#### IV. SUMMARY COST AND REVENUE DATA

Summary cost and revenue data are presented in two subsections below – one each for California and Oregon. As different survey instruments were used, the data in IV.A are not directly comparable to those in IV.B.

### IV.A. California

### California Costs by Operational Configuration

The top three expenditures by OC are given in Table 7. Vessel and gear repairs/ maintenance tend dominate the fixed cost categories, while crew wages and fuel are the largest expenses for variable costs. It is notable that fixed costs have higher percentages in the Salmon and the Salmon Albacore OCs, while variable costs (particularly crew wages) are higher for the Salmon and Dungeness OCs.

		Top Thre	ee Costs	
		% of		% of
<b>Operational Configuration</b>	Fixed Cost	Total	Variable Cost	Total
Salmon	Other Gear Purchase	9.38	Wage	7.25
	Engine Purchase	7.96	Fuel	6.70
	Slip Costs	7.34	Transport	4.52
Salmon & Albacore	Hull Repair	11.04	Fuel	8.59
	Other Gear Purchase	9.29	Wage	8.03
	Interest	7.43	Transport	3.72
Salmon & Dungeness – Small	Engine Purchase	9.51	Wage	18.92
Vessels	Fed Tax	5.58	Fuel	12.71
	Other Gear Repair	5.53	Transport	7.05
Salmon & Dungeness –	Other Gear Purchase	8.68	Wage	16.53
Medium & Large Vessels	Fed Tax	7.84	Fuel	6.77
	Hull Repair	7.31	Bait	5.06
All Salmon Fisheries	Other Gear Purchase	8.98	Wage	11.58
	Hull Repair	7.36	Fuel	6.99
	Other Gear Repair	7.12	Transport	4.06

Tables 8 through 11 give total and average cost for each of the 27 cost categories from the Hackett and Hansen (2008) survey. Average costs are calculated on a "per-fisherman" basis (not per vessel, as with the Oregon data), as some fishermen do not own vessels or may share the use of a vessel. Each table provides these costs for a given OC. Costs are further disaggregated into the four vessel size classes described in section III.A. above.

	Estimated Total Cost (\$)					Estimated Average Cost (\$)			
Vessel Size Class	Unclassified	< 26'	26' - 36'	> 36'	All	Unclassified	< 26'	26' - 36'	> 36'
Number of Fishermen	73	84	124	60	341	73	84	124	60
Cost Category									
Engine Repair	77,041	88,151	223,991	75,869	465,052	988	1,062	1,750	1,431
Engine Purchase	75,136	110,301	386,614	31,846	603,897	963	1,329	3,020	601
Electrical Gear Repair	25,562	17,219	76,616	62,902	182,299	328	207	599	1,187
Electrical Gear Purchase	70,150	34,403	88,466	39,350	232,369	899	414	691	742
Hull Repair	71,366	42,485	237,592	179,025	530,467	915	512	1,856	3,378
Hull Purchase	43,999	35,208	108,475	39,592	227,273	564	424	847	747
Other Gear Repair	69,581	82,780	243,576	155,233	551,170	892	997	1,903	2,929
Other Gear Purchase	141,401	61,983	336,442	172,396	712,220	1,813	747	2,628	3,253
Vessel Insurance	43,005	40,484	86,849	48,123	218,461	551	488	679	908
Storage	23,746	50,224	80,100	29,722	183,792	304	605	626	561
Interest	51,325	21,826	227,093	118,879	419,123	658	263	1,774	2,243
Federal Taxes	81,062	84,451	162,080	65,856	393,449	1,039	1,017	1,266	1,243
State Taxes	15,665	16,352	28,504	11,639	72,160	201	197	223	220
Boat Reg. Fees	0	19,951	32,622	10,671	63,244	0	240	255	201
Permit Fees	1,889	1,272	2,970	2,907	9,039	24	15	23	55
Commercial License	5,892	6,779	11,583	3,778	28,032	76	82	90	71
Slip	94,018	100,182	258,877	103,993	557,071	1,205	1,207	2,022	1,962
Other Slip	8,191	2,621	2,138	249	13,199	105	32	17	5
Bait	25,967	26,262	68,007	90,004	210,240	333	316	531	1,698
Wage	95,011	123,307	235,993	95,889	550,201	1,218	1,486	1,844	1,809
Food	45,676	56,768	130,141	74,465	307,050	586	684	1,017	1,405
Fuel	115,117	84,630	183,784	124,761	508,291	1,476	1,020	1,436	2,354
Harbor	11,067	19,341	29,882	10,519	70,808	142	233	233	198
Ice	15,331	9,938	26,308	20,556	72,132	197	120	206	388
Transportation	72,225	70,451	142,943	57,783	343,403	926	849	1,117	1,090
Membership	13,031	8,000	15,572	5,354	41,956	167	96	122	101
Landing Taxes	5,287	2,010	10,726	5,482	23,505	68	24	84	103
TOTAL COSTS	1,297,740	1,217,376	3,437,943	1,636,842	7,589,901	16,637	14,668	26,859	30,884

# Table 8: Estimated Costs Incurred in the CA Salmon OC by Vessel Size Class in 2006\*

	Estimated Total Cost (\$)					Estimated Average Cost (\$)			
Vessel Size Class	Unclassified	lassified < 26'	26' - 36'	> 36'	All	Unclassified	< 26'	26' - 36'	> 36'
Number of Fishermen	10	6	8	38	62	10	6	8	38
Cost Category									
Engine Repair	10,541	2,246	3,200	39,560	55,547	1,054	449	400	1,014
Engine Purchase	11,618	3,433	5,397	15,761	36,208	1,162	687	675	404
Electrical Gear Repair	3,049	1,366	1,041	29,485	34,941	305	273	130	756
Electrical Gear Purchase	2,167	659	1,224	16,965	21,015	217	132	153	435
Hull Repair	30,148	852	3,378	98,437	132,816	3,015	170	422	2,524
Hull Purchase	13,874	730	1,516	19,604	35,724	1,387	146	189	503
Other Gear Repair	9,463	2,990	3,230	67,331	83,014	946	598	404	1,726
Other Gear Purchase	21,151	1,696	4,501	84,396	111,743	2,115	339	563	2,164
Vessel Insurance	28,388	2,140	1,997	31,080	63,605	2,839	428	250	797
Storage	3,168	762	1,039	12,718	17,687	317	152	130	326
Interest	22,894	1,027	3,685	61,840	89,446	2,289	205	461	1,586
Federal Taxes	18,534	1,989	2,480	51,636	74,639	1,853	398	310	1,324
State Taxes	4,160	513	453	9,801	14,927	416	103	57	251
Boat Reg. Fees	0	411	532	3,835	4,779	0	82	67	98
Permit Fees	177	103	98	658	1,036	18	21	12	17
Commercial License	588	155	150	1,698	2,592	59	31	19	44
Slip	13,016	1,545	3,536	46,679	64,776	1,302	309	442	1,197
Other Slip	1,096	57	14	452	1,618	110	11	2	12
Bait	1,916	11,273	1,274	20,592	35,056	192	2,255	159	528
Wage	24,463	9,027	4,666	58,541	96,696	2,446	1,805	583	1,501
Food	6,936	1,049	1,262	26,428	35,676	694	210	158	678
Fuel	30,976	6,040	3,693	62,613	103,320	3,098	1,208	462	1,605
Harbor	5,083	6,784	381	3,725	15,972	508	1,357	48	96
Ice	5,260	1,999	326	8,757	16,341	526	400	41	225
Transportation	9,635	4,156	2,133	28,816	44,740	963	831	267	739
Membership	962	1,171	329	5,187	7,649	96	234	41	133
Landing Taxes	483	14	111	1,292	1,900	48	3	14	33
TOTAL COSTS	279,744	64,188	51,644	807,888	1,203,465	27,974	12,837	6,456	20,715

# Table 9: Estimated Costs Incurred in the CA Salmon & Albacore OC by Vessel Size Class in 2006\*

	Estin	nated Total Cost	(\$)	Estimated Average Cost (\$)		
Vessel Size Class	Unclassified	< 26'	All	Unclassified	< 26'	
Number of Fishermen	2	11	13	2	11	
Cost Category						
Engine Repair	2,452	9,419	11,870	1,226	856	
Engine Purchase	7,300	23,384	30,684	3,650	2,126	
Electrical Gear Repair	1,231	2,206	3,436	615	201	
Electrical Gear Purchase	3,743	4,187	7,930	1,872	381	
Hull Repair	2,569	8,523	11,092	1,284	775	
Hull Purchase	1,925	9,123	11,047	962	829	
Other Gear Repair	4,367	13,491	17,858	2,183	1,226	
Other Gear Purchase	4,496	11,469	15,965	2,248	1,043	
Vessel Insurance	1,525	6,271	7,796	763	570	
Storage	2,000	6,145	8,145	1,000	559	
Interest	122	2,177	2,299	61	198	
Federal Taxes	7,383	10,629	18,013	3,692	966	
State Taxes	936	2,584	3,520	468	235	
Boat Reg. Fees	0	3,257	3,257	0	296	
Permit Fees	0	1,468	1,468	0	133	
Commercial License	204	830	1,034	102	75	
Slip	2,500	14,968	17,468	1,250	1,361	
Other Slip	0	0	0	0	0	
Bait	2,400	7,747	10,147	1,200	704	
Wage	19,003	42,074	61,077	9,501	3,825	
Food	1,775	4,752	6,527	888	432	
Fuel	9,053	31,961	41,014	4,527	2,906	
Harbor	3,100	1,651	4,751	1,550	150	
Ice	0	0	0	0	0	
Transportation	3,500	19,251	22,751	1,750	1,750	
Membership	40	1,325	1,365	20	120	
Landing Taxes	1,183	1,099	2,283	592	100	
TOTAL COSTS	82,806	239,992	322,797	41,403	21,817	

Table 10: Estimated Costs Incurred in the CA Salmon & Dungeness – Small Vessels OC by Vessel Size Class in 2006\*

	E	stimated To	tal Cost (\$)		Estimated	Average Co	ost (\$)
Vessel Size Class	Unclassified	26' - 36'	> 36'	All	Unclassified	26' - 36'	> 36'
Number of Fishermen	27	52	75	148	27	52	75
Cost Category							
Engine Repair	37,054	100,704	127,009	264,767	1,372	1,937	1,740
Engine Purchase	46,265	166,036	60,584	272,885	1,714	3,193	830
Electrical Gear Repair	19,288	45,293	108,941	173,522	714	871	1,492
Electrical Gear Purchase	30,382	40,134	73,470	143,986	1,125	772	1,006
Hull Repair	79,491	127,768	307,073	514,332	2,944	2,457	4,206
Hull Purchase	30,195	60,153	70,478	160,826	1,118	1,157	965
Other Gear Repair	85,154	134,625	277,942	497,722	3,154	2,589	3,807
Other Gear Purchase	130,483	150,172	329,598	610,253	4,833	2,888	4,515
Vessel Insurance	72,004	46,555	93,819	212,378	2,667	895	1,285
Storage	23,000	37,271	53,470	113,742	852	717	732
Interest	37,054	120,448	209,540	367,041	1,372	2,316	2,870
Federal Taxes	101,124	107,723	342,490	551,337	3,745	2,072	4,692
State Taxes	23,462	18,541	63,570	105,573	869	357	871
Boat Reg. Fees	0	18,754	25,542	44,296	0	361	350
Permit Fees	419	5,130	4,591	10,140	16	105	62
Commercial License	2,365	4,412	6,759	13,536	88	85	93
Slip	51,347	114,473	194,275	360,095	1,902	2,201	2,661
Other Slip	5,383	100	6,422	11,905	199	2	88
Bait	136,084	101,849	118,170	356,103	5,040	1,959	1,619
Wage	361,986	250,601	549,740	1,162,326	13,407	4,819	7,531
Food	45,245	57,674	124,898	227,817	1,676	1,109	1,711
Fuel	127,708	101,961	246,280	475,949	4,730	1,961	3,374
Harbor	5,004	25,945	12,180	43,129	185	499	167
Ice	11	70	0	80	0	1	0
Transportation	63,020	67,068	115,215	245,302	2,334	1,290	1,578
Membership	9,308	16,019	14,557	39,885	345	308	199
Landing Taxes	19,411	8,798	26,087	54,296	719	169	357

Table 11: Estimated Costs Incurred in the CA Salmon & Dungeness – Medium and Large Vessels OC by Vessel Size Class in 2006\*

\* Source: Hackett and Hansen (2008)

1,542,248

TOTAL COSTS

1,928,274 3,562,700 **7,033,223** 

57,120

37,088

48,803

#### **California Costs by County**

According to CDFG landings records, commercial fishermen landed salmon in 18 California counties in 2006. Sonoma County led the state in total number of commercial salmon fishing trips in 2006, followed by San Mateo and Mendocino Counties (Table 12). When the trip data are disaggregated by OC, the resulting lists of top three counties reveal considerable heterogeneity, with only Mendocino County appearing in the top-three lists for all OC's (Table 13).

# Table 12: Top Three California Counties Based on Frequency of All Commercial Salmon Fishing Trips in 2006\*

County	Shares of Total Statewide Trips in 2006 (%)
Sonoma	28.98
San Mateo	16.73
Mendocino	11.54

\* Source: Hackett and Hansen (2008)

# Table 13: Top Three California Counties Based on Frequency of All Commercial Salmon Fishing Trips in 2006, by OC\*

Sal	lmon	Salmon & Albacore		Salmon & Dungeness – Small Vessels		Salmon & Dungeness – Medium & Large Vessels	
County	Share of Statewide Trips (%)	County	Share of Statewide Trips (%)	County	Share of Statewide Trips (%)	County	Share of Statewide Trips (%)
Sonoma	42	Humboldt	34	Marin	43	San Mateo	24
Monterey	21	Santa Cruz	17	Sonoma	18	Sonoma	23
Mendocino	12	Mendocino	10	Mendocino	14	Mendocino	11

One can see from Table 14 and Figure 1 below that Sonoma County ranks first among all California counties in terms of total costs associated with commercial salmon fishing in 2006, whereas Orange County ranked last.

California County	Total Cost (\$)	California County	Average Cost (\$)
Sonoma	2,034,785	San Diego	24,792
San Francisco	1,815,646	San Benito	22,425
Mendocino	1,410,632	Humboldt	21,406
Unknown	1,275,788	Los Angeles	18,433
Monterey	1,110,070	North Of California	18,189
Humboldt	984,654	Trinity	17,919
San Luis Obispo	966,359	Fresno	16,526
San Mateo	964,284	Santa Clara	16,385
Santa Cruz	859,542	Sacramento	14,662
Marin	291,862	Unknown	13,718
Del Norte	175,568	San Luis Obispo	13,238
San Diego	173,547	San Francisco	12,436
Santa Barbara	108,627	Santa Cruz	11,310
Los Angeles	92,163	Marin	11,225
Alameda	86,967	Mendocino	10,076
North Of California	72,756	Monterey	9,824
Sacramento	58,649	Contra Costa	9,271
Contra Costa	37,084	Santa Barbara	9,052
Ventura	33,671	Sonoma	8,443
Santa Clara	32,770	Ventura	8,418
San Benito	22,425	San Mateo	7,840
Trinity	17,919	Del Norte	7,023
Fresno	16,526	Alameda	4,141
Solano	10,753	Solano	3,584
Orange	2,460	Orange	2,460

## Table 14: Estimated Commercial Salmon Costs Incurred in 2006, by California County (All OC's)\*

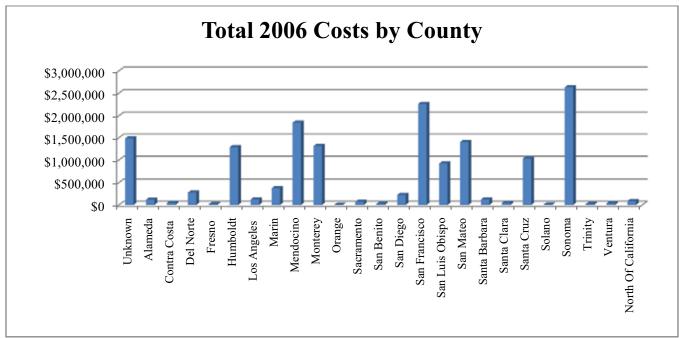


Figure 1: Total Estimated 2006 Commercial Salmon Costs by California County (All OC's)\*

\* Source: Hackett and Hansen (2008)

#### **California Costs by Region**

California can be divided into five coastal regions: North, North Central, Central, South Central, and South (Table 15). Commercial salmon costs by California coastal region are shown in Figure 2 below. Fishermen in the North Central region incurred the largest share of California's total estimated 2006 salmon costs, likely due to the large number of commercial fishermen making landings and having their home ports in this region. The southern regions have fewer salmon fishermen with home and landing ports in the area (as salmon are less frequently encountered off southern California), and thus contribute the least to statewide costs.

Table 15:	California	Coastal	Regions
-----------	------------	---------	---------

Regions	Counties
North	Del Norte, Humboldt, Mendocino
North Central	Alameda, Contra Costa, Marin, Napa, San Francisco, Santa Clara, Solano, Sonoma
Central	Monterey, San Mateo, Santa Cruz
South Central	San Luis Obispo, Santa Barbara, Ventura
South	Los Angeles, Orange, San Diego

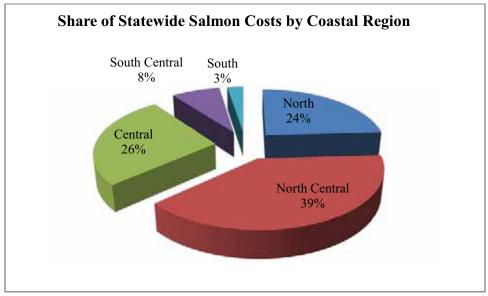


Figure 2: Share of Total 2006 Commercial Salmon Costs by Coastal Region\*

#### California Ex-Vessel Revenue and Net Revenue

California fishermen received nearly \$15 million in gross revenue from commercial fishing activity in the four salmon OCs in 2006. As shown in Table 16, the majority of total revenue was generated from the Salmon & Dungeness – medium and large OC, due in large part to bountiful landings of valuable Dungeness crab by fishermen participating in that OC. As salmon ex-vessel revenue is further apportioned into vessel size classes, the larger vessels accrued the most revenue except in the case of the salmon OC, where medium sized vessels attained the highest total revenue (Table 17). Recall that exvessel revenue is solely derived from landing receipts from commercial fishing, and does not include disaster payments, income from other sources, or other transfers (e.g. Social Security).

#### Table 16: Ex-Vessel California Revenues in 2006 by OC\*

	Ex-Vessel Revenue in 2006 (\$)			
Operational Configuration	Total	Average		
Salmon	2,801,917	8,217		
Salmon & Albacore	550,182	8,874		
Salmon & Dungeness – Small Vessels	300,847	23,142		
Salmon & Dungeness – Med. & Large Vessels	11,205,875	75,715		
Total	14,858,821	26,345		

\*Source: CDFG 2006 landings receipt database

<sup>\*</sup> Source: Hackett and Hansen (2008)

		Ex-Vessel Rev (\$)	
Operational Configuration	Size	Total	Average
	Unclassified	658,962	9,027
Salmon	< 26'	261,617	3,114
Samon	26' - 36'	1,103,370	8,898
	> 36'	77,968	12,966
	Unclassified	82,476	8,248
Salmon & Albacore	< 26'	13,565	2,261
Samon & Albacole	26' - 36'	16,292	2,037
	> 36'	437,849	11,522
Salmon & Dungeness – Small Vessels	Unclassified	115,379	57,690
	< 26'	185,468	16,861
	Unclassified	2,137,792	79,177
Salmon & Dungeness – Med. & Large Vessels	26' - 36'	2,351,022	47,020
	> 36'	6,717,061	92,014

Table 17: Ex-Vessel California Revenue by OC and Vessel Size Class in 2006 \*

\*Source: CDFG 2006 landings receipt database

Figure 3 provides information on the share of ex-vessel commercial fishing revenue in the four salmon OCs by California coastal region. The North Central region had the largest share of statewide ex-vessel revenue, while in contrast the South region had smallest share of revenue.

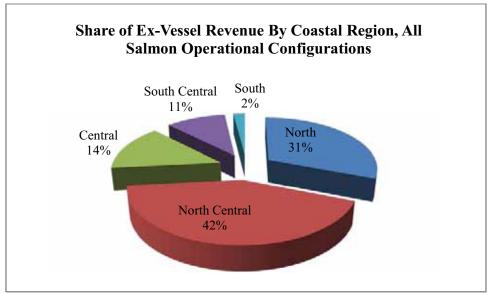


Figure 3: Share of 2006 Ex-Vessel Commercial Revenue by California Coastal Region\*

Ex-vessel revenues in 2006 from the four commercial salmon OCs in California were heavily impacted by fishing restrictions that occurred along the coast. As mentioned in section II above, ex-vessel revenues in 2006 in California were down \$7.6 million in nominal terms from 2005. The steep decline in revenue created negative net revenues in three of the four salmon OCs evaluated in this study, and for the entire California salmon fishery taken as a whole (Table 18). Table 19 further examines salmon net revenues within the OC's vessel size classes. The disastrous season resulted in over half of the participating 2006 salmon fishermen having negative net revenues (Table 20).

	Total Net Revenues	Average Net Revenues
OC	(\$)	(\$)
Salmon	-4,787,984	-14,305
Salmon & Albacore	-653,283	-10,537
Salmon & Dungeness – Small Vessels Salmon & Dungeness – Med. & Large	-21,950	-1,689
Vessels	4,172,652	28,194
All Salmon Fisheries	-1,290,565	-2,346

Table 18: California Net Revenues in 2006 by Operational Configuration\*

\*Source: Hackett and Hansen (2008) and CDFG

<sup>\*</sup> Source: CDFG 2006 landings receipt database

### Table 19: 2006 California Estimated Net Revenue by Vessel Size Class and Operational Configuration\*

		Estimated Total Net Revenue (\$)						Net Revenu	e (\$)
Vessel Size Class	Unclassified	< 26'	26' - 36'	> 36'	All	Unclassified	< 26'	26' - 36'	> 36'
<b>Operational Configuration</b>									
Salmon	-638,778	-896,882	-2,279,137	-973,187	-4,787,984	-7,611	-11,329	-17,121	-18,817
Salmon Albacore	-197,268	-50,623	-35,352	-370,039	-653,283	-19,727	-10,577	-4,419	-9,193
Salmon Dungeness – Small Vessels	32,573	-54,524	n/a	n/a	-21,950	16,287	-4,956	n/a	n/a
Salmon Dungeness – Med. & Large Vessels	595,544	n/a	422,748	3,154,361	4,172,652	22,057	n/a	9,932	43,211

\*Source: Hackett and Hansen (2008) and CDFG

# Table 20: Net Revenue Status in 2006 for Commercial Fishermen Active in all California Salmon Operational Configurations

	Number of Fishermen	Share of All CA Salmon Fishermen (%)
Negative Net Revenue	380	69
Positive Net Revenue	170	31
Total	550	100

\*Source: Hackett and Hansen (2008) and CDFG

#### **IV.B.** Oregon

This section of the report is built on data from the NOAA NMFS (2008) survey covering open access groundfish vessels, as well as various types of vessels targeting salmon and other species groups. This survey collected cost data for California, Oregon, and Washington (CA/OR/WA) commercial fishing vessels, and the following tables provide information for vessels that landed salmon in 2005 and 2006. CA/OR/WA data refer to information drawn from (or aggregated by) the entire survey area, while Oregon data refer to information drawn from (or aggregated for) all Oregon vessels (defined as vessels that made a majority of their landings at Oregon ports in 2005 or 2006, as requested by ODFW personnel). As previously noted, revenue data for each state are derived from the PacFin database. Note that while the California data in section IV.A are aggregated from the individual fisherman level, the NOAA NMFS (2008) data reported below are aggregated for use in the FEAM vessel level. The vessel-level data for CA/OR/WA and for Oregon are organized for use in the FEAM vessel impacts model, as requested by ODFW personnel.

Tables 21 through 24 provide average costs for surveyed Oregon (OR) and for CA/OR/WA vessels landing salmon in 2006 and 2005 by cost categories and FEAM vessel type. ODFW personnel requested additional analysis specifically focused on the salmon troller FEAM vessel type, and this information is provided in Tables 25 through 27 below. From the list of top three cost categories for the salmon troller FEAM vessel type given in Table 25 below, one can see that captain's wages and elective repairs and maintenance costs were consistently the top two. The third largest expense for these vessels in 2005 was crew wage, while in 2006 it was vessel fuel.

			<b>2006</b> A	Average Cos	ts (\$)		
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other ≤ \$15,000	Weighted Average
Number of Vessels	5	6	4	13	10	32	70
Cost Categories	_						
Captain Wage	22,400	30,667	20,000	19,653	20,400	3,927	13,731
Crew Wage	22,000	17,333	7,500	34,340	3,165	1,498	11,000
Fuel	11,144	5,417	10,250	16,348	4,137	2,772	6,740
Food	850	567	2,475	1,640	1,442	647	1,057
Ice	570	117	684	2,738	1,045	349	907
Bait	2,880	2,342	1,125	6,775	18	545	1,981
Repair, Maintenance, and Improvements	13,640	7,917	33,600	11,799	7,692	4,906	9,105
Insurance	1,000	0	0	8,384	457	618	1,976
Interest	1,000	0	6,000	550	70	349	686
Permit Purchase	0	0	8,750	401	0	127	632
Permit Lease	1,800	0	0	0	0	0	129
Total	76,284	64,358	84,384	102,077	38,357	15,388	47,258
			2006 Aver	age Cost Sh	ares (%)		
Captain Wage	29.4	47.6	23.7	19.3	53.2	25.5	29.1
Crew Wage	28.8	26.9	8.9	33.6	8.3	9.7	23.3
Fuel	14.6	8.4	12.1	16.0	10.8	18.0	14.3
Food	1.1	0.9	2.9	1.6	3.8	4.2	2.2
Ice	0.7	0.2	0.8	2.7	2.7	2.3	1.9
Bait	3.8	3.6	1.3	6.6	0.0	3.5	4.2
Repair, Maintenance, and Improvements	17.9	12.3	39.8	11.6	20.1	31.9	19.3
Insurance	1.3	0.0	0.0	8.2	1.2	4.0	4.2
Interest	1.3	0.0	7.1	0.5	0.2	2.3	1.5
Permit Purchase	0.0	0.0	10.4	0.4	0.0	0.8	1.3

Table 21. 2006 Average Costs and Cost Shares for Oregon Survey Vessel Types\*

\* Source: NOAA NMFS (2008)

Total

Permit Lease

\*\*Shrimper and "Other > 15,000" vessels not included (n < 3)

2.4

100.0

0.0

100.0

0.0

100.0

0.0

100.0

0.0

100.0

0.0

100.0

0.3

100.0

			2005 A	Average Cos	ts (\$)		
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other ≤ \$15,000	Weighted Average
Number of Vessels	5	7	1	8	28	29	77
Cost Categories							
Captain Wage	46,400	17,143	n/a	32,768	14,892	2,524	14,342
Crew Wage	26,000	14,671	n/a	32,459	7,691	714	9,460
Fuel	8,844	6,314	n/a	17,482	6,845	1,353	5,964
Food	1,300	629	n/a	1,803	2,182	441	1,289
Ice	570	143	n/a	2,354	1,269	165	818
Bait	4,360	2,621	n/a	8,538	750	147	1,737
Repair, Maintenance, and Improvements	15,700	13,743	n/a	17,393	12,631	4,579	10,394
Insurance	1,760	386	n/a	9,890	2,074	448	2,100
Interest	1,000	71	n/a	1,248	1,317	362	816
Permit Purchase	0	71	n/a	495	1,250	187	583
Permit Lease	0	0	n/a	0	0	0	0
Total	104,934	55,721	n/a	123,182	49,585	10,558	46,685
		2	005 Aver:	age Costs Sh	ares (%)		
Captain Wage	44.2	30.8	n/a	26.6	30.0	23.9	30.7
Crew Wage	24.8	26.3	n/a	26.4	15.5	6.8	20.3
Fuel	8.4	11.3	n/a	14.2	13.8	12.8	12.8
Food	1.2	1.1	n/a	1.5	4.4	4.2	2.8
Ice	0.5	0.3	n/a	1.9	2.6	1.6	1.8
Bait	4.2	4.7	n/a	6.9	1.5	1.4	3.7
Repair, Maintenance, and Improvements	15.0	24.7	n/a	14.1	25.5	43.4	22.3
Insurance	1.7	0.7	n/a	8.0	4.2	4.2	4.5
Interest	1.0	0.1	n/a	1.0	2.7	3.4	1.7
Permit Purchase	0.0	0.1	n/a	0.4	2.5	1.8	1.2
Permit Lease	0.0	0.0	n/a	0.0	0.0	0.0	0.0
Total	100.0	100.0	n/a	100.0	100.0	100.0	100.0

Table 22. 2005 Average Costs and Cost Shares for Oregon Survey Vessel Types\*

\* Source: NOAA NMFS

(2008)

\*\*Shrimper and "Other > 15,000" vessels not included (n < 3)

			2	2006 Averag	e Costs (\$)			
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other > \$15,000	Other ≤ \$15,000	Weighted Average
Number of Vessels	9	10	12	41	27	7	77	183
Cost Categories								
Captain Wage	19,556	26,500	13,208	22,121	18,002	33,286	3,454	13,615
Crew Wage	16,602	11,050	8,346	27,827	3,835	6,989	836	9,387
Fuel	8,142	5,960	9,530	12,740	4,228	17,755	3,601	7,023
Food	1,321	940	2,757	2,562	1,417	5,537	716	1,593
Ice	343	320	903	1,503	699	443	270	664
Bait	2,700	1,805	721	4,688	242	5,009	341	1,700
Repair, Maintenance, and Improvements	9,876	6,250	20,736	13,099	8,112	21,299	5,851	9,595
Insurance	556	80	1,889	5,460	973	775	510	1,767
Interest	1,230	300	2,460	610	535	1,524	233	610
Permit Purchase	11,597	0	2,917	176	407	314	162	941
Permit Lease	1,000	0	0	24	39	0	14	66
Total	71,692	52,905	61,006	90,200	37,955	91,407	15,756	46,352
			2006	Average Co	sts Shares	(%)		
Captain Wage	27.3	50.1	21.7	24.5	47.4	36.4	21.9	29.4
Crew Wage	23.2	20.9	13.7	30.9	10.1	7.6	5.3	20.3
Fuel	11.4	11.3	15.6	14.1	11.1	19.4	22.9	15.2
Food	1.8	1.8	4.5	2.8	3.7	6.1	4.5	3.4
Ice	0.5	0.6	1.5	1.7	1.8	0.5	1.7	1.4
Bait	3.8	3.4	1.2	5.2	0.6	5.5	2.2	3.7
Repair, Maintenance, and Improvements	13.8	11.8	34.0	14.5	21.4	23.3	37.1	20.7
Insurance	0.8	0.2	3.1	6.1	2.6	0.8	3.2	3.8
Interest	1.7	0.6	4.0	0.7	1.4	1.7	1.5	1.3
Permit Purchase	16.2	0.0	4.8	0.2	1.1	0.3	1.0	2.0
Permit Lease	1.4	0.0	0.0	0.0	0.1	0.0	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

# Table 23. 2006 Average Costs and Cost Shares for CA/OR/WA Survey Vessel Types\*

\* Source: NOAA NMFS (2008)

\*\*Shrimper vessels not included (n < 3)

			,	2005 Averag	e Costs (\$)			
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other > \$15,000	Other ≤ \$15,000	Weighted Average
Number of Vessels	10	14	4	22	78	4	60	192
Cost Categories								
Captain Wage	38,100	18,286	24,500	25,792	14,856	40,000	3,673	14,800
Crew Wage	27,403	10,729	17,525	29,063	6,857	2,900	662	8,958
Fuel	8,593	9,486	11,464	12,150	5,940	16,100	3,715	6,680
Food	1,540	1,171	3,380	2,144	2,067	7,100	708	1,690
Ice	413	239	1,338	1,353	895	400	250	672
Bait	4,237	2,196	1,050	6,307	810	6,863	143	1,642
Repair, Maintenance, and Improvements	10,897	10,336	19,902	14,528	10,374	33,788	3,804	9,508
Insurance	880	193	3,325	7,603	1,551	1,359	426	1,792
Interest	915	763	189	1,166	707	63	247	606
Permit Purchase	39	36	0	6,189	768	3,500	319	1,198
Permit Lease	0	0	0	100	14	0	0	17
Total	92,102	52,671	82,483	105,229	44,130	112,009	13,701	46,956
			2005	Average Co	osts Shares	(%)		
Captain Wage	41.4	34.7	29.7	24.5	33.7	35.7	26.8	31.5
Crew Wage	29.8	20.4	21.2	27.6	15.5	2.6	4.8	19.1
Fuel	9.3	18.0	13.9	11.5	13.5	14.4	27.1	14.2
Food	1.7	2.2	4.1	2.0	4.7	6.3	5.2	3.6
Ice	0.4	0.5	1.6	1.3	2.0	0.4	1.8	1.4
Bait	4.6	4.2	1.3	6.0	1.8	6.1	1.0	3.5
Repair, Maintenance, and Improvements	11.8	19.6	24.1	13.8	23.5	30.2	27.8	20.2
Insurance	1.0	0.4	4.0	7.2	3.5	1.2	3.1	3.8
Interest	1.0	1.4	0.2	1.1	1.6	0.1	1.8	1.3
Permit Purchase	0.0	0.1	0.0	5.9	1.7	3.1	2.3	2.6
Permit Lease	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

# Table 24. 2005 Average Costs and Cost Shares for CA/OR/WA Survey Vessel Types\*

\* Source: NOAA NMFS (2008)

\*\*Shrimper vessels not included (n < 3)

#### Table 25: Top 3 Average Cost Categories for the Salmon Troller Vessel Type in 2005 and 2006\*

	Share of Tot	al Costs		Share of Tota	al Costs
2005 Cost Categories	CA/OR/WA	OR	2006 Cost Categories	CA/OR/WA	OR
Captain Wage	37	30	Captain Wage	47	53
Repair, Maintenance, and Improvements	24	25	Repair, Maintenance, and Improvements	21	20
Crew Wage	16	16	Fuel	11	11

\* Source: NOAA NMFS (2008)

Captain and crew earnings expressed as shares of total ex-vessel revenue for the salmon troller FEAM vessel type is given in Table 26. Captains generally receive between one-quarter and one-third of total vessel revenue, while the crew receives between 11 and 16 percent of total vessel revenue. Somewhat surprisingly, average crew size does not increase with vessel revenue and the data in Table 27 show that many commercial fishermen operating salmon troller vessels fish alone or with only one deck hand.

#### Table 26: Shares of Salmon Troller Vessel-Type Revenue Allocated to Captain and Crew Wages\*

	Average Sl	ares of Salmo	n Troller Vessel Re	Froller Vessel Revenue (%)			
	Capt	tain	Cre	W			
Salmon Troller Annual Revenue	CA/OR/WA	Oregon	CA/OR/WA	Oregon			
< \$500	30	29	14	16			
\$500 to \$5,000	26	28	12	11			
\$5,000 to \$25,000	24	24	12	11			
> \$25,000	33	30	12	16			

\* Source: NOAA NMFS (2008)

	Salmon Troller Average Crew Size**					
Salmon Troller Annual Revenue	CA/OR/WA	Oregon				
< \$500	1.3	n/a				
\$500 to \$5,000	0.9	0.9				
\$5,000 to \$25,000	0.6	0.6				
> \$25,000	0.6	0.7				

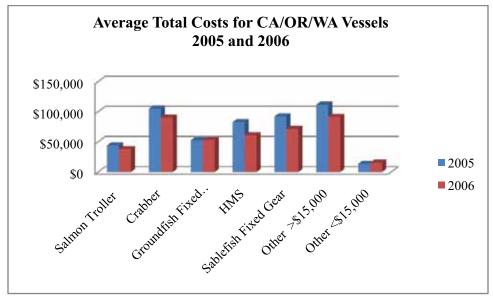
#### Table 27: Average Crew Size per Salmon Troller-Type Vessel by Vessel Revenue Category\*

\* Source: NOAA NMFS (2008)

\*\*Crew size does not include the captain

When comparing average total vessel costs between 2005 and 2006 (Figures 4 and 5), it is interesting to note that 2005 costs are generally greater than 2006 costs for five of the seven CA/OR/ WA vessel types, and for three of the five applicable OR vessel types. Tables 28 through 31 may provide the reason for this. It shows that the average number of trips for 2005 vessels were generally higher than for 2006. Therefore, in making more fishing trips, vessels in 2005 most likely incurred more operating costs than in 2006. Data on average number of trips by vessel type for 2006 and 2005 for all Oregon and CA/OR/WA vessels are provided in Tables 32 to 35.

Figure 4: Average Total Costs for CA/OR/WA Vessels by Type in 2005 and 2006\*



\* Source: NOAA NMFS (2008)

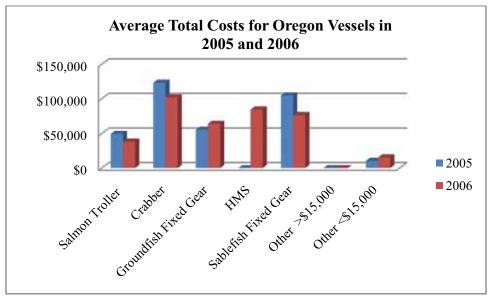


Figure 5: Average Total Costs for Oregon Vessel Types in 2005 and 2006\*

<sup>\*</sup> Source: NOAA NMFS (2008)

# Table 28. 2006 Average Number of Trips for Oregon Survey Vessel Types by Species Landed\*

		2006 A	verage Nu	nber of Trips		
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other ≤ \$15,000
Number of Vessels	5	6	4	13	10	32
Species Group						
Whiting	0	0	0	0	0	0
Groundfish	23	58	3	4	0	5
Salmon Troll	8	3	4	4	10	8
Salmon Net	0	0	0	0	0	0
Crab	5	13	3	38	3	1
Shrimp	0	0	0	1	0	0
Other	2	2	8	3	5	1
Total	38	75	17	51	18	14
		2006 Av	erage Distri	bution of Trip	DS	
Whiting	0.0	0.0	0.0	0.0	0.0	0.0
Groundfish	61.3	76.8	16.2	8.4	1.6	34.4
Salmon Troll	20.8	3.6	23.5	8.0	56.4	51.9
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.0
Crab	13.9	16.9	14.7	75.0	15.9	3.7
Shrimp	0.0	0.0	0.0	2.1	0.0	0.0
Other	4.0	2.7	45.6	6.4	26.1	10.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

\* Source: NOAA NMFS (2008)

\*\*Shrimper and "Other > 15,000" vessels not included (n < 3)

# Table 29. 2005 Average Number of Trips for Oregon Survey Vessel Types by Species Landed\*

		2005 A	verage Nu	mber of Trips		
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other ≤ \$15,000
Number of Vessels	5	7	1	8	28	29
Species Group						
Whiting	0	0	n/a	0	0	0
Groundfish	27	52	n/a	2	2	5
Salmon Troll	11	10	n/a	6	19	10
Salmon Net	0	0	n/a	0	0	0
Crab	12	20	n/a	24	3	0
Shrimp	0	0	n/a	0	0	0
Other	6	2	n/a	5	3	2
Total	56	84	n/a	38	27	18
		2005 Av	erage Distri	ibution of Trij	ps	
Whiting	0.0	0.0	0.0	0.0	0.0	0.0
Groundfish	47.2	62.0	0.0	5.6	6.9	29.8
Salmon Troll	20.2	11.8	0.0	15.9	71.3	56.1
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.0
Crab	22.0	23.9	0.0	64.7	9.9	2.7
Shrimp	0.0	0.0	0.0	0.0	0.0	0.0
Other	10.6	2.4	0.0	13.7	11.9	11.3
Total	100.0	100.0	0.0	100.0	100.0	100.0

\* Source: NOAA NMFS (2008)

\*\*Shrimper and "Other > 15,000" vessels not included (n < 3)

			2006 N	umber of Ti	rips		
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other > \$15,000	Other ≤ \$15,000
Number of Vessels	9	10	12	41	27	7	77
Species Group							
Whiting	0	0	0	0	0	0	0
Groundfish	26	53	2	5	1	4	5
Salmon Troll	6	2	3	4	14	1	8
Salmon Net	0	0	0	0	0	0.3	0.0
Crab	5	13	3	35	2	7	0
Shrimp	0	0	0	0	0	0	0
Other	2	2	8	5	5	60	3
Total	39	69	16	49	21	71	17
		2000	6 Average	Distributio	n of Trips		
Whiting	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Groundfish	67.3	76.4	13.9	9.7	4.7	5.6	28.5
Salmon Troll	16.4	2.3	21.1	8.0	64.0	0.8	48.0
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.4	0.1
Crab	12.4	18.9	18.0	70.9	9.8	9.6	2.9
Shrimp	0.0	0.0	0.0	0.7	0.0	0.0	0.0
Other	3.8	2.4	46.9	10.6	21.6	83.6	20.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* Source: NOAA NMFS (2008)

\*\*Shrimper Vessels not included (n < 3)

		20	05 Avera	ge Number	of Trips		
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other > \$15,000	Other ≤ \$15,000
Number of Vessels	10	14	4	22	78	4	60
Species Group							
Whiting	0	0	0	0	0	0	0
Groundfish	27	48	0	6	2	5	7
Salmon Troll	8	7	6	7	19	0	10
Salmon Net	0	0	0	0	0	0	0.1
Crab	7	13	2	31	4	5	0
Shrimp	0	0	0	0	0	0	0
Other	6	18	4	5	5	69	5
Total	48	86	12	49	29	79	23
		2005	5 Average	Distributio	n of Trips		
Whiting	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Groundfish	56.8	55.6	0.0	11.8	5.7	6.4	31.0
Salmon Troll	16.4	7.8	47.8	15.2	66.1	0.0	45.4
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Crab	15.4	15.6	17.4	63.6	12.4	6.1	1.3
Shrimp	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	11.4	21.1	34.8	9.4	15.8	87.6	22.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

# Table 31. 2005 Average Number of Trips for CA/OR/WA Survey Vessel Types by Species Landed\*

\* Source: NOAA NMFS (2008)

\*\*Shrimper Vessels not included (n < 3)

# Table 32. 2006 Average Number of Trips for Oregon Vessel Types by Species Landed (*All Active Fishermen*)\*

		20	06 Number	of Trips		
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other ≤ \$15,000
Number of Vessels	17	19	22	81	46	184
Species Group						
Whiting	0	0	0	0	0	0
Groundfish	20	44	2	4	1	5
Salmon Troll	3	2	4	5	11	6
Salmon Net	0	0	0	0	0	0
Crab	3	8	1	34	1	0
Shrimp	0	0	0	0	0	0
Other	3	4	6	4	5	2
Total	30	58	13	47	18	14
		2006 Av	erage Distri	bution of Trij	ps	
Whiting	0.0	0.0	0.0	0.0	0.0	0.0
Groundfish	66.4	75.6	13.8	7.8	5.4	39.0
Salmon Troll	11.5	3.6	29.7	10.1	61.5	40.7
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.0
Crab	11.5	14.2	6.5	73.4	5.5	3.3
Shrimp	0.8	0.0	0.0	0.0	0.0	0.0
Other	9.8	6.7	50.0	8.7	27.5	17.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

\* Source: NOAA NMFS (2008)

\*\*Shrimper and "Other > 15,000" vessels not included (n < 3)

# Table 33. 2005 Average Number of Trips for Oregon Vessel Types by Species Landed (*All Active Fishermen*)\*

	2005 Average Number of Trips									
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other ≤ \$15,000				
Number of Vessels	18	23	11	50	123	223				
Species Group										
Whiting	0	0	0	0	0	0				
Groundfish	27	45	2	4	1	6				
Salmon Troll	6	4	6	9	19	9				
Salmon Net	0	0	0	0	0	0				
Crab	7	9	1	33	3	0				
Shrimp	0	0	0	0	0	0				
Other	2	4	5	4	3	2				
Total	42	62	13	50	26	17				
		2005 Av	erage Distri	ibution of Tri	ps					
Whiting	0.0	0.0	0.0	0.0	0.0	0.0				
Groundfish	63.2	72.2	12.2	8.6	3.4	35.7				
Salmon Troll	15.3	6.9	43.5	18.5	72.8	52.5				
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.0				
Crab	15.9	14.5	5.4	65.7	12.4	1.6				
Shrimp	0.0	0.0	0.0	0.0	0.0	0.0				
Other	5.5	6.5	38.8	7.2	11.4	10.2				
Total	100.0	100.0	100.0	100.0	100.0	100.0				

\* Source: NOAA NMFS (2008)

\*\*Shrimper and "Other > 15,000" vessels not included (n < 3)

T 11 04 000C 1				
Table 34, 2006 Average	e Number of Trips for	' CA/OR/WA Ves	ssel Types by Species	Landed (All Active Fishermen)*
10010010200011001050				

			20	06 Average N	umber of Ti	rips		
FEAM Vessel Type	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Shrimper	Crabber	Salmon Troller	Other > \$15,000	Other ≤ \$15,000
Number of Vessels	49	81	50	4	232	170	14	501
Species Group								
Whiting	0	0	0	0	0	0	0	0
Groundfish	24	35	2	4	3	1	8	5
Salmon Troll	2	2	3	0	4	14	0	5
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Crab	2	4	1	0	32	4	3	1
Shrimp	0	0	0	47	0	0	0	0
Other	6	30	7	10	4	4	49	6
Total	34	71	13	60	44	23	61	17
			2006	Average Dis	tribution of	Trips		
Whiting	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Groundfish	69.4	49.1	14.3	6.2	7.2	4.9	12.8	27.7
Salmon Troll	7.2	2.3	25.7	0.0	10.3	59.2	0.5	30.9
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.1
Crab	6.5	5.8	8.9	0.0	73.4	17.4	5.2	3.8
Shrimp	0.6	0.6	0.0	78.0	0.0	0.9	0.1	0.1
Other	16.3	42.2	51.1	15.8	9.1	17.5	81.1	37.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* Source: NOAA NMFS (2008)

# Table 35. 2005 Average Number of Trips for CA/OR/WA Vessel Types by Species Landed (All Active Fishermen)\*

			200	5 Average Nu	mber of Tri	ps		
FEAM Vessel Type	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Shrimper	Crabber	Salmon Troller	Other > \$15,000	Other ≤ \$15,000
Number of Vessels	56	86	27	4	122	409	11	436
Species Group								
Whiting	0	0	0	0	0	0	0	0
Groundfish	29	37	1	6	5	1	10	6
Salmon Troll	3	3	5	3	8	18	4	8
Salmon Net	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1
Crab	4	4	0	1	32	5	0	0
Shrimp	0	1	0	37	0	0	0	0
Other	5	56	5	13	4	4	43	6
Total	42	100	12	60	48	28	57	21
			2005	Average Distr	ibution of T	rips		
Whiting	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Groundfish	69.6	36.4	10.3	9.7	9.4	3.5	16.9	30.8
Salmon Troll	7.8	2.6	44.4	4.6	16.3	64.2	7.1	38.0
Salmon Net	0.0	0.0	0.0	0.8	0.1	0.1	0.0	0.2
Crab	10.6	4.3	3.6	0.8	66.1	18.4	0.0	2.3
Shrimp	0.0	0.7	0.0	62.2	0.4	0.1	0.0	0.0
Other	12.1	56.0	41.7	21.8	7.8	13.7	76.0	28.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* Source: NOAA NMFS (2008)

#### **Oregon Ex-Vessel Revenue and Net Revenue**

The next eight tables give average ex-vessel revenues by vessel type for commercial fishing vessels that landed salmon on the west coast in 2005 and 2006. Ex-vessel revenues are further broken down by species landed and the type of gear used. The first two tables (Tables 36 and 37) refer to survey respondents that made a majority of their landings in Oregon. The second pair of tables (Tables 38 and 39) covers CA/OR/WA fishermen who responded to the survey. The third pair of tables (Tables 40 and 41) covers all vessels that made a majority of their landings Oregon. The final two tables (Tables 42 and 43) refer to all active west coast fishermen that landed salmon in CA/OR/WA. These average ex-vessel revenues pertain to individual participating vessels in each vessel type category. Recall that revenues are entirely derived from landing receipts from commercial fishing, and do not include disaster payments or other sources of income.

	2006 Average Revenue (\$)										
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other ≤ \$15,000	Weighted Average				
Number of Vessels	5	6	4	13	10	32	70				
Species Group											
Whiting	0	0	0	0	0	0	0				
Groundfish	61,473	33,910	2,344	9,103	201	1,522	9,846				
Salmon Troll	7,491	1,298	6,583	7,199	16,971	3,337	6,309				
Salmon Net	0	0	0	0	0	0	0				
Crab	11,325	22,384	7,454	148,086	9,646	221	32,135				
Shrimp	0	0	0	10,184	0	0	1,891				
HMS	821	295	39,193	8,414	9,306	446	5,419				
Pelagic Species	0	0	0	8	0	0	1				
Halibut	220	0	0	599	111	34	158				
Total***	81,330	57,921	55,574	183,631	36,245	5,560	55,772				

### Table 36. 2006 Average Ex-Vessel Revenue for Oregon Survey Vessel Types\*

		2006 Average Ex-Vessel Revenue Shares (%)								
Whiting	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Groundfish	75.6	58.5	4.2	5.0	0.6	27.4	17.7			
Salmon Troll	9.2	2.2	11.8	3.9	46.8	60.0	11.3			
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Crab	13.9	38.6	13.4	80.6	26.6	4.0	57.6			
Shrimp	0.0	0.0	0.0	5.5	0.0	0.0	3.4			
HMS	1.0	0.5	70.5	4.6	25.7	8.0	9.7			
Pelagic Species	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Halibut	0.3	0.0	0.0	0.3	0.3	0.6	0.3			
Total	100.0	99.9	100.0	100.0	100.0	100.0	100.0			

\* Source: NOAA NMFS (2008)

\*\*Shrimper and "Other > 15,000" vessels not included (n < 3)

### Table 37. 2005 Average Ex-Vessel Revenue for Oregon Survey Vessel Types\*

	2005 Average Revenue (\$)									
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other ≤ \$15,000	Weighted Average			
Number of Vessels	5	7	1	8	28	29	77			
Species Group										
Whiting	0	0	n/a	0	0	0	0			
Groundfish	69,127	33,098	n/a	5,033	1,755	1,876	9,817			
Salmon Troll	13,592	4,064	n/a	13,601	35,624	4,667	11,068			
Salmon Net	0	0	n/a	0	0	0	0			
Crab	15,168	16,750	n/a	86,349	4,832	331	19,397			
Shrimp	0	0	n/a	0	0	0	0			
HMS	5,125	56	n/a	10,532	6,506	173	3,336			
Pelagic Species	0	0	n/a	0	0	0	0			
Halibut	2,899	0	n/a	160	467	18	312			
Total***	105,912	53,996	n/a	116,485	49,731	7,066	44,161			
	2005 Average Ex-Vessel Revenue Shares (%)									
Whiting	0.0	0.0	n/a	0.0	0.0	0.0	0.0			
Groundfish	65.3	61.3	n/a	4.3	3.5	26.5	22.2			
Salmon Troll	12.8	7.5	n/a	11.7	71.6	66.1	25.1			
Salmon Net	0.0	0.0	n/a	0.0	0.0	0.0	0.0			
Crab	14.3	31.0	n/a	74.1	9.7	4.7	43.9			
Shrimp	0.0	0.0	n/a	0.0	0.0	0.0	0.0			
HMS	4.8	0.1	n/a	9.0	13.1	2.5	7.6			
Pelagic Species	0.0	0.0	n/a	0.0	0.0	0.0	0.0			
Halibut	2.7	0.0	n/a	0.1	0.9	0.3	0.7			
Total	100.0	99.9	0.0	99.3	98.9	100.0	99.5			

\* Source: NOAA NMFS (2008)

\*\*Shrimper and "Other > 15,000" vessels not included (n < 3)

# Table 38. 2006 Average Ex-Vessel Revenue for CA/OR/WA Survey Vessel Types\*

	2006 Average Revenue (\$)							
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other > \$15,000	Other ≤ \$15,000	Weighted Average
Number of Vessels	9	10	12	41	27	7	77	183
Species Group								
Whiting	0	0	0	0	0	0	0	0
Groundfish	54,811	34,399	2,213	8,129	895	3,465	1,229	7,324
Salmon Troll	10,470	779	7,332	6,825	23,329	254	4,344	7,847
Salmon Net	0	0	0	3	0	161	5	9
Crab	6,892	19,073	3,629	110,480	5,807	2,219	332	27,453
Shrimp	0	0	0	3,229	0	0	0	723
HMS	456	189	49,459	8,000	4,462	163	237	5,833
Pelagic Species	0	0	0	2	0	0	1	1
Halibut	982	28	147	1,337	765	6,634	150	789
Total***	73,612	54,489	66,593	138,694	35,262	98,064	6,301	53,643
		2	2006 Avera	ge Ex-Vessel	Revenue S	hares (%)		
Whiting	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Groundfish	74.5	63.1	3.3	5.9	2.5	3.5	19.5	13.7
Salmon Troll	14.2	1.4	11.0	4.9	66.2	0.3	68.9	14.6
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Crab	9.4	35.0	5.5	79.7	16.5	2.3	5.3	51.2
Shrimp	0.0	0.0	0.0	2.3	0.0	0.0	0.0	1.3
HMS	0.6	0.3	74.3	5.8	12.7	0.2	3.8	10.9
Pelagic Species	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Halibut	1.3	0.1	0.2	1.0	2.2	6.8	2.4	1.5
Total	100.0	100.0	94.3	99.5	100.0	13.1	100.0	93.2

\* Source: NOAA NMFS (2008)

\*\*Shrimper Vessels not included (n < 3)

# Table 39. 2005 Average Ex-Vessel Revenue for CA/OR/WA Survey Vessel Types\*

			20	05 Average	Revenue (\$	)		
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other > \$15,000	Other ≤ \$15,000	Weighted Average
Number of Vessels	10	14	4	22	78	4	60	192
Species Group								
Whiting	0	0	0	0	0	0	0	0
Groundfish	53,858	32,803	0	9,066	1,153	7,032	1,712	7,386
Salmon Troll	14,785	3,124	13,717	15,577	33,009	0	5,602	18,229
Salmon Net	0	0	0	0	4	0	46	16
Crab	9,840	11,050	5,735	88,215	6,566	1,720	174	14,303
Shrimp	0	0	0	0	0	0	0	0
HMS	4,315	28	69,865	8,875	3,073	31	85	3,975
Pelagic Species	0	0	0	6	0	0	0	1
Halibut	2,061	1,028	194	925	367	15,083	114	791
Total***	84,860	51,044	89,510	122,965	45,410	91,023	7,732	46,857
	2005 Average Ex-Vessel Revenue Shares (%)							
Whiting	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Groundfish	63.5	64.3	0.0	7.4	2.5	7.7	22.1	15.8
Salmon Troll	17.4	6.1	15.3	12.7	72.7	0.0	72.4	38.9
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
Crab	11.6	21.6	6.4	71.7	14.5	1.9	2.3	30.5
Shrimp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HMS	5.1	0.1	78.1	7.2	6.8	0.0	1.1	8.5
Pelagic Species	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Halibut	2.4	2.0	0.2	0.8	0.8	16.6	1.5	1.7
Total	100.0	94.1	100.0	99.8	97.3	26.2	100.0	95.4

\* Source: NOAA NMFS (2008)

\*\*Shrimper Vessels not included (n < 3)

## Table 40. 2006 Average Ex-Vessel Revenue for Oregon Vessel Types (All Active Fishermen)\*

			2006 Av	verage Reven	ue (\$)		
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other ≤ \$15,000	Weighted Average
Number of Vessels	17	19	22	81	46	193	378
Species Group							
Whiting	0	0	0	0	0	0	0
Groundfish	23,369	23,689	2,021	3,881	872	1,862	4,248
Salmon Troll	3,957	2,015	8,539	5,230	20,115	2,708	5,728
Salmon Net	0	0	0	0	0	0	0
Crab	265	0	0	0	0	0	12
Shrimp	2,927	12,787	2,547	108,791	2,532	273	24,683
HMS	3,286	1,276	53,553	11,606	10,530	512	7,359
Pelagic Species	0	0	0	1	0	0	0
Halibut	2,043	1,313	406	1,825	316	29	626
Total***	35,849	41,174	67,067	131,591	34,368	5,388	42,717
		2006	Average Ex	-Vessel Rever	ue Shares (%	%)	
Whiting	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Groundfish	65.2	57.5	3.0	2.9	2.5	34.6	9.9
Salmon Troll	11.0	4.9	12.7	4.0	58.5	50.3	13.4
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crab	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Shrimp	8.2	31.1	3.8	82.7	7.4	5.1	57.8
HMS	9.2	3.1	79.9	8.8	30.6	9.5	17.2
Pelagic Species	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Halibut	5.7	3.2	0.6	1.4	0.9	0.5	1.5
Total	100.0	<b>99.8</b>	100.0	99.8	100.0	99.9	99.9

\* Source: NOAA NMFS (2008)

\*\*Shrimper and "Other > 15,000" vessels not included (n < 3)

			2005 Av	verage Revenu	1e (\$)				
FEAM Vessel Type**	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Crabber	Salmon Troller	Other ≤ \$15,000	Weighted Average		
Number of Vessels	18	23	11	50	123	152	377		
Species Group									
Whiting	0	0	0	0	0	0	0		
Groundfish	28,257	22,312	2,102	4,148	751	1,798	4,413		
Salmon Troll	5,740	1,945	15,905	13,225	32,108	4,513	10,327		
Salmon Net	0	0	0	0	6	0	1		
Crab	0	0	0	0	0	0	0		
Shrimp	6,485	10,369	2,086	70,689	5,260	140	16,793		
HMS	1,631	211	45,300	8,537	6,492	223	5,454		
Pelagic Species	0	0	0	0	0	0	0		
Halibut	1,630	564	11	1,111	396	92	436		
Total***	43,744	35,413	65,407	97,740	45,022	6,765	37,431		
	2005 Average Ex-Vessel Revenue Shares (%)								
Whiting	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Groundfish	64.6	63.0	3.2	4.2	1.7	26.6	11.8		
Salmon Troll	13.1	5.5	24.3	13.5	71.3	66.7	27.6		
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Crab	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Shrimp	14.8	29.3	3.2	72.3	11.7	2.1	44.9		
HMS	3.7	0.6	69.3	8.7	14.4	3.3	14.6		
Pelagic Species	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Halibut	3.7	1.6	0.0	1.1	0.9	1.4	1.2		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

# Table 41. 2005 Average Ex-Vessel Revenue for Oregon Vessel Types (All Active Fishermen)\*

\* Source: NOAA NMFS (2008)

\*\*Shrimper and "Other > 15,000" vessels not included (n < 3)

# Table 42. 2006 Average Ex-Vessel Revenue for CA/OR/WA Vessel Types (All Active Fishermen)\*

	2006 Average Revenue (\$)								
FEAM Vessel Type	Sablefish Fixed Gear	Groundfish Fixed Gear	HMS	Shrimper	Crabber	Salmon Troller	Other > \$15,000	Other ≤ \$15,000	Weighted Average
Number of Vessels	49	81	50	4	232	170	14	501	1101
Species Group									
Whiting	0	0	0	62	0	0	0	0	0
Groundfish	22,442	23,201	2,484	6,667	3,602	892	4,301	1,770	4,599
Salmon Troll	4,305	2,551	6,779	0	6,851	24,732	127	2,949	7,293
Salmon Net	0	9	0	0	5	47	192	14	18
Crab	160	528	0	72,650	4	47	31	2	320
Shrimp	2,507	5,777	1,783	76	107,386	6,953	1,106	339	24,488
HMS	1,440	342	56,958	0	7,326	3,718	73	346	4,952
Pelagic Species	16	9	58	29	3	98	848	3	32
Halibut	815	8,711	244	1,872	1,125	448	394	217	1,105
Total**	32,776	42,000	71,257	83,064	126,531	37,334	80,871	5,679	44,126
			<b>2006</b> A	Average Ex-V	essel Reve	nue Shares	(%)		
Whiting	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Groundfish	68.5	55.2	3.5	8.0	2.8	2.4	5.3	31.2	10.4
Salmon Troll	13.1	6.1	9.5	0.0	5.4	66.2	0.2	51.9	16.5
Salmon Net	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.0
Crab	0.5	1.3	0.0	87.5	0.0	0.1	0.0	0.0	0.7
Shrimp	7.6	13.8	2.5	0.1	84.9	18.6	1.4	6.0	55.5
HMS	4.4	0.8	79.9	0.0	5.8	10.0	0.1	6.1	11.2
Pelagic Species	0.1	0.0	0.1	0.0	0.0	0.3	1.0	0.1	0.1
Halibut	2.5	20.7	0.3	2.3	0.9	1.2	0.5	3.8	2.5
Total	96.7	97.9	95.9	97.9	99.8	98.9	8.7	99.3	97.0

\* Source: NOAA NMFS (2008)

#### 2005 Average Revenue (\$) Sablefish Fixed Groundfish Salmon Other > Other $\leq$ Weighted FEAM Vessel Type Gear **Fixed Gear** HMS Shrimper Crabber Troller \$15,000 \$15,000 Average 56 86 27 4 122 409 11 436 1151 Number of Vessels **Species Group** 0 0 0 0 0 0 0 0 0 Whiting Groundfish 29,151 22,795 6,782 7,047 1,838 5,485 813 2,013 4,128 Salmon Troll 14,979 3,659 1,928 1,647 13,674 36,869 7,004 4,143 15,301 Salmon Net 0 11 0 168 62 31 0 37 19 Crab 0 548 0 0 64,551 1,686 12 0 449 Shrimp 4,433 4,478 1,206 214 76,834 9,036 4 225 11,935 HMS 969 0 71 54,103 5,954 3,485 1,841 104 3,209 8 **Pelagic Species** 1 47 0 0 3 1 8 5 Halibut 739 7,685 149 2,062 1,020 303 651 843 183 Total\*\* 39,372 40,684 73,766 75,783 104,736 51,261 99,672 6,761 37,225 2005 Average Ex-Vessel Revenue Shares (%) Whiting 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Groundfish 74.0 56.0 2.5 8.9 5.2 1.6 7.1 29.8 11.1 Salmon Troll 2.2 13.1 71.9 41.1 9.3 4.7 20.3 7.0 61.3 Salmon Net 0.0 0.2 0.1 0.1 0.5 0.1 0.0 0.0 0.0 Crab 0.0 0.0 85.2 1.6 0.0 0.0 0.0 1.2 1.3 Shrimp 11.3 11.0 1.6 0.3 73.4 17.6 0.0 32.1 3.3 HMS 2.5 0.0 5.7 0.2 73.3 6.8 1.8 1.5 8.6 **Pelagic Species** 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.1 2.7 Halibut 1.9 18.9 0.2 1.0 0.6 0.7 2.7 2.3 92.3 98.0 99.5 100.0 99.3 96.4 Total 98.9 98.6 16.6

#### Table 43. 2005 Average Ex-Vessel Revenue for CA/OR/WA Vessel Types (All Active Fishermen)\*

\* Source: NOAA NMFS (2008)

The nearly \$10,000 reduction in average ex-vessel salmon revenues from 2005 to 2006 for CA/OR/WA salmon fishermen are shown in Figure 6. The only noticeable increase in ex-vessel revenue from 2005 to 2006 is for HMS. This increase may indicate a shift in strategy by targeting albacore instead of salmon during the 2006 season. Figure 7 also shows the sharp decline in Oregon average ex-vessel revenue (over \$13,000) from 2005 to 2006. Revenue from salmon caught by troll gear was \$18,000 less in 2006 from 2005. Oregon salmon fishermen appear to have honed their efforts to harvesting crab and HMS species, however, as these revenues increased in 2006.



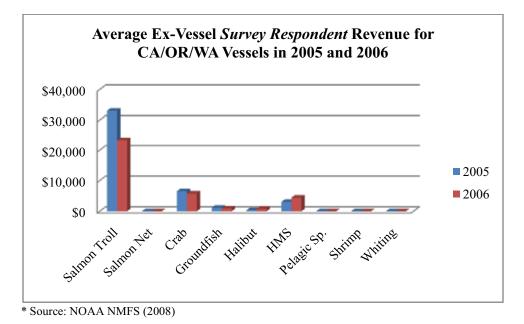
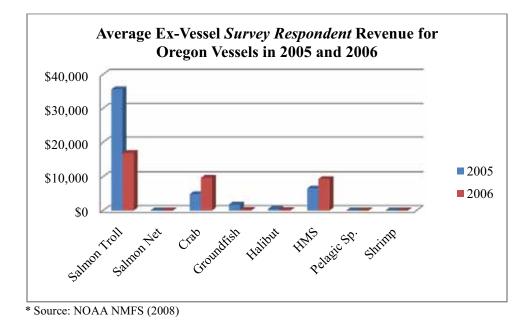


Figure 7: Average Ex-Vessel Survey Respondent Revenue for Oregon Vessels in 2005 and 2006\*



<sup>46</sup> 

While Oregon's total net revenue is only 45 percent of CA/OR/WA total net revenue in 2006, on average individual Oregon vessels generated similar net revenues to other west coast vessels (Table 44). Oregon groundfish fixed gear and HMS vessels preformed less well compared to CA/OR/WA vessels, however, in 2006. But average net revenue for 2006 Oregon crabbers was over \$33,000 higher than CA/OR/WA vessels. When comparing across years (Tables 44 and 45), total and average net revenues of salmon trollers diverge dramatically. Total 2006 net revenue for CA/OR/WA and Oregon were down by 173 percent and 616 percent, respectively, from 2005. Although 2006 was a dismal year for salmon fishermen, west coast and Oregon crabbers vastly increased their net revenues from 2005.

		2006 Net Revenue (\$)							
FEAM Vessel Type	CA/OI	R/WA	Oregon						
	Total	Average	Total	Average					
Salmon Troller	-72,700	-2,693	-21,110	-2,111					
Crabber	1,988,224	48,493	1,060,197	81,554					
Groundfish Fixed Gear	15,839	1,584	-38,626	-6,438					
HMS	67,047	5,587	-115,239	-28,810					
Sablefish Fixed Gear	17,284	1,920	25,231	5,046					
Other > \$15,000	46,604	6,658	0	n/a					
Other $\le$ \$15,000	-728,035	-9,455	-314,491	-9,828					
Total	1,334,262	7,291	595,962	8,514					

Table 44: CA/OR/WA Survey Respondent Net Revenue by Vessel Type in 2006

\* Source: NOAA NMFS (2008)

#### Table 45: CA/OR/WA Survey Respondent Net Revenue by Vessel Type in 2005

		2005 Net Revenue (\$)							
	CA/O	R/WA	Oregon						
FEAM Vessel Type	Total	Average	Total	Average					
Salmon Troller	99,848	1,280	4,086	146					
Crabber	390,189	17,736	-53,574	-6,697					
Groundfish Fixed Gear	-22,791	-1,628	-12,078	-1,725					
HMS	28,111	7,028	n/a	n/a					
Sablefish Fixed Gear	-72,421	-7,242	4,891	978					
Other > \$15,000	-83,942	-20,985	n/a	n/a					
Other $\le$ \$15,000	-358,093	-5,968	-101,265	-3,492					
Total	-19,099	-99	-157,941	-2,025					

\* Source: NOAA NMFS (2008)