


## West Coast Groundfish, Shorebased IFQ Program First look at 2014

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### 1. Data used

Data from the National Marine Fisheries Service's Shorebased IFQ Vessel Accounts Database (VA) were used for this report, queried March 9, 2015. Trips were defined as vessel-days, and whiting trips consisted of 50 percent or more whiting, by weight of total catch.

### 2. Effort, catch per unit effort, and participation

Effort, as the number of non-whiting trips per month in 2014 is compared with monthly averages over 2011-2013 in Figure 1. January trip counts and catch per trip were unusually high; 71 percent and 26 percent higher than average respectively, coinciding with high catch of Dover Sole, Longspine Thornyhead, and Petrale Sole. Winter catch of Petrale sole has been climbing since 2013, especially during January and February. This pattern continues into 2015. Monthly values for other species are very similar to average. Trip counts were very similar in February and March to previous years, and tended to be lower than average for the rest of the year. Monthly catch per trip (Figure 2) tended to be equal or higher than average during 2014; it was higher mainly during winter months.

The total number of vessels with catch declined slightly during 2014, to 102 from 103 in 2013 (Table 1A), showing a loss of six vessels since the start of the program in 2011. Annual vessel counts were slightly lower after filtering for non-whiting vessels that caught 10,000 pounds or more each year, and whiting vessels that caught 100,000 pounds or more (Table 1B). During January February and March of 2014, vessel counts were higher than previous IFQ years, then they were lower than average during the rest of 2014 (Table 1C, Figure 3).

### 3. Catch and attainment

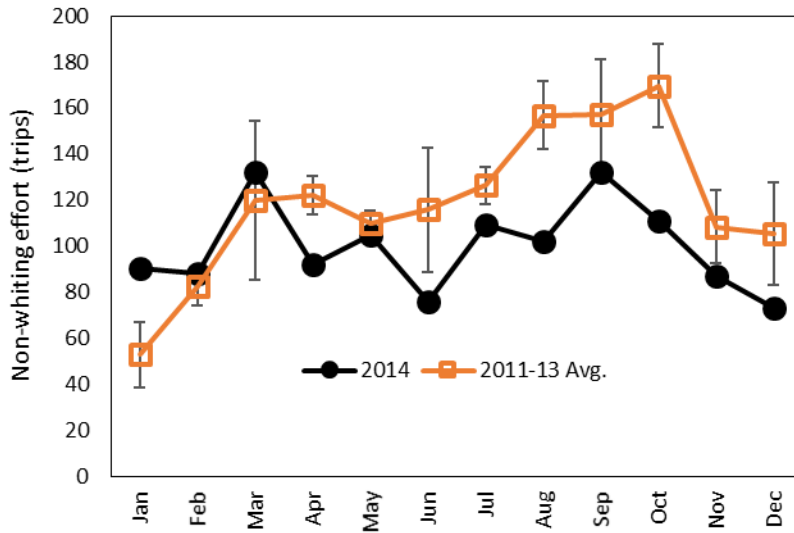
Annual catch and attainment are summarized in Table 2. For the most part, previous catch and attainment trends continued. Petrale Sole, northern Sablefish and Pacific Whiting showed the highest attainment, at 97, 95, and 83 percent respectively. Whiting attainment was lower than usual, although the shoreside allocation (and U.S. TAC) was the highest in many years, at more than 263 million pounds, compared with 216 million pounds in 2013.

Widow rockfish catch was up 59 percent from 2013 to 2014, and attainment was up 25 percent; both catch and the allocation have been rising since 2011. Catch of Yellowtail Rockfish, allocation size, and attainment all jumped in 2014; attainment was up 13 percent, from 27 percent in 2013 to 40 percent in 2014. Chilipepper rockfish catch, allocation, and attainment were all down slightly; 2014 attainment was seven percent lower than 2013. Catch of Arrowtooth Flounder dropped 18 percent, while Starry Flounder catch was up four fold from 2013, at its highest level since the program started. While attainment of southern Sablefish increased from 15 to 32 percent, it remained dramatically lower than its northern counterpart.

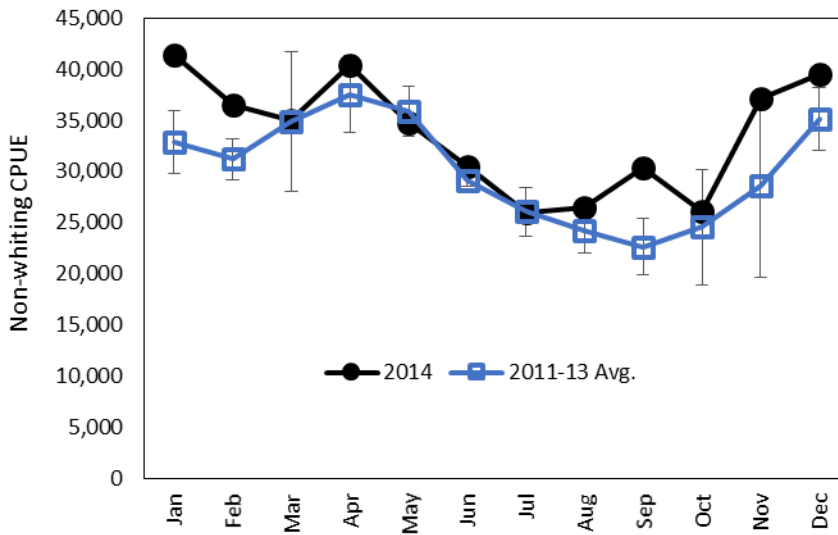
Catch of each species category during 2014 is shown divided between non-whiting and whiting trips in Table 3.

#### 4. Retention rates

Overall, retention rates remained high, with two thirds of the species categories continuing to show retention rates at 90 percent or higher. The aggregate retention rate for all species but Pacific Whiting was 93.7 percent in 2014, down 1.3 percent from 2013; the annual average rate remained at just over 95 percent (2011-2014). Retention of Pacific Whiting, which has by far the highest weight of removals in the fishery, remained steady at 99.3 percent, essentially unchanged over the past four years. Arrowtooth flounder retention was down ten points from 81 to 71 percent, to its lowest level in four years. Northern minor shelf rockfish retention dropped 15 points from 77 to 61 percent, its lowest level in four years as well. At the same time, southern Minor Shelf Rockfish retention rose by 14 percent from 12 to 26 percent, its highest level under the program.



**Figure 1.** Monthly non-whiting effort (number of trips) for 2014 (black dots) compared with the annually averaged monthly values for 2011-2013 (orange open squares). Whiskers represent plus and minus one standard deviation. Source: NMFS IFQ Vessel Account Database.



**Figure 2.** Monthly non-whiting catch per unit effort (total catch per trip) for 2014 (black dots), compared with the annually averaged monthly values for 2011-2013 (blue open squares). Whiskers represent plus and minus one standard deviation. Source: NMFS IFQ Vessel Account Database.

**Table 1.** Annual counts of participating vessels in the shorebased IFQ fishery; A. by trip type (all, non-whiting, and whiting), B. counts of vessels catching 10,000 pounds or more per year on non-whiting trips, or 100,000 pounds per year on whiting trips, C. monthly counts of vessels making non-whiting trips. Source: NMFS IFQ Vessel Account Database.

**A.**

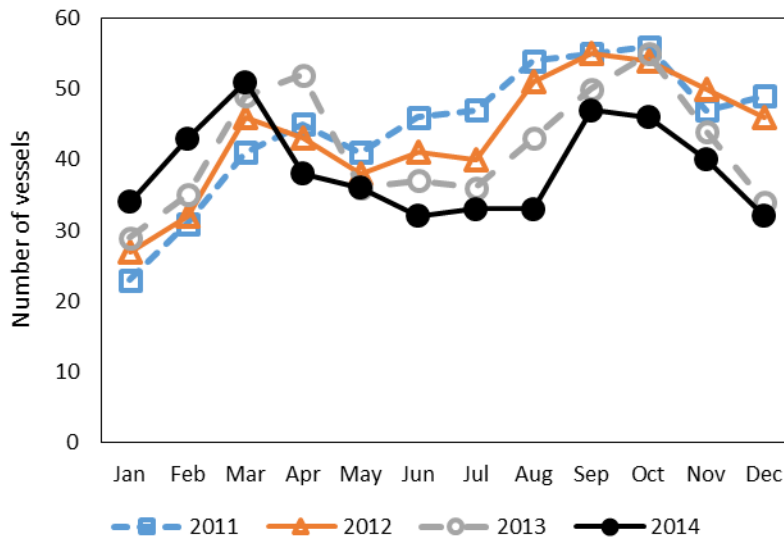
Year	All	Non-whiting	Whiting
2011	108	94	26
2012	106	89	25
2013	103	86	24
2014	102	85	25

**C.**

Month	2011	2012	2013	2014
Jan	23	27	29	34
Feb	31	32	35	43
Mar	41	46	49	51
Apr	45	43	52	38
May	41	38	36	36
Jun	46	41	37	32
Jul	47	40	36	33
Aug	54	51	43	33
Sep	55	55	50	47
Oct	56	54	55	46
Nov	47	50	44	40
Dec	49	46	34	32

**B.**

Year	All	Non-whiting	Whiting
2011	106	92	26
2012	105	88	25
2013	98	81	24
2014	95	78	25



**Figure 3.** Monthly counts of participating vessels making non-whiting trips for 2011-2014. Source: NMFS IFQ Vessel Account Database.

**Table 2.** Shorebased IFQ catch, allocations, and attainment for 2011-2014 by species/area category (non-whiting and whiting trips combined). Trend columns illustrate interannual trends in each variable. Source: NMFS IFQ Vessel Account Database. Surplus carryover pounds are not included in allocation values.

Species	Catch 2011	Catch 2012	Catch 2013	Catch 2014	Catch trend /b	Allocation 2011	Allocation 2012	Allocation 2013	Allocation 2014	Allocation trend /b	Attain 2011	Attain 2012	Attain 2013	Attain 2014	Attain trend /c
Arrowtooth flounder	5,575,919	5,478,557	5,344,110	3,865,068	▣▣▣▣	27,406,105	20,861,131	8,479,264	7,643,603	▣▣▣▣	20%	26%	63%	51%	▣▣▣▣
Bocaccio rockfish South of 40°10' N.	11,715	19,461	28,332	19,745	▣▣▣▣	132,277	132,277	165,126	174,165	▣▣▣▣	9%	15%	17%	11%	▣▣▣▣
Canary rockfish	8,121	15,944	22,516	23,270	▣▣▣▣	57,100	57,761	87,964	90,610	▣▣▣▣	14%	28%	26%	26%	▣▣▣▣
Chilipepper rockfish South of 40°10' N.	688,187	642,329	870,774	688,447	▣▣▣▣	3,252,370	2,934,904	2,423,983	2,352,883	▣▣▣▣	21%	22%	36%	29%	▣▣▣▣
Cowcod South of 40°10' N.	39	204	486	436	▣▣▣▣	3,968	3,968	2,205	2,205	▣▣▣▣	1%	5%	22%	20%	▣▣▣▣
Darkblotched rockfish	200,256	197,801	256,443	215,773	▣▣▣▣	552,997	548,808	587,976	613,789	▣▣▣▣	36%	36%	44%	35%	▣▣▣▣
Dover sole	17,269,399	16,015,666	17,568,179	14,381,547	▣▣▣▣	49,018,682	49,018,682	49,018,682	49,018,682	▣▣▣▣	35%	33%	36%	29%	▣▣▣▣
English sole	302,936	320,492	489,717	523,876	▣▣▣▣	41,166,808	21,037,611	14,032,486	11,598,189	▣▣▣▣	1%	2%	3%	5%	▣▣▣▣
Lingcod	639,133	839,006	784,635	571,265	▣▣▣▣	4,107,873	3,991,800	3,785,298	3,592,323	▣▣▣▣	16%	21%	21%	16%	▣▣▣▣
Longspine thornyheads North of 34°27' N.	2,119,794	2,010,232	2,399,700	1,982,592	▣▣▣▣	4,334,839	4,219,648	4,100,267	3,993,453	▣▣▣▣	49%	48%	59%	50%	▣▣▣▣
Minor shelf rockfish North of 40°10' N.	34,206	88,231	65,614	75,159	▣▣▣▣	1,150,813	1,150,813	1,119,948	1,119,948	▣▣▣▣	3%	8%	6%	7%	▣▣▣▣
Minor shelf rockfish South of 40°10' N.	6,633	28,522	44,443	21,403	▣▣▣▣	189,598	189,598	178,574	178,574	▣▣▣▣	3%	15%	25%	12%	▣▣▣▣
Minor slope rockfish North of 40°10' N.	319,866	485,325	430,890	407,150	▣▣▣▣	1,828,779	1,828,779	1,712,835	1,740,285	▣▣▣▣	17%	27%	25%	23%	▣▣▣▣
Minor slope rockfish South of 40°10' N.	113,337	271,674	258,778	218,445	▣▣▣▣	831,958	831,958	829,181	834,736	▣▣▣▣	14%	33%	31%	26%	▣▣▣▣
Other flatfish	1,527,766	1,511,844	1,766,544	1,855,702	▣▣▣▣	9,253,683	9,253,683	9,236,501	9,245,746	▣▣▣▣	17%	16%	19%	20%	▣▣▣▣
Pacific cod	556,691	873,698	339,606	366,036	▣▣▣▣	2,502,247	2,502,247	2,480,830	2,483,309	▣▣▣▣	22%	35%	14%	15%	▣▣▣▣
Pacific halibut (IBQ) North of 40°10' N.	70,830	100,656	72,649	60,664	▣▣▣▣	257,524	232,856	236,660	236,660	▣▣▣▣	28%	43%	31%	26%	▣▣▣▣
Pacific ocean perch North of 40°10' N.	101,433	117,900	107,945	89,674	▣▣▣▣	263,148	263,441	241,241	247,535	▣▣▣▣	39%	45%	45%	36%	▣▣▣▣
Pacific whiting /d	200,475,185	144,893,699	215,449,259	217,631,540	▣▣▣▣	204,628,442	151,373,798	216,707,790	263,309,103	▣▣▣▣	98%	96%	99%	83%	▣▣▣▣
Petrale sole	1,789,627	2,323,748	4,699,603	5,105,269	▣▣▣▣	1,920,226	2,324,995	5,110,315	5,242,593	▣▣▣▣	93%	100%	92%	97%	▣▣▣▣
Sablefish North of 36° N.	5,265,740	4,948,883	4,077,870	4,158,056	▣▣▣▣	5,613,719	5,438,797	4,030,050	4,382,790	▣▣▣▣	94%	91%	101%	95%	▣▣▣▣
Sablefish South of 36° N.	1,009,286	503,511	200,064	454,542	▣▣▣▣	1,170,390	1,133,352	1,327,800	1,439,839	▣▣▣▣	86%	44%	15%	32%	▣▣▣▣
Shortspine thornyheads North of 34°27' N.	1,574,518	1,568,716	1,824,537	1,509,605	▣▣▣▣	3,156,138	3,120,533	3,054,183	3,025,822	▣▣▣▣	50%	50%	60%	50%	▣▣▣▣
Shortspine thornyheads South of 34°27' N.	18,653	803	8,150	6,040	▣▣▣▣	110,231	110,231	110,231	110,231	▣▣▣▣	17%	1%	7%	5%	▣▣▣▣
Splitnose rockfish South of 40°10' N.	88,523	130,462	101,757	148,024	▣▣▣▣	3,045,245	3,206,513	3,346,838	3,472,501	▣▣▣▣	3%	4%	3%	4%	▣▣▣▣
Starry flounder	25,936	18,404	7,705	32,472	▣▣▣▣	1,471,586	1,480,404	1,656,774	1,665,592	▣▣▣▣	2%	1%	0%	2%	▣▣▣▣
Widow rockfish	303,596	340,320	907,503	1,441,850	▣▣▣▣	755,348	755,352	2,191,016	2,191,020	▣▣▣▣	40%	45%	41%	66%	▣▣▣▣
Yelloweye rockfish	128	76	139	123	▣▣▣▣	1,323	1,323	2,205	2,205	▣▣▣▣	10%	6%	6%	6%	▣▣▣▣
Yellowtail rockfish North of 40°10' N.	1,626,463	2,196,162	1,586,357	2,565,377	▣▣▣▣	6,821,455	6,850,556	5,809,905	6,479,055	▣▣▣▣	24%	32%	27%	40%	▣▣▣▣
Sum without whiting	41,248,731	41,048,627	44,265,046	40,787,610	▣▣▣▣	170,376,430	143,482,021	125,358,338	123,178,343	▣▣▣▣	24%	29%	35%	33%	▣▣▣▣
Sum all	241,723,916	185,942,326	259,714,305	258,419,150	▣▣▣▣	375,004,872	294,855,819	342,066,128	386,487,446	▣▣▣▣	64%	63%	76%	67%	▣▣▣▣

a/ Lingcod N. and S. were combined for comparison across all years.

b/ Catch trend and allocation trend columns are not standardized among species trends, differences may appear exaggerated to illustrate trend.

c/ Attainment trend column is comparable among species, it is on a 0-100% scale.

d/ Whiting allocations include reapportioned pounds.

**Table 3.** Shorebased IFQ catch during 2014 by trip type and species/area category. Surplus carryover pounds are not included allocation values.

Species	Non-whiting	Non-whiting % of allocation	Whiting	Whiting % of allocation	Sector allocation
Arrowtooth flounder	3,851,115	50.4%	13,953	0.2%	7,643,603
Bocaccio rockfish South of 40°10' N.	19,745	11.3%		0.0%	174,165
Canary rockfish	17,597	19.4%	5,673	6.3%	90,610
Chilipepper rockfish South of 40°10' N.	688,447	29.3%		0.0%	2,352,883
Cowcod South of 40°10' N.	436	19.8%		0.0%	2,205
Darkblotched rockfish	197,794	32.2%	17,979	2.9%	613,789
Dover sole	14,381,293	29.3%	254	0.0%	49,018,682
English sole	523,870	4.5%	6	0.0%	11,598,189
Lingcod North of 40°10' N.	509,911	20.0%	20,079	0.8%	2,546,670
Lingcod South of 40°10' N.	41,275	3.9%		0.0%	1,045,653
Longspine thornyheads North of 34°27' N.	1,982,537	49.6%	55	0.0%	3,993,453
Minor shelf rockfish North of 40°10' N.	72,185	6.4%	2,974	0.3%	1,119,948
Minor shelf rockfish South of 40°10' N.	21,403	12.0%		0.0%	178,574
Minor slope rockfish North of 40°10' N.	327,105	18.8%	80,045	4.6%	1,740,285
Minor slope rockfish South of 40°10' N.	218,445	26.2%		0.0%	834,736
Other flatfish	1,853,310	20.0%	2,392	0.0%	9,245,746
Pacific cod	365,640	14.7%	396	0.0%	2,483,309
Pacific halibut (IBQ) North of 40°10' N.	57,842	24.4%	2,822	1.2%	236,660
Pacific ocean perch North of 40°10' N.	66,770	27.0%	22,904	9.3%	247,535
Pacific whiting	537,449	0.2%	217,094,091	82.4%	263,309,103
Petrале sole	5,105,210	97.4%	59	0.0%	5,242,593
Sablefish North of 36° N.	4,146,522	94.6%	11,534	0.3%	4,382,790
Sablefish South of 36° N.	454,542	31.6%		0.0%	1,439,839
Shortspine thornyheads North of 34°27' N.	1,504,958	49.7%	4,647	0.2%	3,025,822
Shortspine thornyheads South of 34°27' N.	6,040	5.5%		0.0%	110,231
Splitnose rockfish South of 40°10' N.	148,024	4.3%		0.0%	3,472,501
Starry flounder	32,472	1.9%		0.0%	1,665,592
Widow rockfish	787,884	36.0%	653,966	29.8%	2,191,020
Yelloweye rockfish	120	5.4%	3	0.1%	2,205
Yellowtail rockfish North of 40°10' N.	1,882,941	29.1%	682,436	10.5%	6,479,055
Sum	39,802,882	-	218,616,268	-	386,487,446



**Table 4.** Annual retention rates for the Shorebased IFQ Program during 2011-2014 by species/area category, average annual retention rates and standard deviation values. Source: NMFS IFQ Vessel Account Database. The trend column illustrates interannual trends in retention for each species.

Species	Retention 2011	Retention 2012	Retention 2013	Retention 2014	Trend retention	Average annual retention	Standard deviation
Arrowtooth flounder	90.2%	91.5%	81.3%	71.3%	■ ■ ■ ■ ■	83.6%	9.3%
Bocaccio rockfish South of 40°10' N.	99.8%	99.9%	99.9%	96.4%	■ ■ ■ ■ ■	99.0%	1.7%
Canary rockfish	96.1%	99.4%	99.3%	99.3%	■ ■ ■ ■ ■	98.5%	1.6%
Chilipepper rockfish South of 40°10' N.	92.0%	81.8%	81.5%	87.9%	■ ■ ■ ■ ■	85.8%	5.1%
Cowcod South of 40°10' N.	82.1%	90.2%	98.8%	98.6%	■ ■ ■ ■ ■	92.4%	8.0%
Darkblotched rockfish	98.1%	97.0%	97.7%	91.8%	■ ■ ■ ■ ■	96.2%	3.0%
Dover sole	98.0%	98.9%	98.7%	98.0%	■ ■ ■ ■ ■	98.4%	0.5%
English sole	78.7%	79.0%	89.0%	80.1%	■ ■ ■ ■ ■	81.7%	4.9%
Lingcod	86.0%	92.1%	93.2%	91.5%	■ ■ ■ ■ ■	90.7%	3.2%
Longspine thornyheads North of 34°27' N.	94.7%	95.5%	96.8%	95.4%	■ ■ ■ ■ ■	95.6%	0.9%
Minor shelf rockfish North of 40°10' N.	81.0%	83.7%	77.1%	61.6%	■ ■ ■ ■ ■	75.8%	9.9%
Minor shelf rockfish South of 40°10' N.	5.4%	4.1%	12.0%	26.1%	■ ■ ■ ■ ■	11.9%	10.1%
Minor slope rockfish North of 40°10' N.	90.1%	91.3%	86.6%	85.7%	■ ■ ■ ■ ■	88.4%	2.7%
Minor slope rockfish South of 40°10' N.	97.7%	96.6%	96.2%	97.6%	■ ■ ■ ■ ■	97.0%	0.7%
Other flatfish	82.3%	85.4%	87.1%	79.9%	■ ■ ■ ■ ■	83.7%	3.2%
Pacific cod	100.0%	99.8%	99.7%	99.7%	■ ■ ■ ■ ■	99.8%	0.1%
Pacific halibut (IBQ) North of 40°10' N.	1.1%	1.5%	4.3%	4.9%	■ ■ ■ ■ ■	3.0%	1.9%
Pacific ocean perch North of 40°10' N.	99.1%	97.7%	97.9%	96.5%	■ ■ ■ ■ ■	97.8%	1.1%
Pacific whiting	99.2%	99.5%	99.3%	99.3%	■ ■ ■ ■ ■	99.3%	0.1%
Petrale sole	98.0%	98.9%	99.0%	99.0%	■ ■ ■ ■ ■	98.7%	0.5%
Sablefish North of 36° N.	99.0%	98.7%	99.0%	98.4%	■ ■ ■ ■ ■	98.8%	0.3%
Sablefish South of 36° N.	98.6%	98.5%	95.6%	96.9%	■ ■ ■ ■ ■	97.4%	1.4%
Shortspine thornyheads North of 34°27' N.	99.1%	99.0%	99.0%	98.6%	■ ■ ■ ■ ■	98.9%	0.2%
Shortspine thornyheads South of 34°27' N.	97.4%	91.2%	98.6%	90.0%	■ ■ ■ ■ ■	94.3%	4.3%
Splitnose rockfish South of 40°10' N.	23.8%	32.9%	30.4%	26.4%	■ ■ ■ ■ ■	28.4%	4.0%
Starry flounder	94.0%	96.6%	91.8%	92.6%	■ ■ ■ ■ ■	93.8%	2.1%
Widow rockfish	91.4%	100.0%	99.2%	99.3%	■ ■ ■ ■ ■	97.5%	4.1%
Yelloweye rockfish	91.4%	100.0%	98.6%	98.4%	■ ■ ■ ■ ■	97.1%	3.9%
Yellowtail rockfish North of 40°10' N.	100.0%	100.0%	100.0%	100.0%	■ ■ ■ ■ ■	100.0%	0.0%
Sum without whiting	95.6%	96.1%	95.0%	93.7%	■ ■ ■ ■ ■	95.1%	1.0%