

## SUMMARY OF COMMUNITY IMPACTS BASED ON CHANGES TO PROJECTED EX-VESSEL REVENUE UNDER THE GROUND FISH HARVEST SPECIFICATIONS ALTERNATIVES

This supplemental attachment contains the following tables and figures to illustrate the estimated effects of the alternatives for groundfish harvest specifications and management measures:

- Table 1 summarizes the elements of the analytical alternatives used to evaluate impacts of the 2011-2012 groundfish harvest specifications and management measures.
- Table 2 and Table 3 show the absolute (\$millions) and relative (percent) change in projected ex-vessel revenue under the action alternatives for 2011 compared to the No Action alternative. Table cells are highlighted in a color gradient to show the magnitude of changes. For the purposes of assessing the relative impact of the alternatives examining 2011 projections should be sufficient, because at this general level changes in 2012 should be very similar in direction and magnitude.
- Table 4 and Table 5 show personal income impacts by port group area for non-tribal, non-whiting sector groundfish landings in a format to the preceding tables. These estimates were produced by the Northwest Fisheries Science Center's IO-Pac model based on projected landings.
- Table 6 is a more detailed view in format similar to Table 2, showing the absolute change in ex-vessel revenue by port group area and fishery.
- Figures 1 and 2 show the year to year percent change in ex-vessel revenue, 1999-2009 for nonwhiting and whiting sectors to provide context for the changes projected under the alternatives.
- Figure 3 shows the distribution in groundfish ex-vessel revenue in 2009 by port group area.
- Table 7 shows the "primary sector" for the port group area, using PacFIN revenue data to identify which sector accounted for the largest source of ex-vessel groundfish revenue, 2005-2009 (the actual value is shown in parenthesis). It summarizes the vulnerability analysis (Agenda Item B.3.a, Attachment 4) by showing the number of counties rated vulnerable or most vulnerable within the region. It takes information from the Amendment 20 Final Environmental Impact Statement port comparative advantage model on factors related to trawl rationalization, but also relevant to the effects of 2011-2012 management measures. It also shows relative standing of port group areas with respect to "potential QP revenue."<sup>1</sup>
- Table 8 shows the importance of various sectors within port group areas from a coastwide and within port perspective. Coastwide importance is based on the rank of the port group area relative to all other port groups in terms of ex-vessel revenue from the sector. The in-port importance is based on the port's ranking in terms of landings from groundfish sectors in that port as a percentage of all landings in the port group. Values in parenthesis show the actual percent of groundfish landings from that sector relative to either coastwide or within port revenues.

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<sup>1</sup>Potential QP revenue was calculated based on an assessment of the principal port of vessels associated with trawl limited access permits and the expected initial allocation of quota shares to these permits. Based on the trawl sector allocations under the preliminary preferred alternative and recent average prices by species category, potential revenue from the quota pounds that could be assigned to vessels associated with the ports was calculated. That this is potential revenue cannot be over-emphasized because there are many factors that could cause quota pounds to be landed in other ports and regions. In addition, because of both potential bycatch and market constraints, actual landings may not take the full allocation for a given species.

- Table 9 provides additional information on the distribution of ex-vessel revenue by sector and port group area.
- Additional detailed ex-vessel revenue projections are available in an Excel workbook posted on the Council’s website at <http://www.pcouncil.org/council-operations/briefing-books/>.

Projected coastwide revenues (\$millions) under the alternatives are as follows:

	No										
	Action	Alt 1a	Alt 1b	Alt 1g	Alt 1h	Alt 2a	Alt 2b	Alt 3a	Alt 3b	Alt 3c	Alt 3d
<b>2011</b>	382.26	373.72	374.01	373.70	373.72	369.98	370.01	369.51	369.53	365.41	365.44
<b>2012</b>	382.26	373.03	373.07			369.10	369.12	371.50	371.52	368.96	368.98

Some key points indicated by the information in the tables:

- Port group areas in Oregon, particularly Astoria, Newport, and Coos Bay show the largest absolute declines in ex-vessel revenue followed by the Northern California ports of Eureka and Fort Bragg; ports in Central and Southern California show very small decreases or modest increases in projected revenue. The largest absolute declines in ex-vessel revenue are projected for Newport Oregon, ranging from -\$1.5 million under Alternative 1 to -\$3.0 million under Alternative 3.
- Projected changes in personal income show a similar distribution among port group areas as ex-vessel revenue. This is not unexpected because the distribution of projected ex-vessel revenue is the input to the IO-Pac model.
- The largest relative decline in ex-vessel revenue occurs in Brookings (-5.7% to -13.5%) and Fort Bragg (-6.7% to -12.6%).
- Looking at the more detailed data in Table 6, nonwhiting trawl in Astoria and Newport would experience the largest absolute decline in ex-vessel revenue (-30.9% and -28.5%, respectively) which would occur under Alternatives 2a and 2b and all of the Alternative 3 options. Declines in nonwhiting trawl in these ports are also accompanied by maximum declines in limited entry fixed gear revenues of up to 48 percent.
- The projected relative change in coastwide ex-vessel revenue under all the action alternatives is within the range of year to year changes seen for groundfish sectors over the past decade. For nonwhiting sectors these year-on revenue changes have ranged roughly +/- 20 percent; whiting fisheries have been more volatile in terms of year to year revenue changes.
- The Oregon and Northern California ports showing the largest declines in revenue depend on nonwhiting trawl as a significant share of groundfish revenue based on 2005-2009 data. At the high end, 79 percent of revenue came from nonwhiting trawl in Eureka; Newport has the lowest share among these ports at 41 percent. These ports are also in counties rated vulnerable or most vulnerable, with the exception of Astoria. Astoria accounted for the largest share of groundfish revenue in 2009 at 18 percent; Newport was second at 17 percent.

**Table 1. Summary of the analytical alternatives.**

<b>Alternative</b>	<b>Analytical Scenario</b>	<b>Trawl Option</b>	<b>Non-Nearshore Option</b>	<b>Nearshore Option</b>
"No Action"	2010	2010	2010	No Action.1
"Alt 1a"	SQ SPR for OF Spp* and PPA for Non-OF Spp	Alava Closed	1	1 a: 50-50
"Alt 1b"		Alava Closed	1	1 a: 55-45
"Alt 1g"		Alava Open	1	2 a: 50-50
"Alt 1h"		Alava Open	1	2 a: 55-45
"Alt 2a"	Intermed. OF Spp ACL and PPA for Non-OF Spp	Intermediate Petrale ACL	2	2 a: 50-50
"Alt 2b"		Intermediate Petrale ACL	2	2 a: 55-45
"Alt 3a"	Low OF Spp ACL and PPA for Non-OF SPP**	Low Petrale, Low Sablefish	3.1	3 a: 50-50
"Alt 3b"		Low Petrale, Low Sablefish	3.1	3 a: 55-45
"Alt 3c"		Low Petrale, Low Sablefish	3.2	3 a: 50-50
"Alt 3d"		Low Petrale, Low Sablefish	3.2	3 a: 55-45
* Except Widow and Yelloweye (see p. 18 B3a Att 1)				
** Low sablefish ACL				

**Table 2. Change in projected ex-vessel revenue (\$millions) by alternative and port group area.**

Port Area	Alt 1a	Alt 1b	Alt 1g	Alt 1h	Alt 2a	Alt 2b	Alt 3a	Alt 3b	Alt 3c	Alt 3d
Puget Sound	-0.5	-0.5	-0.5	-0.5	-0.7	-0.7	-0.8	-0.8	-1.1	-1.1
N. WA Coast	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.8	-0.8	-1.0	-1.0
S.& Cen. WA Coast	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.7	-0.7	-1.0	-1.0
Unid. WA	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Astoria	-1.4	-1.4	-1.4	-1.4	-2.6	-2.6	-2.6	-2.6	-2.9	-2.9
Newport	-1.5	-1.5	-1.5	-1.5	-2.1	-2.1	-2.0	-2.0	-3.0	-3.0
Coos Bay	-1.1	-1.1	-1.1	-1.1	-1.6	-1.6	-1.6	-1.6	-2.0	-2.0
Brookings	-0.9	-0.7	-0.9	-0.9	-1.1	-1.0	-1.2	-1.1	-1.7	-1.7
Crescent City	-0.3	-0.3	-0.3	-0.3	-0.5	-0.5	-0.5	-0.5	-0.7	-0.7
Eureka	-0.7	-0.7	-0.7	-0.7	-1.1	-1.1	-1.1	-1.1	-1.3	-1.3
Fort Bragg	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6	-0.6	-0.9	-0.9
Bodega Bay	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
San Francisco	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.5	-0.5
Monterey	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.3	-0.3
Morro Bay	+0.1	+0.1	+0.1	+0.1	+0.0	+0.0	-0.0	-0.0	-0.1	-0.1
Santa Barbara	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1
Los Angeles	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
San Diego	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Coastwide	-8.5	-8.3	-8.6	-8.5	-12.3	-12.3	-12.8	-12.7	-16.8	-16.8

**Table 3. Percent change in projected ex-vessel revenue by alternative and port group area.**

Port Area	Alt 1a	Alt 1b	Alt 1g	Alt 1h	Alt 2a	Alt 2b	Alt 3a	Alt 3b	Alt 3c	Alt 3d
Puget Sound	-1.2%	-1.2%	-1.2%	-1.2%	-1.6%	-1.6%	-1.8%	-1.8%	-2.6%	-2.6%
N. WA Coast	-5.7%	-5.7%	-5.7%	-5.7%	-5.7%	-5.7%	-6.3%	-6.3%	-7.9%	-7.9%
S.& Cen. WA Coast	-1.2%	-1.2%	-1.2%	-1.2%	-1.6%	-1.6%	-1.9%	-1.9%	-2.7%	-2.7%
Unid. WA	-3.3%	-3.3%	-3.3%	-3.3%	-3.3%	-3.3%	-3.3%	-3.3%	-3.3%	-3.3%
Astoria	-3.7%	-3.7%	-3.7%	-3.7%	-7.1%	-7.1%	-7.1%	-7.1%	-7.8%	-7.8%
Newport	-5.1%	-5.0%	-5.1%	-5.1%	-7.2%	-7.2%	-7.0%	-7.0%	-10.3%	-10.3%
Coos Bay	-4.2%	-4.2%	-4.2%	-4.2%	-6.4%	-6.4%	-6.3%	-6.3%	-8.1%	-8.1%
Brookings	-6.7%	-5.7%	-6.9%	-6.8%	-8.3%	-8.2%	-9.1%	-9.0%	-13.5%	-13.4%
Crescent City	-2.1%	-1.6%	-2.1%	-2.1%	-3.0%	-3.0%	-3.4%	-3.3%	-4.2%	-4.2%
Eureka	-4.3%	-4.2%	-4.3%	-4.3%	-6.8%	-6.8%	-6.8%	-6.8%	-8.1%	-8.1%
Fort Bragg	-6.7%	-6.7%	-6.7%	-6.7%	-7.9%	-7.9%	-7.7%	-7.7%	-12.6%	-12.6%
Bodega Bay	-2.0%	-2.0%	-2.0%	-2.0%	-2.7%	-2.7%	-2.7%	-2.7%	-4.3%	-4.3%
San Francisco	-2.1%	-2.1%	-2.1%	-2.1%	-3.1%	-3.1%	-3.3%	-3.3%	-4.5%	-4.5%
Monterey	-1.4%	-1.4%	-1.4%	-1.4%	-2.0%	-2.0%	-2.1%	-2.1%	-4.2%	-4.2%
Morro Bay	1.0%	1.0%	1.0%	1.0%	0.7%	0.7%	-0.3%	-0.3%	-1.0%	-1.0%
Santa Barbara	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Los Angeles	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
San Diego	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
Coastwide	-2.2%	-2.2%	-2.2%	-2.2%	-3.2%	-3.2%	-3.3%	-3.3%	-4.4%	-4.4%

**Table 4. Summary of income impacts for non-tribal, non-whiting commercial groundfish fisheries sectors under the 2011-2012 management alternatives.**

<b>Port Area</b>	<b>Change from No Action (\$ million)</b>										
	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>
<b>Port Area</b>	<b>No Action</b>	<b>Alt 1a</b>	<b>Alt 1b</b>	<b>Alt 1g</b>	<b>Alt 1h</b>	<b>Alt 2a</b>	<b>Alt 2b</b>	<b>Alt 3a</b>	<b>Alt 3b</b>	<b>Alt 3c</b>	<b>Alt 3d</b>
Puget Sound	5.70	-1.10	-1.10	-1.11	-1.11	-1.40	-1.40	-1.65	-1.65	-2.43	-2.43
N. WA Coast	1.32	-0.24	-0.24	-0.25	-0.25	-0.25	-0.25	-0.33	-0.33	-0.59	-0.59
S.& Cen. WA Coast	4.86	-0.66	-0.66	-0.66	-0.66	-0.86	-0.86	-1.00	-1.00	-1.45	-1.45
Astoria	15.49	-1.96	-1.96	-1.98	-1.98	-3.76	-3.76	-3.70	-3.70	-4.16	-4.16
Tillamook	0.22	-0.06	-0.02	-0.06	-0.06	-0.06	-0.06	-0.11	-0.10	-0.11	-0.11
Newport	9.88	-1.57	-1.56	-1.59	-1.59	-2.18	-2.18	-2.11	-2.11	-3.25	-3.24
Coos Bay	7.87	-1.34	-1.34	-1.35	-1.35	-2.01	-2.01	-1.97	-1.97	-2.60	-2.60
Brookings	3.93	-0.72	-0.61	-0.74	-0.73	-0.86	-0.85	-0.95	-0.94	-1.47	-1.46
Crescent City	1.60	-0.24	-0.18	-0.24	-0.23	-0.33	-0.32	-0.37	-0.36	-0.48	-0.48
Eureka	6.06	-0.92	-0.90	-0.92	-0.92	-1.43	-1.43	-1.44	-1.44	-1.75	-1.75
Fort Bragg	5.23	-0.71	-0.71	-0.72	-0.72	-0.84	-0.84	-0.81	-0.81	-1.37	-1.37
Bodega Bay	0.37	-0.06	-0.06	-0.07	-0.07	-0.09	-0.09	-0.08	-0.08	-0.14	-0.14
San Francisco	1.87	-0.25	-0.25	-0.26	-0.26	-0.36	-0.36	-0.38	-0.38	-0.54	-0.54
Monterey	1.46	-0.11	-0.11	-0.12	-0.12	-0.16	-0.16	-0.16	-0.16	-0.33	-0.33
Morro Bay	3.43	+0.03	+0.03	-0.12	-0.12	-0.13	-0.13	-0.03	-0.03	-0.07	-0.07
Santa Barbara	0.80	+0.11	+0.11	+0.10	+0.10	+0.10	+0.10	+0.10	+0.10	+0.10	+0.10
Los Angeles	1.74	-0.04	-0.04	-0.07	-0.07	-0.07	-0.07	-0.04	-0.04	-0.05	-0.05
San Diego	0.73	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
<b>Coastwide</b>	<b>72.57</b>	<b>-9.86</b>	<b>-9.59</b>	<b>-10.17</b>	<b>-10.14</b>	<b>-14.73</b>	<b>-14.71</b>	<b>-15.05</b>	<b>-15.02</b>	<b>-20.69</b>	<b>-20.67</b>

**Table 5. Summary of income impacts for non-tribal, non-whiting commercial groundfish fisheries sectors under the 2011-2012 management alternatives.**

<b>Port Area</b>	<b>% Change from No Action</b>										
	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>	<b><i>(\$ million)</i></b>
<b>Port Area</b>	<b>No Action</b>	<b>Alt 1a</b>	<b>Alt 1b</b>	<b>Alt 1g</b>	<b>Alt 1h</b>	<b>Alt 2a</b>	<b>Alt 2b</b>	<b>Alt 3a</b>	<b>Alt 3b</b>	<b>Alt 3c</b>	<b>Alt 3d</b>
Puget Sound	5.70	-19.3%	-19.3%	-19.4%	-19.4%	-24.6%	-24.6%	-28.9%	-28.9%	-42.6%	-42.6%
N. WA Coast	1.32	-18.3%	-18.2%	-18.9%	-18.9%	-19.3%	-19.3%	-25.0%	-25.0%	-44.7%	-44.7%
S.& Cen. WA Coast	4.86	-13.5%	-13.5%	-13.6%	-13.6%	-17.8%	-17.8%	-20.6%	-20.6%	-29.8%	-29.8%
Astoria	15.49	-12.6%	-12.6%	-12.8%	-12.8%	-24.3%	-24.3%	-23.9%	-23.9%	-26.8%	-26.8%
Tillamook	0.22	-24.7%	-7.8%	-26.2%	-24.6%	-29.0%	-27.4%	-48.0%	-46.5%	-49.7%	-48.2%
Newport	9.88	-15.9%	-15.8%	-16.1%	-16.0%	-22.1%	-22.0%	-21.4%	-21.4%	-32.8%	-32.8%
Coos Bay	7.87	-17.0%	-17.0%	-17.1%	-17.1%	-25.5%	-25.5%	-25.1%	-25.1%	-33.0%	-33.0%
Brookings	3.93	-18.4%	-15.5%	-18.7%	-18.5%	-21.9%	-21.7%	-24.1%	-23.8%	-37.4%	-37.1%
Crescent City	1.60	-15.0%	-11.2%	-14.9%	-14.6%	-20.5%	-20.2%	-22.9%	-22.7%	-30.2%	-30.0%
Eureka	6.06	-15.2%	-14.8%	-15.2%	-15.2%	-23.6%	-23.6%	-23.8%	-23.8%	-28.9%	-28.9%
Fort Bragg	5.23	-13.7%	-13.6%	-13.7%	-13.7%	-16.1%	-16.1%	-15.5%	-15.5%	-26.2%	-26.2%
Bodega Bay	0.37	-17.5%	-17.5%	-18.2%	-18.2%	-23.7%	-23.7%	-22.7%	-22.7%	-36.7%	-36.7%
San Francisco	1.87	-13.6%	-13.3%	-13.9%	-13.9%	-19.2%	-19.2%	-20.2%	-20.2%	-29.0%	-29.0%
Monterey	1.46	-7.8%	-7.4%	-8.4%	-8.4%	-10.7%	-10.7%	-10.6%	-10.6%	-22.8%	-22.8%
Morro Bay	3.43	+0.9%	+1.0%	-3.4%	-3.4%	-3.8%	-3.8%	-1.0%	-1.0%	-1.9%	-1.9%
Santa Barbara	0.80	+13.6%	+13.9%	+11.9%	+11.9%	+11.9%	+11.9%	+12.3%	+12.3%	+12.3%	+12.3%
Los Angeles	1.74	-2.3%	-2.3%	-4.3%	-4.3%	-4.3%	-4.3%	-2.4%	-2.4%	-2.8%	-2.8%
San Diego	0.73	-1.3%	-1.3%	-2.5%	-2.5%	-2.5%	-2.5%	-1.4%	-1.4%	-1.4%	-1.4%
<b>Coastwide</b>	<b>72.57</b>	<b>-13.6%</b>	<b>-13.2%</b>	<b>-14.0%</b>	<b>-14.0%</b>	<b>-20.3%</b>	<b>-20.3%</b>	<b>-20.7%</b>	<b>-20.7%</b>	<b>-28.5%</b>	<b>-28.5%</b>

**Table 6. Change in projected ex-vessel revenue (\$millions) by alternative and port group area and fishery.**

IO_AREA	SECTOR_NAME	Change from No Action (\$ million)									
		Alt 1a	Alt 1b	Alt 1g	Alt 1h	Alt 2a	Alt 2b	Alt 3a	Alt 3b	Alt 3c	Alt 3d
Puget Sound	Non-whiting trawl	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
	Limited entry fixed gear	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-0.8	-0.8
N. WA Coast	Non-whiting trawl	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	Limited entry fixed gear	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	Tribal groundfish	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
S. & Cen. WA Coast	Shoreside whiting trawl	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	Non-whiting trawl	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
	Limited entry fixed gear	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.6	-0.6
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1
	Incidental OA										
Astoria	Shoreside whiting trawl	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	Non-whiting trawl	-1.1	-1.1	-1.1	-1.1	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
	Limited entry fixed gear	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.4	-0.4
	OA nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Tillamook	Non-whiting trawl	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	OA nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Newport	Shoreside whiting trawl	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	Non-whiting trawl	-0.7	-0.7	-0.7	-0.7	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4
	Limited entry fixed gear	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-1.5	-1.5
	OA nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Coos Bay	Shoreside whiting trawl	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	Non-whiting trawl	-0.7	-0.7	-0.7	-0.7	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
	Limited entry fixed gear	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.5	-0.5
	OA nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	OA non-nearshore	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
Brookings	Non-whiting trawl	-0.3	-0.3	-0.3	-0.3	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
	Limited entry fixed gear	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.6	-0.6
	OA nearshore	-0.2	-0.0	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3
	OA non-nearshore	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.3	-0.3
Crescent City	Shoreside whiting trawl	+0.0	+0.0	+0.0	+0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	Non-whiting trawl	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
	Limited entry fixed gear	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
	OA nearshore	-0.1	+0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Eureka	Shoreside whiting trawl	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0

**Change from No Action (\$ million)**

<u>IO AREA</u>	<u>SECTOR NAME</u>	<u>Alt 1a</u>	<u>Alt 1b</u>	<u>Alt 1g</u>	<u>Alt 1h</u>	<u>Alt 2a</u>	<u>Alt 2b</u>	<u>Alt 3a</u>	<u>Alt 3b</u>	<u>Alt 3c</u>	<u>Alt 3d</u>
	Non-whiting trawl	-0.5	-0.5	-0.5	-0.5	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
	Limited entry fixed gear	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
	OA nearshore	-0.0	+0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	OA non-nearshore	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.0	-0.0	-0.1	-0.1
Fort Bragg	Non-whiting trawl	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
	Limited entry fixed gear	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.4	-0.4
	OA nearshore	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1
	OA non-nearshore	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
Bodega Bay	Non-whiting trawl	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	Limited entry fixed gear	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	OA nearshore	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
San Francisco	Non-whiting trawl	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
	Limited entry fixed gear	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
	OA nearshore		+0.0					-0.0	-0.0	-0.0	-0.0
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
	Incidental OA										
Monterey	Non-whiting trawl	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
	Limited entry fixed gear	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
	OA nearshore	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.0	+0.0	+0.0	+0.0
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1
Morro Bay	Non-whiting trawl	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	Limited entry fixed gear	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	OA nearshore	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2
	OA non-nearshore	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
	Incidental OA										
	Non-tribal non-groundfish										
Santa Barbara	Limited entry fixed gear	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	OA nearshore	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	Incidental OA										
Los Angeles	Limited entry fixed gear	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	OA nearshore		+0.0					-0.0	-0.0	-0.0	-0.0
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	Incidental OA										
	Non-tribal non-groundfish										
San Diego	Limited entry fixed gear	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
	OA nearshore		+0.0					-0.0	-0.0	-0.0	-0.0
	OA non-nearshore	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0

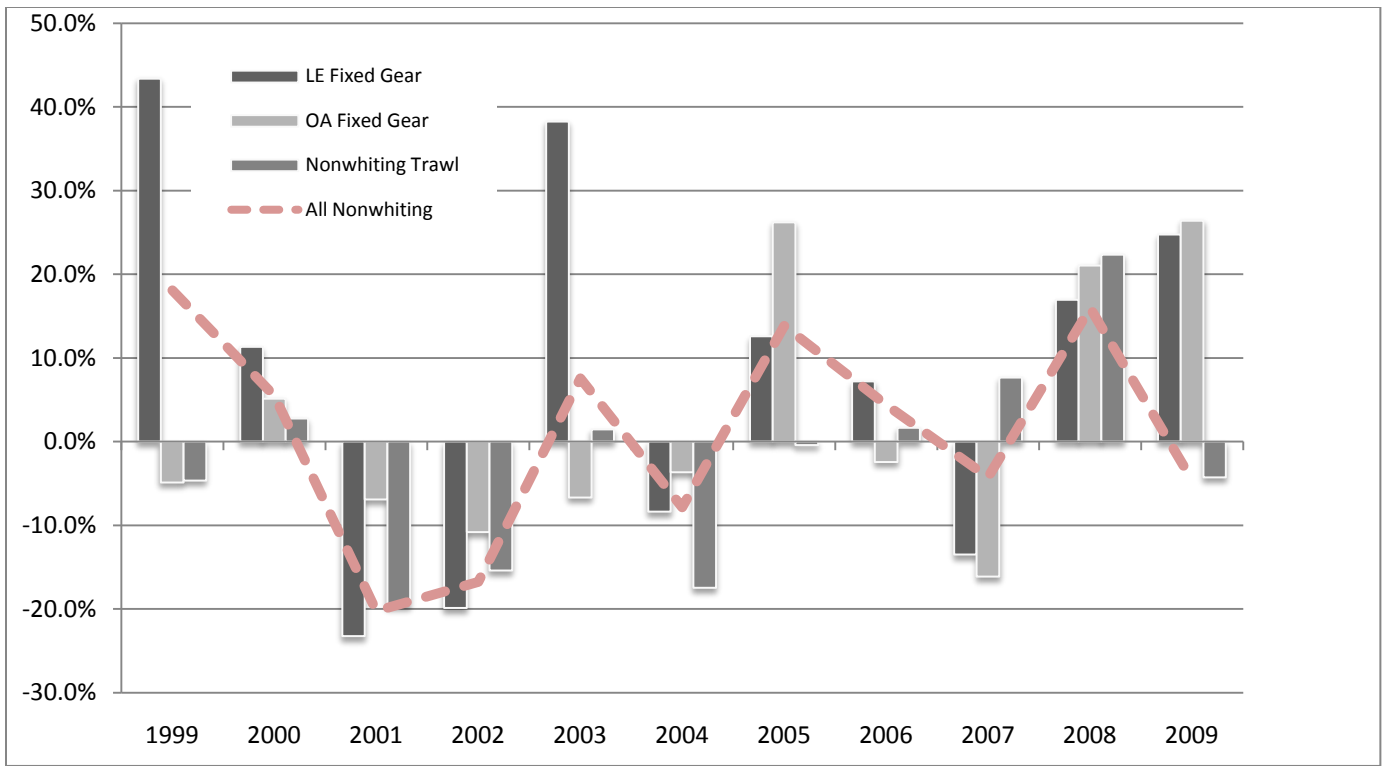


Figure 1. Percent change in inflation adjusted ex-vessel revenue for nonwhiting sectors, 1999-2009.



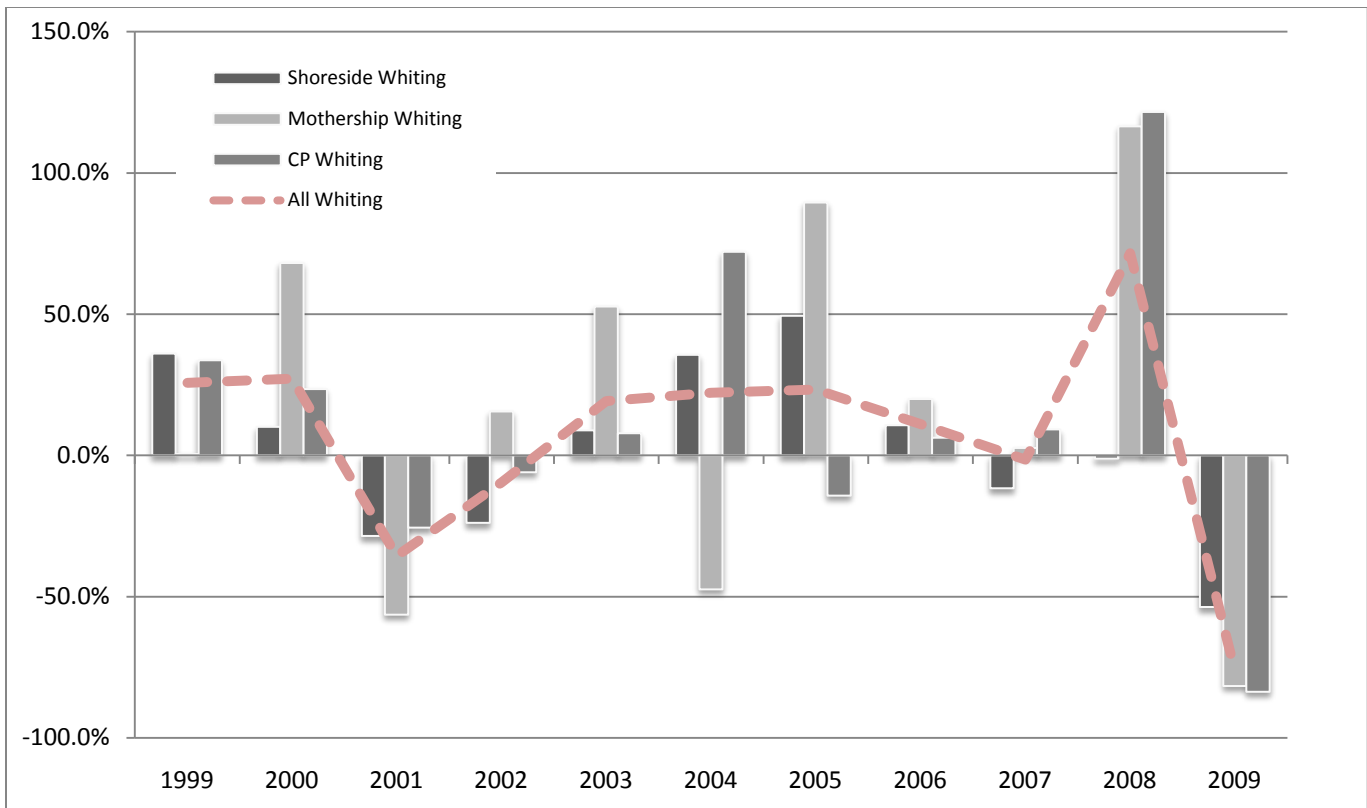
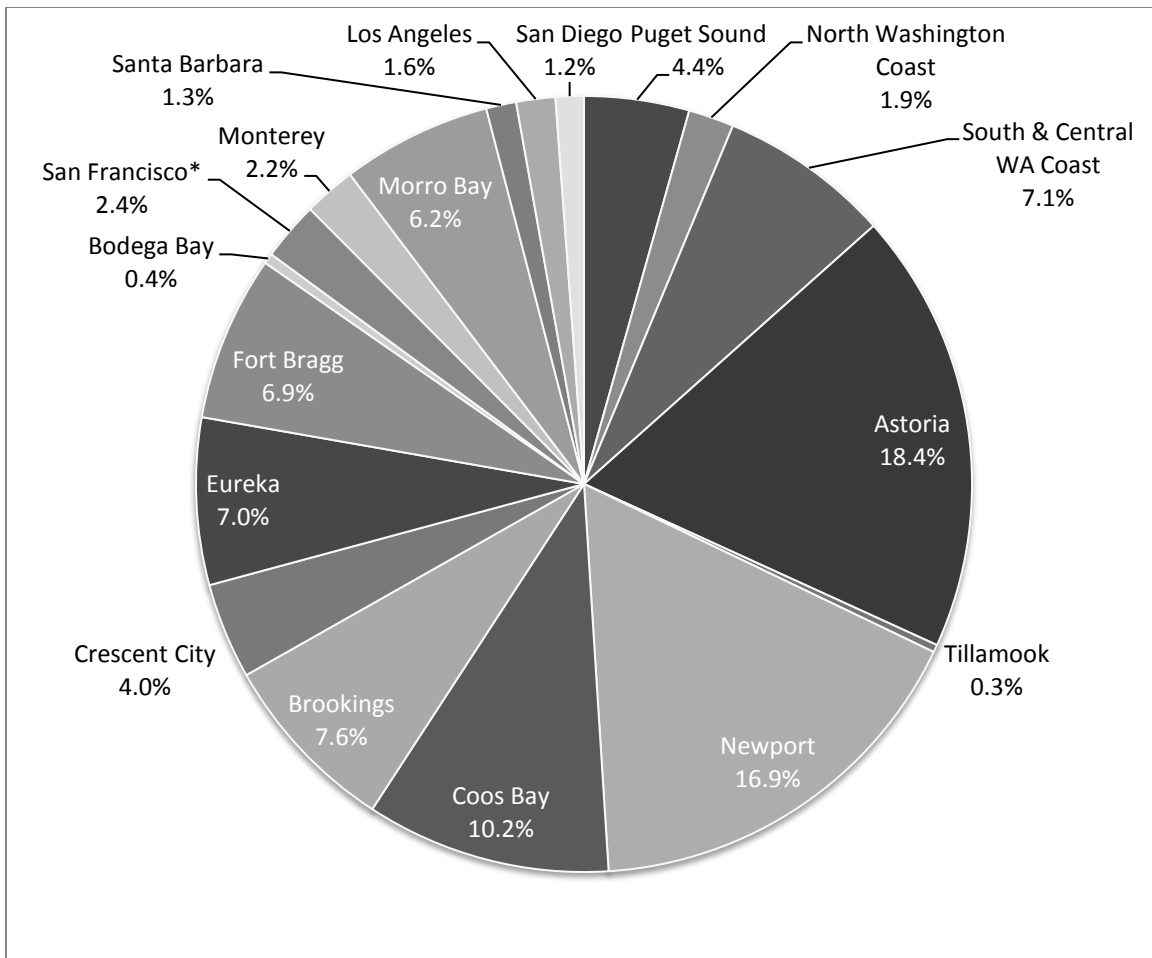


Figure 2. Percent change in inflation adjusted ex-vessel revenue for whiting sectors, 1999-2009.



**Figure 3. Distribution of revenue from groundfish in 2009 by port group area.**

**Table 7. Community status indicators, commercial groundfish fishery.**

Port Group Area	Primary Sector	Vulnerable Counties	Rationalization Effects			Potential QP Revenue
			Fleet Efficiency	Bycatch Dependent Area	Shorebased Infrastructure	
Puget Sound	Nonwhiting Trawl (53.5%)	None out of 8*	?	--	++	Medium
North Washington Coast	Tribal Nonwhiting (59.7%)	None out of 2	-	--	--	Low
S. and Central WA Coast	Shoreside Whiting (41.9%)	2 out of 3	-	-	+	Medium
Astoria	Nonwhiting Trawl (67.0%)	None out of 2	+	+	++	High
Tillamook	OA Fixed Gear (58.9%)	1 out of 1				Low
Newport	Nonwhiting Trawl (40.9%)	1 out of 1 (Most Vulnerable)	+	+	++	High
Coos Bay	Nonwhiting Trawl (72.8%)	1 out of 3	+	+	++	High
Brookings	Nonwhiting Trawl (42.7%)	1 out of 1	+	+	-	Low
Crescent City	Nonwhiting Trawl (60.7%)	1 out of 1 (Most Vulnerable)	-	+	+	Low
Eureka	Nonwhiting Trawl (79.4%)	1 out of 1	+	+	+	High
Fort Bragg	Nonwhiting Trawl (67.9%)	1 out of 1 (Most Vulnerable)	-	-	+	Medium
Bodega Bay	Nonwhiting Trawl (58.4%)	None out of 2				Low
San Francisco	Nonwhiting Trawl (68.1%)	None out of 2	-	--	++	High
Monterey	Nonwhiting Trawl (47.3%)	None out of 2	-	--	+	Medium
Morro Bay	OA Fixed Gear (60.8%)	None out of 1	?	+	-	Medium
Santa Barbara	OA Fixed Gear (51.6%)	None out of 2				None
Los Angeles	LE Fixed Gear (79.5%)	None out of 2				None
Sand Diego	LE Fixed Gear (75.0%)	None out 1				None

**Table 8. Importance of sectors in port group areas based on ex-vessel revenue, 2005-2009.**

Port Group Area	Shoreside Whiting		Nonwhiting Trawl		Fixed Gear (LE & OA)	
	Coastwide	In Port	Coastwide	In Port	Coastwide	In Port
Puget Sound	Medium (0.0%)	Medium (0.1%)	High (6.5%)	Medium (53.5%)	High (9.5%)	Medium (44.6%)
North Washington Coast	Low (0.0%)	Low (0.0%)	Low (2.3%)	Low (17.7%)	Medium (5.2%)	Low (22.4%)
South and Central WA Coast	High (27.4%)	High (41.9%)	Medium (2.9%)	Low (15.3%)	High (6.9%)	Low (20.4%)
Astoria	High (27.7%)	High (23.0%)	High (23.6%)	High (67.0%)	Medium (5.8%)	Low (9.4%)
Tillamook	None (0.0%)	None (0.0%)	Low (0.2%)	Medium (33.1%)	Low (0.8%)	High (63.9%)
Newport	High (35.4%)	High (36.2%)	High (11.7%)	Medium (40.9%)	High (11.1%)	Low (21.9%)
Coos Bay	High (3.7%)	Medium (5.8%)	High (13.7%)	High (72.8%)	High (6.8%)	Low (20.5%)
Brookings	Low (0.0%)	Low (0.0%)	Medium (4.3%)	Medium (42.7%)	High (10.2%)	High (56.8%)
Crescent City	Medium (2.6%)	High (10.2%)	Medium (4.6%)	High (60.7%)	Medium (3.8%)	Medium (28.6%)
Eureka	Medium (3.0%)	Medium (6.4%)	High (11.1%)	High (79.4%)	Low (3.4%)	Low (13.9%)
Fort Bragg	None (0.0%)	None (0.0%)	High (7.4%)	High (67.9%)	Medium (6.1%)	Medium (31.7%)
Bodega Bay	None (0.0%)	None (0.0%)	Low (0.9%)	Medium (58.4%)	Low (1.0%)	Medium (36.3%)
San Francisco	None (0.0%)	None (0.0%)	Medium (4.6%)	High (68.1%)	Low (3.2%)	Medium (26.4%)
Monterey	Low (0.0%)	Low (0.0%)	Medium (3.5%)	Medium (47.3%)	Medium (6.5%)	Medium (49.4%)
Morro Bay	None (0.0%)	None (0.0%)	Medium (2.4%)	Low (32.7%)	High (8.5%)	High (64.9%)
Santa Barbara	None (0.0%)	None (0.0%)	Low (0.0%)	Low (0.4%)	Low (3.5%)	High (87.6%)
Los Angeles	None (0.0%)	None (0.0%)	Low (0.0%)	Low (0.1%)	Medium (4.7%)	High (91.9%)
San Diego	None (0.0%)	None (0.0%)	Low (0.0%)	Low (0.0%)	Low (2.9%)	High (92.5%)

**Table 9. Distribution of ex-vessel revenue from groundfish within port group areas, 2005-2009.**

Port Group Area	Whiting Shoreside	Nonwhiting Trawl	LEFG	OAFG	Incidental	Tribal Shoreside Whiting	Tribal Nonwhiting Groundfish
Puget Sound	0.1%	53.5%	43.8%	0.8%	0.2%	0.0%	1.6%
North Washington Coast	0.0%	17.7%	19.0%	3.4%	0.1%	0.0%	59.7%
South and Central WA Coast	41.9%	15.3%	16.9%	3.6%	0.8%	20.9%	0.6%
Unidentified WA	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	99.9%
Astoria	23.0%	67.0%	8.2%	1.2%	0.6%	0.0%	0.0%
Tillamook	0.0%	33.1%	5.1%	58.9%	3.0%	0.0%	0.0%
Newport	36.2%	40.9%	20.5%	1.4%	1.0%	0.0%	0.0%
Coos Bay	5.8%	72.8%	16.8%	3.7%	0.9%	0.0%	0.0%
Brookings	0.0%	42.7%	23.9%	32.9%	0.5%	0.0%	0.0%
Crescent City	10.2%	60.7%	12.7%	15.9%	0.6%	0.0%	0.0%
Eureka	6.4%	79.4%	8.9%	5.0%	0.3%	0.0%	0.0%
Fort Bragg	0.0%	67.9%	10.9%	20.8%	0.5%	0.0%	0.0%
Bodega Bay	0.0%	58.4%	8.6%	27.7%	5.3%	0.0%	0.0%
San Francisco	0.0%	68.1%	13.4%	13.0%	5.5%	0.0%	0.0%
Monterey	0.0%	47.3%	25.3%	24.1%	3.3%	0.0%	0.0%
Morro Bay	0.0%	32.7%	4.2%	60.8%	2.3%	0.0%	0.0%
Santa Barbara	0.0%	0.4%	36.0%	51.6%	12.0%	0.0%	0.0%
Los Angeles	0.0%	0.1%	79.5%	12.3%	8.1%	0.0%	0.0%
San Diego	0.0%	0.0%	75.0%	17.5%	7.5%	0.0%	0.0%
Unidentified CA	0.0%	0.0%	51.5%	43.0%	5.5%	0.0%	0.0%