

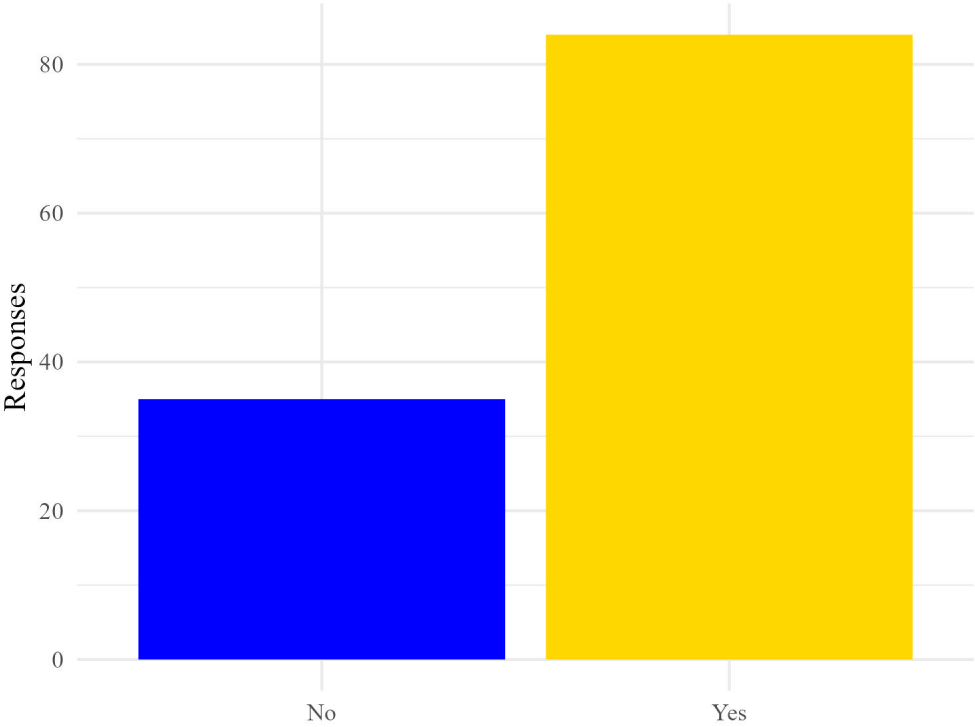
Prince William Sound Shrimp Pot Limitation Survey Results

An Investigation into Permit Holder Support for Limitation

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Support of Limitation Among Surveyed Permit Holders



Introduction

In 2021, the Commercial Fisheries Entry Commission (CFEC) received a request from Shrimp Pros to examine the possibility of limitation in the Prince William Sound (PWS) commercial shrimp pot fishery. Since then, CFEC has undertaken the task of examining the economic and ecological realities of the fishery, and soliciting feedback from the commercial fishing permit holders in the PWS shrimp pot fishery.

The purpose of this report is to provide a summary of the PWS Shrimp Pot Survey. This survey was short, and designed to get the **maximum feedback** from respondents regarding support of limitation efforts. This survey is not designed to gather high-resolution economic information regarding fixed or variable costs, or the amount of profit required for participation in the PWS shrimp pot fishery.

Historical Background

Commercial shrimp pot landings in Prince William Sound (PWS) started in 1960, with records indicating harvests in the Inside District's Traditional Harvest Area. Between 1960 and 1977, harvests fluctuated, reaching 25,000 lb in 1974. The industry saw growth from 1978 to 1982 as local markets developed. However, overfishing led to regulatory changes, such as shortened seasons from 1982-1984 and the introduction of a split season in 1985. Despite regulations, harvests surpassed guidelines, peaking at 290,600 lb in 1986. Conservation concerns arose in 1988, exacerbated by the Exxon Valdez oil spill in 1989. Subsequent years saw tighter regulations, but declining shrimp abundance led to an 18-year closure (1992-2009). A revised management plan was introduced in 2009, rotating fishing across three areas.

Since its reopening in 2010, the PWS commercial shrimp pot fishery has operated for 12 seasons under a new management plan that divides the region into three areas. Guideline harvest levels (GHL) have been fairly consistent since 2017, ranging from 67,000 to 70,000 lb. Strict regulations require participants to report harvests and trips, allowing the ADF&G to closely monitor the GHL, which has been almost fully utilized over the last six seasons. Area 1 has seen the most success in the modern fishery, with the highest catch per unit effort (CPUE). Although the number of Commercial Fisheries Entry Commission (CFEC) permits has varied, actual participation ranged from 23 in 2015 to 70 in 2010. Vessel registration, a good indicator of effort, peaked in 2010 with 156 vessels, but not all registered vessels participate. In recent years, participation peaked at 63 permits in 2019, and has decreased to 53 permits in 2022. In open-access fisheries, typically one individual has one permit, and emergency transfers do not take place except in rare circumstances; the number of permits fished indicates how many individuals participated.

Survey Methodology

The survey was digitally dispatched to individuals assigned a permit in the Prince William Sound Shrimp Pot fishery from 2018 through 2022 for whom the CFEC had valid email addresses. The decision to target this specific group was underpinned by the belief that they possess a historically informed and current understanding of the fishery, thereby making their insights valuable. The survey consisted of a series of questions ranging from the individual's support or opposition to the limitation efforts, their economic reliance on the fishery, their roles within the industry, affiliations, and more. The introductory letter and the survey itself can be viewed in appendix A.

It is important to note that not all individuals who received a permit fished their shrimp pot permit.

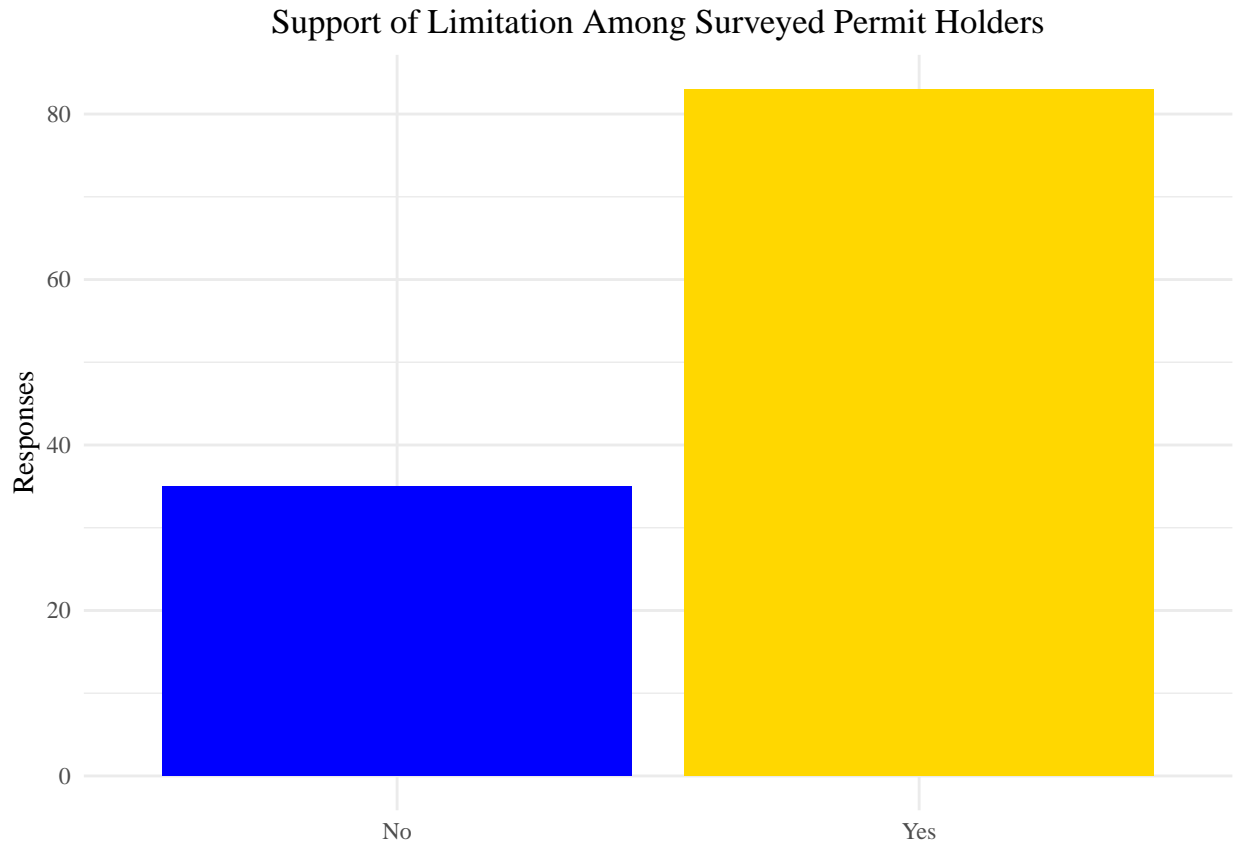
Individuals received an initial email on August 1, 2023. The email contained an introductory letter, along with a link to the survey questions. Follow up reminder emails were sent to individuals who did not respond on August 8 and August 15. Starting on August 15, individuals who responded to none of the emails were called and a survey was attempted over the phone. Response rates for phone surveys were considerably lower than for email surveys.

Out of the 208 individuals with valid email addresses recorded by CFEC, a total of 118 individuals responded to the survey.

Survey Results

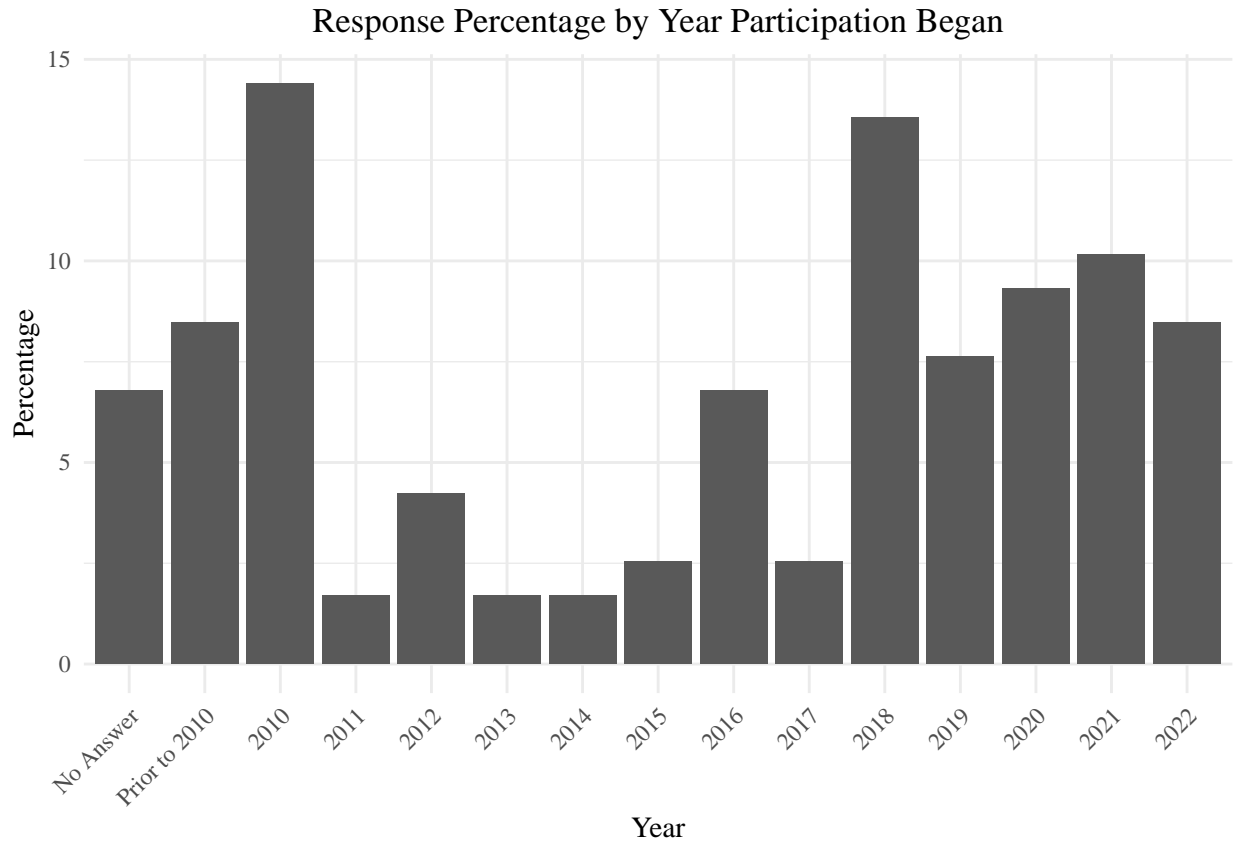
Survey results are provided question by question. Where relevant, graphics are provided in order to put the overall data set into perspective. Summary statistics are also provided when relevant.

Question 1: Are you in support of efforts to limit the Prince William Sound shrimp pot fishery?



The purpose of this survey was to gauge support for limitation among individuals who have held a PWS shrimp pot permit, and as such, question one was the most important question in the survey. A total of 70.6 percent of respondents were in favor of limiting the PWS shrimp pot fishery. This support for limitation was broad across all categories of respondents. Out of the 119 people who responded to the survey, every one of them answered this question.

Question 2: What year did you begin participation in the PWS commercial shrimp pot fishery?

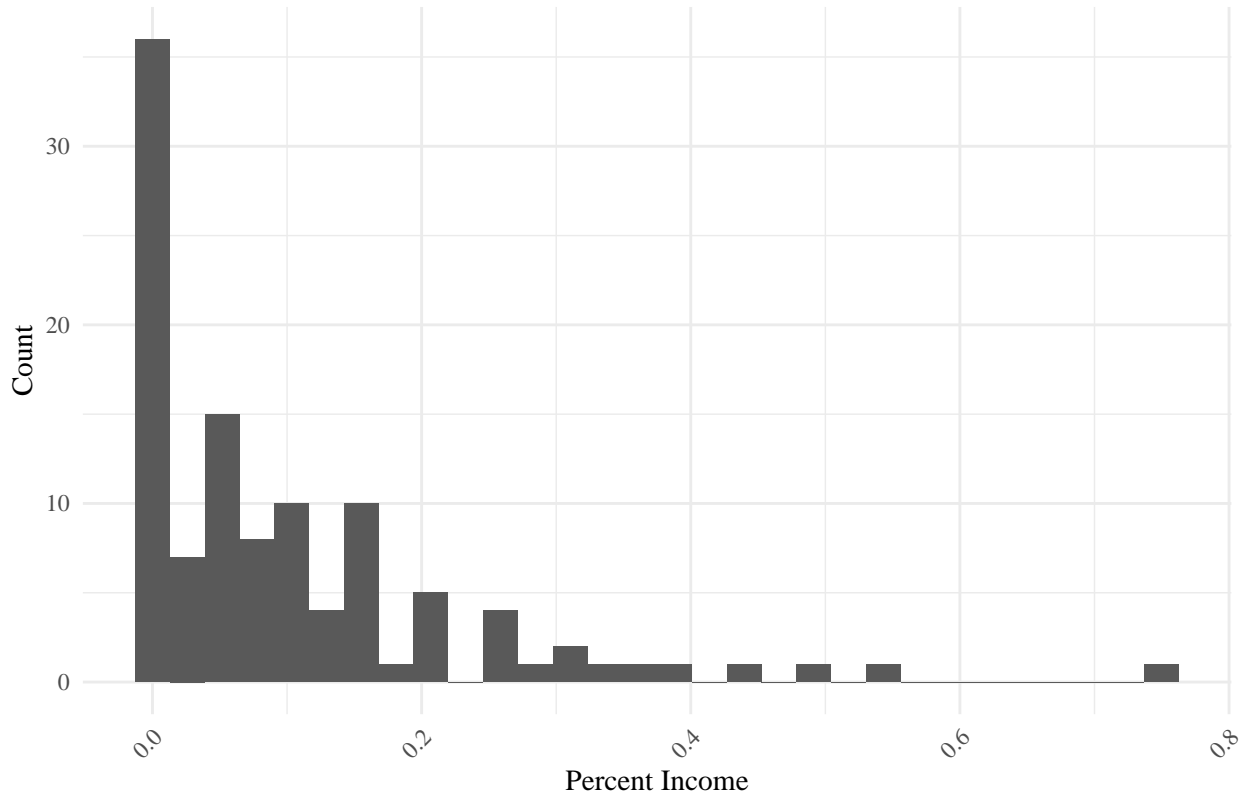


Question two was asked in an attempt to distinguish if there was a split in opinion regarding limitation based upon length of participation in the fishery. No relationship was found between length of participation in the fishery, and support for limitation. Interestingly, a proportionally large number of individuals began participation the year the fishery reopened in 2010, or indicated their participation in the fishery prior to 2010. Few individuals surveyed began participation between the years 2011 and 2018 (inclusive). Out of the 118 respondents to the survey, 110 answered this question, and 8 abstained from answering.

Question 3: Roughly what percentage of your yearly income is from the PWS shrimp pot fishery?

Across the board, respondents indicated that the amount of money made from the PWS shrimp pot fishery was proportionally small compared to their main source of income. The mean reported percentage of yearly income from the PWS shrimp pot fishery was reported as 11.2 percent. This value ranged from a minimum of zero to 75 percent at the upper end. No correlation was found between percentage of yearly income, and support for limitation. Zero was taken to mean either that net income was zero, or that they never participated (brought a permit, but never landed a harvest). Answers to this question are ambiguous, but can still be taken to strongly indicate that participants are not making a large proportion of the income from this fishery not matter how the data is chosen to be interpreted. Out of the 118 respondents to this survey, 110 chose to answer this question.

Response Frequency by Percent of Income



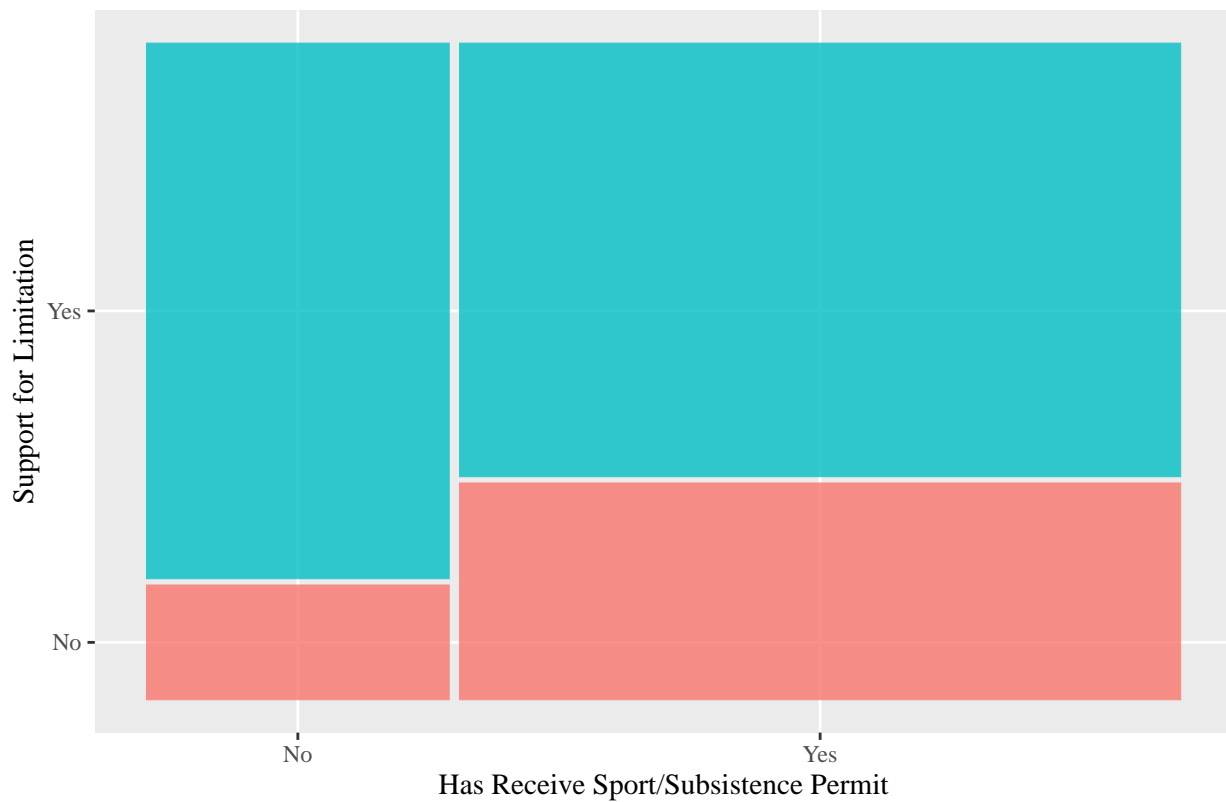
Question 4: Are you a catcher/seller, catcher/processor, or direct marketer of your own shrimp harvest?

A total of 86.5 percent of respondents indicated that they sold, processed, or marketed their own harvest. Out of the 118 respondents, 114 answered this question.

Question 5: Have you ever received a subsistence or sport fish permit for Prince William Sound?

Seventy percent of respondents indicate that they have received a sport fish or subsistence fish permit for shrimp in PWS at some point in the past. There is a slight inverse correlation between having received a sport fish or subsistence fish permit for PWS shrimp and support for limitation. In other words, proportionally more people who indicated they received a sport or subsistence permit indicated that they were *not in support* of limitation than could be expected if the two answers were not related in any way. The mosaic plot below illustrates this, although in depth analysis beyond graphical investigation is outside the scope of this report. Out of 118 respondents, 115 answered this question with 81 answering that they had received a permit. Of the 81 individuals who received a subsistence/sport fish permit, 54 were in favor of limitation, or 66.6 percent. A total of 34 individuals indicated that they had never received a sport or subsistence shrimp pot permit, with 24 of those individuals (82 percent) indicating support for limitation.

Mosaic Plot of Support vs Subsistence/Sport Fish Permit Possession



Question 6: Do you belong to, or participate in, any organization(s) that represent fishers in Prince William Sound? Is so, which one(s)?

A total of 71.26% of respondents indicated that they were involved in some way in with fisher organizations in PWS. A total of 87 of respondents answered this question, with three opting not to answer. The most common organization named in this question was the Cordova District Fishermen United, which is a non-profit organization formed to represent fishermen in PWS.

Question 7: What is your primary source of income?

The majority of respondents to this question indicated that their primary source of income was commercial fishing (59), followed by individuals who indicated that they were retired (11).

Question 8: (Optional) What is your driver's license number? This will be used for identity verification only.

As the answers to this question are confidential, they are not reported.

Conclusion:

The survey results are clear: among respondents support is overwhelmingly in favor of limitation. There is some evidence that sport or subsistence permit holders in the PWS shrimp fishery are more likely not to support limitation than individuals who have never had a sport or subsistence shrimp pot permit in PWS. However, even among individuals who have received subsistence/sport fish PWS shrimp permits, 66.6 percent were in favor of limitation.

Appendix A: PWS Shrimp Pot Limitation Survey

Dear Prince William Sound Shrimp Pot Permit Holder,

Please help CFEC by taking a moment to respond to a brief survey regarding the commercial Prince William Sound Shrimp Pot fishery.

The Alaska Commercial Fisheries Entry Commission (CFEC) is charged with responding to petitions from the public advocating a fishery be limited. Recently, CFEC has been charged with investigating the necessity of limiting the Prince William Sound Shrimp Pot fisheries in response to such a petition. CFEC is interested in determining the level of support for limitation among those participating in this fishery. We are contacting you because our records indicate that you have held a Prince William Sound Shrimp Pot permit (P09E or P91E permit) sometime over the last five years (2018 – 2022). The process of determining whether to limit a fishery is extensive and the results of this survey contribute to a vast sum of information that will be gathered and used to make a decision. A brief description of limited entry and the limitation process can be found here.

We are grateful for your participation and responses, and we encourage you to share any additional information you believe is relevant to the decision-making process. Furthermore, if you are interested in discussing the fishery with the research personnel at CFEC, please do not hesitate to reach out. We understand that your operations are intricate, and your input is essential for CFEC to achieve the appropriate outcome.

Rest assured, your responses will be treated with utmost confidentiality. The ultimate results will combine all responses and be presented as generalized descriptions and values.

You might receive multiple surveys if you have used varying emails or contact numbers when you filled out CFEC forms. In such an instance, we request you to ONLY FILL OUT ONE SURVEY. Similarly, if you are acquainted with a Prince William Sound Shrimp Pot permit holder who hasn't received a survey, kindly inform them to reach out to CFEC.

We extend our sincerest gratitude. If you have any questions, please contact the CFEC Research and Analysis Section at DFG.CFEC.Research@alaska.gov.

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Appendix A: PWS Shrimp Pot Limitation Survey

1. (Required) Are you in support efforts to limit the Prince William Sound Shrimp Pot fishery?
2. What year did you begin participation in the commercial fishery?
3. Roughly what percentage of your yearly income is from the PWS shrimp pot fishery?
4. Are you a catcher/seller, catcher/processor, or direct marketer of your own shrimp harvest?
5. Have you ever received a subsistence or sport fish shrimp permit for Prince William Sound?
6. Do you belong to, or participate in, any organization(s) that represent fishers in Prince William Sound? If so, which one(s)?
7. What is your primary source of income?
8. (Optional) What is your driver's license number? This will be used for identity verification only.