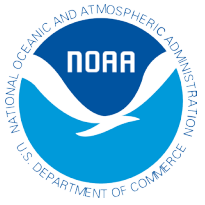
NOAA Technical Memorandum NMFS-NWFSC-134



Washington and Oregon Charter Vessel Survey:
Methodology and Results

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Executive Summary

The charter fishing industry has a long history in Washington and Oregon, as residents and tourists have a myriad of fishing opportunities, from salmon fishing in the Puget Sound and the Columbia River area to rockfish and tuna fishing opportunities throughout marine areas in both states. The Washington and Oregon Charter Vessel Survey was administered in 2014 by the Northwest Fisheries Science Center (NWFSC). The survey collected data that can be used to construct key economic performance measures related to the profitability, productivity, and regional economic impacts of the fishery. This Technical Memorandum describes the methodology used to administer the survey, in addition to some of the basic findings, including costs by type, revenue earned, business practices, economic prospects in the future, and challenges facing the industry.

The survey was conducted as a census of all charter license holders who actively engaged in marine charter fishing in 2012. Contact information for 369 charter vessel license holders in Washington and Oregon was obtained from the Washington Department of Fish and Wildlife and the Oregon Department of Fish and Wildlife. However, some of these license holders do not go fishing in marine waters. After an initial telephone screener to determine if the license-holders had actively participated in charter fishing in 2012, the survey was administered primarily in person, but mail and telephone responses were accepted. The survey instrument closely mirrored other recent charter vessel surveys conducted by NWFSC and the Southwest Fisheries Science Center (SWFSC), but it incorporated additional suggestions by industry associations. The starting point for the survey instrument was a version fielded by NWFSC and the Pacific States Marine Fisheries Commission in 2007. The previous questionnaire was modified using feedback from representatives of the Westport Charterboat Association, Charterboat Owners of Puget Sound, and an anonymous Oregon charter vessel owner.

A relatively high proportion of active marine charter fishing owners participated in the survey. 152 charter vessel owners participated altogether. Out of an estimated 277 active charter companies, the 152 completed surveys yield a response rate estimate of 55%. This is a sizable improvement over the 43% response rate from the 2007 survey. The improvement is likely due in part to the primarily in-person administration of the survey, as the 2007 survey was fielded mainly by mail. Additionally, this survey included a strong outreach effort to industry representatives to encourage participation.

Acknowledgments

The survey described in this document was developed through collaboration and consultation with numerous individuals. The Washington Department of Fish and Wildlife and the Oregon Department of Fish and Wildlife provided data from license databases allowing us to query charter vessel owners. Representatives of the Pacific States Marine Fisheries Commission, particularly Geana Tyler and Dave Colpo, provided assistance in the management and administration of the survey. A number of individuals provided input on the questionnaire used in the survey: representatives from the Westport Charter Boat and Puget Sound Charter Boat Associations, an anonymous charter vessel owner in Oregon, James Hilger of the Southwest Fisheries Science Center (SWFSC), and Leif Anderson of the Northwest Fisheries Science Center (NWFSC). Carl Lian (NWFSC) provided assistance with the Paperwork Reduction Act package filed with the Office of Management and Budget. NWFSC also thanks all of the charter vessel owners who volunteered their time for the survey.

Introduction

The charter fishing industry has a long history in Washington and Oregon. Residents and tourists have a myriad of fishing opportunities, from salmon fishing in the Puget Sound and the Columbia River area to rockfish and tuna fishing throughout marine areas in both states. Charter fishing has been a notable component of tourism along the Washington and Oregon coasts for decades. In the mid-1970s, the marine charter vessel industry in Washington and Oregon consisted of close to 650 vessels: 417 in Washington (Crutchfield and Schelle 1977) and 239 in Oregon (Fraser et al. 1977). While the number of active charter vessels has declined since the 1970s, charter fishing remains an important piece of costal economies. In 2012, charter patrons in Washington and Oregon generated sales impacts of approximately $40 million, and value-added impacts in the form of wages, salaries, and accounting profits reached $26.7 million (NMFS 2014). In addition to its economic importance, charterboating also contributed to a sense of community identity, and was revered as an expression of the rugged and independent coastal lifestyle (Manfredo et al. 1988).

The present survey collected data that are needed to construct key economic performance measures related to the profitability, productivity, regional economic impacts, and social aspects of the fishery. The data will be used to estimate the economic contribution of the Washington and Oregon fleet. Additionally, the data gathered and the performance measures constructed will be used to estimate the effects of changes in environmental, economic, and management measures.

A prior study of the Washington and Oregon charter fleet, with a similar survey instrument, was completed in 2007. It collected cost–earnings data pertaining to 2006. Since then, the industry has faced a variety of difficult circumstances. In 2008, the Secretary of Commerce declared a commercial fishery failure for the West Coast salmon fishery (Upton 2010), and the prior 2007 survey indicated that the charter industry was still highly dependent on salmon. Additionally, nominal marine fuel prices increased 47% over the six-year period from 2006 to 2012, and the 2007 survey indicated that fuel was the single largest non-labor operating expense. Significant changes occurred during the seven years from 2007 until this survey was conducted in 2014. As such, this survey fulfilled a need to collect updated cost and earnings data and related social data from the Washington and Oregon charter fleets.

Survey Instrument Design

Administration

The survey was conducted as a census of all charter license holders who had actively engaged in marine charter fishing in 2012. Contact information for 369 charter vessel license holders in Washington and Oregon was obtained from the Washington Department of Fish and Wildlife and the Oregon Department of Fish and Wildlife. However, a portion of the 369 license holders do not go fishing in marine waters. Some fish only in fresh water, and others carry passengers in marine waters for purposes other than fishing, such as wildlife watching. Without contacting every individual vessel to ascertain its activities, the number of active marine fishing vessels in 2012 is unknown.

The fielding of the survey was completed by Pacific Market Research as follows. All license holders were mailed a letter highlighting the intent of the survey and inviting them to participate. License holders were then called by phone for a presurvey screener to determine if they had actively engaged in marine charter fishing in 2012. Those who indicated that their vessels had carried fishing passengers in salt water in 2012 were mailed a questionnaire and scheduled for an in-person interview. If respondents were unable to participate in an in-person interview, they were given the option of responding via mail or phone. All presurvey screener of interviewees and scheduling was conducted by a single professional recruiter.

Interviews were conducted in a manner to minimize travel expenses and reduce barriers to participation. Interviews were scheduled for different geographic areas in clusters to reduce travel costs. The location of the interview was chosen by the respondent and most frequently was conducted in a public location such as a café, coffee shop, or restaurant. However, some were conducted at the respondent's residence or the location of their vessel. Interviewers guided respondents through the questionnaire and asked follow-up questions where appropriate. For example, interviewers were prompted to ask questions about the nature of repair and maintenance expenses when survey respondents reported particularly large expenditures. All in-person interviews were conducted between December 2013 and January 2014.

Some licensees were unable to participate in the in-person interview, and others were not possible to contact via phone after 12 attempts. Those who were reached via phone but were unable to complete an interview in person were given the option of completing either by mail or by phone. Those who were not possible to contact after 12 attempts were left voice mails requesting their participation, which included a toll-free number for the cell phone of the recruiter conducting the screener and scheduling. They were also mailed questionnaires to complete.

Instrument

The survey instrument was developed using prior charter vessel surveys and feedback from industry representatives. The starting point for the instrument was the previous survey fielded by NWFSC and the Pacific States Marine Fisheries Commission in 2007. The prior survey was modified using feedback from representatives of the Westport Charterboat Association, Charterboat Owners of Puget Sound, and an anonymous Oregon charter vessel owner.

Table 1. Disposition of charter license holder responses to survey.

Disposition	Frequency	Percent
Completed	152	45%
Left voicemail	57	17%
Phone number problem	30	9%
Refused	29	9%
Did not fish during target season	28	8%
Did not answer	22	6%
Said they mailed it in	11	3%
Did not complete	4	1%
Sick or ill	3	1%
Retired or did not own charter vessel	3	1%
Total:	**339**	**100%**

Additionally, the instrument utilized feedback from a pilot study of the San Diego Commercial Passenger Fishing Vessels (CPFV) industry consisting of interviews of eight CPFV owners representing ten of the 76 vessels registered in San Diego County in 2011 (Hanan and Hanan[1]).

Survey Responses

Response Rate

To calculate the effective response rate, we first estimated the number of active marine charter businesses in 2012. Participation in marine charter fishing could not be ascertained unless a license holder was 1) reachable during the telephone screener, and 2) willing to give some indication that he or she had participated in marine charter fishing in 2012. For several of the survey outcome categories (Table 1), it is unknown whether or not the licensee operated a marine charter fishing vessel in 2012. The unknown categories include: left voicemail, wrong or inactive number, no answer, said it was mailed in, incomplete, and refused. These unknown categories were multiplied by the ratio of known 2012 participants to non-participants. Known participants were those who completed surveys, and non-participants were those who didn't fish during the target season, were sick or ill, retired, or didn't own a charter vessel. The percentage of known participants was calculated at 81.7%. Applying this 81.7% to the total unknown participants and adding the known participants results in an estimated count of 277 active charter companies. Using this estimate of active charter businesses, our 152 completed surveys yields a response rate estimate of 55%. The response rate calculation is given by the following:

$$ResponseRate = \frac{N_{completed}}{(\alpha_{active})(N_{unknown}) + N_{completed}},$$

[1] Hanan, D., and Z. Hanan. 2012. Pers. commun. Southwest Fisheries Science Center, La Jolla, CA.

where $\alpha_{active} = \frac{N_{completed}}{(N_{inactive} + N_{completed})}$,

$N_{completed}$ refers to the total number of completed surveys, $N_{unknown}$ refers to the number of licensees for whom participation is unknown, and $N_{inactive}$ refers to the number of licensees who were known non-participants.

Business Demographics and Structure

Respondents were queried about the number of years they had been involved in the charter industry and how many charter vessels they currently owned. The mean years involved in the industry was 19.0, and the mean years owning a charter vessel was 17.5 (Table 2). The mean years of ownership in Washington and Oregon were 19.9 and 15.5 respectively. The majority of charter business owners in Washington or Oregon have only one vessel, and the mean number of vessels owned is 1.4.

Respondents were queried about several business charachteristics such as whether they captain their own vessel, , percent of household income generated by the charter business, and the percent of customers that are return customers (Table 3). Nearly all charter vessel owners (148 out of 151) served as captain on at least one of their charter vessels. The most frequent response to the percent of household income coming from the charter business was 1–20% (at 30% of responses). After that, responses were fairly evenly distributed among the other categories. The most frequent category for percent of return customers was 61–80%. Relatively few businesses (5%) indicated that 1–20% of clientele were return customers. These results suggest that return business is a very important component of charter business operations in Washington and Oregon.

Table 2. Years in charter industry and number of charter vessels owned.

Area of charter operation	*n*	Mean	Standard Deviation
Washington and Oregon			
Years involved in industry	151	19.0	14.6
Years owned operation	151	17.5	11.6
Number of vessels owned	151	1.4	0.7
Washington			
Years involved in industry	63	21.6	15.9
Years owned operation	63	19.9	12.6
Number of vessels owned	63	1.4	0.8
Oregon			
Years involved in industry	88	15.8	10.5
Years owned operation	88	17.1	13.3
Number of vessels owned	88	1.3	0.6

Table 3. Business operating characteristics.

Business Structure	Total	OR	WA
Captain Practices			
Served as captain	148	*	*
Did not captain	3	*	*
% of Household Income from Charter			
1–20%	43	27	16
21–40%	28	16	12
41–60%	22	10	12
61–80%	10	7	3
81–99%	17	10	7
100%	24	12	12
% of Return Customers			
1–20%	7	3	4
21–40%	27	15	12
41–60%	36	24	12
61–80%	42	25	17
81–99%	34	17	17
100%	4	*	*

* Omitted for confidentiality.

Table 4. Revenue by source (in 2012 dollars).

	Total			Washington			Oregon		
Revenue Source	***n***	**Mean**	**Standard Deviation**	***n***	**Mean**	**Standard Deviation**	***n***	**Mean**	**Standard Deviation**
Combination salmon/ other	135	13,242	31,259	57	23,200	44,715	78	5,966	10,923
Salmon fishing	135	38,827	45,538	57	53,489	57,828	78	28,112	30,023
Groundfish fishing	135	20,275	46,782	57	16,040	31,990	78	23,371	55,149
Halibut fishing	135	5,733	11,168	57	6,278	9,972	78	5,335	12,016
Tuna/albacore fishing	135	13,295	39,363	57	19,907	56,964	78	8,464	16,749
Shellfish fishing	135	4,853	45,175	57	744	2,294	78	7,856	59,381
Other recreational fishing	135	7,823	14,781	57	10,229	19,029	78	6,065	10,462
Commercial	135	1,452	15,588	57	3,176	23,977	78	192	968
Nature watching	135	2,858	20,785	57	329	1,386	78	4,707	27,244
Non-fishing scuba diving	135	502	4,552	57	980	6,900	78	153	1,068
Burial at sea	135	631	2,252	57	758	2,879	78	538	1,666
Other purpose	135	1,583	6,969	57	1,653	7,364	78	1,531	6,713
Souvenirs	135	574	4,361	57	1,036	6,642	78	237	857
Lodging owned by charter owner	135	789	6,668	57	554	2,670	78	962	8,492
Equipment rental	135	19	145	57	18	132	78	20	154
Other non-fishing revenue	135	3,878	22,465	57	6,834	32,883	78	1,718	8,980
Total:	**135**	**116,336**	**145,428**	**57**	**145,224**	**139,694**	**78**	**95,226**	**146,778**

Revenue

Respondents were queried about the revenue earned by their charter business from a variety of fishing trips based on target species pursued and from other activities the business engaged in, such as commercial fishing and scuba diving (Table 4). The total number of survey respondents who answered the revenue questions was 135. Among respondents, mean revenue for Washington and Oregon combined was $116,300. Salmon fishing provided the highest amount of revenue with a mean of $38,800, while combination salmon and other species trips had a mean of $13,200. When combined, businesses earned an average of $52,000 on trips targeting salmon in some capacity. This is more than double the next highest fish type, groundfish, which earned $20,300. This discrepancy is greater in Washington than in Oregon, which indicates that salmon is a relatively more important target species in Washington than in Oregon.

Expenditures

Respondents were queried about expenditures by type (Table 5). Unlike the Revenue questions, in which respondents either answered all or none of the questions, there was some variation in the Cost Category questions. Respondents were permitted to answer "don't know" or "refuse" to each cost category separately, and all responses as such were treated as missing values. Hence, for each

Table 5. Expenditures by type (in 2012 dollars).

	Total			Washington			Oregon		
Expenditure Type	***n***	**Mean**	**Standard Deviation**	***n***	**Mean**	**Standard Deviation**	***n***	**Mean**	**Standard Deviation**
Payroll for skipper and crew	127	27,682	83,260	53	28,820	36,064	74	26,867	105,058
Vessel fuel costs	139	11,809	12,366	58	15,480	13,967	81	9,181	10,395
Annual principal payment on vessels	139	4,419	8,559	58	5,438	10,759	81	3,689	6,527
Annual interest payment on vessels	114	1,060	2,656	47	1,262	2,870	67	919	2,508
Industry association fees/memberships	139	341	790	58	451	921	81	263	677
Moorage	141	1,899	2,303	59	2,607	2,489	82	1,389	2,026
Booking fees	139	4,421	10,281	57	5,792	10,561	82	3,467	10,036
Haulout costs	134	868	1,792	55	1,158	2,088	79	666	1,535
Vessel and onboard equipment[a]	140	12,028	17,274	59	13,070	19,144	81	11,269	15,854
Food and drink costs	138	874	1,488	58	1,035	1,614	80	758	1,388
Bait costs	135	2,863	6,341	56	4,414	9,356	79	1,764	2,098
Ice (purchased dockside)	136	447	1,771	58	583	2,644	78	347	545
U.S. taxes, government fees, vessel permits	137	3,867	8,633	58	5,254	10,715	79	2,849	6,601
Foreign taxes, government fees, foreign fishing licenses	139	20	213	58	43	328	81	4	25
Other expenditures	137	2,644	12,192	57	2,250	5,696	80	2,924	15,254
Payroll of non-vessel personnel	136	2,204	11,290	56	2,929	15,092	80	1,696	7,656
Professional services (legal, accounting, etc.)	137	661	1,106	57	557	579	80	736	1,362
Rent paid on office space used for business	136	1,435	5,653	57	1,023	2,403	79	1,732	7,138
Lease/loan payments for business motor vehicles	137	1,347	3,353	58	1,883	4,451	79	953	2,180
Telephone and other communications	136	1,949	1,914	57	2,007	1,831	79	1,907	1,982
Advertising services or charges	139	2,593	5,216	59	3,569	7,196	80	1,873	2,878
Insurance	137	4,201	4,910	57	4,936	5,327	80	3,678	4,551
Total:	**141**	**86,077**	**132,528**	**59**	**101,052**	**93,845**	**82**	**75,302**	**154,176**

[a] Includes purchases, repairs, and maintenance.

cost category, the number of respondents (*n*) varies. Among respondents, payroll for skipper and crew comprised the largest business expenditure, with a mean of $27,700. The next two largest cost categories are vessel equipment, repair, and maintenance ($12,000), and fuel ($11,800), but even combined they don't average as much as payroll.

Business Practices, Expectations, and Challenges

Respondents were queried about potential problems and challenges for their businesses. These questions were asked in the form of a Likert scale where respondents rated some items from low to high. For example, when queried about how challenging different types of regulations were for their business, respondents chose answers from "not challenging" to "extremely challenging." In many cases, to avoid confidentiality concerns, categories have been grouped together for the purpose of this report. The items to be rated were developed from write-in responses to similar questions on the 2007 survey after consultations with industry representatives.

Tables 6–8 present the responses to a variety of potential problems for charter businesses. With respect to the importance of each to the success of their businesses, respondents rated potential problems on a scale of importance. Fuel costs, fishing regulations, and poor fishing were most frequently rated as "extremely important." Washington and Oregon respondents exhibited some differences. Washington respondents had a relatively greater frequency of rating high cost of overhead as "extremely important," and Oregon had a relatively greater frequency of rating fishing regulations as "extremely important." Personnel problems, competition with others, too

Table 6. Rating of potential problems for charter business (in number of respondents), Washington and Oregon.

	Importance Level			
Washington and Oregon	**Not or Slightly**	**Moderately**	**Very**	**Extremely**
Fuel costs	4	13	37	97
High cost of overhead	22	36	32	61
High cost of bait	36	50	34	31
Shoreline growth and development	60	40	22	20
Unsafe boats	50	31	34	34
Unsafe captains	41	26	34	50
Competition with others	70	40	24	17
Getting customers	20	26	42	63
Too many operators	61	45	17	27
Fishing regulations	9	11	34	97
Weather/natural events	24	36	45	46
Poor fishing	23	21	38	69
Profitability	9	19	59	64
Personnel problems	106	10	16	8
Safety of bar crossing	48	14	32	54
Poor bait availability	52	37	25	36

Table 7. Rating of potential problems for charter business (in number of respondents), Washington only.

	Importance Level			
Washington	**Not or Slightly**	**Moderately**	**Very**	**Extremely**
Fuel costs	*	6	14	42
High cost of overhead	7	11	12	33
High cost of bait	14	28	12	9
Shoreline growth and development	24	17	12	8
Unsafe boats	23	10	19	10
Unsafe captains	21	7	17	18
Competition with others	27	17	12	7
Getting customers	5	9	20	29
Too many operators	31	14	7	10
Fishing regulations	4	3	18	38
Weather/natural events	10	21	16	16
Poor fishing	8	8	17	30
Profitability	*	9	22	30
Personnel problems	40	3	12	4
Safety of bar crossing	28	6	10	18
Poor bait availability	20	20	8	14

* Omitted for confidentiality.

Table 8. Rating of potential problems for charter business (in number of respondents), Oregon only.

	Importance Level			
Oregon	**Not or Slightly**	**Moderately**	**Very**	**Extremely**
Fuel costs	*	7	23	55
High cost of overhead	15	25	20	28
High cost of bait	22	22	22	22
Shoreline growth and development	36	23	10	12
Unsafe boats	27	21	15	24
Unsafe captains	20	19	17	32
Competition with others	43	23	12	10
Getting customers	15	17	22	34
Too many operators	30	31	10	17
Fishing regulations	5	8	16	59
Weather/natural events	14	15	29	30
Poor fishing	15	13	21	39
Profitability	*	10	37	34
Personnel problems	66	7	4	4
Safety of bar crossing	20	8	22	36
Poor bait availability	32	17	17	22

* Omitted for confidentiality.

many operators, and shoreline growth and development were most frequently "not important" or "slightly important." The number of "not important" responses for personnel problems is not surprising or particularly interesting, given that very few vessels employ anyone other than the captain, who is also typically the owner. More interesting is the finding that competition and shoreline growth and development are relatively slight concerns. Getting customers is often cited as "extremely important," but given the responses to the competition question, one conclusion is that owners are not particularly concerned about losing customers to their competitors. Figure 1 displays the percent of total responses that were categorized as either very or extremely important for Washington and Oregon combined. The figure provides a clear visualization of the importance of fuel cost, fishing regulations, and profitability for running a successful charter business.

In anticipation that regulations would be important to the successful operation of a charter business, we included questions asking vessel owners to rate a variety of regulatory measures with respect to how challenging they were for their businesses. The responses to these questions for both Washington and Oregon are shown in Tables 9–17. These tables display the frequency results, but Figure 2 summarizes the results. The figure shows the percentage of respondents in Washington and Oregon who indicated that regulations were "very challenging" or "extremely challenging." The percentages of responses by category for Washington and Oregon were very similar. Respondents in both states indicated that seasonal closures and in-season regulation changes were the most challenging to their businesses. About 60% of respondents in both states also indicated that day of week and depth restrictions were "very challenging" or "extremely challenging." The minimum size limit restrictions for salmon and for species other than salmon had the lowest percentage of respondents indicating "very challenging" or "extremely challenging," both around 10%.

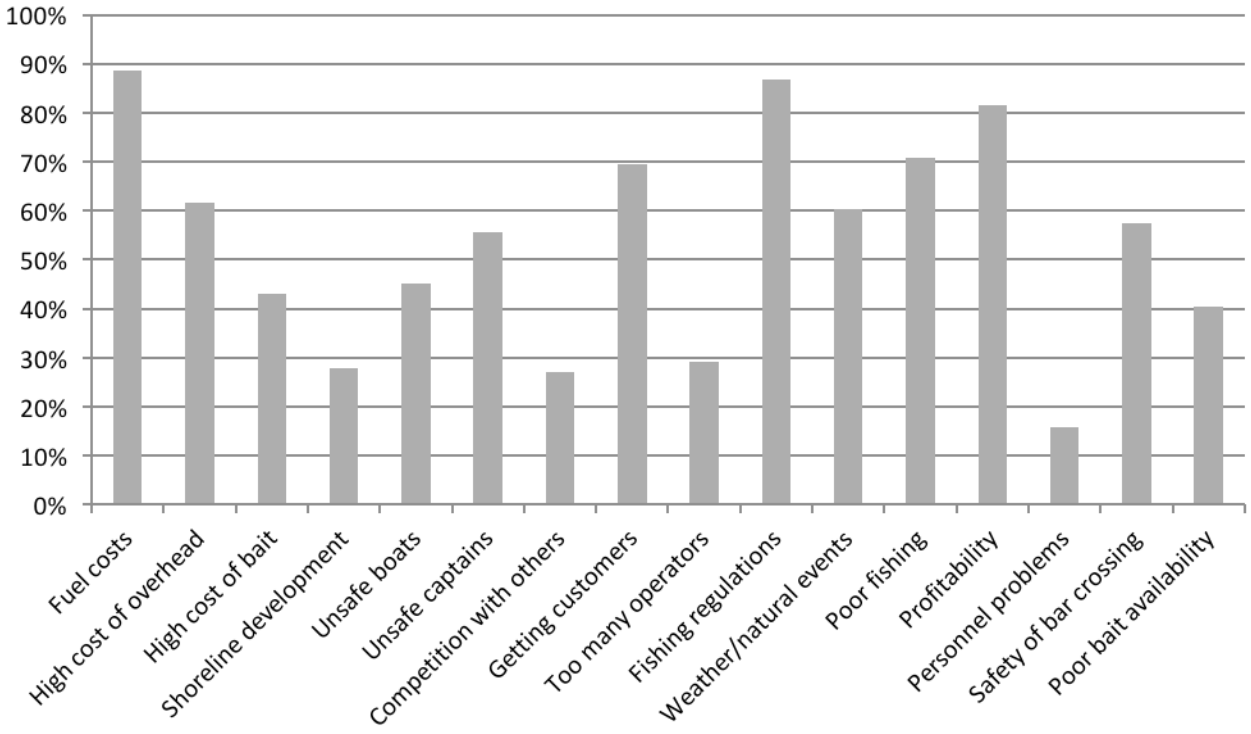

Figure 1. Percentage of respondents who indicated that potential problems were very or extremely challenging for their charter business.

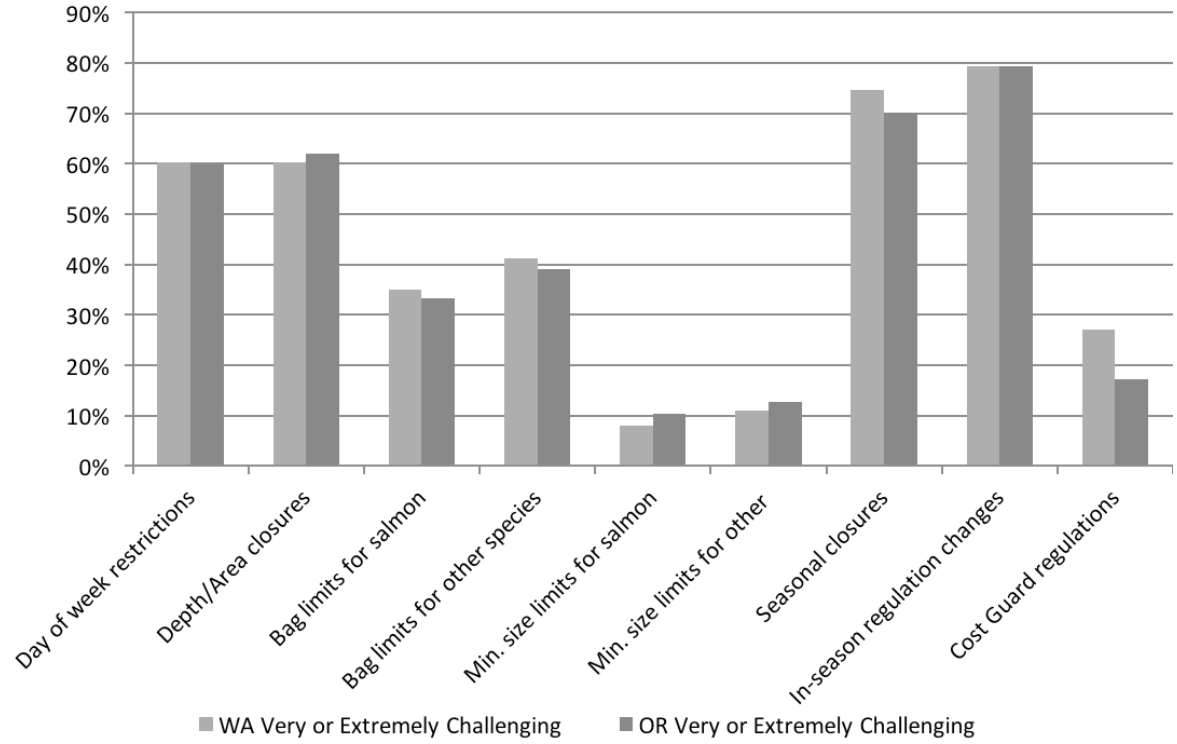

Figure 2. Percentage of respondents indicating very or extremely challenging regulation types.

Table 9. Rating of challenge level for day-of-week restrictions.

Challenge Level	Total	WA	OR
Not or Slightly	28	14	14
Moderately	49	22	26
Very	49	24	25
Extremely	71	37	34

Table 10. Rating of challenge level for depth/area closures.

Challenge Level	Total	WA	OR
Not	18	6	11
Slightly	10	6	3
Moderately	49	27	22
Very	56	33	23
Extremely	66	27	39

Table 11. Rating of challenge level for bag limits for salmon.

Challenge Level	Total	WA	OR
Not	37	22	15
Slightly	36	13	23
Moderately	58	30	28
Very	32	21	11
Extremely	36	14	22

Table 12. Rating of challenge level for bag limits for non-salmon species.

Challenge Level	Total	WA	OR
Not	28	14	14
Slightly	34	14	20
Moderately	55	27	28
Very	28	19	9
Extremely	52	22	30

Table 13. Rating of challenge level for minimum size limits for salmon.

Challenge Level	Total	WA	OR
Not	87	37	51
Slightly	48	29	20
Moderately	47	27	20
Very	11	5	6
Extremely	8	3	5

Table 14. Rating of challenge level for minimum size limits for non-salmon species.

Challenge Level	Total	WA	OR
Not	70	29	41
Slightly	53	29	24
Moderately	50	29	22
Very or Extremely	24	11	13

Table 15. Rating of challenge level for seasonal closures.

Challenge Level	Total	WA	OR
Not or Slightly	22	13	9
Moderately	33	13	21
Very	40	19	21
Extremely	105	56	49

Table 16. Rating of challenge level for in-season regulation changes.

Challenge Level	Total	WA	OR
Not or Slightly	11	6	5
Moderately	30	14	16
Very	51	30	21
Extremely	108	49	59

Table 17. Rating of challenge level for Coast Guard regulations.

Challenge Level	Total	WA	OR
Not	74	35	39
Slightly	31	10	22
Moderately	50	29	22
Very	21	14	7
Extremely	23	13	10

Table 18. Rating of business practices on importance of running a successful charter business.

Business Practice	Total	WA	OR
Catching More Fish			
Not or Slightly	13	5	8
Moderately	38	13	25
Very	34	15	19
Extremely	66	30	36
Public Relations with Clients			
Not or Slightly	7	*	*
Moderately	8	*	*
Very	33	14	19
Extremely	103	45	58

* Omitted for confidentiality.

There was a desire on the part of industry representatives to explore the importance of customer relations with clients and catching more fish on the success of charter businesses (Table 18). Respondents were asked to rate both on a scale of "not important" to "extremely important." The responses to the two questions were very similar between the states. Combining Washington and Oregon, responses to the importance of catching more fish were more evenly distributed across response categories than responses to the public relations question. For catching more fish, responses were distributed as follows: "not/slightly important," 9%; "moderately important," 25%; "very important," 23%; "extremely important," 44%. Responses to the public relations questions were more heavily concentrated (68%) in "extremely important."

Lastly, two questions were posed to gauge opinion on the current economic health of the industry (Table 19). Respondents were queried about the number of current clients compared to five years prior, on a scale of "many fewer" to "many more." The responses by category were very similar for both Washington and Oregon. The most common response, at about 28%, was "a bit more." The least common response was "many fewer," at 10%. Given that salmon are such an important source of revenue, and that the salmon disaster occurred around five years prior to 2012, it is perhaps not surprising that "many fewer clients" was the least common response. Additionally, a baseline of poor salmon conditions may be partially responsible for the 24% of respondents who indicated "many more" clients.

Table 19. Business structure and outlook.

Business Outlook	Total	OR	WA
Clients compared to 5 years ago			
Many fewer	15	8	7
A bit fewer	28	16	12
About the same	29	14	15
A bit more	41	24	17
Many More	35	23	12
Economic outlook in next 5 years			
Very unfavorable	31	16	15
Somewhat unfavorable	51	31	20
About the same	41	22	19
Favorable	27	18	9

Respondents were also queried about the economic outlook for the charter industry over the next five years on a scale of "very unfavorable" to "very favorable." The most frequent response in both Washington and Oregon was "somewhat unfavorable," at 34%. The category "very favorable" was the least common response. Due to confidentiality concerns, those responses were grouped with "somewhat favorable" to form the single "favorable" category in Table 19; that category comprised 18% of all responses.

Conclusion

The Washington and Oregon Charter Vessel Survey collected data needed to construct key economic performance measures related to the profitability, productivity, economic impacts, and social aspects of the fishery. This is the second survey of the charter industry in Washington and Oregon conducted by NWFSC. Using the response rate as a gauge, the survey was generally well received by charter businesses. Out of an estimated 277 active charter companies, we received 152 completed surveys for a response rate of 55%, which is substantially better than the 43% response rate from NWFSC's first charter survey in 2007. The improved response rate is attributed to improved and expanded outreach to industry associations and the primarily in-person administration of the survey.

While this report provides the general survey results, future work using these data is planned. These data will be used to estimate the economic impacts of charter fishing on Washington and Oregon economies. Additionally, further work will include a closer examination of factors that affect opinions concerning the economic outlook for the industry.

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Appendix A

Initial telephone contact

I'm from Pacific Market Research and we're conducting a survey with Washington and Oregon Charter fishing vessel owners to better understand the economic contributions to recreational fisheries and the potential impact of changes in the fisheries.

Did your vessel carry fishing passengers in salt water in 2012? Saltwater is defined as all waters seaward of river or stream mouths, including estuaries, and the Columbia River seaward of the Tongue Point-Rocky Point line.

1. Yes [Continue]

2. No [Thank and terminate]

[If yes] For this survey we're mailing questionnaires and scheduling in-person appointments at a location convenient to you.

Appendix B

Washington and Oregon Charter Vessel

2012 Calendar Year

Cost and Earnings Survey

All answers are confidential and voluntary.

Please report 2012 calendar year statistics.

This survey is funded by the National Oceanic and Atmospheric Administration, National Marine Fisheries Service, to collect data on the Washington and Oregon Charter fishing industry to better understand their contribution to their local economy.

Data collected will be kept confidential as required by section 402(b) of the Magnuson-Stevens Act and NOAA Administrative Order 216-100, Confidentiality of Fisheries Statistics. We appreciate the confidential nature of the data being collected by this survey. When publishing survey results, we will combine your responses with information provided by other participants, and report it in summary form so that responses for any individual vessel cannot be identified. If a Freedom of Information Act (FOIA) request is received for the data collected by this survey, we will seek to protect the confidentiality of the survey responses under Exemption 4 of the FOIA, which protects trade secrets and commercial or financial information obtained from a person that is privileged or confidential.

A.Industry Participation Background

#	Question	
1.	What year did you become involved in the charter industry in any capacity?	_____ (YYYY)
2.	Do you serve as the vessel captain for a charter vessel?	☐ Yes ☐ No
3.	How many charter fishing vessels do you own?	_____ vessel(s).
4.	If you own a vessel, what year did you purchase your first vessel?	_____ (YYYY)

B. Business Expenditures for the 2012 Calendar Year

	Vessel Expenditures	**Amount Paid**
5.	All payments made to skipper and crew (include wages, bonuses, benefits, payroll taxes, retirement payments and life, health, and unemployment insurance)	$
6.	Vessel fuel costs	$
7.	Annual principal payment on vessels	$
8.	Annual interest payment on vessels	$
9.	Industry association fees/memberships	$
10.	Moorage	$
11.	Booking fees	$
12.	Haul out costs	$
13.	Vessel and on-board equipment purchases, repair and maintenance (expensed in 2012) (Engine, electronics, tanks, icemaker. fishing equipment, etc.)	$
14.	Food and drink costs (for passengers, captain, crew)	$
15.	Bait costs	$
16.	Ice (purchased dockside)	$
17.	U.S. taxes, government fees and vessel permits (local, state, and federal)	$

	Vessel Expenditures	**Amount Paid**
18.	Foreign taxes, government fees, visas, vessel permits, and foreign fishing licenses	$

#	**General Overhead Expenses**	**Expenses**
19.	Total payroll of non-vessel personnel (include wages, bonuses, benefits, payroll taxes, retirement payments and life, health, and unemployment insurance) **Exclude captain and crew payroll.**	$
20.	Professional services (legal, accounting, etc.)	$
21.	Rent paid on office space used for business	$
22.	Lease or loan payments for business motor vehicles	$
23.	Telephone and other communications (business satellite phone, cell phone, internet/network)	$
24.	Advertising services or charges. Exclude if included in booking fee charges.	$
25.	Insurance (Vessel, property, liability, cars and trucks, etc.)	$

C. Vessel Characteristics

Please provide information for each vessel that you own. If you are a single vessel owner please provide information for your vessel under "Vessel 1" and disregard questions related to additional vessels.

#	Vessel	Coast Guard ID	City/port this vessel primarily operates out of	Overall length of the vessel	Total horsepower of the main engine(s)
26.	Vessel 1				
27.	Vessel 2				
28.	Vessel 3				
29.	Vessel 4				

#	Vessel	Operating capacity of vessel while fishing (including captain and crew)	Average number of crew per trip (including the captain)	Total number of passengers in 2012	Total number of fishing trips in 2012
30.	Vessel 1				
31.	Vessel 2				
32.	Vessel 3				
33.	Vessel 4				

D.Vessel Related Revenue for the 2012 Calendar Year

#	Primary Purpose of Trip	Number of Passengers by Type in 2012	2012 Revenue by Trip Type
34.	Combination salmon/other fishing	(anglers)	$
35.	Recreational salmon fishing	(anglers)	$
36.	Recreational groundfish fishing	(anglers)	$
37.	Recreational halibut fishing	(anglers)	$
38.	Recreational tuna/albacore fishing	(anglers)	$
39.	Recreational shellfish fishing	(anglers)	$
40.	Other recreational fishing	(anglers)	$
41.	Commercial fishing		$
42.	Nature watching	(Passengers)	$
43.	Non-fishing scuba diving	(Passengers)	$
44.	Burial at sea	(Passengers)	$
45.	Other purpose: (please specify)		$

E. Non-Fishing Operations Revenue for the 2012 Calendar Year

The following questions pertain to sources of revenue other than that generated by the charter vessel.

#	NON-FISHING	2012 Total Annual Revenue
46.	Souvenirs	$
47.	Lodging that is owned by charter boat owner	$
48.	Equipment rental	$
49.	Other (please specify)_____	$

F. Economic Conditions

How would you rate each of the following potential problems as problems for your charter business? Circle the number to indicate if it's extremely important, very important, moderately important, slightly important, or not important.

#	Potential Problem	Not Important	Slightly Important	Moderately Important	Very Important	Extremely Important	Not Sure
50.	Unsafe boats in industry	1	2	3	4	5	9
51.	Unsafe captains in industry	1	2	3	4	5	9
52.	High cost of overhead	1	2	3	4	5	9
53.	Competition with other operators	1	2	3	4	5	9
54.	Shoreline growth and development	1	2	3	4	5	9
55.	Getting customers	1	2	3	4	5	9
56.	Cost of insurance	1	2	3	4	5	9
57.	Too many operators	1	2	3	4	5	9
58.	Fishing regulations	1	2	3	4	5	9
59.	Weather/natural events	1	2	3	4	5	9
60.	Poor fishing/too few available fish	1	2	3	4	5	9
61.	Profitability	1	2	3	4	5	9
62.	Fuel costs	1	2	3	4	5	9
63.	Crew personnel problems	1	2	3	4	5	9
64.	Safety of bar crossing	1	2	3	4	5	9
65.	Poor bait availability	1	2	3	4	5	9
66.	High cost of bait	1	2	3	4	5	9
67.	Other_____	1	2	3	4	5	9

Please rate the effect on your business of the following types of fishery regulations.

#	Regulations	Not Challenging	Slightly Challenging	Moderately Challenging	Very Challenging	Extremely Challenging	Not Sure
68.	Day of week restrictions	1	2	3	4	5	9
69.	Depth/area closures	1	2	3	4	5	9
70.	Bag limits for Salmon	1	2	3	4	5	9
71.	Bag limits for species other than Salmon	1	2	3	4	5	9
72.	Minimum size limits for Salmon	1	2	3	4	5	9
73.	Minimum size limits for species other than Salmon	1	2	3	4	5	9
74.	Seasonal closures	1	2	3	4	5	9
75.	In season regulation changes	1	2	3	4	5	9
76.	Coast Guard regulations	1	2	3	4	5	9

How would you rate the following business practices in importance to running a successful charter business?

#	Business Practice	Not Important	Slightly Important	Moderately Important	Very Important	Extremely Important	Not Sure
77.	Leading clients to catch more fish	1	2	3	4	5	9
78.	Public relations with clients	1	2	3	4	5	9
79.	Other (please specify)	1	2	3	4	5	9

G. Business Structure and Outlook

Please check the appropriate box.

#	Question	Response
80.	Approximately, what percent of your 2012 total household income is generated from the charter boat operations?	☐1% - 20% ☐21% - 40% ☐41% - 60% ☐61% - 80% ☐81% - 99% ☐100%
81.	Compared to 5 years ago, how many clients are you servicing in a year?	☐Many Fewer ☐A Bit Fewer ☐About the Same ☐A Bit More ☐Many More
82.	What percent of your customers are return customers?	☐1% - 20% ☐21% - 40% ☐41% - 60% ☐61% - 80% ☐81% - 99% ☐100%
83.	How do you see the economic outlook for the charter boat industry over the next 5 years?	☐Very Unfavorable ☐Somewhat Unfavorable ☐About the Same ☐Somewhat Favorable ☐Very Favorable

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