

NATIONAL MARINE FISHERIES SERVICE REPORT ON PACIFIC HALIBUT CATCH
SHARING PLAN CHANGES FOR 2015

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Purpose of the document

The purpose of this document is to: (1) assess the impacts of the non-tribal allocation alternatives using a range of Total Allowable Catch (TAC) scenarios; and (2) examine possible season structure alternatives using an estimated catch per day and catch per week methods for the California recreational fishery. Unless otherwise stated, all weights in this reports are net weight.

Baseline Summary of Commercial and Recreational Halibut Fisheries

The following section provides a brief summary of each state's recreational fishery including catch, quota, and numbers of open days. Information for the area south of Humbug Mountain Oregon and off the California coast is combined in this section because this subarea was allocated quota and managed as a subarea prior to 2014. To find catch data for California only see Section 2 below. This section also provides information on the directed non-treaty commercial fishery including catch, quota, days open, number of licenses and number of participants. To see more detailed information on the Pacific halibut fishery and the subareas see the final environmental assessment (EA) (Agenda Item G.1.b, NMFS Report 2).

Recreational Fisheries

Recreational halibut fisheries are managed through state and subarea specific Plan allocations.

Washington

Sport fishing for halibut in Washington is divided into four subareas for management and catch allocation purposes: WA Inside Waters (Puget Sound) subarea, WA North Coast subarea, WA South Coast subarea, and Columbia River subarea (which is shared with Oregon and discussed in a separate section below). The WA Inside Waters Subarea includes all waters east of the Sekiu River mouth and includes Puget Sound, most of the Strait of Juan De Fuca, the San Juan Islands area, Hood Canal and Admiralty Inlet. From 2003-2009 the Puget Sound fishery was open 49-65 days in each area and from 2010-2013 it has been open 8-17 days in each area. The WA North Coast Subarea is the area west of the Sekiu River mouth and north of the Queets River. Between 2003-2013 this area was open between 4-20 days, except in 2008 and 2009 when the nearshore fishery was open for several months. The WA South Coast Subarea lies to the south of Queets River and north of Leadbetter Point, WA. Between 2003-2013 this area has been open between 6-153 days, with the most recent years being between 18-36 days including the nearshore fishery which is typically open more days than the primary (non-nearshore) fishery. To see dates for each Washington subarea as well as quota and catch see Appendix C.

Columbia River

The Columbia River subarea lies between Leadbetter Point and Cape Falcon, Oregon, and is shared with Oregon. The allocations for this subarea are derived from both the Washington and Oregon sport allocations. This subarea was broken out from the southern Washington subarea in 1995 and includes the area from Leadbetter Point, WA, to Cape Falcon, OR. Between 2003-2013 this area was open between 36 and 153 days, with the most recent years between 40-60 days. To see the specific dates, catch, and quota for this area see Appendix C.

Oregon

Sport fishing for halibut in Oregon is divided into three subareas for management and catch allocation purposes: Columbia River subarea (which is shared with Washington and described above), Central Coast subarea, and the Southern Oregon subarea that was created for the 2014 fishery. Prior to 2014, halibut fishing off Southern Oregon was managed as part of the South of Humbug subarea, described in the next section. Between 1995 and 2003, the major Oregon sport fishery management area was broken into north (Cape Falcon to Siuslaw River) and south (Siuslaw River to California border) subareas. Since 2004, there has been one Oregon-only subarea, the Central Coast, from Cape Falcon to Humbug Mountain. This subarea is divided into a nearshore, spring and summer fishery. The nearshore fishery was previously open 7 days per week from May through October. However, the length of the season has been decreasing in the last several years due to increased effort and the presence of halibut in the area with the nearshore fishery transitioning from being an incidental fishery to a more targeted fishery. Between 2004 (the year the North and South Central areas were combined) -2013, the central coast was open 11-60 days for the all depth (non-nearshore fishery) with the most recent years around 20 days. For the same period, the nearshore fishery was open between 38-184 days. To see the specific dates, catch, and quota for this area see Appendix C.

South of Humbug Mountain, Oregon and off the California Coast

The sport fishery for Pacific halibut in the area south of Humbug Mountain, Oregon and in California was previously a non-target fishery with incidental catches of Pacific halibut primarily occurring in the Shelter Cove area during groundfish fisheries. In the last several years the fishery has transitioned to a more targeted fishery with landings also occurring with salmon and more of the catch occurring in the area north of Shelter Cove. A separate California recreational allocation was originally established in 1990 based on an expectation of incidental catch, which was about 2.6 percent of the Oregon/California (OR/CA) sport allocation. The SOH management area, used through 2013, was established in 1999 and 0.4% of the OR/CA sport allocation was shifted to the SOH area to account for the addition of southern OR; this provided SOH with 3.0% of the whole CA/OR sport allocation until 2013.

Unlike the other sub-areas (except Puget Sound), the South of Humbug Mt. subarea has had fixed season lengths (May 1-Oct 31, prior to 2004 through Sept 30), regardless of harvest (1999-2013 2A Catch Sharing Plans). Harvests in the South of Humbug Mt. subarea received minimal attention prior to 2011, although catches started to increase in 2008. However, that changed in 2011, and fishery managers became aware of potentially substantial landings in California waters, as well as increased landings in the Oregon portion. In response, the Council created a South of Humbug Workgroup and Policy Committee to analyze the fishery and recommend any changes necessary to reduce catches in the area. Based on the advice of both groups the Council recommended several changes to the recreational fishery in the South of Humbug area beginning in 2014 in order to begin to reduce catches in the area. The Council recommendation split the existing subarea, which includes portions of both southern Oregon and northern California, into two state-specific subareas. This change allowed each state to use the most effective available management tools to attempt to keep the catch within their respective quotas. The existing Oregon/California sport fishery allocation of 31.7 percent of the non-tribal allocation was split into a 1 percent California sport fishery allocation and a 30.7 percent Oregon sport fishery allocation. The new California subarea was open to fishing from May-July and September-

October, with the month of August closed as a quota management measure. The State of Oregon monitored and managed the Southern Oregon subarea in season to avoid exceeding the quota. Due to the set season this area has been open 184 days every year between 2004-2013. To see the specific dates, catch, and quota for this area see Appendix C.

Commercial Fisheries

The commercial fishery allocations in the Plan have been divided into two components since 1995: a directed commercial fishery (e.g., the traditional longline fishery) and an incidental halibut catch in the salmon troll fishery. The directed commercial fishery is restricted to the area south of Point Chehalis, WA. An allocation for incidental halibut retention in the commercial sablefish primary fishery comes from the Washington sport allocation, and is only available in years when the TAC is above 900,000 lb. Between 2004-2014 only the 2010 and 2011 Area 2A TACs were below that minimum. Between 2004-2013 the directed commercial fishery has been open 1-4 days, incidental halibut retention in the salmon troll fishery has been allowed between 47-199 days, and incidental halibut retention in the sablefish primary fishery has been allowed 176-184 days. To see the specific dates, catch, and quota for these fisheries see Appendix C.

Overall 2A Quota and Catch

Finally, the following three tables present the 2A TAC, resulting subarea allocations and catch for 2004-2014 and the overall 2A TAC and catch 2004-2013.

Table 1. 2004-2013 catch and quota by subarea, all weights are in net weight.

Catch by subarea 2004-2013										
	2004		2005		2006		2007		2008	
	Quota	Catch	Quota	Catch	Quota	Catch	Quota	Catch	Quota	Catch
TRIBAL INDIAN	543,000	558,000	490,500	489,000	508,000	509,000	494,000	468,400	427,000	426,879
Commercial	523,600	520,000	452,500	453,000	472,000	476,000	461,000	468,400	397,000	426,879
Ceremonial and Subsistence	19,400	38,000	38,000	36,000	36,000	33,000	33,000		30,000	
NON-TRIBAL	937,000	980,853	839,500	822,834	872,000	772,049	846,000	795,659	793,000	759,836
COMMERCIAL	367,029	357,000	336,121	346,000	346,424	335,000	338,182	294,500	321,381	272,236
Troll	44,554	43,000	39,918	42,000	41,464	34,000	40,227	24,000	37,707	16,685
Directed	252,475	246,000	226,203	236,000	234,960	236,000	227,955	224,500	213,674	220,590
Sablefish Incidental	70,000	68,000	70,000	68,000	70,000	65,000	70,000	46,000	70,000	34,961
SPORT	584,212	623,853	517,126	476,834	546,746	437,049	528,196	501,159	490,381	487,600
WA Sport	272,942	236,629	237,257	225,896	249,152	227,664	239,636	211,070	220,238	230,554
OR/CA Sport	297,029	372,463	266,122	235,907	276,424	187,666	268,182	269,805	251,381	239,147
WA Inside Waters	76,220	49,577	64,800	62,370	68,607	63,375	65,562	45,415	59,354	83,304
WA North Coast	126,857	124,229	115,437	108,149	119,244	105,805	116,199	114,489	109,991	106,852
WA South Coast	61,565	62,823	50,146	55,377	53,952	58,484	50,907	51,166	44,700	40,398
Columbia River	14,241	14,761	13,747	15,031	21,170	21,719	20,378	20,284	18,762	17,899
Early Season		n/a		n/a		n/a		n/a		n/a
Late Season		n/a		n/a		n/a		n/a		n/a
OR Central Coast	282,178	186,209	266,122	235,071	254,310	183,689	246,727	264,378	231,271	225,107
Inside 40 fathoms	22,574	2,028	20,101	5,540	20,345	8,419	19,738	8,652	18,502	11,833
Spring (May-June)	194,703	145,541	173,372	165,238	175,474	109,410	170,242	133,090	159,577	119,656
Summer (August- October)	64,901	38,640	57,791	64,293	58,491	65,860	56,747	122,636	53,192	93,618
OR S. of Humbug/CA	8,911	45	7,984	836	8,293	3,977	8,045	5,427	7,541	14,040
TOTAL	1,480,000	1,538,853	1,330,000	1,311,834	1,380,000	1,281,049	1,340,000	1,264,059	1,220,000	1,186,715

	2009		2010		2011		2012		2013	
	Quota	Catch	Quota	Catch	Quota	Catch	Quota	Catch	Quota	Catch
TRIBAL INDIAN	332,500	333,814	283,500	276,390	318,500	354,216	346,150	387,261	346,500	342,003
Commercial	303,500	303,386	253,072	251,090	293,200	328,916	321,650	355,061	314,300	313,503
Ceremonial and Subsistence	29,000	30,428	30,428	25,300	25,300	25,300	24,500	32,200	32,200	28,500
NON-TRIBAL	617,500	696,093	526,500	565,146	591,500	594,071	642,850	677,199	643,500	717,841
COMMERCIAL	195,748	194,525	166,900	161,187	187,506	193,883	203,783	219,265	225,400	215,388
Troll	29,362	11,310	25,035	28,627	28,126	25,753	30,568	35,255	30,600	30,388
Directed	166,385	177,800	141,865	132,560	159,380	168,130	21,173	179,000	21,410	173,000
Sablefish Incidental	11,895	5,415	0	0	0	0	173,216	5,010	173,390	12,000
SPORT	425,593	501,568	373,036	403,959	419,412	400,188	419,412	457,934	429,995	502,453
WA Sport	214,110	265,924	192,699	209,612	216,489	194,697	214,110	225,331	214,110	245,292
OR/CA Sport	195,748	222,906	166,901	183,536	187,506	194,213	203,783	222,059	203,990	250,693
WA Inside Waters	57,393	114,050	50,542	71,801	58,155	45,856	57,393	77,385	57,393	95,351
WA North Coast	108,030	102,782	101,179	95,014	108,792	103,741	108,030	105,479	108,030	107,856
WA South Coast	42,739	39,595	35,887	34,554	43,500	45,100	42,739	42,467	42,740	42,085
Columbia River	15,735	12,738	13,436	10,811	15,418	11,278	11,895	10,544	11,895	6,468
Early Season	11,014	11,266	9,405	8,552	10,793	8,782	9,516	6,499	9,516	4,725
Late Season	4,720	1,472	4,031	2,259	4,625	2,496	2,379	4,045	2,379	1,743
OR Central Coast	180,088	182,960	153,548	155,567	187,506	170,010	203,783	191,535	191,979	194,484
Inside 40 fathoms	14,407	8,227	12,284	12,927	13,800	24,451	23,014	37,413	23,038	22,248
Spring (May-June)	124,261	122,403	105,948	112,500	115,578	114,752	120,821	111,269	120,947	145,167
Summer (August- October)	41,420	52,330	36,316	30,140	43,126	30,807	47,945	42,853	47,995	27,069
OR S. of Humbug/CA	5,872	36,704	5,007	25,401	5,625	24,203	6,056	30,524	6,063	56,209
TOTAL	950,000	1,029,907	810,000	841,536	910,000	948,287	989,000	1,064,460	990,000	1,059,844

Table 2. 2A TAC, total catch for all areas and fisheries, and percent of quota taken, 2004-2013.

	2A TAC	Total catch	Percent of Quota Taken
2004	1,480,000	1,538,853	103.98%
2005	1,330,000	1,311,834	98.63%
2006	1,380,000	1,281,049	92.83%
2007	1,340,000	1,264,059	94.33%
2008	1,220,000	1,186,715	97.27%
2009	950,000	1,029,907	108.41%
2010	810,000	841,536	103.89%
2011	910,000	948,287	104.21%
2012	989,000	1,064,460	107.63%
2013	990,000	1,059,844	107.05%

1. Non-treaty allocation changes

Non-Treaty Allocation Alternatives

The Council approved a range of non-treaty allocation changes for public review at the September 2014 meeting. The approved range included changes to the commercial allocations and changes to the Washington, Oregon, and California recreational allocations. The allocation alternatives are shown in Table 1, are described below, and can also be found at http://www.pcouncil.org/wp-content/uploads/Full_Blog_2015CSP_changes.pdf

Table 3. Council approved range of non-treaty allocations changes. These alternatives came from two reports presented at the September 2014 Council meeting. The Tri-state report was a joint Washington, Oregon, and California report. The GAP report is from the Groundfish Advisory Panel.

	Status Quo	Alt 1 (TriState)	Alt 2 (TriState)				Alt 3 (GAP)		Alt 4 (GAP)		Alt 5 (GAP)	
			Option A		Option B		2A TAC ≤ 1 M. lb	Portion of 2A TAC > 1 M. lb	2A TAC ≤ 1 M. lb	Portion of 2A TAC > 1 M. lb	2A TAC ≤ 1 M. lb	Portion of 2A TAC > 1 M. lb
			2A TAC ≤ 1 M. lb	2A TAC > 1 M. lb	2A TAC ≤ 1 M. lb	Portion of 2A TAC > 1 M. lb						
WA Sport:	36.60%	36.60%	36.60%	36.60%	36.60%	18.5-25.9%	35.93%	35.60%	35.60%	35.27%	35.27%	34.93%
OR Sport:	30.70%	30.70%	30.70%	30.70%	30.70%	15.5-21.7%	30.03%	29.70%	29.70%	29.37%	29.37%	29.03%
CA Sport:	1.00%	3.00%	3.00%	4.00%	3.00%	30-50%	3.00%	4.00%	4.00%	5.00%	5.00%	6.00%
Commercial:	31.70%	29.70%	29.70%	28.70%	29.70%	16-22.4%	31.03%	30.70%	30.70%	30.37%	30.37%	30.03%

Status Quo: The non-treaty allocation is apportioned according to the 2014 CSP: Washington sport (36.60%), Oregon sport (30.70%), California sport (1.00%), and commercial (31.70%).

Alternative 1: Maintain allocations as described in the CSP (Status Quo), except increase the California sport allocation by two percent, for a total California sport allocation of three percent, by reducing the non-treaty commercial fishery share.

Alternative 2, Option A: Same allocations as described in Alternative 1 when the 2A TAC is one million pounds or less. When the 2A TAC is above one million pounds, the California sport allocation would increase by an additional one percent, for a total California sport allocation of four percent, by reducing the non-treaty commercial fishery share.

Alternative 2, Option B: Same allocations as described in Alternative 1 when the 2A TAC is one million pounds or less. When the 2A TAC is greater than one million pounds, the first one million pounds of the 2A TAC shall be distributed according to the Alternative 1 allocations. For the portion of the 2A TAC that exceeds one million pounds, the California sport allocation would increase to 30-50 percent of the non-treaty share, and allocation percentages for the non-treaty commercial and recreational (Washington and Oregon) would be reduced to remain proportional to the status quo non-treaty shares.

Alternative 3: Increase the California sport allocation by two percent, for a total California sport allocation of three percent, when the 2A TAC is less than one million pounds by reducing the three major non-treaty group allocations (i.e., Washington sport, Oregon sport, and commercial). When the 2A TAC is greater than one million pounds, the first one million pounds of the 2A TAC shall be distributed according to the Alternative 3 allocations. For the portion of the 2A TAC that exceeds one million pounds, the California sport allocation would increase to four percent of the non-treaty share by reducing the three major non-treaty group allocations.

Alternative 4: Increase the California sport share by three percent, for a total allocation of four percent, when the 2A TAC is less than one million pounds by reducing the three major non-treaty group allocations. When the 2A TAC is greater than one million pounds, the first one million pounds of the 2A TAC shall be distributed according to the Alternative 4 allocations. For the portion of the 2A TAC that exceeds one million pounds, the California sport allocation would increase to five percent of the non-treaty share by reducing the three major non-treaty group allocations.

Alternative 5: Increase the California sport share by four percent, for a total allocation of five percent, when the 2A TAC is less than one million pounds by reducing the three major non-treaty group allocations. When the 2A TAC is greater than one million pounds, the first one million pounds of the 2A TAC shall be distributed according to the Alternative 5 allocations. For the portion of the 2A TAC that exceeds one million pounds, the California sport allocation would increase to six percent of the non-treaty share by reducing the three major non-treaty group allocations.

Maximum limits on the California Sport Allocation

In addition to allocation changes, the Council approved two options for maximum limits on the California sport allocation.

Status Quo: No maximum limit on the California sport allocation.

Maximum Limit A: Include a maximum limit on the California sport allocation of 75,000 pounds, in an effort to not strand pounds. This limit may be combined with Alternatives 1, 2A, or 2B described in the table above. Any amount above 75,000 pounds would remain in the non-treaty commercial fishery share.

Maximum Limit B: Include a maximum limit on the California sport allocation of 50,000 pounds, in an effort to not strand pounds. This limit may be combined with Alternatives 3 – 5 described in the table above. Any amount above 50,000 pounds would remain in the Washington sport, Oregon sport, and commercial fisheries in proportion to their respective shares under the Alternative.

Allocation Alternative Comparison

Because all the alternatives, except status quo, increase the California Sport allocation a first step to examining the alternatives is to see where the increase to the California Sport allocation comes from. For Alternatives 1, 2A, and 2B, with TACs less than 1 million lbs., the increase to the California sport allocation comes from a decrease to only the commercial allocation, meaning

there are no changes to the Washington and Oregon sport allocations. At TACs over 1 million Alternative 2A increases the California allocation by reducing only the commercial allocation. Alternative 2B, with a TAC over 1 million lbs., allocates the portion of the TAC under 1 million lbs. using Alternative 1 allocations, and allocates the portion of the TAC over 1 million lbs. by reducing the commercial, Washington, and Oregon allocations.

Under Alternatives 3-5, increases to the California sport allocation come equally from the commercial, Washington and Oregon sport allocations. Similar to alternative 2B, alternatives 3-5 allocate the portion of the 2A TAC above and below 1 million lbs. with different percentages, dividing the increase to the California sport allocation equally among the remaining non-treaty allocations (commercial, Washington and Oregon sport). Under Alternative 3 with a TAC under 1 million lbs. the commercial, Washington and Oregon sport allocations are decreased by 0.67%, for the portion above 1 million lbs. the allocations are decreased by 1%. Under Alternative 4 with a TAC under 1 million lbs. the commercial, Washington and Oregon sport allocations are decreased by 1%, for the portion above 1 million lbs. the allocations are decreased by 1.33%. Under Alternative 5 with a TAC under 1 million lbs. the commercial, Washington and Oregon sport allocations are decreased by 1.33%, for the portion above 1 million lbs. the allocations are decreased by 1.67%. To see how the fishery allocations that would result from these allocation changes see Appendix A which shows each allocation alternative applied to the 2014 Status Quo TAC.

Total Allowable Catch/Allocation Alternative Scenarios

In order to show the allocations that result from the allocation alternatives above, they must be applied to hypothetical TAC level to show the resulting allocations to the commercial fishery and the state recreational allocations. We decided to apply the various allocation alternatives to three different TAC levels to explore how the alternatives would affect the fishery and subarea allocations. Each combination of allocation alternative and hypothetical TAC level is referred to as a “scenario.”

Three TAC levels were used in this analysis to illustrate how the allocation alternatives might work given a low, medium, and high TAC. The TAC levels used to develop these scenarios are 1) 720,000 lbs., the 2014 International Pacific Halibut Commission (IPHC) “Blue Line¹”, which was chosen as a low end TAC level and is below any TAC approved in the last 10 years 2) 960,000 lbs., 2014 TAC, which is the status quo TAC with status quo allocations and represents a mid-range TAC and is also similar to approved over the last five years, 3) 1,480,000 lbs, the 2004 TAC, which is the highest TAC approved between 2004-2014. A TAC of 1,283,333 is included in the tables in Appendix A, but is not further discussed in this document because the resulting allocations were too similar to the 1.48 million TAC to be useful for analysis.

Allocation alternatives were then applied to the three TAC levels to show the resulting subarea allocation scenarios. Four allocation alternatives, in addition to status quo, were chosen to help illustrate a range of subarea allocations and possible impacts in the body of this report. We used

¹ “Blue Line” is the estimate of harvest available when the IPHC target harvest rates are applied to the current estimate of exploitable biomass. In recent years IPHC has adopted a harvest rate for Area 2A that is higher than the IPHC’s target harvest rate for Area 2A (for 2014 the target harvest rate TAC would have been 720,000 lbs however IPHC adopted 960,000 lbs)

only a few of the allocation alternatives in this analysis in order to explore the extremes of the allocations and their impacts. This examination however is not the best tool to examine the tradeoffs between the allocation alternatives, focusing on the number of days each fishery may be open. For this, the reader should examine Appendix A and the section on recreational impacts below which describe each allocation alternative.

To see the results of applying all of the alternatives to the three TAC levels described above, see Appendix A. While the Council's final motion for the use of the 50,000 lbs. max was specified to allocation alternatives 3-5, this report applies the 50,000 lbs. max on the California sport allocation to Alternative 2b because when applied to the highest TAC this result in the highest California allocation.

We applied the Status Quo and Alternative 1 allocations to the 720,000 lbs. TAC. Status Quo applied to this TAC results in the smallest California allocation of all the scenarios, therefore setting the low end of the range. Alternative 1 increases the California sport allocation by reducing only the commercial allocation. This alternative does not decrease the Washington and Oregon sport allocations. The resulting California allocation was below either of the alternative maximum limits so we did not need to apply a maximum limit. This scenario shows the lowest California allocation when considering the action alternatives.

The Status Quo TAC scenario uses the 2014 TAC and the 2014 Plan allocations. This scenario has the lowest California allocation even though the overall TAC is higher than the 720,000 lbs. TAC/Allocation alternative 1 scenario. This happens because no changes are made to the subarea allocations, meaning the California allocation is not increased. The Washington sport allocation under this alternative has been reduced by 14,274 lbs. to allocate that amount to incidental halibut retention in the sablefish primary fishery consistent with the Plan.

The allocation alternatives applied to the 1,480,000 lbs. TAC include status quo, Alternative 2B, with the California sport allocation receiving 30 percent of the TAC above 1 million lbs., with a 50,000 lbs. maximum, and Alternative 2b with the California sport allocation receiving 50 percent of the TAC above 1 million lbs., with no maximum. Allocation Alternative 2b with the maximum is analyzed because it results in a California sport allocation of 50,000 lbs., which is higher than any catch in the area to date. We examined this scenario to show how high the TAC and allocation would need to be to accommodate the most recent California catch in 2013 of 43,254 lbs. The Washington sport allocation under this alternative has been reduced by 70,000 lbs. to allocate that amount to incidental halibut retention in the sablefish primary fishery consistent with the Plan. Alternative 2b with a 50% allocation to California of TAC above 1 million pounds, without any cap on the California allocation, would result in the highest California allocation possible under the range of TACs chosen for this analysis and the Council's alternatives.

Table 4. Estimated subarea allocation under a range of 2A TAC scenarios with allocation alternatives applied and status quo allocations under each TAC scenario.

	720K (SQ allocation)	720K (Alt 1 allocation)	960K* (SQ allocation)	1.48M ^{1/} (SQ allocation)	1.48M ^{1/} (Alt 2b, CA 30% > 1 mill, 50k max) ^{2/}	1.48M (Alt 2b, CA 50% > 1 mill, no max)
WA Sport	171,288	171,288	214,110	282,092	271,803	225,620
OR Sport	143,676	143,676	191,568	295,334	286,626	247,910
CA sport	4,680	14,040	6,240	9,620	50,000	175,500
Commercial	148,356	138,996	197,808	304,954	282,941	242,970

1/ The Washington allocations under 960K and 1.48K have been reduced, per Plan provisions to allocate 70,000 lbs to the sablefish primary fishery

2/ Under this alternative a 50,000 lb maximum was applied to the California allocation. The pounds in excess of 50,000 lbs were distributed to the Commercial fishery only, according to the Tristate report rules for the 50,000 lbs max.

Impacts of the Alternatives

This section describes potential impacts from the range of subarea allocation alternatives described above. There are two purposes for examining the range of alternatives, first is to determine the biological and physical impacts from changes in fishing behavior and areas fished based on changes in allocations. The scenarios described above provide a range of potential change within which we can reasonably determine the biological and physical impacts of the alternatives. The second purpose to examining a range of alternatives in this report is to help the Council decide what, if any, allocation changes it wants to recommend. This purpose is best served by looking across all the allocation alternatives under each TAC scenario and examining the tradeoffs between fisheries and subareas from reducing the Washington, Oregon, or commercial allocations in order to increase the California allocation, focusing on the number of days each fishery may be expected to be open. The full allocation tables applied to each TAC can be found in Appendix A, catch tables for each subarea showing yearly catch estimates can be found in Appendix C. Additionally, the Council approved several sub options that allocate the pounds differently above and below a TAC of 1 million lbs., and finally maximum caps of 50,000 lbs. and 75,000 lbs. were approved as optional features to the allocation alternatives, all of which is presented in Appendix A.

In order to show how each fishery may be affected by allocation changes, this report shows participation (number trips and vessels) and days open in each fishery over the recent past. This information should than be compared to the allocations in Appendix A. Typically, when considering allocations we must consider where the increase in one area comes from, what is the impact to the area that is having a decreased allocation, present participation in and dependence on the fishery, including alternative fisheries, and historical fishing practices in and historical dependence on the fishery.

Biological effects of the Alternatives

For the 2014 fishery, NMFS completed an EA and Biological Opinion (BiOp) on the continuing implementation of the Plan. Similar to this document, the EA analyzed a range of TACs and resulting Plan allocations. Because the range analyzed in the EA is not substantially different from the range analyzed in this report, the conclusions regarding the biological impacts of the Plan are the same for the range in this report and are summarized from the EA for halibut, listed species, and overfished species.

Pacific Halibut

There are no expected effects to the Pacific halibut population beyond the expected effects of the continuing implementation of the Plan, from any of the allocation alternatives. Currently the directed commercial fishery is limited to retaining halibut that are greater than 32 inches, while there is no size limit in the recreational fishery. Therefore, depending on the allocation changes the 2A catch may consist of smaller fish than status quo if the commercial allocation is reduced and smaller fish are caught from an increase to the California recreational fishery. This change is not expected to have an impact on the coastwide Pacific halibut population, but could result in local effects such as a reduction in the numbers of smaller fish off California. Overall, no effects at the population level are expected because under all the alternatives Pacific halibut will continue to be managed consistent with the overall 2A TAC, which is updated each year with the most recent stock assessment information. Further, while the allocation alternatives are a change from status quo, they all retain the inseason management procedures, which help keep the catch of halibut within the subarea allocations and the overall 2A TAC.

Overfished Species

On September 21, 2004 (69 FR 56550), NMFS published a proposed rule to implement the Pacific coast groundfish harvest specifications and management measures for 2005-2006. This rule implemented large depth-based closures along the coast to protect rockfish called Rockfish Conservation Areas (RCA). Different RCAs apply to the commercial and recreational groundfish fisheries and are also used by halibut fisheries. The commercial halibut fishery must comply with the commercial RCA used in the groundfish commercial fishery. The recreational halibut fishery must comply with the same recreational Yelloweye Rockfish Conservation Areas (YRCA) used in the recreational groundfish fisheries in each state. However, the recreational halibut fishery does not use the groundfish recreational RCA that runs along the coast because state regulations allow halibut fishing within the boundaries of the groundfish recreational RCA. Finally, the taking and retaining of canary and yelloweye rockfish² is prohibited in the recreational halibut fishery coastwide.

None of the alternatives are expected to have much, if any, effect on groundfish species, including yelloweye and canary rockfish, because in addition to prohibiting retention of these species and complying with closed areas, bycatch of these species in halibut fisheries is managed consistent with the groundfish FMP, rebuilding plans for the overfished species, and the species specific Annual Catch Limit (ACL). Depending on how the allocations are modified there may be a transfer of impacts by area. For example, allocation alternatives 2b-5 reduce the Oregon and Washington allocations in order to increase the California allocation, which could result in less overfished species impacts in Washington and Oregon due to a reduced number of fishing days. This may also increase the overfished species impacts in California. However, while the impacts may move geographically, any impacts on groundfish would be taken into account through the groundfish management process and would be within the parameters of the applicable rebuilding plans and ACLs for the rockfish species impacted.

The biggest impact to overfished species comes from changes to the 2A TAC. The TAC has the largest impact because this would result in the largest changes to the number of fishing days and

² Beginning in 2015, there will be a one fish sub-bag limit for canary rockfish in the Oregon recreational fishery, in areas open for groundfish. The alternatives proposed for the Plan will not have any additional impacts to overfished species.

therefore changes to the chance for interaction between the halibut fishery and these species. None of the changes in the allocation alternatives are expected to result in changes to the fishery such that the rebuilding of these species would be effected. The RCA and YRCAs would continue to protect rockfish along the coast, including canary and yelloweye and other overfished groundfish species, from halibut fisheries interception in depths where they commonly occur. Salmon trollers would continue to be allowed to retain halibut in the RCA in the area north of 40°10' N.lat.

Listed Species

Because none of the allocation alternatives are significantly different from the status quo fishery in terms of impacts to listed species, there are no expected effects on listed species, above what is expected from the continuing implementation of the Plan. The effects of the continuing implementation of the Plan were analyzed in a BiOp, which concluded that the status quo fishery is not expected to have a significant effect on marine mammals, sea turtles, and salmon, but may negatively impact Puget sound rockfish, Puget Sound and lower Columbia River Chinook, and green sturgeon since these are bycatch in the fishery. Further, none of the allocation alternatives would result in changes to the commercial fishery that would alter anticipated effects on seabirds. NMFS is currently working with USFWS to analyze the effects of the halibut fishery on seabirds. Seabirds may be impacted by longline gear, however, no seabird interactions have been reported in halibut fisheries.

Socioeconomic Impacts

Determining socioeconomic impacts from any of the allocation alternatives is a difficult task because at a coastwide level the largest driver of economic impacts is the IPHC TAC decision, which is not a NMFS or Council decision. Therefore, rather than examine coastwide revenue this report presents information on the number of trips and number of days certain fisheries may be open under different allocation alternatives. This section shows how participation may change across the allocation alternatives by presenting the number of trips and number of open days for the Washington and Oregon recreational Pacific halibut fisheries and presents the number of days and number of vessels participating for the directed commercial, incidental salmon and incidental sablefish fisheries, to examine how these might be effected by the allocation changes. The current California state recreational sampling and estimation program does not have a specific Pacific halibut angler trip type. Effort information on Pacific halibut is included in the estimates for other trip types (e.g., salmon, bottomfish), but at this time there is no reasonable way to determine how many trips taken in the recreational fishery are targeting Pacific halibut. Due to this limitation, California recreational Pacific halibut angler trip data was unavailable for this report.

Commercial Fishery Impacts

The commercial fishery is allocated 31.7 percent of the non-Indian share of the 2A TAC and is divided between the directed halibut fishery (85%) and an incidental catch fishery during the salmon troll fishery (15%). The allocation to the sablefish primary fishery, which consists of vessels with a groundfish limited entry permit with a sablefish endorsement, comes from the Washington sport allocation that is in excess of 214,110, as long as 10,000 lbs. is available, with a maximum of 70,000 lbs.

To discuss the impacts of the allocation alternatives to the commercial fisheries we take the allocation alternatives and compare them to the previous TACs and fishery participation from

2008-2013. At the low end of the range, the commercial allocation is 138,996 pounds, which is lower than any allocation that has been implemented since 2004. Under the Alternative 1 allocations, the low end of the range increases the California allocation by reducing only the commercial allocation and by 2 percent. Between 2008-2013 the directed commercial fishery has been open for 1-4 days, each opening being 10-hours, with most years resulting in two openers. In order to stay within its allocation the commercial fishery is managed with vessel landing limits based on vessel size, which would continue under all the allocation alternatives. Table 5 below shows the 2A TAC from 2004-2012, the resulting commercial allocation, and number of vessels participating in each commercial fishery. There does not appear to be a direct relationship between the 2A TAC and the number of vessels that participate each year.

Because each open period is 10 hours the number of boats per opener is also the number of trips per open period because vessels generally do not make more than one trip per opener. Under 2010 TAC of 810,000 lbs. the directed commercial fishery was open only one 10-hour period with 70 boats participating. At the low end of the range in Table 4, the commercial allocation is lower than the 2010 TAC. Therefore, under the 720,000 lbs. TAC and the Alternative 1 allocations it is anticipated the commercial fishery would have one 10 hour open period with a decrease in the number of vessels participating and decreased boat limits. Reduced boat limits, maximum pounds per landing per vessel based on vessel size, would have to be reduced relative to status quo to stay within the reduced commercial allocation. Similarly, incidental landing limits for the salmon troll and sablefish fisheries would have to be reduced compared to status quo in order to stay within each fishery allocation under a low TAC and reduced commercial allocation. At the high end of the allocation range the commercial allocation is decreased. However, the commercial allocation is still higher than the commercial allocation because of the increase in the TAC, therefore it is unlikely to change to the participation in the commercial fishery from status quo, outside of what has occurred between 2008-2013, because the allocation would be similar to.

Table 5. Number of vessels participating in each directed commercial opener by year. Some vessels participated in more than one opener therefore the total represents the total number of trips.

	2A TAC	Opening 1, No. vessels	Opening 2, No. vessels	Opening 3, No. vessels	Opening 4, No. vessels	Total
2008	1,220,000	64	76	25	48	213
2009	950,000	82	62			144
2010	810,000	70				70
2011	910,000	71	57			128
2012	989,000	87	40			127
2013	990,000	55	47			102

Incidental halibut retention in the salmon troll fishery has been allowed between 47 days in 2010 when the 2A TAC was 810,000 lbs. with 89 vessels participating and 199 days when the TAC was between 950,000 lbs. when 41 vessels participated and 1,380,000 lbs. when 92 vessels participated. Incidental halibut retention in the salmon troll fishery is managed through inseason action, with actions taken to extend the season when quota is available. The two lowest years of participation in 2008 and 2009 are likely due to poor salmon years rather than halibut. There

does not appear to be a direct relationship between the 2A TAC and the number of vessels that participate each year.

Incidental retention in the sablefish fishery has been allowed between 176 days in 2005 when the 2A TAC was 1,330,000 lbs. with 27 vessels participating and 184 days every other year between 2004-2012 when the TAC has been between 950,000 lbs. with 14 vessel participating and 1,480,000 lbs. with 30 vessels participating. The landing ratio of halibut to sablefish is determined before the sablefish primary fishery begins and is designed to allow halibut retention for the primary season from May 1-October 31, this is why the number of open days has been consistently high between 2004-2012. Over this time in order to stay within the allocation the ratio has been adjusted. Recent years participation has been lower than in the years when the TAC was over 1 million pounds between 2004-2008, some of the decrease in participation is likely due to the lower of the ratio making it less worth it to retain the halibut caught in this fishery.

Table 6. 2A TAC, commercial allocation, number of unique vessels participating in the directed commercial, incidental salmon troll and incidental sablefish primary fishery by year, from 2004-2012. Data from IPHC Annual Reports 2003-2012.

	2A TAC	Commercial Allocation ^{2/}	Directed Comm	Number Open Days	Salmon Incidental	Number Open Days	Sablefish Incidental ^{1/}	Number Open Days
2004	1,480,000	367,029	94	4	160	90	30	184
2005	1,330,000	336,121	83	4	169	99	27	176
2006	1,380,000	346,424	89	3	92	199	27	184
2007	1,340,000	338,182	88	4	99	199	26	184
2008	1,220,000	321,381	96	4	35	199	24	184
2009	950,000	207,642	89	2	41	199	14	184
2010	810,000	166,900	70	1	89	47	n/a	n/a
2011	910,000	187,506	76	2	84	166	n/a	n/a
2012	989,000	203,783	88	2	103	64	10	184

1/ The allocation for incidental halibut retention in the sablefish primary fishery comes from the Washington sport allocation

2/ Includes allocation to the Sablefish Primary fishery that comes from the Washington Sport allocation

Recreational fishery impacts

To discuss the impacts of the allocation alternatives to the recreational fisheries we take the allocation alternatives and compare them to the TACs and fishery participation from 2008-2013. There are two parts to this discussion, first we discuss the range of subarea allocations from the TAC scenarios, and second we discuss the policy choice in front of the Council in determining which years to consider when establishing the California allocation.

First, we discuss the range of subarea allocations resulting from the TAC scenarios. As stated above in the commercial fishery impacts section, the 720,000 lbs. TAC is lower than any TAC implemented since 2004. The biggest impact under this TAC scenario is to the commercial allocation because the increase in the California allocation comes from a decrease to the commercial allocation. The biggest differences between all three TAC scenarios are due to changes in the TAC except for the difference under the 1.48 million TAC scenario. The TAC

does not drive the differences under this scenario because this scenario is over 1 million pounds and therefore the allocation alternatives and the optional features that allow the California allocation to increase to 50% of the 2A TAC over 1 million pounds are what drive the difference. At the upper end of the range under the 1.48 million TAC, any reductions to the commercial, Washington and Oregon sport allocations are compensated by the increase in TAC and therefore the resulting subarea allocations are greater than status quo. This would likely result in fisheries that have increased season length and increased participation over status quo, but this increase would be due to the increased in the TAC. Further, given the current understanding of the stock and the results of the most recent stock assessment it is unlikely that the 2A TAC will be as high as 1,480,000 lbs. in the next several years; therefore comparing the upper end of range to status quo does not help illustrate the trade-offs between any of the allocation alternatives. Therefore, it is most helpful to focus on the low end of the range and discuss the impacts of the allocation alternatives with a TAC that is lower than status quo.

Table 7. Washington and Oregon Pacific halibut recreational trips, number of days open from 2008-2013.

Puget Sound - All Areas ^{1/}					
Year	2A TAC	Puget Sound Allocation	No. Days ^{2/}	Halibut	Halibut-Bottomfish
2008	1,220,000	59,534	90	21,464	3,679
2009	950,000	57,393	72	25,517	5,758
2010	810,000	50,542	22	13,382	7,190
2011	910,000	58,155	22	12,232	6,008
2012	989,000	57,393	26	20,719	3,407
2013	990,000	57,393	14	23,988	4,468

1/ The Puget Sound Sampling Program is different than the Ocean Sampling Program. On the coast halibut trips with bottomfish are categorized as a halibut trip -- in PS they are separate trip types. Charter boats are not sampled in the PS (there are very few charter halibut trips). Salmon trips with halibut onboard are not included in this summary for either Puget Sound or the coast.

2/ Number of days includes Eastern and Western areas as a total, days when both areas were open were counted as one day.

Table 8. Washington Halibut trips coastwide from 2008-2013, with the 2A TAC, Washington Sport allocations, number of days, and trips divided among charter and private angler.

Washington Halibut Trips Coastwide- All Areas							
Year	2A TAC	WA Sport Allocation ^{2/}	No. Days	No. Days no NS ^{1/}	Charter	Private	Total
2008	1,220,000	220,238	236	96	3464	5122	8586
2009	950,000	214,110	86	54	3512	4894	8406
2010	810,000	192,699	161	16	3090	4459	7550
2011	910,000	216,489	100	16	3348	5716	9065
2012	989,000	214,110	41	12	2922	6443	9365
2013	990,000	214,110	19	5	2803	6230	9033

1/ Number of days open without the open days for the nearshore fishery, which was often open 7 days per week.

2/ The Washington Sport allocation is reduced to allocate pounds to the sablefish primary fishery per Plan provisions

Table 9. Oregon Halibut trips coastwide from 2008-2013, with 2A TAC, Oregon sport allocation, number of days, and trips divided among charter and private anglers.

Oregon Halibut Trips - All Areas							
Year	2A TAC	OR Sport Allocation ^{2/}	No. Days	No. Days no NS ^{1/}	Charter	Private	Total
2008	1,220,000	251,381	151	43	17,781	5,668	23,449
2009	950,000	195,748	101	21	18,365	5,367	23,732
2010	810,000	166,907	80	11	17,300	3,596	20,896
2011	910,000	187,506	149	17	18,574	4,310	22,884
2012	989,000	203,783	128	21	20,770	6,898	27,668
2013	990,000	203,990	40	18	22,608	4,316	26,924

1/ Number of days open without the open days for the nearshore fishery, which was often open 7 days per week.

2/ The Oregon allocation include the allocation to the South of Humbug Mountain area and includes the allocation to California because it was managed with one allocation through 2013.

To begin, it is helpful to examine the number of trips and number of days in the tables above under status quo allocations in 2010 (the closest TAC to 720,000 lbs.) to show the number of open days and trips under the lowest recent TAC. In 2010, the Washington coastal non-nearshore fisheries were open 16 days, however, since this time the number of open days has been decreasing, with a low of 5 days in 2013, even though the TAC has been increasing. The decreasing number of days could be due to a number of factors including increased participation to good weather. The changes in private angler trips primarily drive the increase in the number of trips between 2008-2013. The Puget Sound subarea was open 22 days in 2010, but has been decreasing since this time as WDFW has shortened the season to try to keep the catch in this area within its quota. The Puget Sound subarea operates on a fixed season that is determined before the fishery begins.

In 2010, the Oregon all depth central coast subarea was open 11 days with a TAC of 720,000. Since this time the number of open days and the number of trips has increased with the increase in the TAC. However, there is only a 1 day difference between a 17 day season in 2011 under a TAC of 910,000 lbs. and an 18 day season in 2013 with a 990,000 lbs. This is largely due to unfavorable weather in the summer in 2012 for ocean fishing. 2013 had much better weather and the nearshore fishery was open 3 days per week, rather than the 7 days per week it had previously been open. Instead of slowing down the pace of the nearshore fishery, it resulted in a derby mentality. One 3 day open period caught more than most years prior to 2010. The change to the nearshore fishery in 2013, combined with the poor weather during the summer of 2012 is likely the two main drivers of the number of angler trips.

Prior to 2014, the fishery in California was open 7 days a week from May 1 through October 31. In 2014, under a new season structure, the fishery in California was open May 1- July 31 and September 1-October 31. Since 2008 there has been increasing interest in targeting Pacific halibut. 2008 and 2009 were years where salmon and groundfish were lower than in previous years therefore fishermen could have been looking for additional opportunities and started fishing for Pacific halibut. The interest has since continued.

Under the 720,000 lbs., TAC scenarios the impacts to the Washington and Oregon fisheries would largely be driven by changes in the TAC because the increase to the California allocation comes from only the commercial allocation when using Allocation alternative 1. If however, a low TAC was combined with allocation alternatives 3-5, which take the increase in the California allocation from the Washington, Oregon and commercial allocation, changes to the fisheries, may be expected due to the lower allocations. Under allocation alternative 5, which results in the highest California allocation under the 720,000 lbs. TAC, the Washington sport allocation is 165,064 lbs. which is a 4% decrease from status quo allocations under a 720,000 lbs. TAC, but results in a California allocation that is 23,400 lbs. which is close to the 2010 and 2012 California catches of 23,935 lbs. and 25,394 lbs. Under the same Alternative 5 allocations, the Oregon and commercial allocations are reduced by 4% and 5% respectively, from status quo allocations under the 720,000 lbs. TAC (see Appendix A for allocations under each TAC scenario). This level of reduction combined with a low TAC, is anticipated to reduce the number of open days for the Washington and Oregon sport fisheries and the commercial fisheries over what would be expected under status quo allocations. Because the halibut effort is different by management area the reductions in allocations could close or significantly reduce the season in one area, this would likely result in effort shift to other areas. There is a high level of complexity

in determining the impacts from the allocation changes because many factors affect the success of each fishery. Further, each state and each subarea within each state operates slightly differently so the impacts are complicated when we examine the changes at the state level. Meaning it is difficult to predict how each fishery would operate under a reduced quota. However, as stated above, the reductions in the Washington and Oregon sport allocations are less than 2 percent under allocation alternatives 1, 2A, 3, 4, and 5. Therefore, it is not anticipated that any of these alternatives would alone reduce any of the other subareas such that fisheries would not be allowed. It is only when you combine an increase in the California allocation with a low TAC that other fisheries may not occur or would be further shortened.

Second, we examine the factors that should be considered in deciding the California sport allocation. When setting allocations the Council may wish to consider present participation in and dependence on the fishery, including alternative fisheries and historical fishing practices in and historical dependence on the fishery. In recent years, the California fishery has transitioned from an incidental fishery to a directed sport fishery. Halibut were previously caught primarily with groundfish species but are now also landed with salmon.

Comparing the 2008-2013 California catch to the status quo TAC under the allocation alternatives, we see that Alternatives 4 and 5 are closest to the catches in 2009, 2010, and 2012, and that Alternatives 1-3 are closest to catches in 2008 and 2011. None of the allocation alternatives would accommodate the catches in 2013. Alternatives 4 and 5 increase the California sport allocation by equaling reducing the Washington and Oregon sport allocations and the commercial allocation, because the TAC is under 1 million pounds.

Table 10. California catch 2008-2012 in net weight.

	2008	2009	2010	2011	2012	2013
Catch	13,303	34,847	23,935	13,636	25,394	43,254

Table 11. Status quo TAC with status quo and all allocation alternatives.

	960,000 (2014 Status Quo)					
	Status Quo	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
WA Sport	228,384	228,384	228,384	224,203	222,144	220,085
OR Sport	191,568	191,568	191,568	187,387	185,328	183,269
CA sport	6,240	18,720	18,720	18,720	24,960	31,200
Commercial	197,808	185,328	185,328	193,627	191,568	189,509

Overall Socioeconomic Impacts

Because the TAC has the biggest economic impact it is expected that at lower allocations, income and harvest opportunities would be slightly reduced compared to the higher end of the range. Effects on cost of participating in the fishery including, cost to fishery participants of materials, fuel, etc. could be slightly different from the low end of the range compared to the high end. At higher allocations, it would be marginally more costly to participate because more fishing days would be allowed, increasing operating costs. Costs would be marginally less at lower allocations. Effects on management and enforcement are not substantially different from status quo because Plan changes and the range of allocations would not require change from

Status Quo in enforcement or management. The current range includes adding inseason adjustment ability to the California sport fishery and while this is new the California subarea, an inseason changes would be conducted consistent with the Plan inseason provisions that are currently in use.

2. California Recreational Management Measures

In addition to changes to the non-treaty fisheries allocations the Council also approved for public review several options for changes to the California recreational season structure, inseason adjustments provisions, and provided guidance to NMFS for calculating a projected catch per day and number of day methodology, similar to what is done for the Puget Sound Area in Washington. The change to the inseason provision is to modify the California Plan section to remove language stating there will be no inseason action in this area and replace it with language that would allow inseason action to occur in this area if necessary. The remaining portions of the motion are discussed below.

The motion for the season structure alternatives and the calculation of the catch per day methodology was as follows:

- 1) Revise the season length so that the fishery is open for one month during the May 1 through October 31 time period. Selection of the month would occur under final action.
- 2) Revise the season length so that the season is open for a 15 consecutive day period during the May 1 through October 31 time period. Selection of the 15 consecutive day period would occur under final action.
- 3) In establishing the CA sport fixed season, recommend NMFS use a formula similar to the Puget Sound area, which is to calculate a projected catch per day and number of days to achieve the subarea quota.

To examine season days this report took the reported Pacific halibut catch data from 2008-2013 and calculated both weekly and daily catches by year and month.

Table 12. Reported catch by year and month of Pacific halibut in California.

	2008	2009	2010	2011	2012	2013	Cumulative Monthly Catch (net pounds)	% Total Catch	Avg Monthly Catch (net pounds)
May	1,150	510	2,362	501	1,523	1,282	7,329	4.69%	1,221
June	1,977	10,600	890	3,154	4,119	5,419	26,159	16.72%	4,360
July	3,062	8,019	8,911	1,347	5,369	12,446	39,155	25.03%	6,526
Aug	5,503	11,315	9,570	5,170	12,306	19,179	63,043	40.30%	10,507
Sept	1,611	4,403	2,202	2,663	3,270	2,554	16,702	10.68%	2,784
Oct	0	0	0	801	856	2,374	4,030	2.58%	672
Total	13,303	34,847	23,936	13,637	27,442	43,254	156,418		22,223

To examine the first part of season structure motion Table 12 shows the reported catch (in net pounds) for each month from 2008-2013 in California, 2014 data is not included because it is not final at this time. This table also provides the cumulative monthly catch, which demonstrates

what percentage of the total catch across all years was landed in each month. The percent total catch shows of the total pounds landed between 2008-2013, what portion of those landings were made in each month, and finally the table shows average monthly catch from 2008-2013.

To examine the second portion of the motion for weekly catches Table 2 takes the monthly catches from Table 1 and divides each months catch by 4 to get a resulting weekly catch by year and by month, and also provides an average weekly catch estimate.

Table 13. Estimate of weekly catch in net weight, by month of Pacific halibut in California (monthly catch divided by four).

	2008	2009	2010	2011	2012	2013	Average Weekly
May	288	128	591	125	381	321	305
June	494	2650	223	789	1030	1355	1090
July	766	2005	2228	337	1342	3112	1631
Aug	1376	2829	2393	1293	3077	4795	2627
Sept	1611	1101	551	666	818	639	897
Oct	0	0	0	200	214	594	168

To examine catch per day estimates two methods are used in this report to provide daily catch estimates. The first in Table 14 below simply takes the monthly catches from Table 1 and divides each monthly catch by the number of days in each month to show an estimated daily catch and an average daily catch.

Table 14. Estimate of daily catch, in net pound, by month of Pacific halibut in California (monthly catch divided by number of days per month).

	2008	2009	2010	2011	2012	2013	Average Daily Catch
May (31 days)	37	16	76	16	49	41	39
June (30 days)	66	353	30	105	137	181	145
July (31 days)	99	259	287	43	173	401	211
August (31 days)	178	365	309	167	397	619	339
September (30 days)	54	147	73	89	109	85	93
October (31 days)	0	0	0	26	28	77	22

These tables can then be used to design a season structure that is projected to result in catches within the allocation, if allocation changes are made. Under a status quo allocation of 6,240 lbs., several season options are available, however, all options would be shorter than the current season structure of May-July and September-October. Using the status quo TAC, the allocation alternatives result in a California allocation from 14,040 to 23,400 lbs. There are ways a 15 or 30 day season could be designed using the catch per month, week, and day above. For example, using an allocation of 14,040 lbs. the Council could recommend a season that would be open for

three weeks in June and the month of August, this season would be estimated to catch 13,742 lbs. just under the low end of the range. At the higher allocations under a status quo TAC the California allocation of 23,400 could be accommodated with an open season May through October. This season is expected to catch an average of 22,223 lbs.

In addition to the simple methods described above Table 15 uses a slightly modified Puget Sound methodology to calculate a catch per day amount. The original methodology is described in Ad Hoc South of Humbug Pacific Halibut Workgroup Report (http://www.pcouncil.org/wp-content/uploads/F1b_ATT1_SHPHW_SEP2012BB.pdf).

Data Sources

NMFS used the harvest data from 2011-2013 reported by CDFW in the South of Humbug Pacific Halibut Workgroup Preliminary Management Measure Analyses (Agenda Item D.2.b, Workgroup Report, September 2013).

Average weight was estimated to be about 20 pounds, based on the CDFW reported weight in RecFIN and anecdotal information from California charter fishing operations and anglers.

Methods

NMFS used a slightly modified Washington Department of Fish and Wildlife (WDFW's) methodology to calculate the season length for the Puget Sound recreational halibut fishery as follows:

1. Divide subarea quota by average weight to approximate the number of fish available
2. Review past seasons to calculate the average number of fish caught per day in each of the last three years
3. Divide the approximate number of fish available by the average catch per day for the past three years to estimate the number of days available for the next season

This method is slightly different from the information presented in the WDFW report because we use 2011-2013 rather than the 2012-2014 data as is used in the WDFW report. Further, we adjusted our method slightly to use a three-year average catch per day based on the number of fishing days from 2011-2013, rather than the highest catch per day for the past five years. This is consistent with the number of years and average catch method used in the WDFW report at this Council meeting.

Results

We applied the revised method to the three TAC alternatives described above (720,000 lbs., 960,000 lbs, 1,480,000 lbs., and all of the allocation alternatives under the 960,000 lbs. status quo TAC) to estimate the season length. The following are the preliminary results of those calculations.

TAC/Alternative	CA allocation	Number of Fish	Number of Days
720k and Alt 1	14,040	702	92
960k and SQ	6,240	312	41
960K Alt 1, Alt 2, Alt 3	18,720	936	123
960K Alt 4	24,960	1,248	163
960K Alt 5	31,200	1,560	204
1,480k and Alt 2b	50,000	2,500	327

With a 960,000 lbs., TAC Alternatives 1-3 result in the same California allocation and are therefore listed in the same row. Through the 2013 fishery, the California sport fishery has been open 194 days. In 2014 the month of August was closed resulting in a season that was 153 days. Only the highest two alternatives result in open number of days that is greater than the most recent fishery.

Conclusion

These results show that in order to have a season projected to stay within the allocation closest to the recent catch around 20,000 lbs., the season would have to be reduced to between 123-163 days under an increased California allocation. Under the status quo TAC with status quo allocations, the season would have to be reduced to 41 days. Further, previous work by the South of Humbug Workgroup showing possible season structures is presented in Appendix B. This information may help the Council decide on any season structure changes to the California sport fishery.

Appendix A. All TAC alternatives applied to all allocation alternatives.

This appendix provide each TAC scenario with each allocation alternative and the optional maximums when appropriate.

Council approved range of non-treaty allocations changes.

	Status Quo	Alt 1 (TriState)	Alt 2 (TriState)				Alt 3 (GAP)		Alt 4 (GAP)		Alt 5 (GAP)	
			Option A		Option B		2A TAC ≤ 1 M. lb	Portion of 2A TAC > 1 M. lb	2A TAC ≤ 1 M. lb	Portion of 2A TAC > 1 M. lb	2A TAC ≤ 1 M. lb	Portion of 2A TAC > 1 M. lb
			2A TAC ≤ 1 M. lb	2A TAC > 1 M. lb	2A TAC ≤ 1 M. lb	Portion of 2A TAC > 1 M. lb						
WA Sport:	36.60%	36.60%	36.60%	36.60%	36.60%	18.5-25.9%	35.93%	35.60%	35.60%	35.27%	35.27%	34.93%
OR Sport:	30.70%	30.70%	30.70%	30.70%	30.70%	15.5-21.7%	30.03%	29.70%	29.70%	29.37%	29.37%	29.03%
CA Sport:	1.00%	3.00%	3.00%	4.00%	3.00%	30-50%	3.00%	4.00%	4.00%	5.00%	5.00%	6.00%
Commercial:	31.70%	29.70%	29.70%	28.70%	29.70%	16-22.4%	31.03%	30.70%	30.70%	30.37%	30.37%	30.03%

TAC Alternative 1: 720,000 lbs, this is the 2014 IPHC Blue Line amount. The Blue Line represents the 2A TAC as calculated by the IPHC applying the current apportionment methodology to each IPHC area.

	720,000 (2014 Blue Line)				
	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
WA Sport	171,288	171,288	168,152	166,608	165,064
OR Sport	143,676	143,676	140,540	138,996	137,452
CA sport	14,040	14,040	14,040	18,720	23,400
Commercial	138,996	138,996	145,220	143,676	142,132

TAC Alternative 2: Status Quo, 2014 TAC and resulting fishery allocations.

	960,000 (2014 Status Quo)				
	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
WA Sport	228,384	228,384	224,203	222,144	220,085
OR Sport	191,568	191,568	187,387	185,328	183,269
CA sport	18,720	18,720	18,720	24,960	31,200
Commercial	185,328	185,328	193,627	191,568	189,509

TAC Alternative 3: 1,283,333 lbs, this is the average of the 2A TACs from 2004-2009.

	Status Quo	Alt 1	Alt 2a	Alt 2b (CA 30%)	Alt 2b (CA 50%, 50k max)	Alt 2b (CA 50%, 75k max)	Alt 2b (CA 50%, no max)	Alt 3	Alt 4	Alt 5
WA Sport	305,305	305,305	305,305	285,599	295,126	271,971	271,971	299,108	296,356	293,584
OR Sport	256,089	256,089	256,089	239,514	247,618	228,096	228,096	249,892	247,140	244,369
CA sport	8,342	25,025	33,367	74,750	50,000	75,000	111,583	26,867	35,208	43,550
Commercial	264,431	247,747	239,406	234,303	241,423	259,100	222,517	258,234	255,481	252,710

TAC Alternative 4: 1,480,000 lbs, this is the 2004 2A TAC which is the highest 2A TAC between 2004-2014.

	Status Quo	Alt 1	Alt 2a	Alt 2b (CA 30%, no max)	Alt 2b (CA 30%, 50k max)	Alt 2b (CA 30%, 75k max)	Alt 2b (CA 50%, no max)	Alt 2b (CA 50%, 50k max)	Alt 2b (CA 50%, 75k max)	Alt 3	Alt 4	Alt 5 (no max)	Alt 5 (50k max)
WA Sport	352,092	352,092	352,092	318,708	341,803	318,708	295,620	342,808	295,620	344,617	341,442	338,237	338,695
OR Sport	295,334	295,334	295,334	267,254	286,626	267,254	247,910	287,694	247,910	287,859	284,684	281,479	281,865
CA sport	9,620	28,860	38,480	113,100	50,000	75,000	175,500	50,000	75,000	31,980	41,600	51,220	50,000
Commercial	304,954	285,714	276,094	262,938	282,941	301,038	242,970	281,499	343,470	297,479	294,304	291,099	291,473

Appendix B. Excerpts from South of Humbug Workgroup Reports.

California				
Month	Alt. 3a. May-July & Sept-Oct	Alt. 3b. May- July 15 & Sept-Oct	Alt. 3c. May- June & Aug- Sept	Alt. 3d. May- June & Sept-Oct
May	1,195	1,195	1,195	1,195
June	4,107	4,107	4,107	4,107
July	5,178	2,589		
Aug			8,616	
Sept	2,797	2,797	2,797	2,797
Oct	329	329		329
Total	13,607	11,018	16,716	8,429

Monthly predicted catch amount (net lbs) for CA (black cells = closed, gray = partially open month)

As with other analysis conducted in other sections of this report, no attempt was made to account for possible shifts or changes in angler behavior. The analysis makes no attempt to account for shifts in angler effort due to potential closed time periods, but it is very likely some level of shift would occur. While there are no data to estimate such a shift, the very potential for it makes it reasonable to state that the reductions noted are overestimates.

Alternative 5. Examine the potential for harvest reduction of other time and area closures off California

The Council requested that the Workgroup also consider any other alternatives deemed appropriate in reducing predicted catch amounts. With that in mind, the Workgroup investigated additional modifications to the season structure with the goal of reducing predicted catch amounts to recent years' allocation amounts.

Using the methodology and assumptions presented in Alternative 3, three additional season structure scenario alternatives (5a-c, below) were developed to evaluate open month combinations that would result in predicted catch amounts that are similar to the recent average subarea catch set aside (approximately 6,000 net pounds). Those seasons would be:

- Alternative 5a.—Open May and September-October
- Alternative 5b.—Open July and October
- Alternative 5c.—Open May-June and October

Table 7. Monthly and total catch (in pounds net weight) for Alternatives 5a-c, resulting in predicted catch amounts that are similar to the last few years' SOH subarea set aside. (Black cells indicate closed months).

California			
Month	Alt. 5a. May & Sept-Oct	Alt. 5b. July & Oct	Alt. 5c. May-June & Oct
May	1,195		1,195
June			4,107
July		5,178	
Aug			
Sept	2,797		
Oct	329	329	329
Total	4,321	5,507	5,632

For the California portion of the South of Humbug Mountain Subarea, similar to the subarea as a whole, only season structure alternatives 5a-c result in catches below the current subarea allocation.

Appendix C. Tables of Seasons, restrictions, and catches for 2A by subarea from 2003-2013

Washington Inside Waters

Seasons, restrictions, and catches of halibut in Washington Inside waters.						
YEAR	SEASON	BAG LIMIT	SIZE LIMIT	DAYS OPEN	QUOTA (lb)	ACTUAL CATCH (lb)
2003	Eastern Region: 5/8 - 7/18 (Thur - Mon)	1	none	52	63,278	68,300
	Western Region: 5/22 - 8/1 (Thur - Mon)	1	none	52		
2004	Eastern Region: 5/6 - 7/14 (Thur - Mon)	1	none	50	76,220	49,577
	Western Region: 5/27 - 8/14 (Thur - Mon)	1	none	58		
2005	Eastern Region: 4/14 - 6/20 (Thur - Mon)	1	none	50	64,800	62,370
	Western Region: 5/26 - 7/31 (Thur - Mon)	1	none	49		
2006	Eastern Region: 4/9 - 6/18 (Thur - Mon)	1	none	51	68,607	63,376
	Western Region: 5/25 - 8/5 (Thur - Mon)	1	none	53		
2007	Eastern Region: 4/9 - 6/16 (Thur - Mon)	1	none	49	65,562	45,415
	Western Region: 5/24 - 8/3 (Thur - Mon)	1	none	52		
2008	Eastern Region: 4/10 - 6/13 (Thur-Mon)	1	none	65	59,354	83,304

	Western Region: 5/22 – 7/21 (Thur-Mon)	1	none	61		
2009	Eastern Region: 4/23 – 6/5 (Thur-Mon)	1	none	54	57,393	114,050
	Western Region: 5/21-7/3 (Thur-Mon)	1	none	44		
2010	Eastern Region: 5/1-22 (Thur-Sat) 5/28-30 (Fri-Sun)	1	none	13	50,542	71,801
	Western Region: 5/28-30 (Fri-Sun) 6/3-6/19 (Thur-Sat)	1	none	12		
2011	Eastern Region: 5/5-5/29 (Thur-Sat)	1	none	12	58,155	45,856
	Western Region: 5/26-6/18 (Thur-Sat) 5/29 (Sun)	1	none	13		
2012	Eastern Region: 5/3-5/19 (Thu-Sat) 5/24-5/28 (Thu-Mon) 5/31-6/2 (Thu-Sat)	1	none	17	57,393	77,385
	Western Region: 5/24-5/28 (Thu-Mon) 5/31-6/23 (Thu-Sat)	1	none	17		
2013	Eastern Region: 5/2-5/4 & 5/16-5/18 (Thu-Sat) 5/23-5/26 (Thu-Sun) 5/30-5/31 (Thu-Fri)	1	none	12	57,393	95,351
	Western Region: 5/23-5/26 (Thu-Sun) 5/30-6/1 (Thu-Sat) 6/8 (Sat)	1	none	8		

Washington North Coast

Seasons, restrictions, and catches of halibut in the Washington North Coast area.

YEAR	SEASON	BAG LIMIT	SIZE LIMIT	DAYS OPEN	QUOTA (lb)	ACTUAL CATCH (lb)
2003	5/1 - 5/17 (Tue - Sat) 5/23 - 5/24 6/18 - 6/21 8/9	1	none	20	113,915	109,738
2004	5/11 - 5/20 (Tue - Sat) 5/29 6/15 - 6/19	1	none	14	126,857	124,229
2005	5/10 - 5/18 (Tue - Sat) 6/16, 6/18	1	none	9	115,437	108,149
2006	5/1 - 5/17 (Sun-Thurs), 5/1 - 5/17 (inshore)	1	none	13 <u>17</u> 17	53,952	58,484
2007	5/1 - 5/8 (Sun-Thurs), 5/1 - 5/8 (inshore)	1	none	6 <u>6</u> 6	116,199	114,489
2008	5/1 - 6/17 (Sun, Thurs) 6/23 - 8/30 (nearshore)	1	none	48 70	109,991	106,852
2009	5/3-5/12 (Sun, Tue) 5/17-6/28(Sun) Nearshore: 5/7-6/27 (Thur-Sat), 7/2-9/27 (Thur-Sun)	1	none	43	108,030	102,782

2010	5-13-5/22 (Thu-Sat) 6/3, 6/5, 6/19	1	none	9	101,179	95,014
2011	5/12-21 (Thu-Sat) 6/2,4,16,30	1	none	10	108,792	103,741
2012	5/10, 12, 17, 19, 31, 6/2, 14	1	none	7	108,030	105,479
2013	5/9, 11, 16, 18	1	none	4	108,030	107,856

Washington South Coast

Seasons, restrictions, and catches of halibut in the Washington South Coast subarea.							
YEAR	SEASON	BAG LIMIT	SIZE LIMIT	DAYS OPEN	QUOTA (lb)	ACTUAL CATCH (lb)	
2003	5/1 - 6/26 (Sun-Thurs),	1	none	41	48,623		
	6/27 - 9/30			97			
	5/1 - 9/30 (inshore)			<u>153</u>			<u>available amt.</u>
	Total			153			48,623
2004	5/2 - 7/3 (Sun-Thurs),	1	none	45	61,565		
	5/2 - 7/3 (inshore)			<u>63</u>	<u>available amt.</u>		
	Total			63	61,565	62,823	
2005	5/1 - 5/30 (Sun-Thurs),	1	none	30	50,146		
	5/1 - 5/30, 7/15-9/30 (inshore)			<u>108</u>	<u>available amt.</u>		
	Total			108	(57,034) ^{3/}	55,546	
2006	5/1 - 5/17 (Sun-Thurs),	1	none	13	53,952		
	5/1 - 5/17 (inshore)			<u>17</u>	<u>available amt.</u>		
	Total			17	53,952	58,483	

2007	5/1 – 5/8 (Sun-Thurs),	1	none	6	50,907	51,166
	5/1 – 5/8 (inshore)			<u>6</u>	<u>available amt.</u>	
	Total			6	50,907	
2008	5/1 – 6/17 (Sun, Thurs)	1	none	48	40,230	40,239
	6/23 – 8/30 (nearshore)			70	4,470	158
	Total				44,700	40,397
2009	5/3-5/12 (Sun, Tue)	1	none	43	42,739	39,595
	5/17-6/28(Sun)					
	Nearshore: 5/7-6/27 (Thur-Sat), 7/2-9/27 (Thur-Sun)					
2010	5/2-5/23 (Sun & Tue)	1	none	158	35,887	34,554
	5/3-9/30 (Nearshore, 7 days a week)					
2011	5/1-5/17 (Sun & Tue)	1	none	96	46,129	45,100
	5/3-7/31 (Nearshore, 7 days a week)					
2012	5/6, 8, 13, 15, 20	1	none	36	42,739	42,467
	5/6-6/8 (Nearshore, 7 days a week)					
2013	5/5, 7, 12, 14, 19	1	none	18	42,740	42,085
	5/5-5/19 (Nearshore, 7 days a week)					

Columbia River

Seasons, restrictions, and catches of halibut in the Columbia River subarea.						
YEAR	SEASON	BAG LIMIT	SIZE LIMIT	DAYS OPEN	QUOTA (lb)	ACTUAL CATCH (lb)
2003	5/1 - 9/30	1	32" ^{1/2}	153	11,923	10,008
2004	5/1 - 7/25	1	32" ^{1/2}	86	14,241	14,761
2005	5/1 - 6/12, 9/15-30	1	none	59	13,747	15,031

2006	5/1 – 5/27 (7 days/wk), 8/4 – 9/3 (Fri-Sun)	1	none	42	21,170	21,720
2007	5/1 – 5/26 (7 days/wk) 8/3 – 8/12, 8/24 - 8/26, 9/1 (Fri-Sun)	1	none	36	20,378	20,601
2008	5/1 – 6/1 (7 days/wk) 8/1, 2, 22, 23, 29	1	None	37	18,762	17,899
2009	5/1-5/29 (Fri-Sun) 8/7-9/27 (Fri-Sun)	1	None	37	15,735	12,738
2010	5/1-6/25 (Thu-Sat) 8/6-9/26 (Fri-Sun)	1	None	48	13,436	10,811
2011	5/5-6/4 (Thu-Sat) 8/5-9/30 (Fri-Sun)	1	None	40	15,418	11,278
2012	5/3-7/14 (Thu-Sat) 8/3-9/30 (Fri-Sun)	1	None	60	11,895	10,544
2013	5/3-7/28 (Fri-Sun) 8/2-9/30 (Fri-Sun)	1	None	52	11,895	10,152
1/ First halibut taken of 32" or greater in length						

Oregon Central Coast

Oregon sport seasons, days open, and catch.						
YEAR	SEASON	BAG LIMIT	SIZE LIMIT (inches)	TOTAL DAYS OPEN	QUOTA ^{1/} (lb)	ACTUAL CATCH (lb)
2003						
<i>North Central Coast</i>	5/1 - 10/31 (7days/wk) ^{1/}	1	32 ^{2/}	184	19,797	1,110
	5/8-10, 5/15-17, 6/19-21 8/1-2, 8/8-9	1	32 ^{2/}	9	156,835	88,385
	8/22-10/18 (Fri-Sat)	1	32 ^{2/}	22	57,660	60,751
<i>South Central Coast</i>					(125,815) ^{4/}	
	5/8-10, 5/15-17, 6/19-21 ^{3/}	1	32 ^{2/}	9	<u>14,609</u>	<u>14,904</u>
Total					248,901	165,150

Oregon sport seasons, days open, and catch.						
2004	5/1 - 10/31 (7days/wk) ^{5/}	1(2) ^{18/}	32 ^{2/}	184	22,574	2,022
<i>Central Coast</i>	5/13-15, 5/20-22, 5/27-29, 6/10-12, 6/25-26, 7/10, 7/24	1	32 ^{2/}	16	194,703	186,209
	8/6-7, 8/20-21, 9/3-4, 9/17-18 (Fri-Sat), 9/24-26, 10/1-3, 10/8-10, 10/15-17, 10/22-24, 10/29-31 (Fri-Sun)					
	Total	1(2) ^{6/}	32 ^{2/}	26	<u>(73,395)^{7/}</u>	<u>38,144</u>
					282,178	226,375
2005	5/1 - 10/17 (7days/wk) ^{5/}	1	none	170	(10,101) ^{9/}	5,540
<i>Central Coast</i>	5/12-14, 5/19-21, 6/2-4, 6/9-11, 6/30-7/2, 7/14-16, 7/28-30 (Thu-Sat)	1	none	21	(165,239) ^{10/}	165,239
	8/5-7, 8/12-14, 8/19-21, 8/26-28, 9/2-4, 9/9-11, 9/16-18, 9/23-25, 9/30-10/2, 10/7-9, 10/14-16, 10/21-23, 10/28-30 (Fri-Sun) ^{1/}					
	Total	1	none	39	<u>(69,924)^{8/}</u>	64,293
					(245,264) ^{8/}	235,071

Oregon sport seasons, days open, and catch.						
2006	5/1 – 9/21 (7days/wk) ^{5/}	1	none	144	(10,345) ^{11/}	8,419
<i>Central Coast</i>	5/11-13, 5/18-20, 5/25-27, 6/1-3, 6/8-10, 6/22-24, 7/6-8 (Thu-Sat)	1	none	21	(183,690) ^{11/}	183,690
	8/4-6, 8/18-20, 9/1-3, (every other week Fri-Sun), 9/8-10,9/15-17(Fri-Sun) ^{24/}					
	Total	1(2) ^{12/}	none	15	(60,275) ^{11/}	65,859
					254,310	257,968
2007	5/1 – 9/20 (7days/wk) ^{5/}	1	none	143	19,738	8,600
<i>Central Coast</i>	5/10-12, 5/17-19, 5/24-26, 5/31-6/2, 6/7-9, 6/21-23, 7/5-7, 7/19-21 (Thu-Sat)	1	none	24	(133,090) ^{13/}	133,090
	8/3-5 (every other week Fri-Sun), 8/10-12, 8/17-19, 8/24-26, 8/31-9/2, 9/7-9, 9/14-16 (Fri-Sun) ^{26/}					
	Total	1(2) ^{14/}	none	21	(93,899) ^{13/}	122,636
					246,727	264,326

Oregon sport seasons, days open, and catch.						
2008	5/1 – 9/28 (7 days/wk) ^{5/}	1	None	151	18,502	11,610
<i>Central Coast</i>	5/8-10, 15-17, 22-23, 29-31, 6/12-14, 26-28, 7/10-12, 24-26	1	None	23	159,557	119,656 ^{28/}
	8/1-3, 8-10. 15-17, 22-24, 29-31	1		15	93,113 ^{16/}	93,619
	9/13, 14, 20, 21			4		
	9/27	2 ^{15/}		1		
	Total	1				231,271
2009	5/1-8/9 (7 days/week) ^{5/}	1	None	101	14,407	8,227
	5/14-16, 21-23. 28-30, 6/4-6. 18-20, 7/2-4			18	124,261	122,403
	8/7-9			3	43,278 ^{17/}	52,330
2010	5/1-7/17 (7 days/week) ^{5/}			78	12,284	12,927
	5/13-15, 20-22, 6/3-5			9	105,948	112,500
	8/6-7			2	28,765 ^{18/}	30,140

Oregon sport seasons, days open, and catch.						
2011	5/1-7/6, 8/13-10/31 (7 days/week) ^{5/}			147	26,945 ^{19/}	24,451
	5/12-14, 26-28, 6/2-4, 9-11, 23-25			15	115,578	114,752
	8/5-6			2	41,843 ^{19/}	30,807
2012	5/1-6/22 (7 days a week), 9/24-10/31 ^{5/}			122	37,800	37,413
	5/10-12, 17-19, 24-26, 5/31-6/2, 14-16, 29-30			17	120,821 ^{20/}	111,269
	8/3-4, 17-18			4	47,639	42,853
2013	5/2-7-26 (Thu-Sat) ^{5/}			38	23,038	22,248
	5/9-11, 16-18, 5/30-6/1, 6-8, 20-22			16	120,947	145,167
	8/2-3			2	24,565 ^{21/}	27,069

1/ This season applies to the area inside 30 fathoms.

2/ First halibut taken of 32" or greater in length

3/ Beginning in 2000, the inside-30-fathom fishery was combined for the North Central and South Central Coast subareas. Catch and number of open days reported under North Central subarea.

4/ The balance of halibut remaining from the May all-depth fishery in the North Central and South Central subareas, 68,155 lbs, was added to the August all-depth fishery quota of 57,660 lbs to get a revised quota of 125,815 lbs.

5/ This season applies to the area inside 40 fathoms.

6/ The bag limit changed from 1 fish to 2 fish per person on 9/22/04.

7/ The balance of halibut remaining from the Spring all-depth fishery, 8,494 lb, was added to the Summer all-depth fishery quota of 64,901 lb to get a revised quota of 73,395 lb.

8/ The balance of halibut remaining from the Spring all-depth fishery, 8,133 lb, plus 10,000 lb from the inside 40-fm fishery, was added to the Summer all-depth fishery quota of 57,791 lb, and then 6,000 lb was transferred to the Columbia River subarea to get a revised Summer all-depth fishery quota of 69,924 lb. Because 6,000 lb was transferred to the Columbia River subarea, the Central Coast subarea quota is reduced from 251,264 lb to 245,264 lb.

9/ 10,000 lb of halibut quota was transferred from the original 20,101 lb inside 40-fm fishery quota to the Summer all-depth fishery quota to get a revised quota of 10,101 lb.

10/ 8,133 lb of halibut quota was transferred from the original 173,372 lb Spring all-depth fishery quota to the Summer all-depth fishery quota to get a revised quota of 165,239 lb.

- 11/ The Spring all-depth fishery overage of 8,216 lb was deducted from the amount available to the Summer all-depth fishery, revising the initial quota available to 50,275 lb. On 9/6/06, 10,000 lb was transferred from the inside 40-fm fishery to the Summer all-depth fishery bringing the revised inside 40-fm quota to 10,345 lb and the revised Summer all-depth quota to 60,275 lb.
- 12/ Beginning 9/8/06, the Summer all-depth fishery opened every Friday-Sunday with a two-fish bag limit because the remaining quota for the combined all-depth and inside 40-fm fishery was 31,267 lb (i.e., greater than 30,000 lb after September 3, as stated in the Plan and regulations).
- 13/ The Spring all-depth fishery was under its quota of 170,242 lb by 37,152 lb. The initial Summer all-depth season quota of 56,747 lb was revised by the 37,152 lb remaining from the Spring fishery. As a result, 93,899 lb was initially available to the Summer all-depth fishery.
- 14/ Beginning 8/10/07, the Summer all-depth fishery opened every Friday-Sunday because the remaining quota for the combined all-depth and inside 40-fm fishery was 94,707 lb (i.e., greater than 60,000 lb after August 5, as stated in the Plan and regulations). Beginning 9/14/07, the Summer all-depth fishery was changed from a one-fish to a two-fish bag limit with the intent that the subarea quota be taken by September 30, in accordance with the CSP and regulations.
- 15/ Beginning 9/13/08 the fishery operated under a 2 fish bag limit because the remaining quota was greater than 60,000 after August 5, as stated in the CSP and regulations.
- 16/ The remaining quota of 39,921 was added to the pounds available to the Summer all-depth fishery.
- 17/ The initial Summer all-depth season quota of 41,420 lb was revised by the 1,858 lb remaining from the Spring fishery. As a result, 43,278 lb was initially available to the Summer all-depth fishery.
- 18/ The original summer quota of 35,316lb was reduced to 28,756lb due to a 6,552 overage in the Spring fishery.
- 19/ The initial Summer all-depth season quota of 43,126 lbs was revised by the 826 lbs underage from the Spring fishery and the 2,108 lbs overage from the early part of the Nearshore fishery. As a result, 41,843 lbs was initially available to the Summer all-depth fishery. The Summer all-depth fishery was open August 5-6 (Friday-Saturday) and resulted in an estimated catch of 30,807 lbs. The fishery was closed on August 7. The remaining 11,037 lbs were added to the nearshore fishery quota resulting in a revised nearshore quote of 24,837 lbs. (the initial 13,800 lbs. plus the 11,037 from the Summer all-depth rollover). The nearshore fishery is still open at the briefing book deadline and is expected to remain open until October 31.
- 20/ The spring all depth underage was allocated 5,000 lbs to the inside 40-fathom fishery and 4,552 to the summer all depth fishery. However, because the final inside 40-fathom fishery landed 4,858 lbs over the revised quota this amount was taken from the summer all depth.
- 21/ The nearshore fishery closed with a 790 lb underage which was added to the summer quota, the Spring fishery closed with a 24,220 overage which was subtracted from the Summer quota, leaving 24,565 lb available to the Summer fishery.

South of Humbug Mountain, OR and off California

South of Humbug, Oregon, and California sport seasons, days open, and catch.						
YEAR	SEASON	BAG LIMIT	SIZE LIMIT (inches)	TOTAL DAYS OPEN	QUOTA (lb)	ACTUAL CATCH (lb)
2003	5/1 - 9/30 (7 days/wk)	1	32	153	7,860	
2004	5/1 - 10/31 (7 days/wk.)	1	32	184	8,911	45
2005	5/1 - 10/31 (7 days/wk)	1	None	184	7,984	836
2006	5/1 - 10/31 (7 days/wk)	1	None	184	8,293	3,977
2007	5/1 - 10/31 (7 days/wk)	1	None	184	8,045	5,427
2008	5/1 - 10/31 (7 days/wk)	1	None	184	7,541	14,040
2009	5/1 - 10/31 (7 days/wk)	1	None	184	5,872	36,704
2010	5/1 - 10/31 (7 days/wk)	1	None	184	5,007	25,401
2011	5/1 - 10/31 (7 days/wk)	1	None	184	5,625	24,203
2012	5/1 - 10/31 (7 days/wk)	1	None	184	6,056	30,254
2013	5/1 - 10/31 (7 days/wk)	1	None	184	6,063	50,229

Non-tribal commercial fishery

Non-tribal commercial fishery catch statistics (dressed weight in pounds).				
Year	Fishery	Quota	Catch	Days Open
2004	Directed	252,475	246,000	4
	Incidental – Salmon	44,554	42,798	90
	Incidental – Sable	70,000	67,837	184
2005	Directed	226,203	236,000	4
	Incidental – Salmon	39,918	42,110	99
	Incidental – Sable	70,000	68,013	176
2006	Directed	234,960	236,000	3
	Incidental – Salmon	41,464	34,375	199
	Incidental – Sable	70,000	64,624	184
2007	Directed	227,955	224,515	4
	Incidental – Salmon	43,667	23,446	199
	Incidental – Sable	70,000	45,780	184
2008	Directed	213,238	22,590	4
	Incidental – Salmon	37,707	18,960	199
	Incidental - Sablefish	70,000	39,728	184
2009	Directed	166,385	177,800	2
	Incidental – Salmon	29,362	11,310	199
	Incidental - Sablefish	11,895	5,415	184
2010	Directed	141,865	132,560	1
	Incidental – Salmon	25,035	28,627	47
	Incidental - Sablefish	n/a	n/a	n/a
2011	Directed	159,380	168,130	2
	Incidental – Salmon	28,126	25,753	166
	Incidental - Sablefish	n/a	n/a	n/a
2012	Directed	173,216	179,000	2
	Incidental – Salmon	30,568	35,255	64
	Incidental - Sablefish	21,173	5,010	184
2013	Directed	173,390	173,000	2
	Incidental – Salmon	30,600	30,388	102
	Incidental - Sablefish	21,410	12,000	184