008 with longline gear (Heery and Bellman 2009). Most discard estimates for the OA fixed gear fishery are shown as zero largely because the WCGOP observed trips in California that were beyond the range of Pacific halibut. The WCGOP therefore deemed these early halibut-discard estimates inappropriate (Heery and Bellman, 2009).

Table 6. Estimated discard mortality (mt and lbs) from each sector of the non-nearshore fixed gear fishery from 2002 through 2008 (modified from Heery and Bellman, 2009)

		Estimated discard mortality			
		LE Sablefish Primary	LE Sablefish Non-primary	OA Fixed Gear	All Sectors
2002	<i>mt</i>	23.1	0.0	0.0	23.1
	lbs	50,927	0	0	50926.7
2003	<i>mt</i>	32.5	0.0	0.0	32.5
	lbs	71,650	0	0	71,650
2004	<i>mt</i>	39.5	0.0	0.0	39.5
	lbs	87,082	0	0	87,082
2005	<i>mt</i>	36.6	0.0	0.0	36.6
	lbs	80,689	0	0	80,689
2006	<i>mt</i>	106.9	0.0	0.0	106.9
	lbs	235,674	0	0	235,674
2007	<i>mt</i>	21.0	0.2	2.9	24.1
	lbs	46,297	441	6,393	53,131
2008	<i>mt</i>	39.3	0.4	6.6	46.3
	lbs	86,642	882	14,550	102,074

The WCGOP provided estimates of the proportion of Pacific halibut larger than 80 cm and less than or equal to 80 cm total length (Table 7). Heery and Bellman (2009) provide a number of caveats on how this data was attained and calculated, and should be consulted prior to making any formal

allocations using data. Nonetheless, we applied these proportions to the annual discard weights (lbs) shown in Table 6 to estimate the mortality of legal versus sublegal halibut discarded in the non-nearshore fixed gear fisheries (Table 8). This estimation procedure is not precise because Table 7 splits length at 80 cm whereas the legal-retention length is 82 cm. Taking into account the assumptions and estimations made in the calculations for Table 8, with the exception of 2006, the LE fixed-gear sablefish primary fishery has resulted in 15,000 - 30,000 lbs (6.8 - 13.6 mt) of legal-sized halibut discard mortality.

Table 7. Number and percentage of sampled Pacific halibut lengths by size (from Heery and Bellman, 2009).

	Pacific halibut lengths	
	Number	Percentage
Actual Length		
< 80cm	56	66.7%
≥ 80 cm	28	33.3%
Visual Estimate		
0-74 cm	3,196	38.6%
75-84 cm	1,887	22.8%
85-150 cm	3,200	38.6%

Table 8. Estimated legal and sub-legal discard mortality (in pounds) for the LE sablefish primary, LE sablefish non-primary and OA fixed gear fisheries, 2002-2008.

		Estimated discard mortality (legal vs sub-legal) in lbs.			
		LE Sablefish Primary	LE Sablefish Non-primary	OA Fixed Gear	All Sectors
2002	sub	33,968	0	0	33,968
	legal	16,959	0	0	16,959
2003	sub	47,791	0	0	47,791
	legal	23,859	0	0	23,859
2004	sub	58,084	0	0	58,084
	legal	28,998	0	0	28,998
2005	sub	53,820	0	0	53,820
	legal	26,869	0	0	26,869
2006	sub	157,194	0	0	157,194
	legal	78,479	0	0	78,479
2007	sub	30,880	294	4,264	35,439
	legal	15,417	147	2,129	17,693
2008	sub	57,790	588	9,705	68,083
	legal	28,852	294	4,845	33,991

Items for Consideration

There are many issues the Council should consider if the choice is to move forward with developing alternatives for allowing incidental halibut retention in the sablefish fishery. Below is a bulleted list of some of the decisions points that would need to be included:

- Which fisheries will be allowed to retain incidental halibut (LE sablefish primary, LE sablefish non-primary, and/or OA fixed gear sablefish)?
- Season structure.
- Season dates (e.g., throughout the year or only during the primary season).
- Amount of Pacific halibut allocated for the retention of incidental catch (e.g., the entire directed commercial allocation or something smaller).
- Trip limit structure.
- Who will track landings?
- Who and how will biological data be collected from these landings?
- Can/will processors purchase and process small amounts of halibut over the course of the season rather than large quantities over short periods of time?

Council Action

As stated previously, the purpose of this report is to provide the Council with information to determine whether this proposed change to the halibut CSP south of Pt. Chehalis should move forward for further analysis and consideration.

References

Heery, E., and M.A. Bellman. 2009. Observed and Estimated Total Discard of Pacific Halibut in the 2002-2008 U.S. West Coast Groundfish Non-Nearshore Fixed Gear Fishery. NWFSC, 2725 Montlake Blvd. E., Seattle, WA 98112.

Northwest Fisheries Science Center (NWFSC). 2008. West Coast Groundfish Observer Program Training Manual. NOAA, West Coast Groundfish Observer Program. Northwest Fisheries Science Center, 2725 Montlake Blvd E, Seattle, WA.

Area 2A Directed Commercial Halibut Fishery, Days Open and Catch, 1980-2010

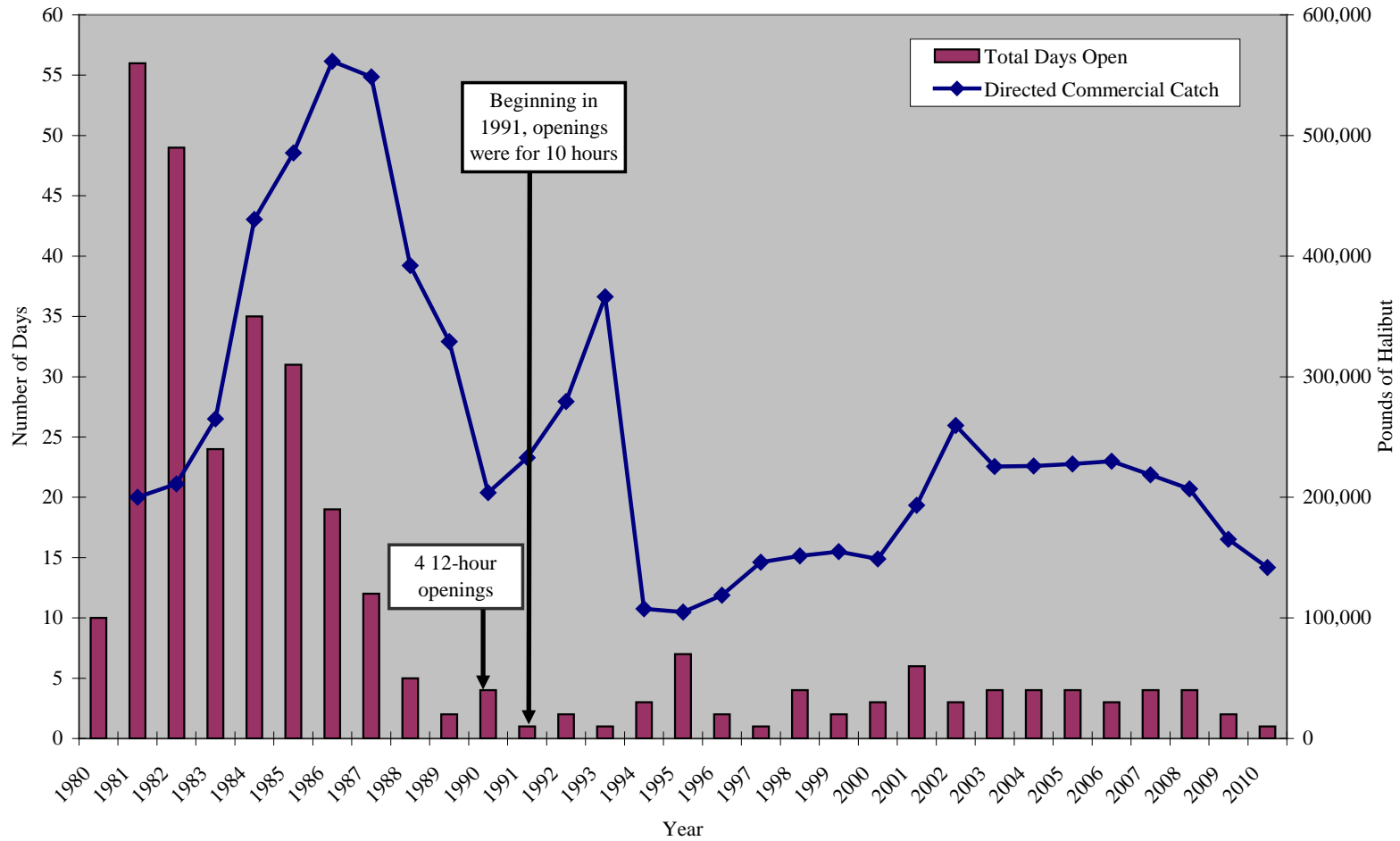


Figure 1. Area 2A directed commercial fishery catch and total number of days with an opening, 1980-2010.