Economic Contributions of Sportfishing on the Cook Inlet Region

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Executive Summary

In 2017, anglers fished a total of 907,000 days in Alaska's Cook Inlet region and spent $716.5 million on trip-related goods and services, pre-purchased packages, equipment and real estate used for fishing. An input-output model of the Cook Inlet region was used to estimate the total economic contributions that the spending created through the economic multiplier effect. As anglers' dollars move from business to business in the Cook Inlet economy, the total effects of the spending generated $832.4 million in economic output and supported more than 6,300 jobs that provided $271.4 in household income.

Although residents of Alaska spent roughly the same as non-residents ($358.5 million compared to $358.0 million), it was the resident spending that made a larger economic contribution (more jobs and income). This was the result of differences in the kinds of expenditures made by residents and non-residents. Resident anglers spent more of their money on equipment while non-residents spent most their money on trip-related purchases and pre-arranged packages that include services such as guides, lodging and meals produced by the region's businesses.

Table E1. Summary of angler activity and economic contributions on the Cook Inlet region in 2017

	Resident Anglers	Non-resident Anglers	All Anglers
Days fished*(thous.)	514.2	392.9	907.1
Angler purchases:			
Trip-related (non-package) (millions)	$46.2	$135.0	$181.2
Packages (millions)	na	$37.2	$37.2
Equipment (millions)	$201.8	$54.0	$255.8
Real estate (millions)	$110.6	$131.7	$242.3
Total retail sales (millions)	$358.5	$358.0	$716.5
Total economic contributions, including multiplier effects:			
Industry output (millions)	$489.0	$343.4	$832.4
Labor income (millions)	$158.8	$112.6	$271.4
Employment (thous.)	3.4	3.0	6.4

*Includes only those days reported fishing in the Cook Inlet region

TABLE OF CONTENTS

Introduction 5
Methodology 5
  Research Objective 5
  Data Collection 6
    Angler Survey 6
    Survey Method 6
    Seasonal Survey Waves 7
  Questionnaire Design 7
    Identifying the Cook Inlet region 7
    Online Questionnaire 10
  Sampling Frame and Sample Sizes 10
    Sample Frame 10
    Sampling Procedures 10
    Contact Protocol 12
Data Analysis 15
  Trip Expenditures 15
  Fishing Equipment Expenditures 16
  Real Estate Expenditures 17
  Economic Modeling 17
    Background and Metrics 17
    Sportfishing Guides Survey 20
Results 21
  Angler Days 21
  Angler Spending 22
  Economic Contributions 26
Summary and Discussion 30
  Detailed Results by Stratum 32
  Angler Survey Packages 41
  Sportfishing Guide Business Operation Survey 78

LIST OF TABLES

Table 1. Expected proportion of responses by stratum 11
Table 2. Sample distribution by survey mode (paper-based and email) and residency 12
Table 3. Angler survey timeline and highlights 13
Table 4. Angler survey respondents by demographics and license type 14
Table 5. Angler days by water type, guide usage, and residency (2017) 21
Table 6. Spending for sportfishing, by residency and expenditure category (2017) 22
Table 7. Average sportfishing expenditures, by residency and category (2017) 23
Table 8. Detailed sportfishing trip spending, by residency (2017) 24
Table 9. Detailed sportfishing equipment spending, by residency (2017) 25
Table 10. Detailed sportfishing real estate spending, by residency (2017) 26
Table 11. Economic contributions of all sportfishing spending by residency (2017) 27
Table 12. Economic contributions of sportfishing trip and package spending by residency (2017) 27
Table 13. Economic contributions of sportfishing equipment and real estate spending by residency (2017) 28
Table 14. Tax revenues generated from the economic contributions of sportfishing (2017) 29
Table A 1. Number of survey respondents reporting fishing activity by strata 33
Table A 2. Detailed sportfishing trip and package spending, by residency, guide use (2017) 34
Table A 3. Detailed sportfishing trip and package spending, by residency, guide use, and water type (2017) 35
Table A 4. IMPLAN sector assignments: Trip and guide spending 36
Table A 5. IMPLAN sector assignments: Equipment and real estate spending 37
Table A 6. Sportfishing guide operations business survey results 38
Table A 7. Economic contributions of sportfishing trip and package spending by residency, guide usage (2017) 39
Table A 8. Economic contributions of sportfishing trip and package spending by residency, guide usage, and water type (2017) 40

LIST OF FIGURES

Figure 1. Detailed map of the Cook Inlet region provided in the survey 8

Introduction

The economic contributions of sportfishing to the economy of the Cook Inlet region is an important consideration for its natural resource managers. Earlier estimates of economic contributions associated with sportfishing are available for Alaska and for the region. For example, the U.S. Fish and Wildlife Service's National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FHWAR) in 2011 provides estimates of angler spending at the state-level. These estimates, however, do not provide the level of detail to calculate the economic contributions at the regional level. A regional economic contribution study of sportfishing in Alaska was conducted by the Alaska Department of Fish & Game (ADF&G) and completed in 2008 with estimates for 2007 fishing activity. The Matanuska-Susitna Borough (MSB) used that study as a basis to do a more regionally specific study through the University of Alaska Anchorage, Institute of social and Economic Research (UAA-ISER) published in 2009. Estimates from these two regional projects are now roughly ten years old.

In 2015, the Matanuska-Susitna Salmon Research, Monitoring & Evaluation Plan for Upper Cook Inlet (RM&E), identified current estimates of the economic contribution of sportfishing to the Cook Inlet region as a gap in available data. In 2017, the MSB contracted with Southwick Associates to develop updated estimates of the economic contribution of sportfishing to the regional economy using the same methods as the 2007 study. The project's goal is to provide information to the MSB needed to develop, implement, and evaluate projects, policies and management strategies in ways that seek to optimize social and economic benefits to Alaskans.

The project was designed to supplement traditional fisheries information on angler effort, catch, and harvest data collected by the ADF&G's of Sport Fish Statewide Harvest Survey (SWHS). The ADF&G provided assistance to the project per a Memorandum of Agreement that included contact information for Alaska resident and non-resident anglers who purchased a sportfishing license, estimates from the Statewide Harvest Survey, contact information for sportfishing guides, and reviews of project plans and methodology.

Methodology

Research Objective

The primary purpose of this study is to quantify the economic contributions generated by resident and non-resident sportfishing activities in the Cook Inlet region of Alaska.[1] Impacts are summarized for several strata: by residency (Alaska residents & non-resident visitors), chartered services (guided and unguided), and water type (freshwater and saltwater).

[1] There is a distinction between the use of "on" versus "in" with respect to the economic contributions to the Cook Inlet region. Contributions from sportfishing "in" the Cook Inlet region includes only those anglers who fished within the region. Contributions from sportfishing "on" the Cook Inlet region included both those anglers who fished in the region as well as those anglers who did not fish in the region but did purchase items used for the purpose of sportfishing from businesses with the region.

Additionally, a key requirement of the project was a set of results that can be directly compared the 2007 study. To that end, care was taken to ensure that the sampling procedures, survey approach, questionnaires and analysis used in this study were consistent with the 2007 study.

Data Collection

The study included two separate surveys. The first, and largest, survey was sent to anglers who purchased a 2017 Alaska fishing license. The purpose of this survey was to collect data for the Cook Inlet related to spending by anglers for fishing trips and equipment. A second survey of fishing charter boat operators was conducted as part of this project. The purpose of the business survey was to improve the accuracy of the economic models used to analyze spending on guided fishing trips.

Angler Survey

The data needed to produce economic contribution estimates of sportfishing on the Cook Inlet region include numbers of anglers, fishing effort and average expenditures. Number of anglers and days of fishing are available from the SWHS. Several sources are available that could provide angler expenditure profiles, such as the USFWS National Survey and previous economic studies of Alaska's sportfishing. They are, however, several years old, do not provide the requisite data at the regional level, and/or fail to capture the full range of expenditures made by Alaska’s anglers. To develop the necessary angler expenditure profiles, a detailed survey of Alaska resident and non-resident anglers was conducted.

Survey Method

The nature of the survey required survey participants to identify where they fished and where they spent money with respect to the Cook Inlet region. To achieve that, a detailed map was created to visually define the regional boundaries for respondents. This prevented the use of a telephone survey.

A multi-mode questionnaire with both a mail and an online component was implemented for the angler survey. A portion of the anglers selected as part of the sample frame was contacted via mail and provided with a paper-based survey packet. These anglers were also given the option to the online questionnaire. The balance of the sample was sent an email message asking them to take part in the survey along with a clickable link to access the online questionnaire. The online questions, content and order of presentation was identical to the mail survey to ensure the data from both survey forms were compatible and could be combined prior to analysis. The detailed mail and online survey instruments are included in the Appendix.

Seasonal Survey Waves

The angler expenditure survey was conducted in two waves. There are two major reasons to not use a single wave approach, such as an annual survey. First, seasonal variations in average trip expenditures, the amount spent by anglers, can vary depending on the time of year. For example, winter fisheries in many places are oriented towards ice fishing and a different mix of gear is required. Even during the summer fisheries, expenditures for early season Chinook fisheries are expected to differ from later season fisheries which range from river to lake fisheries for salmon, trout, grayling, and other species, to saltwater fishing for salmon, halibut and other groundfish. To capture these differences, anglers were asked to report their expenditures for a specific trip within defined time periods, which is expected to result in greater recall accuracy of the final expenditure estimates.

The second reason to conduct the survey in two waves was to reduce the influence of recall error in the reported spending values. An annual survey may force some anglers to report expenses for trips that occurred 12 or more months earlier. Research funded by the US Fish and Wildlife Service has shown that anglers can have significant difficulty recalling specific amounts spent a year earlier. This problem is more severe for items with lower prices and/or are purchased frequently such as terminal tackle, gasoline and other similar items. Sending two waves of surveys, each with recall periods shorter than annual recall, would help reduce recall error.

Wave I inquired about fishing activity and expenditures for trips taken January 1 through April 30, 2017 and May 1 through June 30, 2017. Only residents were included in the first wave as few non-residents typically fish in the winter months. The second survey wave inquired about fishing activity and expenditures for trips taken May 1 through October 31, 2017. Residents and non-residents were included. Separate resident and non-resident survey packets were produced. The detailed resident and non-resident survey instruments are included in the Appendix.

Questionnaire Design

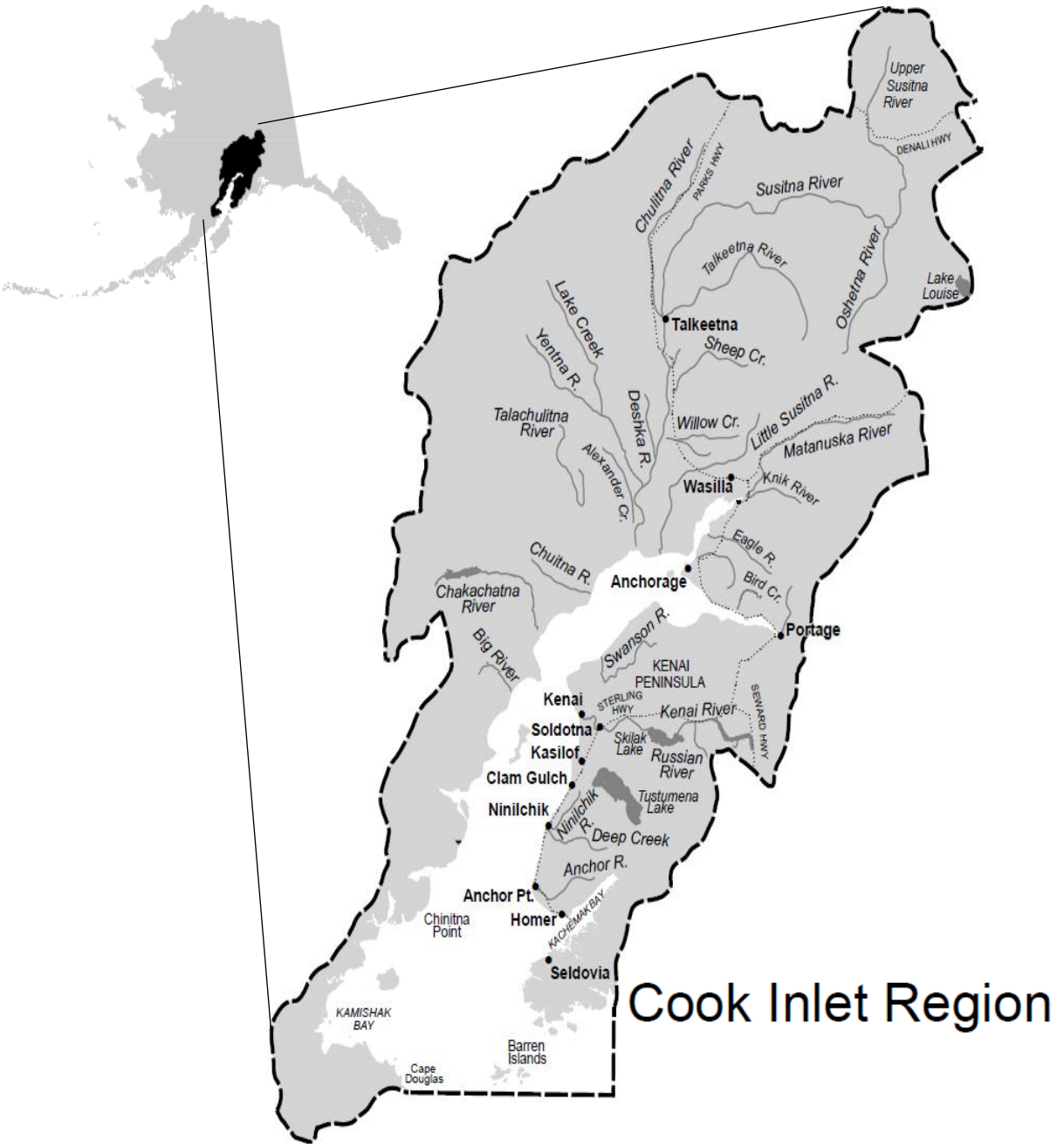
Identifying the Cook Inlet region

The survey questionnaires mirrored those developed during the 2007 statewide research effort with revisions to focus activity and spending only on the Cook Inlet region. While there is probably some level of consensus among anglers of the general locations that make up the region, it is likely that some debate would occur about the specific boundaries of the region among a group of anglers. As a result, it was critical to clearly delineate the boundaries of the region and provide geographical detail to respondents in order to isolate activity and spending which occurred within the Cook Inlet region.

Both the paper-based and online survey instrument provided a visual reference

(Figure 1) of the Cook Inlet region with the regional boundary as defined for this study. The goal was to provide physical landmarks such as rivers, towns, and the coastline for anglers to use as references to help them identify whether they fished or made expenditures within the region.

Figure 1. Detailed map of the Cook Inlet region provided in the survey



Survey Content

At the outset of the survey, each angler was asked several screening questions. Based on their responses to these questions, each angler was directed to a different section of the survey. The screener questions were used to identify anglers who a) actively fished in and purchased items used for sportfishing from the Cook Inlet region, b) actively purchased items used for sportfishing from but had not actively fish in the region, c) actively fished in but did not purchase items used for sportfishing from the region, and d) neither fished in nor purchased items used for sportfishing from the region. To estimate the economic contributions of sportfishing on the Cook Inlet region, it was important to capture spending by anglers who fit into the first three types (a, b, and c).

The survey captured data from four main types of questions: a) the number of days fished in 2017, b) the type of sportfishing and expenditures made on the most recent trip within a 2017 season, c) equipment and real estate expenditures directly attributable to sportfishing made in 2017, and d) demographic information. A brief description of the question types is included below (the detailed surveys are available in the Appendix).

Each angler was asked to reflect on their annual fishing activity in 2017 and report the total days for each survey time period (Jan 1-April 30, May 1-June 30, and July 1-October 31). These responses are critical to allocate total annual days from the SWHS to the season-specific spending profiles to develop annual expenditure profiles for each stratum.

Anglers provided detailed travel-related expenditures made in the Cook Inlet region for their most recent trip within a specified time period and expenditures made for others in conjunction with items such as fuel, food, bait, and ice. Information specific to the type of trip was used to develop the trip-related spending profiles across the multiple strata (residency, guide usage, and water type) and to calculate the trip-related spending as a per fishing day metric.

Equipment used for sportfishing can be used in many trips and was not included in the 'most recent trip' questions. Equipment expenditures in the Cook Inlet region over the past 12 months was requested in both survey waves. For those items which can be used for other activities, respondents were asked about the percentage of time each equipment item was used for sportfishing, and only that percentage of the item's cost was assigned to this project. Items such as rods & reels, tackle, camping equipment, and off-road vehicles were included in this section of the survey. Equipment and real estate spending profiles were developed on a 'per-angler' basis to match with the SWHS numbers of anglers.

Demographic information, such as age and gender, was collected and used to help ensure the results adequately represent the population of Alaska anglers. Where differences between the survey sample and the angler population exist, post-survey, proportional weights were created. Details about the representativeness of the sample is included in a later section.

The survey instrument was also accompanied by a cover letter explaining the purpose of the survey and confidentiality steps. Southwick Associates letterhead was used for the cover letter and the MSB and ADF&G logos were included to reflect the collaborative effort. The use of the logos and the name recognition of the local agencies was expected to increase response rates to the survey.

Online Questionnaire

An online version of the survey instrument was developed and presented the same questions, wording, and order as the mail survey. In the cover letter to the mail group, survey recipients were offered the opportunity to take the survey online as a convenience that could potentially help boost response rates. The draft online survey was tested and made available for the MSB and ADF&G review prior to the mail survey's first distribution. Each survey was assigned a code, used internally to track responses for the second and third round mailings. Survey respondents were asked to use this code to access the survey, preventing them from generating duplicate entries. This code also helped to prevent survey recipients from encouraging friends to take the survey which could bias the results.

Sampling Frame and Sample Sizes

Sample Frame

The 2017 ADF&G sportfishing license database was the sampling source. PIDs and DAVs were included in both survey waves.[2] To prevent diluting the survey sample with individuals who may not have fished in 2017, only PIDS that applied for a license between 2013 and April 30, 2017 were included. According to the ADF&G, there were between 6,000 to 7,000 issued during any one year between 2013 and 2016.

The angler survey was limited to licensed anglers only. Economic contributions are also generated from purchases made for and by unlicensed anglers (e.g., youth under 16 yrs. of age), however. To account for some youth-related purchases, licensed anglers were asked to include their expenditures made for themselves and others, which would include unlicensed youth anglers. As a result, a portion of expenditures made for youth travel and equipment are included in the final impact estimates. While this approach omits youth, who pay their own way, this step does capture a greater share of all sportfishing-related expenditures.

Sampling Procedures

A randomly selected stratified sample was drawn for each of the two survey waves. Only Alaskan residents were included in the sample for Wave I while both resident and

[2] PID: Alaska residents 60 or older are not required to purchase sportfishing licenses but must apply for an ADF&G Permanent Identification Card (PID). These are lifetime hunting, fishing, and trapping licenses. These are valid for the remainder of the recipient's life. It is assumed that those who apply for a PID in a given year are similar in terms of likelihood of going sportfishing as residents who purchase a license. DAV's are Alaskan Disabled American Veteran permits.

non-residents were included in the sample for Wave II. Anglers selected for the sample for Wave I were excluded from inclusion in Wave II. Anglers listed in the ADF&G license database (including issued PIDs/DAVs) and meeting the stratum criteria had an equal chance of being selected to participate in the survey effort.

The results from the 2016 SWHS were used to approximate the proportion of Alaska anglers most likely to fish in the Cook Inlet region by water type (freshwater or saltwater). The results from the 2007 statewide study were used to approximate the proportion of guided and unguided trips (Table 1). The goal was to achieve a minimum target sample based on the most detailed stratum to calculate the total size of the sample to be drawn from the license database.

Table 1. Expected proportion of responses by stratum

	Residents	Non-Residents
Alaskan anglers fishing in the Cook Inlet region	70%	53%
Water type fished in Cook Inlet region		
Freshwater	68%	60%
Saltwater	32%	40%
Charter usage in Cook Inlet region		
Freshwater		
Guided	7%	65%
Unguided	93%	35%
Saltwater		
Guided	23%	78%
Unguided	77%	22%

Based on the above proportions, sample frames of the following sizes were drawn from the 2017 license sales records:

Wave I = 2,423 surveys
Wave II = 22,114 surveys
Total N = 24,537 surveys

The increased rate of email capture among licensed Alaskan anglers, respondents' increased familiarity with online surveys since the 2007, and the low marginal cost of fielding online questionnaires suggested that the survey could make greater use of the online mode for capturing angler survey responses in 2017. In 2016, 55% of non-residents and 61% of residents had provided an email address to ADF&G. Early results from the roll-out of an e-vendor system indicate that the proportion had grown in 2017. It is unclear however if this initial growth remained consistent across the whole year of license sales. Table 2 outlines the sample frame based on the type of survey instrument and angler residency.

Table 2. Sample distribution by survey mode (paper-based and email) and residency

	Email survey	Paper-based survey
Residents		
Total surveys by type	11,000	1,754
Early (Wave I)	2,090	333
Late (Wave II)	8,910	1,421
Non-residents		
Total surveys by type	10,000	1,783

Contact Protocol

The mail survey included an advance postcard indicating that the recipient had been selected for the study and would be receiving a survey package within the next 7-10 days. Using the advance notification technique formalized the request, generated a level of awareness prior to the arrival of the survey, and was anticipated to improve response rates. Next, anglers selected as part of the mail-based effort received a full mail packet, which included a cover letter, questionnaire, and postage-paid return envelope, via first class mail. Initial contact with anglers selected to be part of the email effort began with a message which mirrored the paper-based cover letter as well as a link to the online version of the survey.

Completed surveys were tracked to determine who had responded to prevent mailing a second survey. Business reply mail was used to track undeliverable mail pieces. Follow-up contact for the paper-based effort included a thank-you/reminder postcard approximately 7-10 days after the mail-out of the survey package. Non-respondents to the first email packet were sent a second survey package which included a cover letter, questionnaire, and postage paid envelope. The second packet was sent approximately two weeks following the thank-you/reminder postcard.

Follow-up contact for the email effort included a thank-you/reminder message seven days after the delivery of the initial survey message. Non-respondents to the previous contact received one final message which was similar to the second mail cover letter as well as the link to the online version of the survey. Response among the email group to the Wave II survey effort was light, given the size of the sample. A fourth round of reminders was sent to encourage response. The email subject line and message were modified to signal the need for action before the survey closed.

Table 3. Angler survey timeline and highlights

	WAVE I		WAVE II	
Dates that sample was pulled from ADF&G license database	June 2017		November 2017	
Mailing mode	Mail	Email	Mail	Email
Sample size	334	2,029	3,204	17,780
Target sample	Residents		Residents & Non-residents	
Time period covered by the survey	January 1 – June 30		May 1 – October 31	
Advance message	July 1,2017	na	December 15, 2017	na
First survey invitation	August 4, 2017	August 16, 2017	December 29, 2017	January 10, 2018
Reminder message	August 11, 2017	August 23, 2017	January 12, 2018	January 16, 2018
Second survey invitation	August 25, 2018	August 30, 2017	January 30, 2018	January 29, 2018
Final survey invitation	na	na	na	February 5, 2018
Overall response rate	37%	15%	29%	8%

Note: Detailed response counts and proportions by stratum are reported in Appendix Table A1.

Sample Testing

The survey generated complete responses from 2,763 resident and non-resident anglers who held an Alaska sportfishing license in 2017. The sample underwent rigorous testing in relation to the total population of Alaska's licensed anglers. It was found to be representative of the population by residency. Within the non-resident group, the respondent sample has a higher proportion of males and older anglers relative to the non-resident angler population. Within the resident group, the respondent sample is older and proportionally more live in the Cook Inlet region.[3]

[3] Region assignments are generated by linking the zip code of residency on file in the license database to the respective borough assignment using IMPLAN. Note that the Cook Inlet region is a sub-region of South Central.

Table 4. Angler survey respondents by demographics and license type

	License database	Survey panel
Residency[a]		
Resident	49.3%	45.9%
Non-resident	50.7%	54.1%
Gender[b]		
Residents		
Male	62.6%	67.2%
Female	37.4%	32.8%
Non-residents		
Male	75.1%	86.5%
Female	24.9%	13.5%
Age category[c]		
Residents		
35 years or younger	32.7%	16.7%
35-54 years	34.6%	33.7%
55-64 years	23.6%	37.4%
65 years or older	9.0%	12.3%
Non-residents		
35 years or younger	24.2%	10.8%
35-54 years	32.5%	23.8%
55-64 years	23.3%	32.1%
65 years or older	20.0%	33.2%
License type group (Residents only)[d]		
Sportfishing license	76.0%	75.5%
PID/DAV license holder	24.0%	24.5%
Region of residency (Residents only)[e]		
Cook Inlet	65.9%	74.1%
Interior	17.1%	13.0%
South East	4.8%	9.6%
South Central (excluding Cook Inlet)	12.2%	3.2%

[a]Calculated z-value = 3.1, p-value 0.002
[b]Resident calculated z-value = 2.7, p-value = 0.007/Non-resident calculated z-value = 9.9, p-value = 0.00
[c]Using the average ages: Resident calculated t-stat 12.7, p-value < 0.0001/Non-resident calculated t-stat = 16.5, p-value < 0.0001
[d]Calculated z-value = 0.4, p-value = 0.70
[e]Calculated z-value = 6.1, p-value = <0.0001

An imbalance in any of these characteristics has the potential to impact the average angler spending estimates. For example, older anglers might be more likely to have additional discretionary spending and time to fish. A post-stratification multivariate weighting adjustment was applied to balance our respondent sample with Alaska's licensed angler population. Based on statistical tests (see notes below Table 4), the target variables included residency, gender, age, and region of home residence. An iterative rake weighting procedure available in SPSS was implemented to create proportional respondent weights. The weighted sample matches the angler populations in each of the demographic metrics.

There is the possibility that the respondent sample are systematically different from the group of licensed anglers who opted to not respond (also known as nonresponse bias). Extrapolating data from a biased sample will not produce results that accurately reflect the population. Comparison of the responses provided by anglers who completed their surveys shortly after the earliest contact to responses provided by anglers who completed their surveys after the final contact was the approach used to test for the presence of nonresponse bias. Two metrics which have a direct effect on the spending estimates to be developed (per day trip spending and annual days by water type) were tested for nonresponse bias. Specifically, the calculated average of each metric among anglers reporting early relative to the later responders was tested for statistically significant differences for both residents and non-residents. The results suggest that there was no evidence of nonresponse bias in the survey.[4]

Data Analysis

Sportfishing expenditures were split into three main categories: trip spending, equipment spending, and real estate spending. Trip spending was further broken apart into non-package and package (or pre-bundled expedition) spending.

Trip Expenditures

Development of the trip spending estimates was the most involved due to the application of adjustments for seasonality of spending as well as the likelihood of the trip to occur. Spending profiles were defined for three main seasons: winter (January through April), spring (May through June), and fall (July through October). The analysis assumes that trip spending among residents for trips taken in November through December is similar to spending for winter trips.

Some fishing trips would have occurred even if there was not an opportunity to fish. To count only trip spending associated with fishing, respondents were asked to indicate the likelihood that a trip would have occurred if they were not able to fish. Ordinal response categories were then used to capture trip and expenditure expenditures on a proportional basis. Only spending on items directly related to fishing (i.e. bait, rentals, processing) were included in the trip spending profiles of anglers who indicated they **definitely would** have taken the trip even if they were **<u>not</u>** able to fish. An increasing proportion of ancillary spending was applied to the spending profile as their response shifted from “definitely yes, the trip would have occurred” to “definitely no, the trip would

[4] T-tests for equality of average angler days (proxy for avidity) between early and late responders by stratum: Non-resident saltwater anglers t-value = 0.85, p-value = 0.39. Non-resident freshwater anglers t-value = 1.22, p-value = 0.22. Resident saltwater anglers t-value = 0.66, p-value = 0.52. Resident freshwater anglers t-value = 0.65, p-value = 0.52. T-tests for equality of average per fishing day spending by season between early and late responders by stratum: Non-resident early season trips t-value = -0.38, p-value = 0.70. Non-resident late season trips t-value = -0.75, p-value = 0.46. Resident early season trips t-value = 0.71, p-value = 0.48. Resident late season trips t-value = -0.94, p-value = 0.35.

not have occurred". Among anglers who indicated they **definitely would not** have taken the trip if they were not able to fish, all spending items were included in the trip spending profiles.

Package spending refers specifically to pre-bundled spending made in advance of the fishing trip to the Cook Inlet region. As in the 2007 study, it was assumed that packages were purchased primarily by non-residents. Anglers were asked to report package spending as a lump sum and to indicate the types of goods and services included in the package. Using data from those anglers who did not purchase a package trip, the lump sum was apportion across the set of goods and services categories specific to each respondent's package.

Separate trip and package spending profiles were developed for residents and non-residents, guided and unguided trips, freshwater and saltwater and calculated as a per-fishing day measure. Trips were allocated to each stratum based on survey responses, defining the trip as either salt or fresh water and either guided or unguided. The per fishing day measure was multiplied by total days fished in the Cook Inlet region as reported in the SWHS to generate the regionwide total trip and package spending estimates.

Fishing Equipment Expenditures

Given the geographical focus, we asked anglers to only report spending on items purchased from within the Cook Inlet region. Two groups of equipment items were included within fishing equipment expenditures. First there are those items that are used exclusively for fishing (rods & reels, tackle, etc.). For this group of items, 100% of the reported spending was allocated to the equipment spending profile. The second group includes items that can be used for fishing as well as other activities (boats, coolers, apparel, etc.). For this group, responds were asked to report the percentage of the items use that was specifically for fishing. The reported spending was then adjusted by the percent the item was used for sportfishing. In the case where the stated percent was missing, the average percentage for that item was applied.

The Cook Inlet Region is home to major retail outlets and there are likely many anglers who purchase equipment from businesses within the region but do no fish within the region. Spending for fishing and fishing-related equipment was calculated based on all observations, thereby generating an average per-angler spending measure across all Alaska anglers. Separate estimates were calculated for resident and non-resident anglers. Total fishing and fishing-related equipment spending in the Cook Inlet Region was estimated by multiplying the total number of licensed anglers by the average spending per angler, by residency.

Real Estate Expenditures

The fishing-related real estate category captures spending in 2017 on the purchase or lease of existing structures, on-site construction or maintenance of structures, and purchases of structures constructed off-site, each used primarily for sportfishing. Similar to equipment spending, real estate expenditures were also calculated based on all observations, thereby generating an average amount spent per angler. Separate estimates were calculated for resident and non-resident anglers. Average real estate spending was multiplied by the total number of licensed anglers, by residency, to estimate total spending.

For the purpose of this analysis, 100% of the reported real estate construction and maintenance spending was included in the angler spending profiles. Purchases of existing structures or land are mostly a transfer of assets and generate little economic contributions except for the fees paid to real estate agents, leasing agents and financial institutions. Appropriate adjustments were applied to total annual spending on real estate prior to the IMPLAN modeling to isolate only the portion of the spending that generates economic activity.

Economic Modeling

Background and Metrics

The economic contributions of fishing-related spending on the Cook Inlet region are measured with an input-output model of the regional economy and IMPLAN Pro© impact analysis software.

Input-output models are driven by some change in economic activity, usually spending (also known as the direct effect). The **direct effect** refers to the initial stimulus to the economy. In this study, it refers specifically to the dollars spent by anglers for trip-related purchases, fishing equipment, and other spending that is immediately attributable to their fishing activity. In the strictest sense, the direct effect does not always equate with angler spending due to economic leakages. Because some of the equipment purchased by anglers is manufactured outside of the region, some of the dollars spent by anglers in the Cook Inlet leak immediately beyond the region's borders and do not have a direct effect on the regional economy. In that case, angler spending may not equal direct effect in the language of input-output models. In other cases, the amount of angler spending is the direct effect. For example, spending for lodging and restaurant meals represents purchases of goods and services that are produced entirely where they are bought, and the entire purchase is captured in the direct effect on the regional economy.

The average trip-related expenditures per fishing-day and total angler-days of fishing effort in the Cook Inlet region, as provided by ADF&G in the 2017 SWHS, formed the

basis for the estimate of total trip and package sportfishing spending in Alaska's Cook Inlet region by all anglers in 2017. The average equipment and real estate expenditures per angler and total licensed anglers as reported by the 2017 SHWS defined the balance of estimated total sportfishing spending in the region. The total estimated spending for trip-related and durable equipment items were organized into categories and mapped to specific industry sectors in the IMPLAN input-output model.

The total economic contributions of sportfishing on the Cook Inlet region are based on the spending described above plus the multiplier effect of that spending. The input-output model produces estimates of the total multiplier effects (indirect and induced) that arise from the spending by anglers (the direct effect).

Indirect effect refers to the economic activity (e.g., output, employment, income) in the businesses that supply the industries stimulated by the direct effect. Those indirectly affected industries, in turn, stimulate additional activity among their local suppliers, and so on. For example, if an angler spent $100 to purchase the services of a guide, the guide uses a portion of the $100 paid by the angler to purchase boat fuel, equipment, bait, utilities, etc. from local sources. In addition, a portion of the $100 pays for goods and services from out-of-state providers. In the next round, the in-state business that supplies bait to the guide (as well as all of the other in-state businesses that supply goods and services to the guide), in turn, must use part of the money that it receives from the guide to pay its own business expenses (e.g., fuel, gear, utilities). Their suppliers, in turn, also pay in-state and out-of-state suppliers to support their increased business activity. This indirect activity continues in this way until the effect becomes negligible as a portion of each round of payments for goods and services eventually leaks out of the local economy.

The **induced effect** measures the economic activity that results from the household spending of salaries and wages that were generated from the business activity associated with the direct and indirect effects.

The interpretation of the results of the economic models depends on the changes that drive the model. The term "economic impact" is normally reserved to describe some level of economic activity that would not occur except for the initial economic activity. In the case of recreational activities like sportfishing, it is generally agreed that economic impact comes from spending by visitors to the region. If not for their presence, their spending would never occur. If quality sportfishing was no longer available in the Cook Inlet, for example, non-resident anglers may choose to fish elsewhere, and their spending would not occur in the region and thus not generate additional economic effects in the regional economy. Most resident anglers, on the other hand, choose fishing as an activity on which to spend their recreational dollars locally. If quality sportfishing was no longer available some residents would likely choose some other local recreational activity on which to spend their money in place of fishing and their spending would remain in the regional economy.

It is generally acknowledged that retained economic activity can also represent a real economic impact. For example, the quality of fishing opportunities in the Cook Inlet is such that some anglers choose to fish in Alaska rather than go elsewhere. If the quality of fishing were to decline, then some dedicated resident anglers may choose to travel outside of the region for sportfishing and their dollars would be lost to the Cook Inlet economy. It is unclear what portion of resident anglers would fall into that category. In another retention scenario, it may be the case in the Cook Inlet that there are few recreational alternatives to fishing, so that if the quality of fishing as a recreational activity declined, some portion of anglers may choose to travel outside of the state to pursue an alternative recreational activity (e.g., a Caribbean vacation). It was beyond the scope of this study to investigate either of those scenarios.

The focus of this study was on the total economic activity associated with sportfishing as a measure of its overall contribution to the region's economy. In that case, it was appropriate to include all spending for sportfishing, including both resident and non-resident anglers. That measure is alternately called "economic contribution" or "economic significance", among others. This study was concerned with measuring the economic significance of sportfishing and therefore includes resident spending as part of the direct effect. To help understand the relative contributions that residents and non-residents make to the economy, results in this report were broken out separately by residency.

Separate models, based on residency, guide usage, and water type, were created to estimate the associated contributions of sportfishing. The IMPLAN regional models were based on 2016 economic data. Deflators included within the modeling software were employed to account for inflation effects between the model year data (2016) and the year of reported angler expenditures (2017). IMPLAN economic Data are available for each of the boroughs in Alaska and can be combined to create custom analysis regions. The Cook Inlet economic model consists of the Anchorage, Kenai and Matanuska-Susitna boroughs.

Economic activity can be measured in several different ways. The most common way to portray how expenditures on sportfishing affect the economy include the following metrics. These descriptions explicitly include the multiplier effects of angler spending.

Retail Sales – These include expenditures made by anglers for equipment, travel expenses and services related to their sportfishing activities over the course of the year. These combined initial retail sales are the stimulus that trigger the multiplier effects in the regional economy.

Output – This measure reports the volume of economic activity within the local economy that is related to sportfishing. Because it does not discount the value of raw materials as they move through the production of goods or services, this measure double-counts a portion of the output of the industries in the value chain.

Labor Income – This figure reports the total salaries and wages paid in all sectors of the regional economy as a result of sportfishing activities. These

are not just the paychecks of those employees directly serving anglers or manufacturing their goods, it also includes portions of the paychecks of all employees affected by the direct, indirect and induced effects. For example, it would include a portion of the dollars earned by the truck driver who delivers food to the restaurants serving anglers and the accountants who manage the books for companies down the supply chain, etc.

Employment – Much like Labor Income, this figure reports the total jobs in all sectors of the economy as a result of the sportfishing activity and includes both full-time and part-time jobs. These are not just the employees directly serving anglers or manufacturing their goods but can also include employees of industries impacted by the direct, indirect and induced effects.

Federal, State, and Local Tax Revenues – Including all forms of personal, business and excise taxes, the IMPLAN model estimates the tax revenues collected by the local, state and federal governments as a result of the initial expenditures by anglers.[5]

Sportfishing Guides Survey

The base IMPLAN model includes 536 nationally classified economic sectors, or industries. To the extent that a local industry operates differently from the national model's base assumptions, adjustments can be made to the IMPLAN models to reflect the unique local practices.

A sportfishing guide operations survey was completed during the 2007 research effort in order to produce model results that more accurately reflected the nature of their industry. In the absence of any structural change within the industry signaling the need to update the economic models, it would be reasonable to rely on those models for this effort. Discussions with ADF&G in 2017 suggest some change within the structure of industry necessitated an updated business survey. Therefore, a business survey of guide businesses was repeated to determine how and where they receive and spend their business revenues in 2017. The survey instrument itself was built to mirror the survey implemented for the statewide research effort in 2007 and to capture current business practices.

ADF&G provided the list of licensed sportfishing guides who operate in the Cook Inlet region's fresh and salt water. Email capture among this sportfishing business group was 83%. The business survey was conducted via email and all guides with emails on record were asked to participate in the survey effort. Three rounds of email invitations were sent (Feb. 22nd, March 1st, and March 8th of 2018). The emails included a message

[5] Tax revenue estimates from the IMPLAN model are based on actual total collections from industry but at a more aggregated sector level. These values are then apportioned to specific industries and local levels using Bureau of Economic Analysis and Annual Survey of Government Finances data. This approach can cause estimated collections realized at a more localized level to deviate from the model estimates.

explaining the purpose of the survey and a promise of confidentiality along with a clickable link to the survey. A response rate of 26% was achieved.

Two key vectors were utilized in the modification of the IMPLAN model: 1) the percent that each category of business expense represents of the respondent's total business expenses (i.e., the production function); and, 2) the percent of each business expense category that the respondent purchased in the Cook Inlet region. Detailed results for the vectors are included in the Appendix Table A6. Summary data analysis checks were employed to check for errors. For the first response vector, the sum of responses should add to 100%. In several surveys, the sum of responses did not total 100% and the individual response categories were adjusted to force the sum to equal 100% under the following rule. If the sum of the response categories was less than 90% or more than 110% then the survey was discarded as unusable. If the sum fell within that range but was not equal to 100%, each category response was proportionally adjusted to force the sum to equal 100%. For the second response vector, no single response should exceed 100%.

Results

Angler Days

Anglers spent 907,000 days sportfishing in the Cook Inlet region in 2017 (Table 5). Alaska residents accounted for the majority of days fished (57% or 514,000) while non-residents fished 393,000 days (43%). Eighty-two percent of all sportfishing days were unguided. While there are more freshwater angler days, saltwater fishing days have a higher proportion of guided days (37.0%) relative to freshwater days (13.3%). Non-resident anglers are more likely to have taken a guided fishing trip (34.3%) relative to residents (6.0%), regardless of water types.

Table 5. Angler days by water type, guide usage, and residency (2017)

	Resident		Non-resident		All Anglers	
	Angler-Days (thous.)	%	Angler-Days (thous.)	%	Angler-Days (thous.)	%
Freshwater						
Guided	18.1	4.4%	77.5	25.4%	95.6	13.3%
Unguided	395.7	95.6%	227.1	74.6%	622.8	86.7%
Total	**413.8**	**100.0%**	**304.6**	**100.0%**	**718.4**	**100.0%**
Saltwater						
Guided	12.7	12.7%	57.2	64.7%	69.9	37.0%
Unguided	87.7	87.3%	31.1	35.3%	118.8	63.0%
Total	**100.4**	**100.0%**	**88.3**	**100.0%**	**188.7**	**100.0%**
Total Guided	**30.8**	**6.0%**	**134.7**	**34.3%**	**165.5**	**18.2%**
Total Unguided	**483.4**	**94.0%**	**258.2**	**65.7%**	**741.6**	**81.8%**
TOTAL	**514.2**	**100.0%**	**392.9**	**100.0%**	**907.1**	**100.0%**

Source: 2017 Statewide Harvest Survey, Alaska Department of Fish and Game

Angler Spending

In 2017, anglers spent an estimated $716.4 million in the Cook Inlet region (Table 6). Total spending is evenly split between residents and non-residents ($358.5 million and $358.0 million). Twenty five percent ($181.2 million) of total spending is trip-related spending. A portion of non-resident anglers, traveling to the region to fish, pre-purchase a package experience from one of the many outfitters or guides operating in the region, securing a range of services for the one fixed price. Overall, 5% ($37.2 million) of total spending is package-related spending.

Table 6. Spending for sportfishing, by residency and expenditure category (2017)

Expenditures	Resident Angler Spending (millions)	%	Non-resident Angler Spending (millions)	%	All Angler Spending (millions)	%
Trip	$46.2	12.9%	$135.0	37.7%	$181.2	25.3%
Package	$0.0	0.0%	$37.2	10.4%	$37.2	5.2%
Equipment	$201.8	56.3%	$54.0	15.1%	$255.8	35.7%
Real Estate	$110.6	30.8%	$131.7	36.8%	$242.3	33.8%
Total	**$358.5**	**100%**	**$358.0**	**100%**	**$716.5**	**100%**

During their sportfishing days, both residents and non-residents may make a portion of their trip-related purchases closer to home and then make additional trip-related purchases in the Cook Inlet region. It is important to note that anglers were asked to not include those purchases made outside of the region. As a result, the spending reported in Table 6 reflects only purchases made inside the region.

More than one third ($255.8 million) of all sportfishing related spending in the Cook Inlet region is associated with equipment. While the trip-related spending reflects anglers, who reported fishing in the region, equipment spending includes anglers who fished outside of the region as well. Given that this area contains a large portion of Alaska's businesses, many anglers likely make trips to the region to purchase equipment. As a result, the equipment spending reflects purchases made within the region which may or may not have been used to fish within the region. Finally, another third ($242.3 million) is associated with sportfishing-related real estate spending.

Distribution across the four spending category types is quite different between the two groups. Among resident anglers, spending on sportfishing-related equipment and real estate account for 87.1% ($312.2) of total spending. Equipment and real estate spending still account for the majority of spending (51.9% or $185.7 million) among non-resident anglers. However, the proportion associated with trip and package spending among non-residents is four times greater than residents (48.1% or $172.2 relative to 12.9% or $46.2 million).

Average spending within each of the major expense categories is shown in Table 7. Trip and package spending are based on total spending in those categories (Table 6)

averaged across all reported fishing days in the region (Table 5). Collectively, anglers spend an average of $241 in the region on purchases such as fuel, groceries, bait, lodging, and restaurants (see Table 8 for the complete list of trip-related items).

Table 7. Average sportfishing expenditures, by residency and category (2017)

	Resident Anglers	Non-resident Anglers	All Anglers
	$ per angler-day		
Trip Expenditures	$89.78	$343.61	$199.72
Package Expenditures	NA*	$94.68	$41.01
Total trip spending	$89.78	$438.29	$240.73
	annual $ per licensed angler		
Equipment Expenditures	$1,102.92	$203.08	$569.69
Real Estate Expenditures	$604.26	$494.94	$539.48
Total equipment & real estate spending	**$1,707.18**	**$698.02**	**$1,109.18**

Equipment and real estate spending are based on total spending in those categories (Table 6) averaged across all Alaskan anglers. Based on data from ADF&G's SWHS, there were 182,963 licensed resident anglers and 266,111 licensed non-resident anglers in 2017. Collectively, anglers spent an average of $1,109 in the region on purchases such as rods, reels boats, motors, apparel, docks, and maintenance (see Tables 9 & 10 for the complete list of equipment and real estate items).

On average, non-residents spent more per fishing day on trip-related items in the region relative to residents ($438.29 versus $89.78). Conversely, residents spent more per angler on equipment and real estate items relative to non-residents ($1,707.18 versus $698.02).

Sportfishing trip and package spending encompasses a wide variety of items from fuel and oil to support the trip; from groceries to restaurants to sustain the angler; and from derby tickets to rentals to support the day on the water. The common theme is that trip-related items are services or items considered non-durable and purchased specifically for the trip. The full list of items and the amount spent in the region by resident and non-resident anglers is presented in Table 8. Additional detailed tables by guide use and water type are presented in the Appendix tables A2 & A3.

Table 8. Detailed sportfishing trip spending, by residency (2017)

	Resident Anglers	Non-resident Anglers	All Anglers
Trip Expenditures (millions)			
Fuel and oil for transportation	$13.7	$7.8	$21.5
Guide and charter fees	$6.1	$37.8	$43.9
Air travel	$0.4	$28.0	$28.4
Transportation services	$0.6	$3.1	$3.7
Boat launch & dockage fees	$2.9	$0.8	$3.7
Ice	$0.8	$0.5	$1.3
Bait	$1.3	$0.9	$2.1
Groceries	$8.1	$7.7	$15.8
Restaurants	$5.2	$7.5	$12.7
Heating & cooking fuel	$0.4	$0.2	$0.6
Fish processing	$1.5	$11.0	$12.6
Rentals	$0.7	$7.8	$8.5
Overnight accommodations	$3.8	$17.2	$21.0
Derby	$0.1	$0.2	$0.3
Souvenirs & gifts	$0.3	$3.4	$3.7
Other entertainment expenses	$0.2	$0.6	$0.9
Other	$0.1	$0.5	$0.6
Sub-Total (millions)	**$46.2**	**$135.0**	**$181.2**
Package Expenditures (millions)	na	$37.2	$37.2
Total Trip & Package (millions)	**$46.2**	**$172.2**	**$218.4**

Sportfishing equipment spending encompasses a similarly diverse list of items from rods and tackle (specific to sportfishing) to boats and apparel (which can be used for multiple purposes). In contrast to trip or package related items, equipment items are durable in nature and typically used for more than one trip. Table 9 presents the full list of items and total spending in the region by resident and non-resident anglers.

Table 9. Detailed sportfishing equipment spending, by residency (2017)

	Resident Anglers	Non-resident Anglers	All Anglers
Equipment expenditures (millions)			
License and stamps	$3.8	$12.2	$16.0
Rods, reels, and components	$11.6	$6.2	$17.8
Fishing tackle	$6.7	$4.1	$10.8
Tackle boxes or cases	$1.1	$0.5	$1.7
Electronics	$3.9	$1.0	$5.0
Nets	$2.3	$0.5	$2.9
Miscellaneous fishing equipment	$2.6	$1.5	$4.1
Shellfish equipment	$0.4	$0.1	$0.5
Taxidermy	$1.5	$0.9	$2.4
Books and magazines	$0.4	$0.3	$0.7
Items to store/preserve fish	$4.0	$1.8	$5.9
Coolers, fish boxes	$2.0	$2.1	$4.1
Clothing	$3.7	$3.3	$7.0
Boots, shoes, waders	$4.9	$2.4	$7.3
Life jackets	$1.0	$0.1	$1.1
Boats, canoes, rafts, etc.	$21.5	$0.8	$22.3
Boat motors	$15.4	$0.1	$15.6
Trailers, hitches	$2.5	$0.1	$2.7
Bear spray, bug spray, sun screen	$0.7	$0.7	$1.4
Firearms	$4.7	$1.2	$5.8
Cameras, binoculars, sunglasses	$2.2	$0.9	$3.2
Tents, screen rooms, tarps, backpacks, sleeping bags	$2.1	$0.5	$2.5
Camping trailer	$9.6	$1.1	$10.7
Other camping equipment	$2.1	$0.3	$2.4
Vehicles	$65.6	$4.9	$70.4
Airplanes and related equipment	$0.4	$1.1	$1.5
ATVs, snow machines	$13.2	$1.1	$14.3
Boat/camper registrations and excise taxes	$1.1	$0.1	$1.2
Vehicle, boat, or airplane repair/maintenance	$10.1	$3.3	$13.4
Other	$0.4	$0.9	$1.3
Total (millions)	**$201.8**	**$54.0**	**$255.8**

The reported dollar figures reflect total spending on fishing equipment and only that portion of multi-use equipment items anglers report was used specifically for the purpose of sportfishing. Resident purchases amount to $201.8 million, accounting for 79% of total sportfishing equipment. Non-resident purchases amount to $54.0 million, accounting for 21% of equipment spending.

Annual real estate spending estimates are presented in Table 10. The real estate category captures spending in 2017 on the purchase or lease of existing structures, on-site construction or maintenance of structures, and purchases of structures constructed off-site. Spending by non-residents sums to $131.7 million, the majority (54%) of the total spending in this category. Almost the entirety (98%) is associated with purchases or leases of land and existing houses. Despite the sizable amount of spending, only a portion generates economic activity primarily in the real estate and finance sectors. Residents spend $110.6 million, slightly less than non-residents. Sixty-eight percent of their spending is associated with on-site construction and repair as well as the purchase of structures built off-site.

Table 10. Detailed sportfishing real estate spending, by residency (2017)

	Resident Anglers	Non-resident Anglers	All Anglers
Real Estate Expenditures (millions)			
Purchases of lots, existing houses and cabins, and/or land	$34.1	$116.4	$150.5
Leases of land, cabins, boat slips, and storage	$1.4	$12.0	$13.4
Construction of houses and cabins, and repair or maintenance expenses	$69.4	$2.6	$72.0
Purchase or construction of boat docks, sheds, or outbuildings	$5.7	$0.6	$6.4
Total (millions)	**$110.6**	**$131.7**	**$242.3**

Economic Contributions

The angler spending discussed in the previous section, known as the direct effects, cycles through the regional economy generating additional rounds of economic activity. These extra rounds include indirect effects driven by businesses who provide supporting services and goods to anglers as well as induced effects resulting from household spending by employees of these businesses, known together as the multiplier effects. The three effects as a collective comprise the total economic contribution effects. The IMPLAN model is used to track the flow of these multiple rounds of spending.

Anglers spent an estimated $716.5 million across all expenditure categories (Table 6). After adjustments to isolate the portion of spending that actually generated economic activity within the region, the direct contribution to the region's economic output is $491.6 million (Table 11). That activity supported more than 4,235 full and part-time jobs and $159.2 million in household income.

Spurred by the initial spending of anglers, the economic output attributable to the supporting industries, or multiplier effect, is $340.8 million. The indirect and induced activity supported 2,143 jobs and $112.2 million in household income. Together, the

total effects of the spending activity generated $832.4 million in economic output and supported more than 6,300 jobs that provided $271.4 in household income.

Table 11. Economic contributions of all sportfishing spending by residency (2017)

	Resident Anglers	Non-resident Anglers	All Anglers
Direct effect			
Output (millions)	$299.7	$191.9	$491.6
Labor Income (millions)	$96.2	$63.0	$159.2
Employment (thous.)	2.2	2.0	4.2
Multiplier effects			
Output (millions)	$189.3	$151.5	$340.8
Labor Income (millions)	$62.6	$49.6	$112.2
Employment (thous.)	1.2	1.0	2.1
Total effect			
Output (millions)	$489.0	$343.4	$832.4
Labor Income (millions)	$158.8	$112.6	$271.4
Employment (thous.)	3.4	3.0	6.4

Table 12 presents the economic contributions from trip and package related spending by residency. Tables providing detail by residency, guide usage, and water type are provided in the Appendix tables A7 & A8. The total effects of trip and package spending activity generated $306.2 million in output, more than 2,800 jobs, and $100.3 million in household income. The majority of these effects come from non-resident spending.

Table 12. Economic contributions of sportfishing trip and package spending by residency (2017)

	Resident Anglers	Non-resident Anglers	All Anglers
Direct effects			
Output (millions)	$40.4	$130.6	$171.1
Labor Income (millions)	$12.1	$45.0	$57.1
Employment (thous.)	0.4	1.6	2.0
Multiplier effects			
Output (millions)	$27.6	$107.6	$135.2
Labor Income (millions)	$8.6	$34.6	$43.2
Employment (thous.)	0.2	0.7	0.8
Total effects			
Output (millions)	$68.0	$238.2	$306.2
Labor Income (millions)	$20.6	$79.6	$100.3
Employment (thous.)	0.6	2.2	2.8

Table 13 presents the economic contributions from equipment and real estate related spending by residency. The total effects of equipment and real estate spending activity generated $526.2 million in output, more than 3,500 jobs, and $171.2 million in household income. In this case, the majority of these effects come from resident spending.

Table 13. Economic contributions of sportfishing equipment and real estate spending by residency (2017)

	Resident Anglers	Non-resident Anglers	All Anglers
Direct effects			
Output (millions)	$259.2	$61.3	$320.5
Labor Income (millions)	$84.2	$18.0	$102.2
Employment (thous.)	1.8	0.5	2.2
Multiplier effects			
Output (millions)	$161.7	$43.9	$205.6
Labor Income (millions)	$54.0	$15.0	$69.0
Employment (thous.)	1.0	0.3	1.3
Total effects			
Output (millions)	$421.0	$105.2	$526.2
Labor Income (millions)	$138.2	$33.0	$171.2
Employment (thous.)	2.8	0.7	3.5

The economic activity generated in the region also produced tax revenues at the local, state, and federal level. The IMPLAN modeling produced generalized region-specific estimates of tax revenues based on existing ratios of output, income, and employment to tax revenues. It is estimated that angler spending in the Cook Inlet region in 2017 generated $31.7 million and $63.2 million in state/local and federal tax revenue, respectively (Table 14). Forty-three percent of tax revenues were the result of non-resident angler spending.

Table 14. Tax revenues generated from the economic contributions of sportfishing (2017)

	State and Local Tax Revenues (millions)	Federal Tax Revenues (millions)	Total Tax Revenues (millions)
Resident anglers			
Trip & Package Expenditures	$4.2	$5.4	$9.6
Equipment Expenditures	$10.0	$19.8	$29.8
Real Estate Expenditures	$3.7	$11.5	$15.2
Subtotal	**$18.0**	**$36.7**	**$54.6**
Non-resident anglers			
Trip & Package Expenditures	$10.7	$18.9	$29.6
Equipment Expenditures	$2.3	$6.3	$8.6
Real Estate Expenditures	$0.8	$1.3	$2.2
Subtotal	**$13.8**	**$26.6**	**$40.3**
All anglers			
Trip & Package Expenditures	$14.9	$24.3	$39.2
Equipment Expenditures	$12.3	$26.1	$38.4
Real Estate Expenditures	$4.6	$12.8	$17.4
Total	**$31.7**	**$63.2**	**$95.0**

Summary and Discussion

This study was conducted in order to provide current estimates of the economic contributions made by sportfishing activity on the Cook Inlet region. Prior to this research, the most recent study of sportfishing in Alaska that offers regional level analysis was completed roughly ten years ago. The updated information can contribute to the MSB's policy discussions regarding fishery projects, land and water resource management and other relevant topics.

More than 907,000 days were spent fishing in the Cook Inlet region. Anglers who fished in the region and anglers who traveled to the region to purchase items used for sportfishing spent a total of $716.5 million. The majority of those retail dollars were retained in the local economy supporting more than 4,200 jobs and providing $159.2 in labor income. A regional level input-output model was used to track the collective economic contributions of the direct spending and the multiplier effects created as the angler dollars moved from business to business in the Cook Inlet economy. The total contributions generated by angler spending was estimated to be $832.4 million in economic output, which supported more than 6,300 jobs and $271.4 million in labor income.

One of the main objectives of this study was to take collecting, analyzing and reporting estimates of economic contribution from sportfishing developed for the 2007 study and apply it here. Slight modifications to the methodological approach of this study were made to better capture spending, particularly in the real estate category. Outside of these improvements, every effort was made to mirror the earlier methodology. This was to ensure that the economic information produced by this study could be directly compared to the earlier results to examine changes in specific segments of sportfishing over the past ten years (resident/non-residents, freshwater/saltwater, guided/unguided). We remind readers who wish to make comparisons that adjustments should be made to the 2007 spending estimates to account for inflation over the ten-year period. We also encourage readers making comparisons between the two studies to explore the condition of the state economy between the two periods, as it may provide context for differences in participation, spending, and economic contributions.

Appendices

1. DETAILED ANALYSIS
2. ANGLER SURVEY PACKAGE
    - Resident
    - Non-resident
3. SPORTFISHING GUIDE BUSINESS SURVEY

Detailed Results by Stratum

-Survey response by group (residency, guide usage, and water type)

-Trip and package spending by group (residency, guide usage, and water type)

-Economic contributions of trip and package spending by group (residency, guide usage, and water type)

-Sportfishing guide business operation by water type

Table A 1. Number of survey respondents reporting fishing activity by strata

	Respondents	Response rate		Count	Proportion fishing in Cook Inlet		Count	Proportion by water type		Count	Proportion guided		Count*
Resident													
Email	764	Resident (email)	7%	764	Cook Inlet	54%	680	Fresh water	80%	543	Guided	5%	26***
Mail	503	Resident (mail)	29%	503							Unguided	95%	517*
Subtotal	1,267							Salt water	36%	247	Guided	19%	48***
											Unguided	81%	199*
Non-resident													
Email	936	Non-resident (email)	10%	936	Cook Inlet	55%	821	Fresh water	60%	490	Guided	54%	266*
Mail	560	Non-resident (mail)	31%	560							Unguided	46%	224*
Subtotal	1,496							Salt water	40%	330	Guided	74%	244*
											Unguided	26%	86**
Total	**2,763**												

Note: Asterisk coding reflects a level of caution to be used given the sample sizes at the highest level of disaggregation. The smaller sample sizes among resident guided days and non-resident unguided saltwater days are not unexpectedly smaller and profiles are developed for each group. However, the margin of error around the estimates for these groups would be somewhat larger that those groups with larger sample sizes.

Table A 2. Detailed sportfishing trip and package spending, by residency, guide use (2017)

	Resident		Non-resident		All
	Guided	Unguided	Guided	Unguided	Anglers
Trip Expenditures (millions)					
Fuel and oil for transportation	$1.0	$12.6	$3.0	$4.9	$21.5
Guide and charter fees	$5.9	$0.1	$37.8	$0.0	$43.9
Air travel	$0.4	$0.0	$15.3	$12.7	$28.4
Transportation services	$0.1	$0.5	$1.7	$1.3	$3.7
Boat launch & dockage fees	$0.1	$2.8	$0.2	$0.6	$3.7
Ice	$0.1	$0.7	$0.2	$0.3	$1.3
Bait	$0.1	$1.2	$0.3	$0.5	$2.1
Groceries	$0.7	$7.3	$3.5	$4.2	$15.8
Restaurants	$0.7	$4.5	$4.4	$3.2	$12.7
Heating & cooking fuel	$0.0	$0.4	$0.1	$0.1	$0.6
Fish processing	$0.5	$1.0	$8.5	$2.6	$12.6
Rentals	$0.1	$0.7	$3.7	$4.1	$8.5
Overnight accommodations	$1.0	$2.9	$9.6	$7.7	$21.0
Derby	$0.0	$0.1	$0.2	$0.0	$0.3
Souvenirs & gifts	$0.1	$0.2	$2.2	$1.2	$3.7
Other entertainment expenses	$0.0	$0.2	$0.3	$0.3	$0.9
Other	$0.0	$0.1	$0.4	$0.1	$0.6
Sub-Total	**$10.8**	**$35.4**	**$91.1**	**$43.9**	**$181.2**
Package Expenditures (millions)	na	na	$35.2	$2.0	$37.2
Total Trip & Package (millions)	**$10.8**	**$35.4**	**$126.3**	**$45.9**	**$218.4**

Table A 3. Detailed sportfishing trip and package spending, by residency, guide use, and water type (2017)

	Resident		Non-resident		All
	Guided	Unguided	Guided	Unguided	Anglers
FRESHWATER ANGLERS					
Trip Expenditures (millions)					
Fuel & oil for transportation	$0.6	$9.4	$1.4	$3.7	$15.1
Guide and charter fees	$3.8	$0.1	$17.7	$0.0	$21.7
Air travel	$0.4	$0.0	$6.4	$11.0	$17.8
Transportation services	$0.1	$0.5	$0.8	$1.2	$2.6
Boat launch & dockage fees	$0.1	$2.2	$0.1	$0.5	$2.8
Ice	$0.0	$0.6	$0.1	$0.2	$0.9
Bait	$0.0	$0.8	$0.2	$0.3	$1.3
Groceries	$0.5	$5.9	$1.6	$3.5	$11.4
Restaurants	$0.4	$3.6	$1.9	$2.6	$8.7
Heating & cooking fuel	$0.0	$0.3	$0.0	$0.1	$0.4
Fish processing	$0.2	$0.7	$2.4	$1.8	$5.1
Rentals	$0.1	$0.3	$2.0	$3.6	$6.0
Overnight accommodations	$0.6	$2.1	$3.7	$7.2	$13.6
Derby	$0.0	$0.0	$0.0	$0.0	$0.1
Souvenirs & gifts	$0.1	$0.2	$0.8	$1.0	$2.0
Other entertainment expenses	$0.0	$0.2	$0.1	$0.3	$0.6
Other	$0.0	$0.1	$0.1	$0.1	$0.3
Sub-Total	$7.0	$27.0	$39.3	$37.0	$110.3
Package Expenditures (millions)	na	na	$18.9	$1.7	$20.6
SALTWATER ANGLERS					
Trip Expenditures (millions)					
Fuel & oil for transportation	$0.4	$3.2	$1.6	$1.2	$6.4
Guide and charter fees	$2.1	$0.0	$20.1	$0.0	$22.2
Air travel	$0.0	$0.0	$8.9	$1.7	$10.7
Transportation services	$0.0	$0.0	$0.9	$0.2	$1.1
Boat launch & dockage fees	$0.1	$0.6	$0.1	$0.1	$0.9
Ice	$0.0	$0.2	$0.1	$0.1	$0.3
Bait	$0.0	$0.4	$0.2	$0.2	$0.8
Groceries	$0.2	$1.4	$1.9	$0.8	$4.4
Restaurants	$0.2	$0.8	$2.5	$0.5	$4.1
Heating & cooking fuel	$0.0	$0.1	$0.0	$0.0	$0.2
Fish processing	$0.3	$0.3	$6.1	$0.8	$7.5
Rentals	$0.0	$0.4	$1.6	$0.5	$2.6
Overnight accommodations	$0.3	$0.7	$5.9	$0.5	$7.4
Derby	$0.0	$0.1	$0.1	$0.0	$0.2
Souvenirs & gifts	$0.0	$0.0	$1.4	$0.2	$1.6
Other entertainment expenses	$0.0	$0.0	$0.2	$0.1	$0.2
Other	$0.0	$0.0	$0.3	$0.0	$0.3
Sub-Total	$3.8	$8.4	$51.7	$6.9	$70.8
Package Expenditures (millions)	na	na	$16.3	$0.3	$16.6

Table A 4. IMPLAN sector assignments: Trip and guide spending

Economic survey trip spending categories	IMPLAN Sector(s)	Sector description
Fuel and oil for vehicles, boats, planes	156, 159	Petroleum refineries/Petroleum lubricating oil and grease manufacturing
Guide and charter fees	na	Guide business survey spending categories
Airfare to and from Alaska	408	Air transportation
Commercial travel within Alaska	409, 410, 412	Air, water, and intra-urban transportation
Rentals (boat, equipment, autos)	443	General and consumer goods rental except video tapes
Derby tickets	515	Business and professional associations
Boat launch and dock fees	494, 496	Other amusement, gambling, and recreation industries
Ice	85	Soft drink and ice manufacturing
Bait (natural bait only)	14	Fishing
Groceries, food, liquor bought in stores	PCE	Personal consumption expenditures
Restaurants, bars, take-out food	501, 502, 503	Food services and drinking places
Lodging (hotels, campgrounds, cabins)	499,500	Hotels, motels and other lodging; campgrounds
Souvenirs and gifts	406	Miscellaneous store retailers
Processing and taxidermy	492	Independent artists, writers, and performers
Other entertainment expenses	496	Other amusement, gambling, and recreation industries
Guide business survey spending categories	**IMPLAN Sector(s)**	**Sector description**
Business & guide license/permit	523	Other state government enterprises
Fishing licenses (for anglers)	523	Other state government enterprises
Fuel & oil	156, 159	Petroleum refineries/Petroleum lubricating oil and grease manufacturing
Restaurants & prepared meals	501, 502, 503	Food services and drinking places
Wages, salaries, and payments to owners	5001	
Equipment purchases	286, 344, 349, 364, 385	Engine equipment, light duty truck, trailer, boat, and sporting goods manufacturing
Equipment rental	445	Commercial equipment rental and leasing
Equipment maintenance & repair	504, 506, 507, 508	Auto repair, electronic equipment repair, commercial machinery repair, personal goods repair
Bait	17	Commercial fishing
Groceries	PCE	Personal consumption expenditures
Lodging	499, 500	Hotels, motels and other lodging
Airline tickets	408	Air transportation
Other public transportation	409, 410, 412	Air, water, and intra-urban transportation
Business services (accounting, legal, advertising, etc.)	447, 448, 457, 465, 466, 470	Legal services, accounting services, advertising, business support, security services, other support services
Real estate in the CI region	440	Real estate
Utilities	42, 51	Electricity, water, sewage, and other systems
Taxes	531, 533	State and local government, non-education
Insurance	437	Insurance carriers
Other (boat launch fees)	408, 445, 496	Air transport, machinery and equipment rental, other recreation industries

Table A 5. IMPLAN sector assignments: Equipment and real estate spending

Economic survey equipment spending categories	IMPLAN Sector	Sector description
Equipment		
Rods and reels	385	Sporting and athletic goods manufacturing
Tackle (lines, leaders, lures, etc.)	385	Sporting and athletic goods manufacturing
Tackle boxes	385	Sporting and athletic goods manufacturing
Electronics (e.g., depth finders)	315	Search, detection, and navigation instruments
Nets	385	Sporting and athletic goods manufacturing
Misc. fishing equipment	385	Sporting and athletic goods manufacturing
Shellfish fishing equip.	385	Sporting and athletic goods manufacturing
Taxidermy	492	Independent artists, writers, and performers
Books and magazines	418, 419	Book and periodical publishers
Smokers, vacuum sealers, etc.	329	Household appliance manufacture
Coolers, fish boxes	385	Sporting and athletic goods manufacturing
Clothing	129	Other cut and sew apparel manufacturing
Boots, waders, other footwear	132	Footwear manufacturing
Life jackets, PFDs	129	Other cut and sew apparel manufacturing
Boats, canoes, kayaks, etc.	364	Boat building
Boat motors	286	Other engine equipment manufacturing
Trailers, hitches, etc.	286	Other engine equipment manufacturing
Bear spray, bug spray, etc.	385	Sporting and athletic goods manufacturing
Firearms	259	Small arms manufacturing
Cameras, binoculars	272	Optical instrument and lens manufacturing
Tents, backpacks, sleeping bags	385	Sporting and athletic goods manufacturing
Camping trailer	349	Travel trailer and camper manufacturing
Other camping equipment	385	Sporting and athletic goods manufacturing
Trucks, SUVs, RVs	343, 344	Automobile and light truck manufacturing
Planes and related equip	357	Aircraft manufacturing
ATVs, snow machines	367	All other transportation equipment manufacturing
Registration and excise taxes	523	Other state government enterprises
Vehicle, boat, plane repairs	504	Automotive, electronic, machinery and household repair
Other equipment	385	Sporting and athletic goods manufacturing
Real Estate used primarily for fishing		
Cabins-existing sales	440	Real estate
Land leased for fishing	440	Real estate
Cabin-new construction	59	construction of new single-family residential structures
Maintained and repaired residential structures	63	Maintenance and repair of residential structures
Purchase or construction of boat docks, sheds, or outbuildings	144	Prefabricated wood building manufacturing

Table A 6. Sportfishing guide operations business survey results

	Fresh water guides		Salt water guides	
	Percent of Total	Percent purchased in Cook Inlet	Percent of Total	Percent purchased in Cook Inlet
Business expenses				
Business & guide license/permit	5.5%	90%	4.6%	89%
Fishing licenses (for anglers)	0.3%	98%	0.1%	100%
Fuel & oil	14.4%	90%	23.0%	84%
Restaurants & prepared meals	2.6%	96%	1.2%	100%
Wages, salaries, and payments to owners	21.0%	95%	21.7%	89%
Equipment purchases	11.5%	96%	12.7%	100%
Equipment rental	0.2%	90%	0.1%	99%
Equipment maintenance & repair	5.9%	90%	8.8%	89%
Bait	2.6%	97%	3.9%	99%
Groceries	3.6%	98%	1.3%	99%
Lodging	3.4%	98%	2.3%	95%
Airline tickets	1.5%	92%	0.8%	89%
Other public transportation	0.1%	90%	0.1%	84%
Business services (accounting, legal, advertising, etc.)	7.3%	93%	5.1%	85%
Real estate in the CI region	3.8%	95%	2.3%	95%
Utilities	3.4%	98%	1.6%	100%
Taxes	4.8%	96%	4.3%	100%
Insurance	4.9%	87%	4.2%	89%
Other (boat launch fees)	3.0%	95%	2.1%	95%
Total	**100%**	**na**	**100%**	**na**

Table A 7. Economic contributions of sportfishing trip and package spending by residency, guide usage (2017)

	Resident		Non-resident		TOTAL		All
	Guided	Unguided	Guided	Unguided	Resident	Non-resident	Anglers
ALL ANGLERS							
Direct effects							
Output (millions)	$8.3	$32.1	$94.4	$36.3	$40.4	$130.6	$171.1
Labor Income (millions)	$2.8	$9.3	$32.7	$12.3	$12.1	$45.0	$57.1
Employment	88	331	1,128	443	419	1,571	1,990
Multiplier effects							
Output (millions)	$6.7	$20.9	$80.0	$27.6	$27.6	$107.6	$135.2
Labor Income (millions)	$2.2	$6.4	$26.0	$8.6	$8.6	$34.6	$43.2
Employment	42	122	507	169	163	675	839
Total effects							
Output (millions)	$15.0	$53.0	$174.4	$63.8	$68.0	$238.2	$306.2
Labor Income (millions)	$4.9	$15.7	$58.7	$20.9	$20.6	$79.6	$100.3
Employment	130	453	1,634	612	583	2,246	2,828

Table A 8. Economic contributions of sportfishing trip and package spending by residency, guide usage, and water type (2017)

	Resident		Non-resident		TOTAL		All
	Guided	Unguided	Guided	Unguided	Resident	Non-resident	Anglers
FRESHWATER ANGLERS							
Direct effects							
Output (millions)	$5.3	$24.4	$43.2	$30.4	$29.7	$73.6	$103.3
Labor Income (millions)	$1.8	$7.1	$15.4	$10.5	$8.9	$25.8	$34.7
Employment	53	251	460	363	304	823	1,127
Multiplier effects							
Output (millions)	$4.3	$15.8	$37.1	$23.2	$20.2	$60.3	$80.4
Labor Income (millions)	$1.4	$4.9	$12.1	$7.3	$6.3	$19.4	$25.6
Employment	27	92	233	141	119	374	493
Total effects							
Output (millions)	$9.6	$40.2	$80.3	$53.6	$49.9	$133.9	$183.7
Labor Income (millions)	$3.2	$11.9	$27.5	$17.7	$15.1	$45.2	$60.3
Employment	79	343	692	505	423	1,197	1,619
SALTWATER ANGLERS							
Direct effects							
Output (millions)	$3.0	$7.7	$51.2	$5.9	$10.7	$57.0	$67.8
Labor Income (millions)	$1.0	$2.2	$17.3	$1.8	$3.2	$19.1	$22.4
Employment	35	80	668	80	116	748	863
Multiplier effects							
Output (millions)	$2.4	$5.1	$42.9	$4.4	$7.4	$47.3	$54.7
Labor Income (millions)	$0.8	$1.5	$13.9	$1.4	$2.3	$15.3	$17.6
Employment	15	30	274	27	45	301	346
Total effects							
Output (millions)	$5.4	$12.8	$94.1	$10.3	$18.2	$104.3	$122.5
Labor Income (millions)	$1.7	$3.8	$31.2	$3.2	$5.5	$34.4	$39.9
Employment	50	110	942	107	160	1,049	1,209

Angler Survey Packages

Wave I: Residents only

-Advance postcard
-First letter and survey
-Thank you/reminder postcard
-Second letter
-Email messages

Wave II: Residents and non-residents

-Advance postcard
-First letter and survey
-Thank you/reminder postcard
-Second letter
-Email messages

SURVEY WAVE I: ADVANCE POSTCARD

Pre-post card (FRONT)

COOK INLET SPORTFISHING ECONOMIC STUDY
c/o Southwick Associates
PO Box 6435
Fernandina Beach, Florida 32035

<<First name>> <<Last Name>>
<<Address>>
<<City>>, <<State>> <<Zip>>

Postcard (BACK)

Dear Angler,

The Matanuska-Susitna Borough has contracted Southwick Associates to conduct a study of the economic importance of sportfishing in the Cook Inlet region. The project is being conducted in cooperation with the Alaska Department of Fish & Game with funding provided by the Borough and the Department of Commerce, Community, and Economic Development.

You were selected to be part of this study as a result of purchasing an Alaska sportfishing license in 2017. In approximately 7-10 days, you will be receiving a survey from Southwick Associates in the mail. When it arrives, please take a few minutes to complete and return the survey. Thank You!

Matanuska-Susitna Borough

Alaska Department of Fish & Game

SURVEY WAVE I: FIRST LETTER

SOUTHWICK
ASSOCIATES

{Date}
Dear Alaska angler:

The Matanuska-Susitna Borough has contracted Southwick Associates to conduct a study of the economic importance of sportfishing in the Cook Inlet Region. The project is being conducted with cooperation from the Alaska Department of Fish & Game and funding support from the Borough and the Department of Commerce, Community, and Economic Development.

You have been selected at random to be a part of this study from a sample of anglers who purchased an Alaska sportfishing license in 2017. Even if you did not fish in the Cook Inlet Region, we would still like to hear from you. You are one of a small group of people who have been selected to represent all Alaska anglers, so it is very important that we hear from you. The entire survey should only take you about 10 minutes to complete.

The information that you provide will be kept confidential and will only be used by the project contractor, **Southwick Associates**, Inc. (www.SouthwickAssociates.com) to produce summary estimates of the economic importance of sportfishing in the Cook Inlet Region of Alaska.

After you complete the survey, please return it in the enclosed postage-paid envelope. If you prefer, you can take the survey online at:

www.surveygizmo.com/s3/3694062/AK-Cook-Inlet-2017

Your Access Code for the online survey is <<SA_UID>>.

To show our appreciation for your participation, all completed surveys will be entered into a drawing to be held at the end of the study for a **gift certificate worth $500** at the sporting goods retailer of your choice.

If you have any questions, comments, or concerns about the study, you may contact Lisa Bragg at LBragg@SouthwickAssociates.com or 904-277-9765. I would like to thank you in advance for agreeing to participate in this important study.

Sincerely,

Rob Southwick / *President*
Southwick Associates

Project sponsored by:
Matanuska-Susitna Borough

With assistance from: Alaska Department of Fish and Game

PO Box 6435 ■ Fernandina Beach, FL 32035 ■ Office (904) 277-9765

SURVEY WAVE I: SURVEY

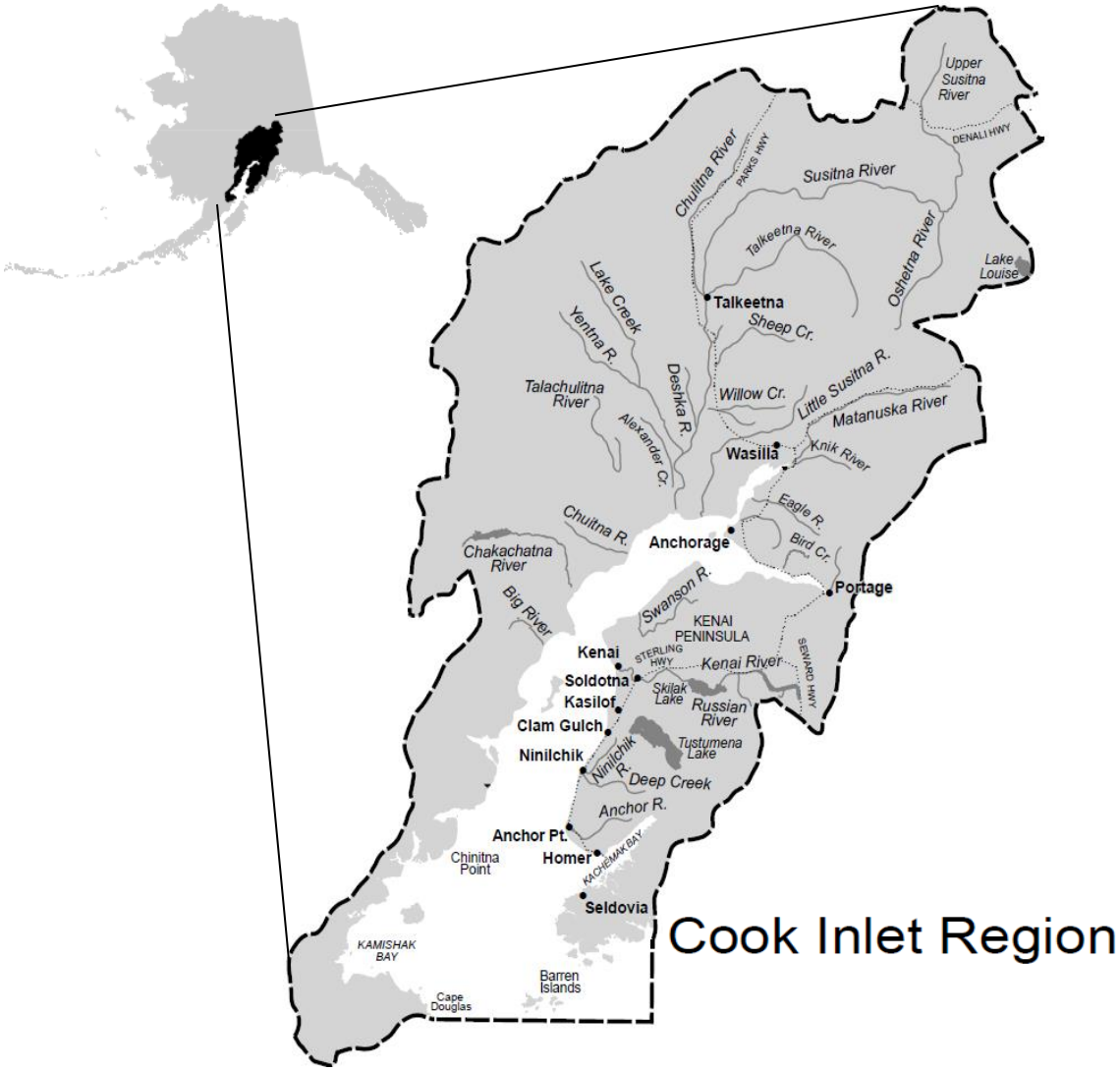
Cook Inlet Sportfishing Economic Survey

This survey asks about your fishing activity and spending in the Cook Inlet Region during the first six months of 2017.

The Matanuska-Susitna Borough has contracted Southwick Associates to conduct this study in cooperation with the Alaska Department of Fish & Game.

<<merge SA_UID>>

Please note that the Cook Inlet Region includes both the saltwater inlet portion above Kodiak Island as well as the freshwater rivers that drain into the Cook Inlet.



Please note that "sportfishing" is defined as the taking of fish and shellfish (clams, crabs, shrimp, etc.) under Alaska sportfishing license regulations, including personal use fishing (e.g. dip netting). Please do not report activities and expenditures associated with subsistence

Section A – GENERAL:

In this section, we are interested in learning some general information about your sportfishing activities in the **Cook Inlet Region.** Please refer to the detailed map at the front of this survey.

1. Did you go sportfishing in the **Cook Inlet Region** of Alaska between **January 1st** and **June 30th, 2017?** *(see map)*
   - ☐ Yes → Please continue to **Question 3 below**.
   - ☐ No →
2. Did you purchase any fishing equipment, fishing-related gear, or real estate in the **Cook Inlet Region** of Alaska in the **last twelve months?** *(see map)*
   - ☐ Yes → Please continue to **Question 16 on page 5**.
   - ☐ No → Please skip to **Question 18 on page 6.**

3. Did you buy an Alaska sportfishing license in 2017 *primarily* to go personal use fishing (e.g. dip netting, gill netting, etc.)**?**
   - ☐ Yes
   - ☐ No

4. As best as possible, please report the number of days you went sportfishing in the **Cook Inlet Region** between **November 1, 2016** and **December 31, 2016**. (Please enter "0" if you did not fish in this period.)

   Number of saltwater fishing days _____

   Number of freshwater fishing days _____

Section B – SPORTFISHING ACTIVITY:

In this section, we want to know how often you went sportfishing in the **Cook Inlet Region** between **January 1st** and **April 30th, 2017** and between **May 1st** and **June 30th, 2017**.

5. **January through April:** How many days did you go freshwater and saltwater fishing in the **Cook Inlet Region** between **January 1, 2017** and **April 30, 2017?** (mark '0' if you did not fish in the Cook Inlet region in January through April)

   Freshwater: _____days in January through April

   Saltwater: _____days in January through April

6. **May through June:** How many days did you go freshwater and saltwater fishing in the **Cook Inlet Region** between **May 1, 2017** and **June 30, 2017?** (mark '0' if you did not fish in the Cook Inlet region in May through June)

   Freshwater: _____days in May through June

   Saltwater: _____days in May through June

7. For the entire period between **January 1** and **June 30, 2017,** please tell us how many **days** you fished for these species. If you fished for more than one species on the same

day mark each species as one day. *Please note the species you targeted might not necessarily have been the fish actually caught on the trip. (Report days for all that apply)*

Species	**Total days Jan. 1 through June 30, 2017**
King Salmon (*Chinook*)	_____days
Silver Salmon (*Coho*)	_____days
Red Salmon (*Sockeye*)	_____days
Other Salmon (*Pink, Chum*)	_____days
Steelhead	_____days
Trout (*rainbow, cutthroat, lake trout, etc*.)	_____days
Halibut	_____days
Other saltwater (*Lingcod. Rockfish, Shark, etc*.)	_____days
Other freshwater (*Dolly Varden, Arctic Grayling, Northern Pike, Burbot, etc.*)	_____days
Shellfish (*clams, crab, shrimp, etc*.)	_____days

Section C – THE LAST TIME YOU WENT SPORTFISHING:

Now we would like to know about the **last time** you went sportfishing in the **Cook Inlet Region** between **January 1st** and **June 30th, 2017.** Please remember, "sportfishing" includes personal use (e.g., dip netting) and shellfish fishing, but does ***not*** include subsistence fishing.

8. In what month did you last go sportfishing in the **Cook Inlet Region** between **January 1** and **June 30, 2017**?
   - ☐ January
   - ☐ February
   - ☐ March
   - ☐ April
   - ☐ May
   - ☐ June

9. Fishing trips often include time for fishing, travel, and non-fishing activities. How long was this last fishing trip (including fishing days, travel days, and non-fishing days)? *Note that single-day trips do not need to take a whole day. For example, if the last time you went fishing you only fished for a few hours after work, this would be counted as '1' day.*

   Total days on your last fishing trip to **Cook Inlet Region**: _____ days

10. How many days did you actually fish the last time you went fishing in the **Cook Inlet Region**? (Count partial days of fishing as '1' day)

    Fishing days on your last trip to **Cook Inlet Region**: _____ days

11. Would you still have taken this trip even if you were not able to go fishing?

Definitely "No"	Maybe "No"	Not sure	Maybe "Yes"	Definitely "Yes"
❑	❑	❑	❑	❑

12. Was this trip primarily…….? **(**check one)
    - □ rod & reel sportfishing
    - □ dip netting (personal use)
    - □ shellfish fishing

13. Was this trip primarily in…….? (check one)
    - □ freshwater
    - □ saltwater

14. Did you pay for a guide or a charter boat on this trip?
    - □ Yes
    - □ No

In this next section, we ask about your spending on your **last fishing trip** to the **Cook Inlet Region** that occurred between **January 1 through June 30, 2017** (the trip described in Questions 8 through 14.

15. As best as possible, please tell us how much you spent on the following TRIP-RELATED items ON THE TRIP DESCRIBED ABOVE. Please only include amounts that you spent within the **COOK INLET REGION**. Include money that **you** spent for other people on your trip; do **not** include money that other people spent on your behalf. We will ask about your equipment purchases in later questions.

Items purchased on last trip in Cook Inlet Region (between January 1 and June 30, 2017)	**Amount Spent in Cook Inlet Region**
Fuel and oil for your car, truck, boat, airplane, ATV, and/or other transportation	$
Guide and charter fees	$
Transportation services (air taxis, boat ferries, shuttle vans, taxis, etc.)	$
Boat launch and dockage fees	$
Ice	$
Bait (natural bait only, do not include lures)	$
Groceries, food, liquor bought in stores (not in restaurants or bars)	$
Restaurants, bars, and take-out food purchases	$
Heating and cooking fuels	$
Fish processing and shipping	$
Rentals (boats, equipment, autos, etc.)	$
Overnight accommodations (hotels/motels, B&B's, campgrounds, cabin rentals, etc.)	$
Derby tickets	$
Souvenirs and gifts	$
Other entertainment expenses during fishing trip (movies, etc.)	$
Other (please specify): _____	$ _____

Section D – FISHING EQUIPMENT EXPENDITURES:

NOTE: In this section, we want to know about sportfishing and related equipment you **purchased in the Cook Inlet Region during the last 12 months**, including equipment purchased for sportfishing, personal use (e.g., dipnet) and/or shellfish fishing.

16. As best as possible, please tell us how much you spent on the following fishing equipment items **IN THE PAST 12 MONTHS. Only report purchases made within the Cook Inlet Region** – excluding purchases from catalogs or online web sites. Include money that **you** spent for other people; do **not** include money that other people spent on your behalf. Please write in the amount that you spent in the Cook Inlet region. Since some items can be used for non-fishing activities, please estimate the percentage that the purchased fishing related gear is used for sportfishing.

Fishing equipment purchased WITHIN COOK INLET REGION DURING THE PAST 12 MONTHS	**Total Amount Spent in the Cook Inlet Region**	**% Used for sportfishing**
FISHING EQUIPMENT:		
Licenses and stamps	$	100%
Rods, reels, & components	$	100%
Fishing tackle (lines, leaders, lures, creels, stringers, etc.)	$	100%
Tackle boxes, cases to protect fishing equipment	$	100%
Depth finders, fish finder, other electronics	$	100%
Landing nets, dipnets & gillnets	$	100%
Miscellaneous fishing equipment (knives, scales, etc.)	$	100%
Shellfish fishing equipment (shovels, pots, buckets, etc.)	$	100%
Fishing mounting (taxidermy)	$	100%
Books and magazines devoted to fishing	$	100%
FISHING-RELATED GEAR OR OTHER NON-FISHING PURCHASES:		
Items to store/preserve fish (smoker, vacuum sealer, etc.)	$	%
Coolers, fish boxes	$	%
Clothing (fishing vest, raingear, heat net, etc.)	$	%
Boots, shoes, waders, and other footwear	$	%
Life jackets	$	%
Boats, canoes, rafts, kayaks, and other watercraft	$	%
Boat motors	$	%
Trailers, hitches, and accessories	$	%
Bear spray, bug spray, sun screen	$	%
Firearms for personal protection	$	%
Cameras, binoculars, sun glasses	$	%
Tents, screen rooms, tarps, backpacks, sleeping bags	$	%
Camping trailer (pop-ups, self-contained, 5th wheel)	$	%
Other camping equipment (stoves, grills, lanterns, etc.)	$	%
Vehicles (trucks, SUVs, motorhomes, etc.)	$	%
Airplanes and related equipment	$	%
ATVs, snow machines	$	%
Boat/camper registrations and excise taxes	$	%
Vehicle, boat, or airplane repair/maintenance	$	%
Other (please specify): _____	$	%

17. Please report how much you spent **IN THE PAST 12 MONTHS** on any real estate located in the **Cook Inlet Region** that was purchased or used primarily for sportfishing purposes. (If you spent nothing, enter '0')

Real estate spending in the past 12 months primarily for fishing in the Cook Inlet Region	**Total Amount Spent**
Purchases of lots, existing houses and cabins, and/or land	$
Leases of land, cabins, boat slips, and storage (do not include any short-term rentals that were already reported as a trip-related expense)	$
Construction of houses and cabins, and repair or maintenance expenses (not including boat docks, sheds, or outbuildings)	$
Purchase or construction of boat docks, sheds, or outbuildings	$

Section E – BACKGROUND INFORMATION:

To help us learn more about who fishes in the **Cook Inlet Region**, please answer these final questions. All answers you provide will be kept fully confidential. Your answers help us ensure the survey best represents ALL **Cook Inlet Region** anglers, even those not surveyed.

18. Is your primary residence within the Cook Inlet Region?

    □ Yes □ No

19. What is your gender?

    □ Male □ Female

20. In what year were you born?_____

21. Which category best describes the highest level of education you have completed?

□ Did not graduate from high school
□ High school graduate or GED
□ 1-3 years college (some college)
□ College graduate (bachelor's degree or equivalent)
□ Postgraduate, master's degree, doctorate, law degree, other professional degree

22. Which best describes your household's annual, before-tax income? (check one)

□ Less than $10,000
□ $10,000 - $19,999
□ $20,000 - $29,999
□ $30,000 - $39,999
□ $40,000 - $49,999
□ $50,000 - $74,999
□ $75,000 - $99,999
□ $100,000 - $149,999
□ $150,000 - $199,999
□ $200,000 or more

Thank you for taking our survey!

If you have any additional comments you wish to share about this study, please provide them here:

SURVEY WAVE I: REMINDER POSTCARD

Thank you/Reminder-post card (FRONT)

COOK INLET SPORTFISHING ECONOMIC STUDY
c/o Southwick Associates
PO Box 6435
Fernandina Beach, Florida 32035

<<First name>> <<Last Name>>
<<Address>>
<<City>>, <<State>> <<Zip>>

Postcard (BACK)

Dear Angler,

Recently, you received a survey from Southwick Associates asking about your sportfishing activities in the Cook Inlet Region of Alaska. If you have already completed and returned your survey, **thank you**! If you have not yet completed the survey, we **ask you** to take a few minutes to do so and return your completed survey in the postage paid envelope included in the package. It is very important that we hear from you, even if you did not fish in the Cook Inlet Region last year.

Southwick Associates was contracted by the Matanuska-Susitna Borough to conduct this study. The project is being conducted with cooperation from the Alaska Department of Fish & Game and funding support from the Borough and the Department of Commerce, Community, and Economic Development.

Thank You!

Matanuska-Susitna Borough

Alaska Department of Fish & Game

SURVEY WAVE I: **SECOND LETTER**

SOUTHWICK ASSOCIATES

{Date}
Dear Alaska angler:

In July, we sent a survey to you asking about your sportfishing activities in the Cook Inlet Region during the first six months of 2017. Many of the other anglers who received the survey have already responded, but we have not yet received your completed questionnaire.

We are conducting the survey to provide a better understanding of the importance of sportfishing to the Cook Inlet Region's economy. Information about your experience is very valuable to this study because you have been chosen to represent many other sport anglers in Alaska. Therefore, it is very important that we hear from you.

Enclosed is a replacement questionnaire. Your responses to the survey questions will be kept strictly confidential. Please take a few minutes to respond to the survey and return it in the postage-paid envelope. If you prefer, you can take the survey online at:

www.surveygizmo.com/s3/3694062/AK-Cook-Inlet-2017
Your Access Code for the online survey is <<SA_UID>>.

The Matanuska-Susitna Borough contracted Southwick Associates to conduct this study. The project is being conducted with cooperation from the Alaska Department of Fish & Game and funding support is provided by the Borough and the Department of Commerce, Community, and Economic Development.

All completed surveys will be entered into a drawing to be held at the end of the study for a **gift certificate worth $500** at the sporting goods retailer of your choice.

If you have any questions, comments, or concerns about the study, you may contact Lisa Bragg at LBragg@SouthwickAssociates.com or 907-277-9765. I would like to thank you in advance for agreeing to participate in this important study.

Sincerely,

Rob Southwick/ *President*
Southwick Associates

Project sponsored by: Matanuska-Susitna Borough

In cooperation with: Alaska Department of Fish and Game

PO Box 6435 ■ Fernandina Beach, FL 32035 ■ Office (904) 277-9765

SURVEY WAVE I: INITIAL AND REMIDER EMAIL INVITATIONS

Dear Alaska angler:

The **Matanuska-Susitna Borough** has contracted Southwick Associates to conduct a study of the economic importance of sportfishing in the Cook Inlet region. The project is being conducted with cooperation from the **Alaska Department of Fish & Game.**

Please take a few minutes to complete our survey. The information that you provide will be kept confidential. The entire survey should only take you about 10 minutes to complete. Even if you did not fish in the Cook Inlet region, we would still like to hear from you.

Click Here to Start the Survey

To show our appreciation for your participation, all completed surveys will be entered into a drawing to be held at the end of the study for a **gift certificate worth $500** at the sporting goods retailer of your choice.

If you have any questions, comments, or concerns about the study, you may contact Lisa Bragg at LBragg@SouthwickAssociates.com or 904-277-9765. Thank you for participating in this important study.

Sincerely,
Rob Southwick/*President*

SOUTHWICK
ASSOCIATES

A cooperative project with:

SURVEY WAVE II: ADVANCE POSTCARD

COOK INLET SPORTFISHING ECONOMIC STUDY
c/o Southwick Associates
PO Box 6435
Fernandina Beach, Florida 32035

Angler name and address

Pre-post card (FRONT)

Postcard (BACK)

Dear Angler,

The Matanuska-Susitna Borough has contracted Southwick Associates to conduct a study of the economic importance of sportfishing in the Cook Inlet region. The project is being conducted in cooperation with the Alaska Department of Fish & Game with funding provided by the Borough and the Department of Commerce, Community, and Economic Development.

You were selected to be part of this study as a result of holding an Alaska sportfishing license in 2017. In approximately 7-10 days, you will be receiving a survey from Southwick Associates in the mail. When it arrives, please take a few minutes to complete and return the survey. Thank You!

Matanuska-Susitna Borough

Alaska Department of Fish & Game

SURVEY WAVE II: LETTER

SOUTHWICK
ASSOCIATES

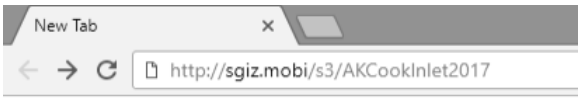
{Date}
Dear Alaska angler:

The Matanuska-Susitna Borough has contracted Southwick Associates to conduct a study of the economic importance of sportfishing in the Cook Inlet region. The project is being conducted with cooperation from the Alaska Department of Fish & Game and funding support from the Borough and the Department of Commerce, Community, and Economic Development.

You have been selected at random to be a part of this study from a sample of anglers who held an Alaska sportfishing license in 2017. You are one of a small group of people who have been selected to represent all anglers who fish in Alaska, so it is very important that we hear from you. Even if you did not fish in the Cook Inlet region, we would still like to hear from you. The entire survey should only take you about 10 minutes to complete.

The information that you provide will be kept confidential and will only be used by the project contractor, **Southwick Associates**, Inc. (www.SouthwickAssociates.com) to produce summary estimates of the economic importance of sportfishing in the Cook Inlet Region of Alaska.

After you complete the survey, please return it in the enclosed postage-paid envelope. If you prefer, you can take the survey online by typing this web address (http://sgiz.mobi/s3/AKCookInlet2017) directly into the address bar of your browser. Your Access Code for the online survey is XXX.



To show our appreciation for your participation, all completed surveys will be entered into a drawing to be held at the end of the study for a **gift certificate worth $500** at the sporting goods retailer of your choice.

If you have any questions, comments, or concerns about the study, you may contact Lisa Bragg at LBragg@SouthwickAssociates.com or 904-277-9765. I would like to thank you in advance for agreeing to participate in this important study.

Sincerely,

Rob Southwick / *President*
Southwick Associates

Project sponsored by:
Matanuska-Susitna Borough

With assistance from: Alaska Department of Fish and Game

PO Box 6435 ■ Fernandina Beach, FL 32035 ■ Office (904) 277-9765

SURVEY WAVE II: RESIDENT SURVEY

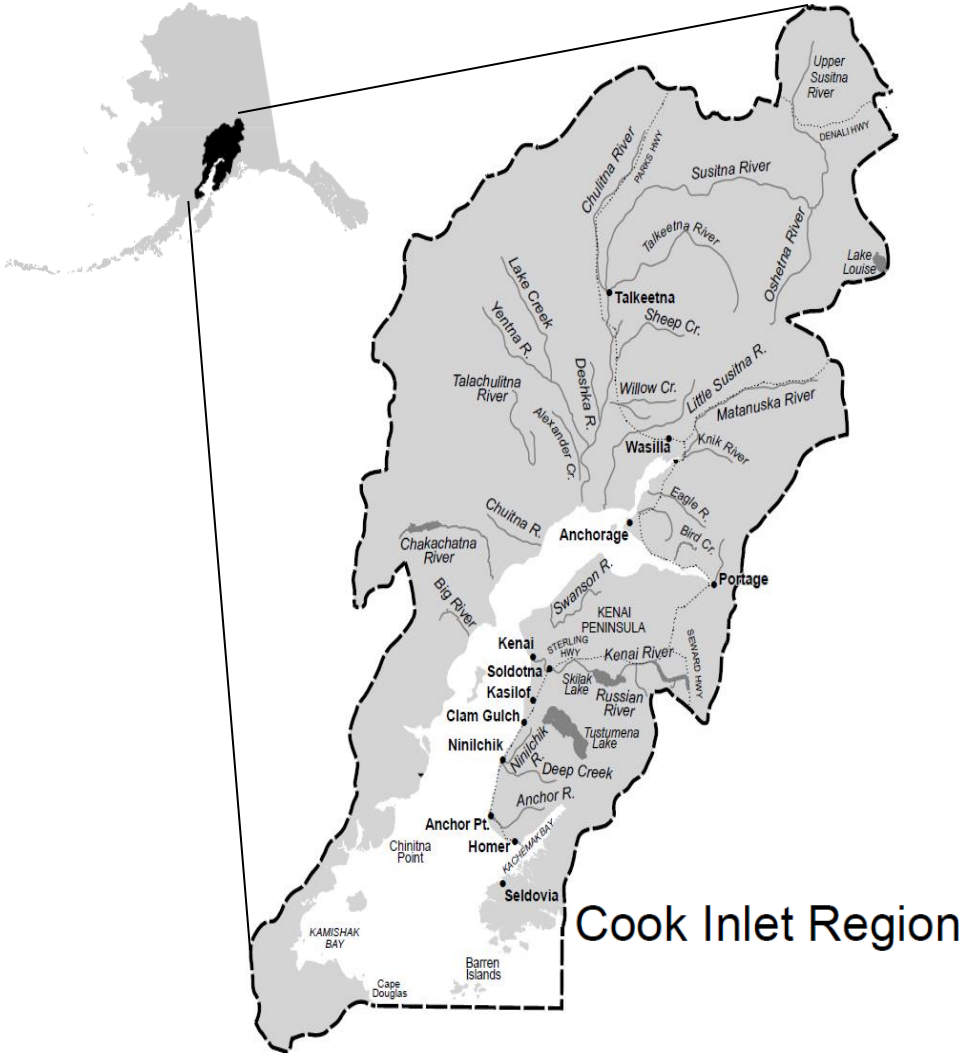
Cook Inlet Sportfishing Economic Survey

This survey asks about your fishing activity and spending in the Cook Inlet region during May to October 2017.

The Matanuska-Susitna Borough has contracted Southwick Associates to conduct this study in cooperation with the Alaska Department of Fish & Game.

<<merge ID>>

Please note that the Cook Inlet region includes both the saltwater inlet portion above Kodiak Island as well as the freshwater rivers that drain into the Cook Inlet.



Please note that "sportfishing" is defined as the taking of fish and shellfish (clams, crabs, shrimp, etc.) under Alaska sportfishing license regulations, including personal use fishing (e.g. dip netting). Please do <u>not</u> report activities and expenditures associated with subsistence fishing.

Section A – GENERAL:

In this section, we are interested in learning some general information about your sportfishing activities in the **Cook Inlet region**. Please refer to the detailed map at the front of this survey.

23. Did you go sportfishing in the **Cook Inlet region** of Alaska between **May 1st through October 31st, 2017**? *(see map)*
    - ☐ Yes → Please skip to Question 3 below.
    - ☐ No →

24. Did you purchase any fishing equipment, fishing-related gear, or real estate that you acquired primarily for fishing purposes in the **Cook Inlet region** of Alaska in the **last twelve months?** *(see map)*
    - ☐ Yes → Please skip to **Question 24 on page 7**.
    - ☐ No → Please skip to **Question 26 on page 8.**

25. Did you by an Alaska sportfishing license in 2017 *primarily* to go personal use fishing (e.g. dip netting, gill netting, etc.)?
    - ☐ Yes
    - ☐ No

26. As best as possible, please report the number of days you went sportfishing in the **Cook Inlet region** between **November 1, 2016** and **December 31, 2016**. (Please enter "0" if you did not fish in this period.)

    Number of saltwater fishing days_____

    Number of freshwater fishing days_____

Section B – SPORTFISHING ACTIVITY:

In this section, we want to know how often you went sportfishing in the **Cook Inlet region** between **May 1st** and **June 30th, 2017** and between **July 1st** and **October 31st, 2017**.

27. **May through June**: How many days did you go freshwater and saltwater fishing in the **Cook Inlet region** between **May 1, 2017** and **June 30, 2017**? (mark '0' if you did not fish in the Cook Inlet region in May through June)

    Freshwater: _____days in May through June

    Saltwater: _____days in May through June

28. **July through October:** How many days did you go freshwater and saltwater fishing in the **Cook Inlet region** between **July 1, 2017** and **October 31, 2017?** (mark '0' if you did not fish in the Cook Inlet region in July through October)

    Freshwater: _____days in July through October

    Saltwater: _____days in July through October

29. For the entire period between **May 1** and **October 31, 2017,** please tell us how many **days** you fished for these species. If you fished for more than one species on the same day mark each species as one day. *Please note the species you targeted might not necessarily have been the fish actually caught on the trip. (Report days for all that apply)*

Species Targeted	**Total days May 1 through Oct 31, 2017**
King Salmon (*Chinook*)	_____days
Silver Salmon (*Coho*)	_____days
Red Salmon (*Sockeye*)	_____days
Other Salmon (*Pink, Chum*)	_____days
Steelhead	_____days
Trout (*rainbow, cutthroat, lake trout, etc*.)	_____days
Halibut	_____days
Other saltwater (*Lingcod. Rockfish, Shark, etc*.)	_____days
Other freshwater (*Dolly Varden, Arctic Grayling, Northern Pike, Burbot, etc.*)	_____days
Shellfish (*clams, crab, shrimp, etc*.)	_____days

Section C1 – LAST TIME YOU WENT SPORTFISHING IN MAY OR JUNE 2017:

Now we would like to know about the last time you went sportfishing in the **Cook Inlet region** between **May 1st** and **June 30th, 2017**. Please remember, "sportfishing" includes personal use (e.g., dip netting) and shellfish fishing, but does ***not*** include subsistence fishing.

30. In what month did you last go sportfishing in the **Cook Inlet region** between **May 1** and **June 30, 2017**?
    - ☐ May
    - ☐ June
    - ☐ I did not fish between May 1st and June 30th (skip to Q16 in section C2)

*** THESE NEXT QUESTIONS REFER TO THE **LAST TIME YOU WENT SPORTFISHING** IN THE **COOK INLET REGION** BETWEEN **MAY 1ST** AND **JUNE 30TH, 2017*****

31. Fishing trips often include time for fishing, travel, and non-fishing activities. How long was this last fishing trip including fishing days, travel days, and non-fishing days? *Note that single-day trips do not need to take a whole day. For example, if the last time you went fishing **MAY** through **JUNE** you only fished for a few hours after work, this would be counted as '1' day.*

Total days on your last fishing trip in **Cook Inlet region**: _____days

32. How many days did you actually fish during your fishing trip in the **Cook Inlet region** between **May 1st** and **June 30th**? (Count partial days of fishing as '1' day)

Fishing days on your last trip in **Cook Inlet region**: _____days

MAY to JUNE

33. Would you still have taken this trip even if you were not able to go fishing?

Definitely "No"	Maybe "No"	Not sure	Maybe "Yes"	Definitely "Yes"
❑	❑	❑	❑	❑

34. Was this trip primarily…….? **(**check one)
    - □ rod & reel sportfishing
    - □ dip netting (personal use)
    - □ shellfish fishing

35. Was this trip primarily in**…….?** (check one)
    - □ freshwater
    - □ saltwater

36. Did you pay for a guide or a charter boat on this trip?
    - □ Yes
    - □ No

In this next section, we ask about your spending on your **last fishing trip** to the Cook Inlet region that occurred between **May 1 through June 30, 2017 (the trip described in Question 8 through 14).**

37. As best as possible, please tell us how much you spent on the following TRIP-RELATED items ON THE TRIP DESCRIBED ABOVE. Please only include amounts you spent in the **COOK INLET REGION**. Include money that **you** spent for other people on your trip; do **not** include money that other people spent on your behalf. We will ask about your equipment purchases in later questions.

Items purchased on last trip to Cook Inlet region (between May 1 and June 30, 2017)	**Amount Spent in Cook Inlet region**
Fuel and oil for your car, truck, boat, airplane, ATV, and/or other transportation	$
Guide and charter fees	$
Airline tickets	$
Transportation services (air taxis, boat ferries, shuttle vans, taxis, etc.)	$
Boat launch and dockage fees	$
Ice	$
Bait (natural bait only, do not include lures)	$
Groceries, food, liquor bought in stores (not in restaurants or bars)	$
Restaurants, bars, and take-out food purchases	$
Heating and cooking fuels	$
Fish processing and shipping	$
Rentals (boats, equipment, autos, etc.)	$
Overnight accommodations (hotels/motels, B&B's, campgrounds, cabin rentals, etc.)	$
Derby tickets	$
Souvenirs and gifts	$
Other entertainment expenses during fishing trip (movies, etc.)	$
Other (please specify): _____	$

DRAFT 6 JUNE

Section C2 – LAST TIME YOU SPORTFISHED DURING JULY THROUGH OCTOBER 2017:

Now we would like to know about the **last time** you went sportfishing in the **Cook Inlet region** between **July 1st and October 31st, 2017**. Please remember, "sportfishing" includes personal use (e.g., dip netting) and shellfish fishing, but does ***not*** include subsistence fishing.

38. In what month did you last go sportfishing in the **Cook Inlet region** between **July 1** and **October 31st of 2017**?
    - □ July
    - □ August
    - □ September
    - □ October
    - □ I did not fish between July 1st and October 31st (skip to Q24 in section D)

THESE NEXT QUESTIONS REFER TO THE **LAST TIME YOU WENT SPORTFISHING** IN THE **COOK INLET REGION** BETWEEN **JULY 1ST** AND **OCTOBER 31st, 2017**

39. Fishing trips often include time for fishing, travel, and non-fishing activities. How long was this last fishing trip including fishing days, travel days, and non-fishing days? *Note that single-day trips do not need to take a whole day. For example, if the last time you went fishing **JULY** through **OCTOBER** you only fished for a few hours after work, this would be counted as '1' day.*

Total days on your last fishing trip in **Cook Inlet region**: _____days

40. How many days did you actually fish during your fishing trip in the **Cook Inlet region** between **July 1st and October 31st**? (Count partial days of fishing as '1' day)

    Fishing days on your last trip in **Cook Inlet region**: _____days

41. Would you still have taken this trip even if you were not able to go fishing?

Definitely "No"	Maybe "No"	Not sure	Maybe "Yes"	Definitely "Yes"
❑	❑	❑	❑	❑

42. Was this trip primarily…….? (check one)
    - □ rod & reel sportfishing
    - □ dip netting (personal use)
    - □ shellfish fishing

43. Was this trip primarily in…….? (check one)
    - □ freshwater
    - □ saltwater

44. Did you pay for a guide or a charter boat on this trip?
    - □ Yes
    - □ No

JULY to OCTOBER

In this next section, we ask about your spending on your last fishing trip to the Cook Inlet Region that occurred between **July 1 through October 31, 2017 (the trip described in Question 16 through 22).**

45. As best as possible, please tell us how much you spent on the following TRIP-RELATED items ON THE TRIP DESCRIBED ABOVE. Please only include amounts **you** spent in the **COOK INLET REGION**. Include money that you spent for other people on your trip; do **not** include money that other people spent on your behalf. We will ask about your equipment purchases in later questions.

Items purchased on last trip to Cook Inlet region (between July 1 and October 31, 2017)	**Amount Spent in Cook Inlet region**
Fuel and oil for your car, truck, boat, airplane, ATV, and/or other transportation	$
Guide and charter fees	$
Airline tickets	$
Transportation services (air taxis, boat ferries, shuttle vans, taxis, etc.)	$
Boat launch and dockage fees	$
Ice	$
Bait (natural bait only, do not include lures)	$
Groceries, food, liquor bought in stores (not in restaurants or bars)	$
Restaurants, bars, and take-out food purchases	$
Heating and cooking fuels	$
Fish processing and shipping	$
Rentals (boats, equipment, autos, etc.)	$
Overnight accommodations (hotels/motels, B&B's, campgrounds, cabin rentals, etc.)	$
Derby tickets	$
Souvenirs and gifts	$
Other entertainment expenses during fishing trip (movies, etc.)	$
Other (please specify): _____	$

JULY TO OCTOBER

Section D-FISHING EQUIPMENT EXPENDITURES:

NOTE: In this section, we want to know about sportfishing and related equipment you purchased in the Cook Inlet Region during the last 12 months, including equipment purchased for personal use (e.g., dipnet) and/or shellfish fishing.

46. As best as possible, please tell us how much you spent on the following fishing equipment in the last 12 months. **Only report purchases made within the Cook Inlet Region** – excluding purchases from catalogs and online web sites. Include purchases you made for yourself and for others. Please write in the amount spent and the percent of time that item was used for sportfishing in the Cook Inlet Region.

Fishing equipment purchased WITHIN COOK INLET REGION DURING THE PAST 12 MONTHS	**Total Amount Spent in the Cook Inlet region**	**% Used for sportfishing**
Licenses and stamps	$	100%
Rods, reels, & components	$	100%
Fishing tackle (lines, leaders, lures, creels, stringers, etc.)	$	100%
Tackle boxes, cases to protect fishing equipment	$	100%
Depth finders, fish finder, other electronics	$	100%
Landing nets, dipnets & gillnets	$	100%
Miscellaneous fishing equipment (knives, scales, etc.)	$	100%
Shellfish fishing equipment (shovels, pots, buckets, etc.)	$	100%
Fishing mounting (taxidermy)	$	100%
Books and magazines devoted to fishing	$	100%
Items to store/preserve fish (smoker, vacuum sealer, etc.)	$	%
Coolers, fish boxes	$	%
Clothing (fishing vest, raingear, head net, etc.)	$	%
Boots, shoes, waders, and other footwear	$	%
Life jackets	$	%
Boats, canoes, rafts, kayaks, and other watercraft	$	%
Boat motors	$	%
Trailers, hitches, and accessories	$	%
Bear spray, bug spray, sun screen	$	%
Firearms for personal protection	$	%
Cameras, binoculars, sun glasses	$	%
Tents, screen rooms, tarps, backpacks, sleeping bags	$	%
Camping trailer (pop-ups, self-contained, 5th wheel)	$	%
Other camping equipment (stoves, grills, lanterns, etc.)	$	%
Vehicles (trucks, SUVs, motorhomes, etc.)	$	%
Airplanes and related equipment	$	%
ATVs, snow machines	$	%
Boat/camper registrations and excise taxes	$	%
Vehicle, boat, or airplane repair/maintenance	$	%
Other (please specify): _____	$	%

47. Please report how much you spent in 2017 on any real estate located in the **Cook Inlet region** that was purchased or used primarily for sportfishing purposes. (If you spent nothing, enter '0')

Real estate spending in the last 12 months for fishing in the Cook Inlet region	**Total Amount Spent**
Purchases of lots, existing houses and cabins, and/or land	$
Leases of land, cabins, boat slips, and storage (do not include any short-term rentals that were already reported as a trip-related expense)	$
Construction of houses and cabins, and repair or maintenance expenses (not including boat docks, sheds, or outbuildings)	$
Purchase or construction of boat docks, sheds, or outbuildings	$

Section E-BACKGROUND INFORMATION:

To help us learn more about who fishes in the **Cook Inlet region**, please answer these final questions. All answers you provide will be kept fully confidential. Your answers will help us evaluate the survey to best represent ALL **Cook Inlet region** anglers, even those not surveyed.

48. Is your primary residence within the Cook Inlet region?

□ Yes □ No

49. What is your gender?

○ Male Female

50. In what year were you born?_____

51. Which category best describes the highest level of education you have completed?

□ Did not graduate from high school □ High school graduate or GED

□ 1-3 years college (some college) □ College graduate (bachelor's degree or equivalent)

□ Postgraduate, master's degree, doctorate, law degree, other professional degree

52. Which best describes your household's annual, before-tax income? (check one)

□ Less than $10,000 □ $40,000 - $49,999 □ $100,000 - $149,999

□ $10,000 - $19,999 □ $50,000 - $74,999 □ $150,000 - $199,999

□ $20,000 - $29,999 □ $75,000 - $99,999 □ $200,000 or more

□ $30,000 - $39,999

Thank you for taking our survey!

If you have any additional comments you wish to share about this study, please provide them here:

SURVEY WAVE II: NON-RESIDENT SURVEY

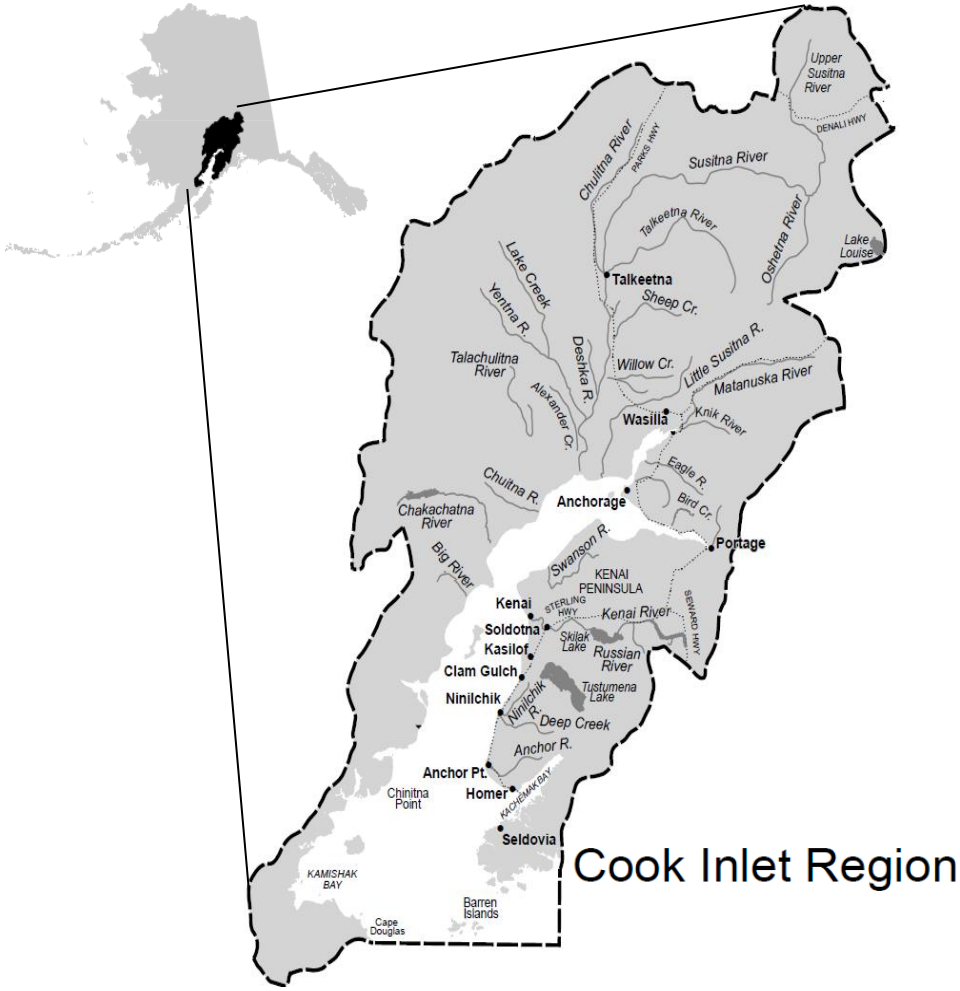
Cook Inlet Sportfishing Economic Survey

This survey asks about your fishing activity and spending in the Cook Inlet region during May to October 2017.

The Matanuska-Susitna Borough has contracted Southwick Associates to conduct this study in cooperation with the Alaska Department of Fish & Game.

<<merge ID>>

Please note that the Cook Inlet region includes both the saltwater inlet portion above Kodiak Island as well as the freshwater rivers that drain into the Cook Inlet.



Please note that "sportfishing" is defined as the taking of fish and shellfish (clams, crabs, shrimp, etc.) under Alaska sportfishing license regulations, including personal use fishing (e.g. dip netting). Please do not report activities and expenditures associated with subsistence

Section A – GENERAL:

In this section, we are interested in learning some general information about your sportfishing activities in the **Cook Inlet region**. Please refer to the detailed map at the front of this survey.

53. Did you go sportfishing in the **Cook Inlet region** of Alaska between **May 1st through October 31st, 2017**? *(see map)*
    - ☐ Yes → Please skip to Question 3 below.
    - ☐ No

54. Did you purchase any fishing equipment, fishing-related gear, or real estate that you acquired primarily for fishing purposes in the **Cook Inlet region** of Alaska in the **last twelve months?** *(see map)*
    - ☐ Yes → Please skip to **Question 25 on page 8**.
    - ☐ No → Please skip to **Question 27 on page 9.**

55. As best as possible, please report the number of days you went sportfishing in the **Cook Inlet region for each of the two time periods listed below**. (Please enter "0" if you did not fish in this period.)

	Number of saltwater fishing days	**Number of freshwater fishing days**
November through December, 2016	_____	_____
January through April, 2017	_____	_____

Section B – SPORTFISHING ACTIVITY:

In this section, we want to know how often you went sportfishing in the **Cook Inlet region** between **May 1st** and **June 30th, 2017** and between **July 1st** and **October 31st, 2017**.

56. **May through June**: How many days did you go freshwater and saltwater fishing in the **Cook Inlet region** between **May 1, 2017** and **June 30, 2017**? (mark '0' if you did not fish in the Cook Inlet region in May through June)
    Freshwater: _____days in May through June
    Saltwater: _____days in May through June

57. **July through October:** How many days did you go freshwater and saltwater fishing in the **Cook Inlet region** between **July 1, 2017** and **October 31, 2017?** (mark '0' if you did not fish in the Cook Inlet region in July through October)
    Freshwater: _____days in July through October
    Saltwater: _____days in July through October

58. For the entire period between **May 1** and **October 31, 2017,** please tell us how many **days** you fished for these species. If you fished for more than one species on the same

day mark each species as one day. *Please note the species you targeted might not necessarily have been the fish actually caught on the trip. (Report days for all that apply)*

Species Targeted	**Total days May 1 through Oct 31, 2017**
King Salmon (*Chinook*)	_____days
Silver Salmon (*Coho*)	_____days
Red Salmon (*Sockeye*)	_____days
Other Salmon (*Pink, Chum*)	_____days
Steelhead	_____days
Trout (*rainbow, cutthroat, lake trout, etc*.)	_____days
Halibut	_____days
Other saltwater (*Lingcod. Rockfish, Shark, etc*.)	_____days
Other freshwater (*Dolly Varden, Arctic Grayling, Northern Pike, Burbot, etc.*)	_____days
Shellfish (*clams, crab, shrimp, etc*.)	_____days

Section C1 – LAST TIME YOU WENT SPORTFISHING IN MAY OR JUNE 2017:
Now we would like to know about the last time you went sportfishing in the **Cook Inlet region** between **May 1st** and **June 30th, 2017**. Please remember, "sportfishing" includes personal use (e.g., dip netting) and shellfish fishing, but does ***not*** include subsistence fishing.

59. In what month did you last go sportfishing in the **Cook Inlet region** between **May 1** and **June 30, 2017**?
    - ☐ May
    - ☐ June
    - ☐ I did not fish between May 1st and June 30th (skip to Q16 in section C2)

THESE NEXT QUESTIONS REFER TO THE **LAST TIME YOU WENT SPORTFISHING** IN THE **COOK INLET REGION** BETWEEN **MAY 1ST** AND **JUNE 30TH, 2017**

60. Fishing trips often include time for fishing, travel, and non-fishing activities. How long was this last fishing trip including fishing days, travel days, and non-fishing days? *Note that single-day trips do not need to take a whole day. For example, if the last time you went fishing **MAY** through **JUNE** you only fished for a few hours after work, this would be counted as '1' day.*

Total days on your last fishing trip in **Cook Inlet region**: _____days

MAY TO JUNE

61. How many days did you actually fish during your fishing trip in **Cook Inlet region** between **May 1st** and **June 30th**? (Count partial days of fishing as '1' day)

Fishing days on your last trip in **Cook Inlet region**: _____days

62. Would you still have taken this trip even if you were not able to go fishing?

Definitely "No"	Maybe "No"	Not sure	Maybe "Yes"	Definitely "Yes"
❑	❑	❑	❑	❑

63. Was this trip primarily…….? **(**check one)
    - □ rod & reel sportfishing
    - □ shellfish fishing

64. Was this trip primarily in**…….?** (check one)
    - □ freshwater
    - □ saltwater

65. Did you pay for a guide or a charter boat on this trip?
    - □ Yes
    - □ No

In this next section, we ask about your spending on your **last fishing trip** to the Cook Inlet region that occurred between **May 1 through June 30, 2017 (the trip described in Question 8 through 13).**

66. As best as possible, please tell us how much you spent PRIOR TO DEPARTING ON YOUR TRIP for any pre-purchased travel packages such as cruises, travel tours, guided trips, etc.

Travel package purchased for last trip to Cook Inlet region (between May 1 and June 30, 2017)	**Amount spent on trip to Cook Inlet region**	
Pre-arranged cruise, package tour or chartered trip (including fishing excursions purchased through a cruise line)	$	
Which of the following were included in the pre-arranged package?		
Transportation to or from Alaska	□ Yes	□ No
Transportation once you arrived in Alaska	□ Yes	□ No
Fishing guides and/or charter boats	□ Yes	□ No
Lodging	□ Yes	□ No
Meals	□ Yes	□ No
Fishing license	□ Yes	□ No

MAY to JUNE

67. As best as possible, please tell us how much you spent on the following TRIP-RELATED items ON THE TRIP DESCRIBED ABOVE. Do **not** include any package spending already reported in Question 14. Please only include amounts you spent in the **COOK INLET REGION**. Include money that **you** spent for other people on your trip; do **not** include money that other people spent on your behalf. We will ask about your equipment purchases in later questions.

Items purchased on last trip to Cook Inlet region (between May 1 and June 30, 2017)	**Amount Spent in Cook Inlet region**
Fuel and oil for your car, truck, boat, airplane, ATV, and/or other transportation	$
Guide and charter fees	$
Airline tickets	$
Transportation services (air taxis, boat ferries, shuttle vans, taxis, etc.)	$
Boat launch and dockage fees	$
Ice	$
Bait (natural bait only, do not include lures)	$
Groceries, food, liquor bought in stores (not in restaurants or bars)	$
Restaurants, bars, and take-out food purchases	$
Heating and cooking fuels	$
Fish processing and shipping	$
Rentals (boats, equipment, autos, etc.)	$
Overnight accommodations (hotels/motels, B&B's, campgrounds, cabin rentals, etc.)	$
Derby tickets	$
Souvenirs and gifts	$
Other entertainment expenses during fishing trip (movies, etc.)	$
Other (please specify):_____	$

MAY to JUNE

Section C2 – LAST TIME YOU SPORTFISHED DURING JULY THROUGH OCTOBER 2017:

Now we would like to know about the **last time** you went sportfishing in the **Cook Inlet region** between **July 1st and October 31st, 2017**. Please remember, "sportfishing" includes personal use (e.g., dip netting) and shellfish fishing, but does ***not*** include subsistence fishing.

68. In what month did you last go sportfishing in the **Cook Inlet region** between **July 1** and **October 31st of 2017**?

- ☐ July
- ☐ August
- ☐ September
- ☐ October
- ☐ I did not fish between July 1st and October 31st (skip to section D)

THESE NEXT QUESTIONS REFER TO THE **LAST TIME YOU WENT SPORTFISHING** IN THE **COOK INLET REGION** BETWEEN **JULY 1ST** AND **OCTOBER 31st, 2017**

69. Fishing trips often include time for fishing, travel, and non-fishing activities. How long was this last fishing trip including fishing days, travel days, and non-fishing days? *Note that single-day trips do not need to take a whole day. For example, if the last time you went fishing **JULY** through **OCTOBER** you only fished for a few hours after work, this would be counted as '1' day.*

Total days on your last fishing trip in **Cook Inlet region**: _____days

70. How many days did you actually fish during your fishing trip in the **Cook Inlet region** between **July 1st and October 31st**? (Count partial days of fishing as '1' day)

Fishing days on your last trip in **Cook Inlet region**: _____days

71. Would you still have taken this trip even if you were not able to go fishing?

Definitely "No"	Maybe "No"	Not sure	Maybe "Yes"	Definitely "Yes"
❑	❑	❑	❑	❑

72. Was this trip primarily…….? (check one)
    - □ rod & reel sportfishing
    - □ shellfish fishing

73. Was this trip primarily in…….? (check one)
    - □ freshwater
    - □ saltwater

74. Did you pay for a guide or a charter boat on this trip?
    - □ Yes
    - □ No

JULY to OCTOBER

In this next section, we ask about your spending on your last fishing trip to the Cook Inlet region that occurred between **July 1 through October 31, 2017 (the trip described in Question 17 through 23).**

75. As best as possible, please tell us how much you spent PRIOR TO DEPARTING ON YOUR TRIP for any pre-purchased travel packages such as cruises, travel tours, guided trips, etc.

Travel package purchased for last trip to Cook Inlet region (between July 1 and October 31, 2017)	**Amount spent on trip to Cook Inlet region**	
Pre-arranged cruise, package tour or chartered trip (including fishing excursions purchased through a cruise line)	$	
Which of the following were included in the pre-arranged package?		
Transportation to or from Alaska	☐ Yes	☐ No
Transportation once you arrived in Alaska	☐ Yes	☐ No
Fishing guides and/or charter boats	☐ Yes	☐ No
Lodging	☐ Yes	☐ No
Meals	☐ Yes	☐ No
Fishing license	☐ Yes	☐ No

76. As best as possible, please tell us how much you spent on the following TRIP-RELATED items ON THE TRIP DESCRIBED ABOVE. Do **not** include any package spending already reported in Question 23. Please only include amounts **you** spent in the **COOK INLET REGION**. Include money that you spent for other people on your trip; do **not** include money that other people spent on your behalf. We will ask about your equipment purchases in later questions.

Items purchased on last trip to Cook Inlet region (between July 1 and October 31, 2017)	**Amount Spent in Cook Inlet region**
Fuel and oil for your car, truck, boat, airplane, ATV, and/or other transportation	$
Guide and charter fees	$
Airline tickets	$
Transportation services (air taxis, boat ferries, shuttle vans, taxis, etc.)	$
Boat launch and dockage fees	$
Ice	$
Bait (natural bait only, do not include lures)	$
Groceries, food, liquor bought in stores (not in restaurants or bars)	$
Restaurants, bars, and take-out food purchases	$
Heating and cooking fuels	$
Fish processing and shipping	$
Rentals (boats, equipment, autos, etc.)	$
Overnight accommodations (hotels/motels, B&B's, campgrounds, cabin rentals, etc.)	$
Derby tickets	$
Souvenirs and gifts	$
Other entertainment expenses during fishing trip (movies, etc.)	$
Other (please specify): _____	$

JULY-OCTOBER

Section D-FISHING EQUIPMENT EXPENDITURES:

NOTE: In this section, we want to know about sportfishing and related equipment you purchased in the Cook Inlet region during the last 12 months, including equipment purchased for personal use (e.g., dipnet) and/or shellfish fishing.

77. As best as possible, please tell us how much you spent on the following fishing equipment in the last 12 months. **Only report purchases made within the Cook Inlet region** – excluding purchases from catalogs and online web sites. Include purchases you made for yourself and for others. Please write in the amount spent and the percent of time that item was used for sportfishing in the Cook Inlet Region.

Fishing equipment purchased WITHIN COOK INLET REGION DURING THE PAST 12 MONTHS	**Total Amount Spent in the Cook Inlet region**	**% Used for sportfishing**
Licenses and stamps	$	100%
Rods, reels, & components	$	100%
Fishing tackle (lines, leaders, lures, creels, stringers, etc.)	$	100%
Tackle boxes, cases to protect fishing equipment	$	100%
Depth finders, fish finder, other electronics	$	100%
Landing nets, dipnets & gillnets	$	100%
Miscellaneous fishing equipment (knives, scales, etc.)	$	100%
Shellfish fishing equipment (shovels, pots, buckets, etc.)	$	100%
Fishing mounting (taxidermy)	$	100%
Books and magazines devoted to fishing	$	100%
Items to store/preserve fish (smoker, vacuum sealer, etc.)	$	%
Coolers, fish boxes	$	%
Clothing (fishing vest, raingear, head net, etc.)	$	%
Boots, shoes, waders, and other footwear	$	%
Life jackets	$	%
Boats, canoes, rafts, kayaks, and another watercraft	$	%
Boat motors	$	%
Trailers, hitches, and accessories	$	%
Bear spray, bug spray, sun screen	$	%
Firearms for personal protection	$	%
Cameras, binoculars, sun glasses	$	%
Tents, screen rooms, tarps, backpacks, sleeping bags	$	%
Camping trailer (pop-ups, self-contained, 5th wheel)	$	%
Other camping equipment (stoves, grills, lanterns, etc.)	$	%
Vehicles (trucks, SUVs, motorhomes, etc.)	$	%
Airplanes and related equipment	$	%
ATVs, snow machines	$	%
Boat/camper registrations and excise taxes	$	%
Vehicle, boat, or airplane repair/maintenance	$	%
Other (please specify): _____	$	%

78. Please report how much you spent in 2017 on any real estate located in the **Cook Inlet region** that was purchased or used primarily for sportfishing purposes. (If you spent nothing, enter '0')

Real estate spending in the last 12 months for fishing in the Cook Inlet region	**Total Amount Spent**
Purchases of lots, existing houses and cabins, and/or land	$
Leases of land, cabins, boat slips, and storage (do not include any short-term rentals that were already reported as a trip-related expense)	$
Construction of houses and cabins, and repair or maintenance expenses (not including boat docks, sheds, or outbuildings)	$
Purchase or construction of boat docks, sheds, or outbuildings	$

Section E-BACKGROUND INFORMATION:

To help us learn more about who fishes in the **Cook Inlet region**, please answer these final questions. All answers you provide will be kept fully confidential. Your answers will help us evaluate the survey to best represent ALL **Cook Inlet region** anglers, even those not surveyed.

79. What is your gender?
    - ◻ Male Female

80. In what year were you born?_____

81. Which category best describes the highest level of education you have completed?

- ◻ Did not graduate from high school
- ◻ High school graduate or GED
- ◻ 1-3 years college (some college)
- ◻ College graduate (bachelor's degree or equivalent)
- ◻ Postgraduate, master's degree, doctorate, law degree, other professional degree

82. Which best describes your household's annual, before-tax income? (check one)

- ◻ Less than $10,000
- ◻ $10,000 - $19,999
- ◻ $20,000 - $29,999
- ◻ $30,000 - $39,999
- ◻ $40,000 - $49,999
- ◻ $50,000 - $74,999
- ◻ $75,000 - $99,999
- ◻ $100,000 - $149,999
- ◻ $150,000 - $199,999
- ◻ $200,000 or more

Thank you for taking our survey!

If you have any additional comments you wish to share about this study, please provide them here:

SURVEY WAVE II: REMINDER POSTCARD

Thank you/Reminder-post card (FRONT)

COOK INLET SPORTFISHING ECONOMIC STUDY
c/o Southwick Associates
PO Box 6435
Fernandina Beach, Florida 32035

Angler name and address

Postcard (BACK)

Dear Angler,

Recently, you received a survey from Southwick Associates asking about your sportfishing activities in the Cook Inlet region of Alaska. If you have already completed and returned your survey, **thank you**! If you have not yet completed the survey, we ask you to take a few minutes to do so and return your completed survey in the postage paid envelope included in the package. It is very important that we hear from you, even if you did not fish in the Cook Inlet region last year.

Southwick Associates was contracted by the Matanuska-Susitna Borough to conduct this study. The project is being conducted with cooperation from the Alaska Department of Fish & Game and funding support from the Borough and the Department of Commerce, Community, and Economic Development.

Thank You!

Matanuska-Susitna Borough

Alaska Department of Fish & Game

SURVEY WAVE II: SECOND LETTER

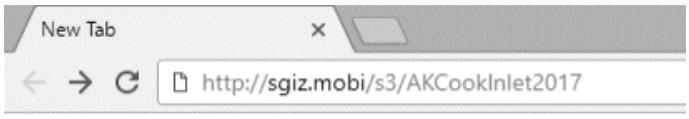
SOUTHWICK ASSOCIATES

{Date}
Dear Alaska angler:

We recently sent a survey to you asking about your sportfishing activities in the Cook Inlet region during May through October of 2017. Many of the other anglers who received the survey have already responded, but we have not yet received your completed questionnaire.

We are conducting the survey to provide a better understanding of the importance of sportfishing to the Cook Inlet region's economy. Information about your experience is very valuable to this study because you have been chosen to represent many other sport anglers who fish in Alaska. Therefore, it is very important that we hear from you.

Enclosed is a replacement questionnaire. Your responses to the survey questions will be kept strictly confidential. Please take a few minutes to respond to the survey and return it in the postage-paid envelope. If you prefer, you can take the survey online by typing this web address (http://sgiz.mobi/s3/AKCookInlet2017) directly into the address bar of your browser. Your Access Code for the online survey is XXX.



The Matanuska-Susitna Borough contracted Southwick Associates to conduct this study. The project is being conducted with cooperation from the Alaska Department of Fish & Game and funding support is provided by the Borough and the Department of Commerce, Community, and Economic Development.

All completed surveys will be entered into a drawing to be held at the end of the study for a **gift certificate worth $500** at the sporting goods retailer of your choice.

If you have any questions, comments, or concerns about the study, you may contact Lisa Bragg at LBragg@SouthwickAssociates.com or 904-277-9765. I would like to thank you in advance for agreeing to participate in this important study.

Sincerely,

Rob Southwick / *President*
Southwick Associates

Project sponsored by:

With assistance from: Alaska

PO Box 6435 ■ Fernandina Beach, FL 32035 ■ Office (904) 277-9765

SURVEY WAVE II: INITIAL EMAIL INVITATION

Dear Alaska angler:

The **Matanuska-Susitna Borough** has contracted Southwick Associates to conduct a study of the economic importance of sportfishing in the Cook Inlet region. The project is being conducted with cooperation from the **Alaska Department of Fish & Game.**

Please take a few minutes to complete our survey. The information that you provide will be kept confidential. The entire survey should only take you about 10 minutes to complete. Even if you did not fish in the Cook Inlet region, we would still like to hear from you.

Click Here to Start the Survey

To show our appreciation for your participation, all completed surveys will be entered into a drawing to be held at the end of the study for a **gift certificate worth $500** at the sporting goods retailer of your choice.

If you have any questions, comments, or concerns about the study, you may contact Lisa Bragg at LBragg@SouthwickAssociates.com or 904-277-9765. Thank you for participating in this important study.

Sincerely,
Rob Southwick/*President*

SOUTHWICK
ASSOCIATES

A cooperative project with:

SURVEY WAVE II: SECOND REMINDER EMAIL

Dear Alaska angler:

We want to ensure that your voice is heard in the Cook Inlet region. The **Matanuska-Susitna Borough** has contracted Southwick Associates to conduct a study of the economic importance of sportfishing in the Cook Inlet region. The project is being conducted with cooperation from the **Alaska Department of Fish & Game.**

Please take a few minutes to complete our survey. The information that you provide will be kept confidential. The entire survey should only take you about 10 minutes to complete. Even if you did not fish in the Cook Inlet region, we would still like to hear from you.

Click Here to Start the Survey

To show our appreciation for your participation, all completed surveys will be entered into a drawing to be held at the end of the study for a **gift certificate worth $500** at the sporting goods retailer of your choice.

If you have any questions, comments, or concerns about the study, you may contact Lisa Bragg at LBragg@SouthwickAssociates.com or 904-277-9765. Thank you for participating in this important study.

Sincerely,
Rob Southwick/*President*
Southwick Associates

A cooperative project with Matanuska-Susitna Borough and the Alaska Department of Fish and Game.

SURVEY WAVE II: THIRD AND FINAL REMINDER EMAIL

Dear Alaska angler:

Recently you were asked to participate in a survey about sportfishing in the Cook Inlet region. Even if you did not fish in the Cook Inlet region, we would still like to hear from you. We have contracted Southwick Associates to conduct the study of the economic importance of sportfishing in the Cook Inlet region. The project is being conducted with cooperation from the Alaska Department of Fish & Game.

Please take a few minutes to complete our survey. The information that you provide will be kept confidential. The entire survey should only take about 10 minutes to complete.

Click Here to Start the Survey

To show our appreciation for your participation, all completed surveys will be entered into a drawing to be held at the end of the study for a **gift certificate worth $500** at the sporting goods retailer of your choice.

If you have any questions, comments, or concerns about the study, you may contact Lisa Bragg at LBragg@SouthwickAssociates.com or 904-277-9765. Thank you for participating in this important study.

Sincerely,
Brianne Blackburn, *Environmental Planner*
Matanuska-Susitna Borough

Sportfishing Guide Business Operation Survey

SOUTHWICK
ASSOCIATES

{Date}

The Matanuska-Susitna Borough has contracted Southwick Associates to conduct a study of the economic importance of sportfishing in the Cook Inlet region. The project is being conducted with cooperation from the Alaska Department of Fish & Game and funding support from the Borough and the Department of Commerce, Community, and Economic Development.

You have been selected at random to be a part of this study from a sample of businesses that held an Alaska Sportfishing Guide Business license in 2017. Even if you did not operate guide services in the Cook Inlet Region, we would still like to hear from you. You are one of a small group of businesses that have been selected to represent the Alaska sportfishing guide and outfitter industry, so it is very important that we hear from you. The entire survey should take only about 10 minutes to complete.

The information that you provide will be kept confidential and will only be used by the project contractor, **Southwick Associates**, Inc. (www.SouthwickAssociates.com) to produce summary estimates of the economic importance of sportfishing in the Cook Inlet region of Alaska.

To access the survey, please click the link below:
<<link>>

If you have any questions, comments, or concerns about the study, you may contact Lisa Bragg at LBragg@SouthwickAssociates.com or 904-277-9765. I would like to thank you in advance for agreeing to participate in this important study.

Sincerely,

Rob Southwick / *President*
Southwick Associates

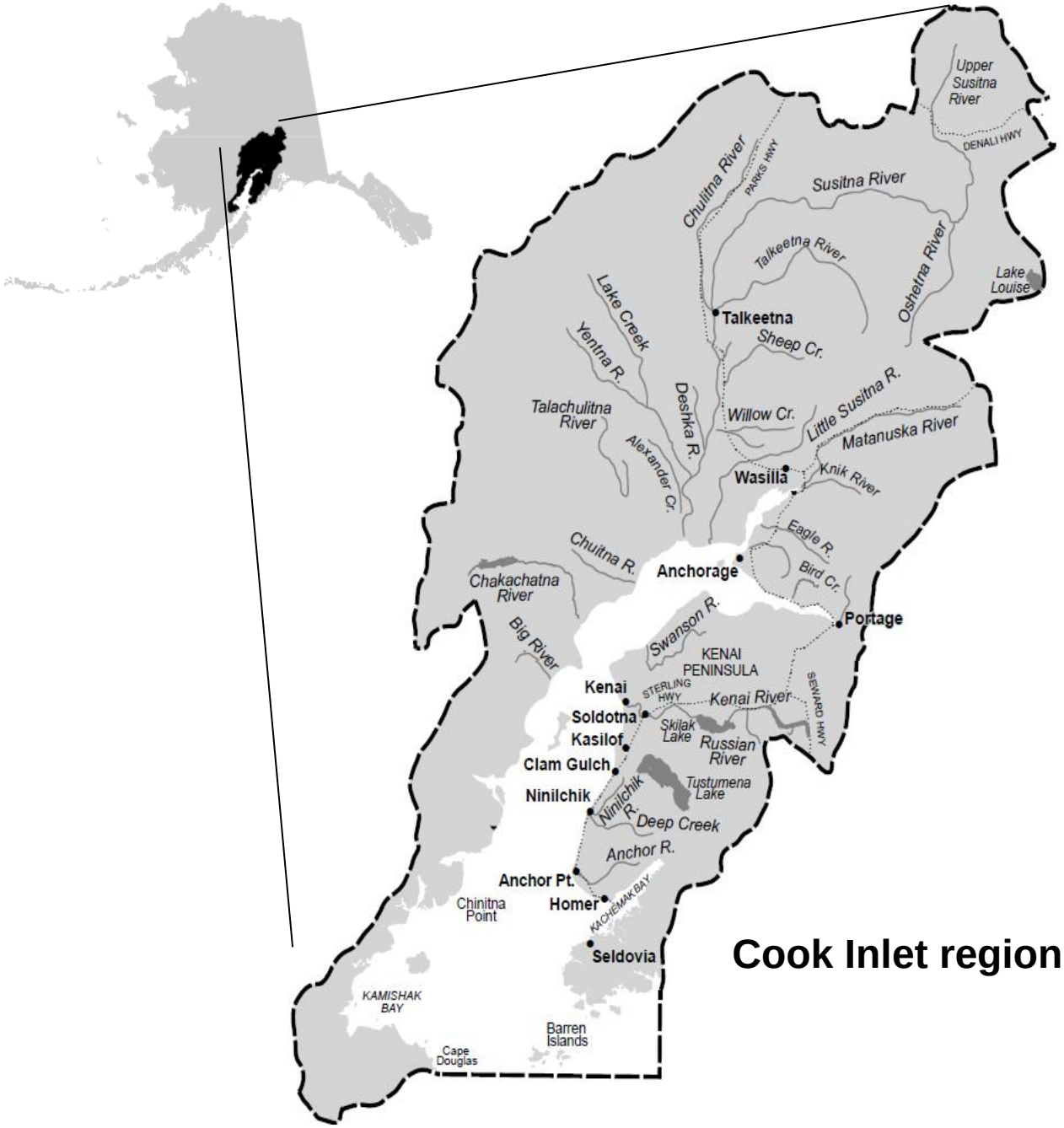
Project sponsored by:
Matanuska-Susitna Borough

With assistance from: Alaska Department of Fish and Game

PO Box 6435 ■ Fernandina Beach, FL 32035 ■ Office (904) 277-9765

Sportfishing Guide Business Survey
Cook Inlet region

Please note that the Cook Inlet region includes both the saltwater inlet portion above Kodiak Island as well as the freshwater rivers that drain into the Cook Inlet.



Cook Inlet region

1. Approximately how many years has your company been providing sportfishing guide services for hire in Alaska? _____years

2. Did you offer sportfishing guide services for hire in the Cook Inlet region in 2017?
☐ Yes ~~Skip to Q~~uestion 4
☐ No

3. Did you make business expense purchases for your sportfishing guide service for hire in the Cook Inlet region in 2017?
☐ Yes ~~Skip to Q~~uestion 5
☐ No

If you selected "No", you have reached the end of the survey. Thank you for your time!

4. What types of services do you provide for your clients on a typical guided sportfishing trip? "Provide" means your business arranged and paid for the service on behalf of your client.
(Check all that apply)

	Freshwater Trips	**Saltwater Trips**
EXAMPLE:	✓	
Fishing licenses		
Lodging		
Meals.....		
Fish Processing (your business cleans and packages fish for the client, not subcontracted to another)		
Transportation to and from the Cook Inlet region		
Transportation within the Cook Inlet region		
Other (please specify) __ **(guiding/safety equipment)** ____		

5. In order to determine the contribution of sportfishing guide business activities to the Cook Inlet regional economy, we need to know general information about how your business expenses were distributed in 2017 and where those expenses occurred. **We do not need to know your actual business expenses.**

In the first column of the table below, write in the percent that each category contributes to your total business expenses in 2017. Include expenses you incur for the business and on behalf of your clients (e.g., licenses, lodging, meals, etc.) The total for the first column should add to 100%.

In the second column, report the approximate percentage of each business expense that you purchase from sources within the Cook Inlet region. These are business expenses incurred by you as the owner, not expenses incurred by your clients.

BUSINESS EXPENSES in 2017	Percent of Total	Percentage purchased in the Cook Inlet region
EXAMPLE: **Business services**	%	%
Business and guide licenses & permits.....		
Licenses purchased for your paying anglers		
Fuel and oil (boat, plane, car/truck, etc.).....		
Restaurants and prepared meals.....		
Wages, salaries and payments to owners (hired labor and your own pay)		
Equipment purchases (boats, motors, vehicles, trailers, gear, etc.).....		
Equipment rental		
Equipment maintenance and repair		
Bait.....		
Groceries.....		
Lodging (for you, employees and provided to clients)		
Airline tickets		
Other public transportation.....		
Business services (accounting, advertising, legal, etc.)		
Real estate located in the Cook Inlet region		
Utilities.....		
Taxes		
Insurance.....		
Other (please specify) _____IE: boat launch fees_ ...		
TOTAL		

If you have any additional comments about the survey or the information you provided, please provide them here.