





## A Message from the Director

CHARLIE SWANTON, DIRECTOR ADF&G, DIVISION OF SPORT FISH

Alaska supports arguably some of the finest and most diverse sportfishing in the world. These opportunities provide Alaskans with a significant and sustainable source of food, relaxation, and social benefits. Additionally, the money spent by residents and visitors who participate in sportfishing activities produces significant economic benefits to Alaska.

The Division of Sport Fish is committed to providing an array of biological, social and economic information to fishery managers and fishery regulators who plan and evaluate fishery projects and make informed decisions about the management of fishery resources.

This report summarizes a recent effort by the Division to provide estimates of angler spending in Alaska and the contribution it makes to Alaska's economy. The results are based on an extensive statewide study of resident and nonresident anglers who went sportfishing in Alaska during 2007. The report contains estimates of the total expenditures on sportfishing by anglers and estimates of the subsequent economic effects this spending had in terms of employment, wages, salaries and tax receipts.

A key objective of this project was to establish a consistent and repeatable methodology for collecting and reporting estimates of economic contribution in Alaska such that reasonably precise estimates would be routinely available to agency personnel, fisheries decision-makers, and the public.

We hope that you find the following information useful and that it contributes to well-informed decision making.



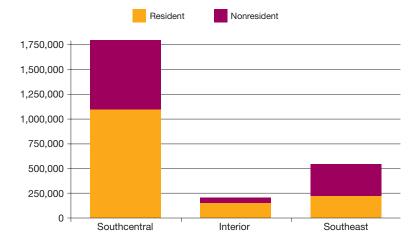
## Sportfishing in ALASKA

Sportfishing is an important component of the Alaskan economy. It contributes to the well-being of Alaskans as recreation, as a source of food, and as part of the state's collective economic fabric. In 2007, 190,644 Alaska residents bought a fishing license, along with 284,890 nonresidents.

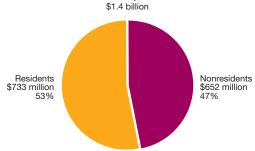
Spending a day fishing with rod and reel usually involves spending at least some money for travel, equipment, and supplies. Because a large number of anglers—both resident and nonresident—spend many days each year enjoying Alaska's diverse fishing opportunities, the annual total of that spending is substantial.

The money spent by anglers in turn helps to support thousands of Alaskan jobs in industries ranging from fishing tackle sales to hospitality and lodging to air taxi and guide services which are an important part of the economy in many of Alaska's local communities. At the same time, angler spending is also creating federal, state and local tax revenues which support local and borough governments and help pay for fisheries management in Alaska.

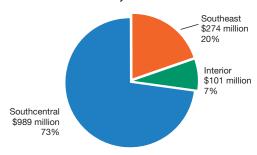
#### DAYS OF SPORTFISHING IN ALASKA BY REGIONS AND RESIDENCY, 2007



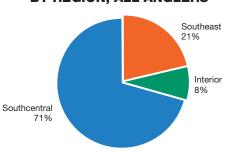
## TOTAL SPORTFISHING EXPENDITURES, All ANGLERS



## SPORTFISHING EXPENDITURES BY REGION, ALL ANGLERS



DAYS OF SPORTFISHING BY REGION, ALL ANGLERS





## Economic Impact vs. Economic Contribution

This project measured and reported the economic impacts and contributions of licensed anglers to Alaska's state and regional economies. The words "impact" and "contribution" are not necessarily synonymous.

Economic impact typically refers to the effects of money being brought in from outside the state or region. It was possible to estimate the total amount of resident and nonresident spending in Alaska as a whole and within specific regions by combining the economic survey results with the ADF&G Statewide Harvest Survey results.

Economic contribution refers to in-state spending by all anglers. In theory, if the dollars spent by resident anglers were not spent on sportfishing, the same money would be spent on other things and would still stimulate economic activity. It isn't possible to accurately predict whether these local dollars would be spent in or outside of Alaska.

This study generated both economic impact estimates (non-resident spending) as well as estimates of the economic contributions of spending by Alaska anglers in 2007.

# Economic IMPACTS & Contributions

The purpose of the study was to obtain current estimates of the economic contribution of sportfishing activities to the Alaska economy and to develop a consistent method for producing such estimates on a regular basis. This project provides a survey-based process that can now be updated periodically at reasonable cost.

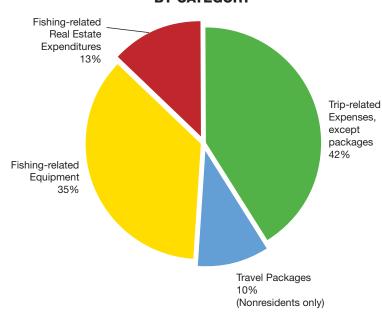
For 2007, the year covered by this report, 1,163 resident and 1,807 nonresident surveys were completed by anglers who fished in Alaska. From the survey responses collected, estimates of how much each angler spends per day of fishing and per year on fishing-related equipment were produced. These survey results were combined with the total number of licensed anglers in 2007 and the total days of fishing in Alaska as estimated by the Division's Statewide Harvest Survey. This survey, conducted every year by the Division, tracks annual sportfishing participation and harvest. By combining the economic survey results with the Statewide Harvest Survey results, it was possible to estimate the total amount of resident and nonresident spending in Alaska as a whole and within specific regions of the state.

An economic model was then used to estimate the additional economic effects that angler spending produced within each region of the state. Using the collective dollars spent by anglers, an economic model known as IMPLAN estimated the total jobs, tax revenues and other economic contributions. Regional as well as statewide totals can be determined and are summarized in the following pages. Information on the dollars associated with guided fishing trips and with nonresident fishing is also included. First, here are some statewide highlights.

## Total Resident and Nonresident Sportfishing Expenditures, by Category

	Resident Anglers	Nonresident Anglers	All Anglers
Licenses and Fees	\$6,627,558	\$16,536,955	\$23,164,513
Trip Expenditures (non-package)	\$219,829,151	\$347,358,999	\$567,188,150
Package Expenditures	n/a	\$137,519,700	\$137,519,700
Equipment Expenditures	\$433,693,104	\$41,385,450	\$475,078,554
Real Estate Expenditures	\$73,139,537	\$109,697,619	\$182,837,156
Total Expenditures	\$733,289,349	\$652,498,723	\$1,385,788,072

#### TOTAL ANGLER SPENDING BY CATEGORY



## Average Per Day Expenditure for Trip-Related Items Only, Including Package Trips

(Lodging, fuel, food, travel packages, etc.)

	Per Day	
All Alaska Fishing Combined	\$277.46	
Residents Only	\$150.63	
Non-Residents Only	\$448.78	
Saltwater		
Residents, Unguided	\$162.81	
Residents, Guided	\$466.53	
Non-Residents, Unguided	\$209.40	
Non-Residents, Guided	\$744.03	
Freshwater		
Residents, Unguided	\$91.73	
Residents, Guided	\$509.56	
Non-Residents, Unguided	\$213.24	
Non-Residents, Guided	\$790.41	

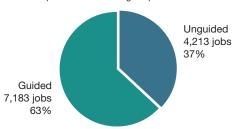
#### ECONOMIC ACTIVITY, OR MULTIPLIER EFFECT: SUPPORTED BY GUIDED AND UNGUIDED FISHING TRIPS

Trip-related and Package Expenditures'



#### JOBS: SUPPORTED BY GUIDED AND UNGUIDED FISHING TRIPS

Trip-related and Package Expenditures\*



\*Only trip related expenditures (food, fuel, lodging, etc.) could be divided into guided and unguided portions. It was not possible to divide equipment expenditures in such a manner.



## How Economic Effects Occur

While the economic effects of sportfishing occur on a large scale statewide, it's important to note that they happen one angler at a time.

Suppose, for example, that a construction worker in downtown Anchorage decides to go fishing on his day off. He stops after work at the local tackle shop and spends \$250 for a rod and reel along with some line, lures, a knife and cooler. Sandwiches, soda, and ice for the trip come from the local grocery store, and he spends still more money to fill his vehicle with gas on the way home. Very early the next morning, he starts the 150-mile drive out the Seward and Sterling highways to the Kenai River where he'll fish for king or coho salmon.

Meanwhile, the money he left behind goes to work. Some of the money he spent for fishing gear helps to pay the wages of a sales clerk, for example, who in turn spends some that evening at a local restaurant, to buy groceries, or pays his utility bill at the local light and power company. These payments, known collectively as the "multiplier effect", help to support still other jobs as the money our angler spent ripples outward in many directions through the local economy, even to those sectors not directly related to fishing. See page 11 for more definitions.

## Regional Economic EFFECTS

Economic effects can be measured regionally and locally as well as statewide. Alaska has several distinct regions, each with its own characteristic sport fisheries that show different patterns in angling participation, spending, and economic effects.

#### STATEWIDE RESULTS

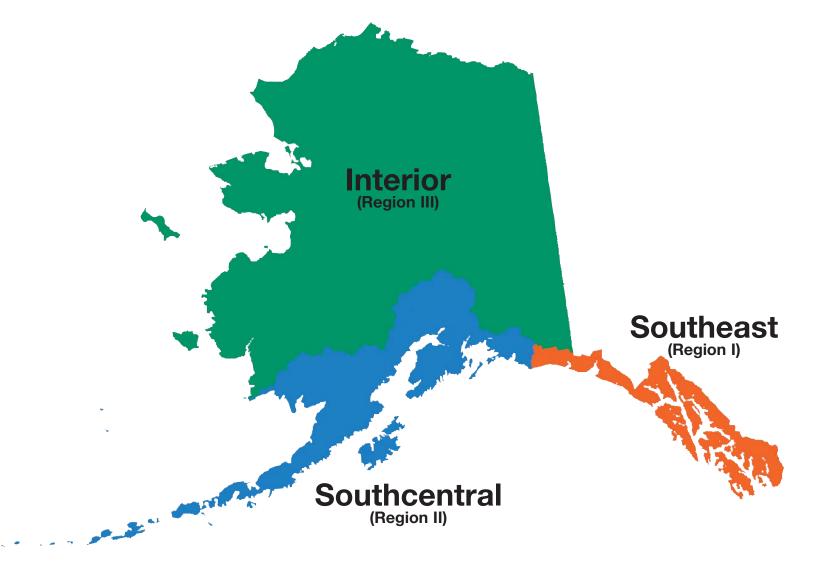
Alaska is blessed with many world-class freshwater and marine fisheries. In 2007, resident and nonresident anglers spent nearly \$1.4 billion on equipment, boats, and trip-related and other items. Alaska anglers on average spent \$2,914 on sportfishing trip expenses, fishing-related equipment, licenses, and other items in 2007. The actual amount spent per angler varies based on his or her preferred fishing locations, region, and more. Details are available in the technical report (see sidebar on page 8).

As anglers' expenditures exchange hands, economic contributions are generated statewide. In 2007, these contributions amounted to 15,879 jobs, \$246 million in tax revenues and \$545 million in income. Economic output, which is the value of all goods and services produced by businesses as a result of anglers' expenditures, was just over \$1.6 billion.

### SOUTHEAST (REGION I)

The so-called Panhandle area extending roughly from Yakutat south-southwest through Juneau and Ketchikan to the British Columbia border is a complex maze of islands, straits, and mountains. The saltwater salmon fishing here is outstanding, although some anglers find steelhead, along with river-resident trout, to be just as appealing.

Total spending by all anglers, resident and nonresident combined, for Southeast Alaska in 2007 was estimated to be \$274 million. The total economic output came to \$295 million, which supported 3,063 jobs and generated \$22 million in state and local taxes.



### **SOUTHEAST MARINE (SUBREGION)**

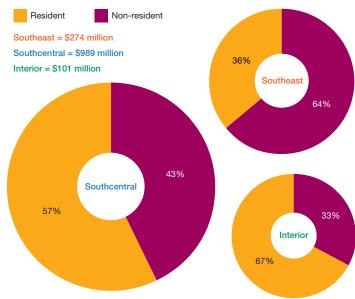
Within southeast Alaska, the popularity of salt-water fishing accounted for almost half of all angler spending. Saltwater anglers in southeast Alaska spent \$132 million of the \$274 million spent on sportfishing in southeast Alaska in 2007, which supported 1,897 jobs and created \$14 million in state and local tax revenues.

#### SOUTHCENTRAL (REGION II)

This is by far the most popular angling region in Alaska as measured in total angler days. It includes Prince William Sound, Cook Inlet and the Anchorage area, as well as Kodiak Island and the Bristol Bay area to the west of Cook Inlet. All five salmon species are fished widely here in both salt- and fresh-water, along with halibut and other saltwater species. Trophy rainbow trout in the various Bristol Bay drainages are world-famous.

Anglers spent \$989 million in the Southcentral region in 2007, supporting 11,535 area jobs and creating \$91 million in state and local taxes.

## RESIDENT AND NONRESIDENT EXPENDITURES BY REGION



Economic measures reported in this chart are based on regional IMPLAN model outputs using 2007 angler expenditures.

## REVISED June 2009. Corrected text displayed in red



## For More Details...

This report is a summary of a 300 page technical report available free from the Alaska Department of Fish and Game, Division of Sport Fish. The complete report presents detailed descriptions of the methods and data sources used in the study, as well as the complete results. Visit www.sf.adfg.state.ak.us/statewide/economics to download a copy in PDF form. You may also contact the Department at (907) 267-2366, or william.romberg@alaska.gov, to request a printed copy of the report.

## Regional Economic EFFECTS (cont.)

#### COOK INLET (SUBREGION )

Notably, much of Southcentral's economic activity centers around the Cook Inlet area, partly because Anchorage and the Matanuska-Susitna valley are such large population centers with good fishing nearby. The Kenai River, for example, is an easy drive from Anchorage and is widely known among anglers as one of the world's foremost salmon rivers. In addition, there are large sport fisheries for halibut and other groundfish that are accessed from several communities that border Cook Inlet. In the Cook Inlet subregion alone (a subset of Southcentral region), anglers spent about \$733 million in 2007, which supported 8,056 jobs and generated \$63 million in state and local taxes.

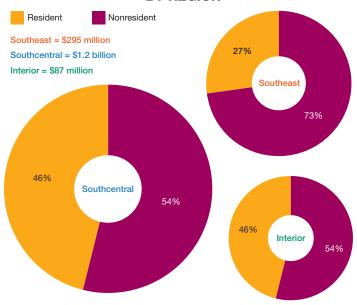
### INTERIOR (REGION III)

Among anglers, the northern two-thirds of the state could be called the road less traveled. This vast area contains many small communities and sport fisheries located off the road system with fisheries less accessible than places farther south in the state. However, the fishing is none the less exceptional, and in addition to salmon and trout there are fisheries for unique species such as sheefish, arctic char, and burbot, as well as huge northern pike found in the "flats" region of the lower Yukon River.

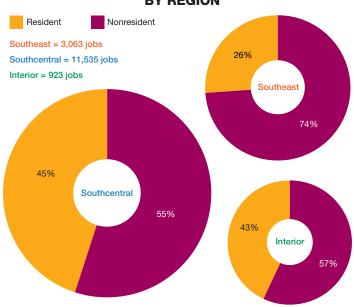
Angling traffic here is lighter than in other regions of the state but still significant. Total regional spending by all anglers in this region topped \$101 million in 2007 and directly or indirectly supported 923 area jobs and \$7 million in state and local taxes.

## Total Angler Expenditures \$1.4 Billion

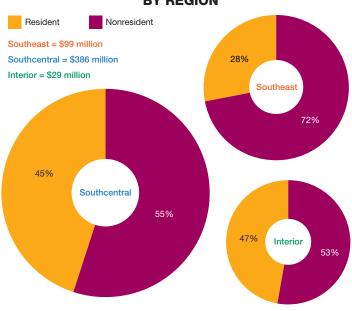
#### RESIDENT AND NONRESIDENT OUTPUT BY REGION



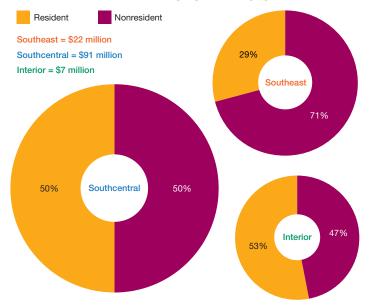
## RESIDENT AND NONRESIDENT EMPLOYMENT BY REGION



## RESIDENT AND NONRESIDENT INCOME BY REGION



## RESIDENT AND NONRESIDENT STATE & LOCAL TAX REVENUES BY REGION



Sportfishing-related Jobs 15,879

Economic measures reported in these charts are based on regional IMPLAN model outputs using 2007 angler expenditures. See page 11 for definitions of terms used on this page.

## Economic Contributions of Sportfishing in Alaska, by Residency & Region, 2007

	Resident Anglers	Nonresident Anglers	All Anglers
ALASKA - STATEWIDE RES			
Anglers' expenditures	\$733,289,349	\$652,498,723	\$1,385,788,072
Output	\$668,729,829	\$938,863,856	\$1,607,593,685
Income	\$223,373,937	\$321,882,151	\$545,256,088
Jobs	6,442	9,437	15,879
Tax Revenues	\$107,433,533	\$138,881,701	\$246,315,114
Local & State	\$56,509,573	\$66,632,831	\$123,142,404
Federal	\$50,923,959	\$72,248,870	\$123,172,709
SOUTHEAST REGION			
Anglers' expenditures	\$98,613,993	\$174,890,811	\$273,504,804
Output	\$79,385,025	\$215,874,985	\$295,260,010
Income	\$27,316,008	\$71,825,686	\$99,141,694
Jobs	791	2,273	3,063
Tax Revenues	\$12,227,368	\$31,368,564	\$43,595,932
Local & State	\$6,376,236	\$15,686,783	\$22,063,019
Federal	\$5,851,132	\$15,681,782	\$21,532,913
SOUTHCENTRAL REGION Anglers' expenditures	\$560,955,071	\$427,603,048	\$988,558,119
		<b>4000 707 F07</b>	A4 40E E4E E40
Output	\$534,838,006	\$630,707,507	\$1,165,545,513
	\$174,829,996	\$630,707,507	\$1,165,545,513 \$386,463,733
Income	\$174,829,996 5,170	\$211,633,737 6,365	\$386,463,733 11,535
Income Jobs	\$174,829,996	\$211,633,737	\$386,463,733
Income Jobs Tax Revenues Local & State	\$174,829,996 5,170 \$86,563,199 \$45,612,530	\$211,633,737 6,365	\$386,463,733 11,535 \$180,255,267 \$90,799,631
Output Income Jobs Tax Revenues Local & State Federal	\$174,829,996 5,170 \$86,563,199	\$211,633,737 6,365 \$93,692,068	\$386,463,733 11,535 \$180,255,267
Income Jobs Tax Revenues Local & State	\$174,829,996 5,170 \$86,563,199 \$45,612,530	\$211,633,737 6,365 \$93,692,068 \$45,187,101	\$386,463,733 11,535 \$180,255,267 \$90,799,631
Income Jobs Tax Revenues Local & State Federal	\$174,829,996 5,170 \$86,563,199 \$45,612,530	\$211,633,737 6,365 \$93,692,068 \$45,187,101	\$386,463,733 11,535 \$180,255,267 \$90,799,631
Income Jobs Tax Revenues Local & State Federal	\$174,829,996 5,170 \$86,563,199 \$45,612,530	\$211,633,737 6,365 \$93,692,068 \$45,187,101	\$386,463,733 11,535 \$180,255,267 \$90,799,631
Income Jobs Tax Revenues Local & State Federal  INTERIOR REGION Anglers' expenditures	\$174,829,996 5,170 \$86,563,199 \$45,612,530 \$40,950,668	\$211,633,737 6,365 \$93,692,068 \$45,187,101 \$48,504,967	\$386,463,733 11,535 \$180,255,267 \$90,799,631 \$89,455,636
Income Jobs Tax Revenues Local & State Federal  INTERIOR REGION Anglers' expenditures Output	\$174,829,996 5,170 \$86,563,199 \$45,612,530 \$40,950,668 \$67,092,727	\$211,633,737 6,365 \$93,692,068 \$45,187,101 \$48,504,967 \$33,467,910	\$386,463,733 11,535 \$180,255,267 \$90,799,631 \$89,455,636
Income Jobs Tax Revenues Local & State Federal  INTERIOR REGION Anglers' expenditures Output Income	\$174,829,996 5,170 \$86,563,199 \$45,612,530 \$40,950,668 \$67,092,727 \$40,133,830	\$211,633,737 6,365 \$93,692,068 \$45,187,101 \$48,504,967 \$33,467,910 \$46,578,879	\$386,463,733 11,535 \$180,255,267 \$90,799,631 \$89,455,636 \$100,560,637 \$86,712,709
Income Jobs Tax Revenues Local & State Federal  INTERIOR REGION Anglers' expenditures Output Income Jobs	\$174,829,996 5,170 \$86,563,199 \$45,612,530 \$40,950,668 \$67,092,727 \$40,133,830 \$13,263,706	\$211,633,737 6,365 \$93,692,068 \$45,187,101 \$48,504,967 \$33,467,910 \$46,578,879 \$15,300,176	\$386,463,733 11,535 \$180,255,267 \$90,799,631 \$89,455,636 \$100,560,637 \$86,712,709 \$28,563,882
Income Jobs Tax Revenues Local & State Federal  INTERIOR REGION	\$174,829,996 5,170 \$86,563,199 \$45,612,530 \$40,950,668 \$67,092,727 \$40,133,830 \$13,263,706 399	\$211,633,737 6,365 \$93,692,068 \$45,187,101 \$48,504,967 \$33,467,910 \$46,578,879 \$15,300,176 524	\$386,463,733 11,535 \$180,255,267 \$90,799,631 \$89,455,636 \$100,560,637 \$86,712,709 \$28,563,882 923

Tax Revenues = the total personal and business tax revenues earned by local, state, and federal government that are generated by angler spending

### **Economic Contributions of Sportfishing for Specific Subregions, 2007**

	Resident Anglers	Nonresident Anglers	All Anglers	
OOK INLET (A SUBREGIO	N OF THE SOUTHCENTRAL	REGION)		
Anglers' expenditures	\$457,938,464	\$275,030,511	\$732,968,975	
Output	\$413,287,612	\$414,602,226	\$827,889,838	
Income	\$136,650,136	\$142,124,416	\$278,774,552	
Employment	4,010	4,046	8,056	
Tax Revenues	\$67,097,024	\$59,935,274	\$127,032,297	
Local & State	\$35,189,444	\$27,943,502	\$63,132,945	
Federal	\$31,907,580	\$31,991,772	\$63,899,352	
SOUTHEAST REGION - MAI				
Anglers' expenditures	\$21,268,271	\$110,345,177	\$131,613,448	
Output	\$28,244,412	\$138,794,141	\$167,038,552	
Income	\$9,132,220	\$44,692,671	\$53,824,891	
Employment	301	1,595	1,897	
Tax Revenues	\$4,791,024	\$21,577,534	\$26,368,559	
	¢2.712.504	\$11,473,357	\$14,186,941	
Local & State	\$2,713,584	ψ 1 1, <del>1 1 , 1 1 , 1 , 1 , 1 , 1 , 1 , 1 </del>	. , , -	

Output = total economic activity generated by angler spending

Income = salaries, wages, employee benefits and proprietors' profits stimulated by anglers

Jobs = same as employment, these are the total number of both full-time and part-time jobs supported by angler spending

Tax Revenues = the total personal and business tax revenues earned by local, state, and federal government that are generated by angler spending

### Definitions of Terms Used in this Report

**Angler Expenditures:** the dollars spent for the primary reason of sportfishing. Such expenditures include trip-related expenses for fishing (fuel, guide services, lodging, etc.), fishing tackle and other fishing equipment, the portion of ancillary equipment used for fishing that may have multiple uses (e.g., coolers, binoculars), and real estate maintenance and construction expenditures if used primarily for the pursuit of sportfishing.

**Total Multiplier Effect (also knows as Total Economic Activity):** the results (measured in output, income, jobs and taxes) of the total rounds of business and consumer spending stimulated by anglers' expenditures.

**Income:** generated as a result of angler's expenditures, this includes total payroll, including salaries and wages, as well as benefits such as insurance, and retirement benefits paid to employees and business proprietors.

**Employment**: the total number of both full-time and part-time jobs supported as a result of anglers' expenditures.

**Tax Revenues**: the total tax revenues earned by local, state, and federal governments as a result of anglers' expenditures. All forms of local, state, and federal taxes are included.

<sup>\*</sup> The contributions are for trip spending only, including travel packages. It was not possible to allocate equipment and real estate espenditures by type of water fished.



#### **ACKNOWLEDGEMENTS**

Funding for this study was provided by the Alaska Legislature which approved a \$229,800 Fish and Game Fund increment and a \$200,000 General Fund increment to the Division of Sport Fish FY-2008 budget. The Division of Sport Fish would like to thank Southwick Associates for their dedicated work on this project as well as the many anglers and guide businesses who participated in this study by providing detailed information on their sportfishing-related expenditures in 2007.

Southwick Associates, based in Fernandina Beach, FL, was founded in 1989 to serve

state fish and wildlife agencies and the sportfishing and hunting industries. From our north Florida offices, we continue to serve this core group, and now provide economic and business intelligence to many more.



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For more information, contact Bill Romberg, Alaska Department of Fish and Game, (907) 267-2366 or william.romberg@alaska.gov.

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ADF&G Division of Sport Fish, Research and Technical Services, 333 Raspberry Road, Anchorage AK 99518 (907) 267-2375.