

**ECONOMIC SIGNIFICANCE OF MIDDLE  
FORK OF THE SALMON FLOATER  
SPENDING ON LOCAL ECONOMIES**

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## INTRODUCTION

The Middle Fork of the Salmon River is world renown for offering visitors one of the most consistently high-quality and memorable wilderness float trips available. Annually, about 10,000 floaters on commercial and private trips float the Middle Fork of the Salmon River. When recreationists travel to the Middle Fork they also spend money in the local economies of the primary communities that surround the river. This report presents an overview of the primary economic drivers in the economies of Custer and Lemhi Counties in Central Idaho. These counties comprise the heart of the economic centers of the upper Salmon River Drainage region.

## METHODS

This analysis is based on existing information and data on Middle Fork use levels and visitor spending patterns. While no original data was collected for this study, existing studies and information on Middle Fork floater expenditures and use levels provide adequate data to estimate a likely range of the significance of these expenditures to the local area economies.

The accounting framework used in this paper is the measure of “economic significance” of Middle Fork-related spending on the local area economy. Economic significance in this context is broadly defined as the size and impact of Middle Fork river runner spending in the local economy relative to the overall size of that economy. In general terms, the larger and more complex an economic region is, the less impact spending related to one sector of that economy has on the overall performance of that local area.

This analysis relies on a statistical description of the two-county area most affected by Middle Fork visitor spending (Custer and Lemhi Counties) by the Economic Profile System<sup>1</sup>. Additionally, information on average visitor spending is collected from a study of guided whitewater rafting<sup>2</sup>, as well as prior estimates of local area spending percentages and spending multipliers.

Results of the estimated economic significance of Middle Fork visitor spending on local area economic activity are presented as a likely range of significance levels.

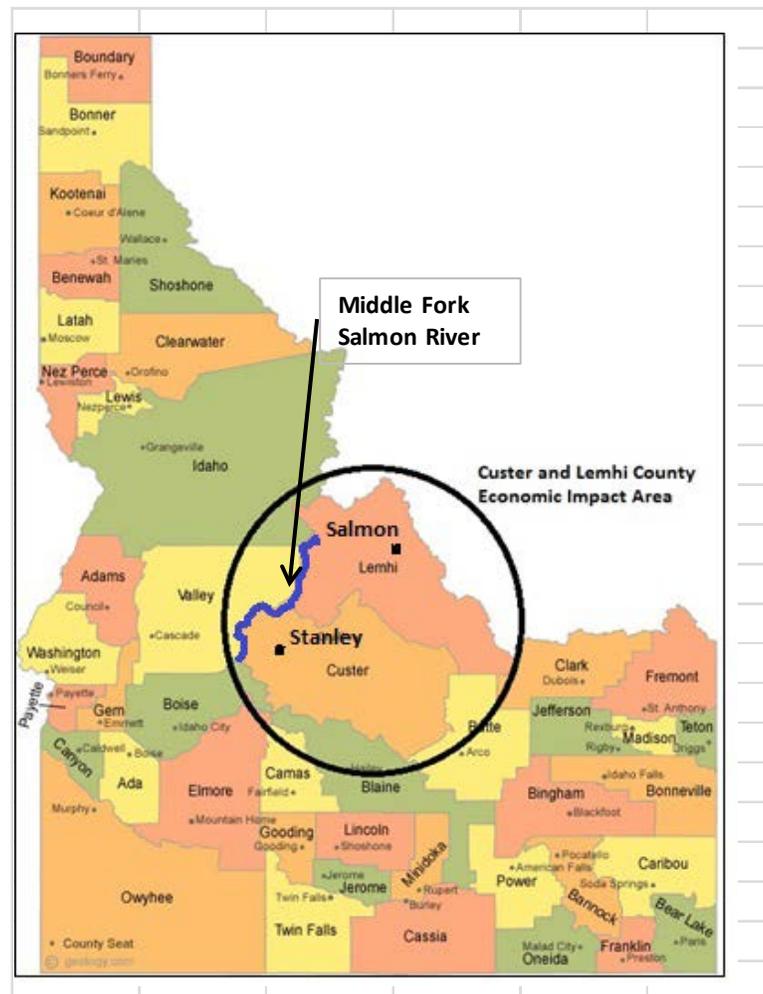
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<sup>1</sup> Headwaters Economics’ Economic Profile System. [headwaterseconomics.org/eps](http://headwaterseconomics.org/eps)

<sup>2</sup> D. English and J. Bowker. 1996. “Economic impacts of guided whitewater rafting: a study of five rivers.” *Water Resources Bulletin*. Vol 32, No. 6. Pp. 1319-1328

## ANALYSIS AREA: ECONOMIC PROFILE

The Middle Fork of the Salmon River flows through the heart of the Frank Church River of No Return Wilderness Area in Central Idaho. The section of the river most frequently floated begins at Boundary Creek (an approximate 1.5 hour drive from Stanley Idaho) and ends at Cache Bar (a 1.5 hour drive from Salmon Idaho). The communities of Stanley and Salmon are two geographic and economic bookends to the typical Middle Fork river float trip. Many floaters spend a night in Stanley before their trips, and others often spend a night either in Stanley or Salmon following their trip<sup>3</sup>. This river-based visitation and visitor spending is an important seasonal driver for these small, isolated economies.



<sup>3</sup> The pattern of overnight stays by outfitted guests varies by outfitters. However, based on reported patterns, spending at least one night in Stanley (usually before a trip) is the most common practice. Several outfitters reported nearly all their clients spending nights both before and after their trip in the town of Stanley.

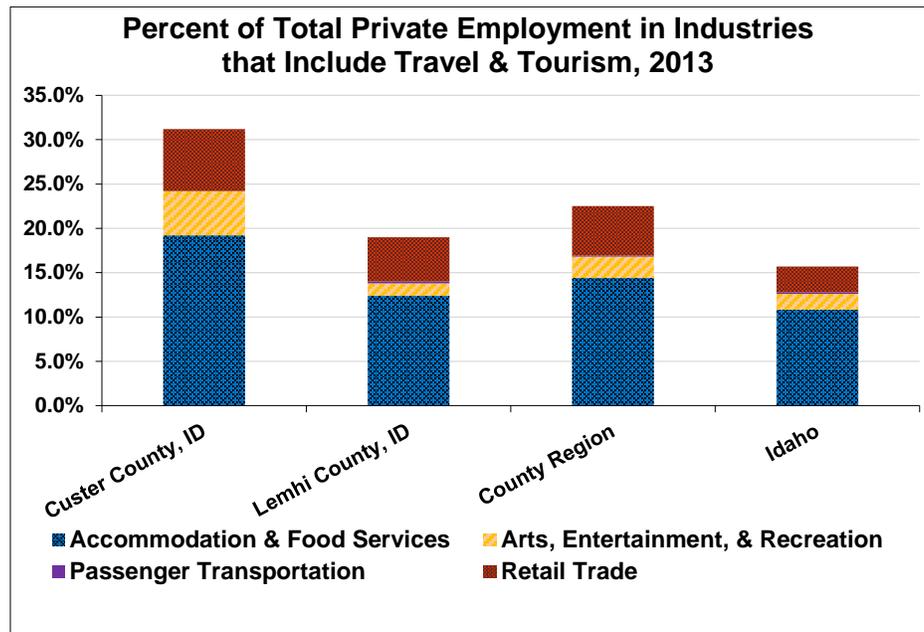
## STANLEY AND SALMON: RIVER GATEWAYS

Both the towns of Stanley and Salmon Idaho qualify as “gateway communities” to the Middle Fork ecosystem. Gateway communities are recognized in the study of regional economics as towns which are the “last outpost” and primary commercial access points for highly valued natural areas. Classic examples are towns such as West Yellowstone, MT at the west entrance to Yellowstone NP, or El Portal, CA on the western boundary of Yosemite NP.

Gateway communities provide the final jumping off location for lodging, food and other purchases, and eating and drinking establishments prior to embarking on a backcountry trip such as a Middle Fork River float. Many if not most commercial clients and many private floaters on the Middle Fork spend at least one night before and or after their river trip in Stanley or Salmon. While in these communities these river visitors stay at hotels, eat in restaurants and bars, and shop in local stores. This injection of spending from outside visitors provides essential money injections in to these economies that are disproportionately dependent on summer season business and the employment that business supports.

The Custer and Lemhi County economic region is heavily dependent on tourism spending in general and river tourist spending in particular in the summer months. This fact is underscored by statistics on the employment of the region which is attributable to travel and tourism sectors of the economy.

*Many, if not most, commercial Middle Fork clients and many private floaters spend at least one night before and/or after their river trip in Stanley or Salmon. While in these communities these river visitors stay at hotels, eat in restaurants and bars, and shop in local stores.*



Source: U.S. Department of Commerce. 2015. Census Bureau, County Business Patterns, Washington, D.C. as reported in Headwaters Economics’ Economic Profile System. [headwaterseconomics.org/eps](http://headwaterseconomics.org/eps)

Overall, 31% of Custer County and 19% of Lemhi County non-farm private employment is in the Travel and Tourism sectors of the economy. In comparison to the state of Idaho (itself a tourism-dependent state) these two counties are between 20% more dependent (Lemhi County) and 100% more dependent (Custer County) on tourism dollars than is the state as a whole. Table 1 provides detailed data on employment specific to the travel and tourism sectors for the two counties for 2013<sup>4</sup>.

**Table 1. Custer and Lemhi County Idaho Employment in Travel & Tourism, 2013.**

	Custer County, ID	Lemhi County, ID	County Region	Idaho
<b>Total Private Employment</b>	681	1,651	2,332	509,986
<b>Travel &amp; Tourism Related</b>	213	313	526	80,553
<b>Retail Trade</b>	48	83	131	14,997
Gasoline Stations	44	62	106	6,097
Clothing & Accessory Stores	4	15	19	5,314
Misc. Store Retailers	0	6	6	3,586
<b>Passenger Transportation</b>	0	3	3	1,098
Air Transportation	0	2	2	1,082
Scenic & Sightseeing Transport	0	1	1	16
<b>Arts, Entertainment, &amp; Recreation</b>	34	23	57	9,228
Performing Arts & Spectator Sports	0	1	1	1,420
Museums, Parks, & Historic Sites	1	3	4	201
Amusement, Gambling, & Rec.	33	19	52	7,607
<b>Accommodation &amp; Food</b>	131	204	335	55,230
Accommodation	71	50	121	11,028
Food Services & Drinking Places	60	154	214	44,202
<b>Non-Travel &amp; Tourism</b>	468	1,338	1,806	429,433
<b>Percent of Total</b>				
<b>Travel &amp; Tourism Related</b>	<b>31.3%</b>	<b>19.0%</b>	<b>22.6%</b>	<b>15.8%</b>
<b>Retail Trade</b>	7.0%	5.0%	5.6%	2.9%
Gasoline Stations	6.5%	3.8%	4.5%	1.2%
Clothing & Accessory Stores	0.6%	0.9%	0.8%	1.0%
Misc. Store Retailers	0.0%	0.4%	0.3%	0.7%
<b>Passenger Transportation</b>	0.0%	0.2%	0.1%	0.2%
Air Transportation	0.0%	0.1%	0.1%	0.2%
Scenic & Sightseeing Transport	0.0%	0.1%	0.0%	0.0%
<b>Arts, Entertainment, &amp; Recreation</b>	5.0%	1.4%	2.4%	1.8%
Performing Arts & Spectator Sports	0.0%	0.1%	0.0%	0.3%
Museums, Parks, & Historic Sites	0.1%	0.2%	0.2%	0.0%
Amusement, Gambling, & Rec.	4.8%	1.2%	2.2%	1.5%
<b>Accommodation &amp; Food</b>	19.2%	12.4%	14.4%	10.8%
Accommodation	10.4%	3.0%	5.2%	2.2%
Food Services & Drinking Places	8.8%	9.3%	9.2%	8.7%
<b>Non-Travel &amp; Tourism</b>	68.7%	81.0%	77.4%	84.2%

<sup>4</sup> U.S. Department of Commerce. 2015. Census Bureau, County Business Patterns, Washington, D.C. as reported in Headwaters Economics' Economic Profile System. [Headwaterseconomics.org/eps](http://Headwaterseconomics.org/eps)

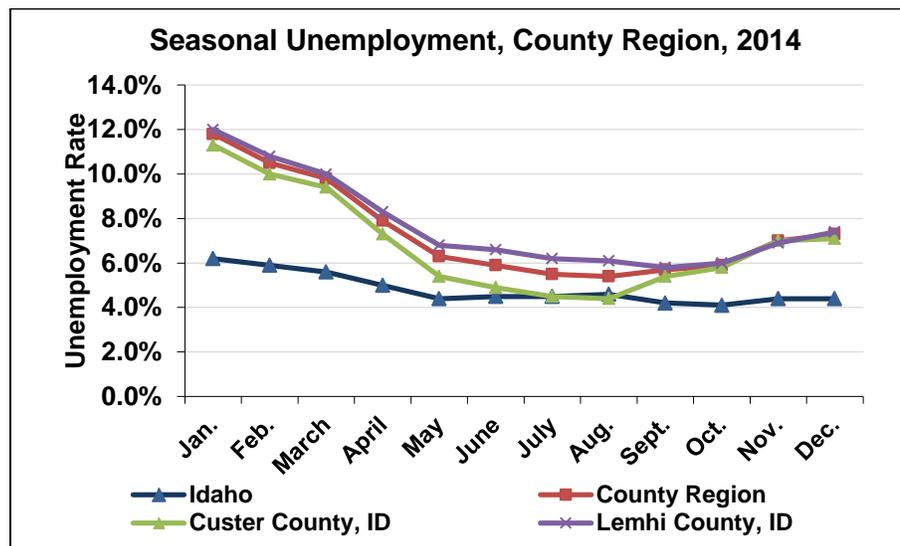
**Overall, the employment profile for Custer and Lemhi Counties shows local economic areas that are disproportionately dependent on tourism spending, and also that have a relatively concentrated period of tourism related activity during the summer months**

Several things are evident from the information shown in Table 1. First, both Custer and Lemhi Counties are extremely small economic areas. The two counties only support about 2,300 private sector, non-agricultural employees. About 70% of this employment is located in Lemhi County with its major town of Salmon, Idaho. The remaining 30% of the employment is in Custer County and its two largest business centers of Challis and Stanley, Idaho.

The second striking characteristic detailed in Table 1 is, again, that both counties are significantly more dependent on travel and tourism business than is the entire state of Idaho. In fact, Custer County has nearly one-third of its private, non-agricultural employment dependent on tourism spending. This percentage is twice the level of tourism dependence seen in the rest of the state.

While different counties in Idaho and the West do have differing levels of dependence on tourism spending to support their economies, the importance of that tourism spending is amplified when employment within the counties is substantially higher during a specific “tourist season”. The profile of unemployment across the year 2014 shows that for the State of Idaho, the unemployment rate is driven primarily by large economic conditions rather than time of year. For both Custer and Lemhi Counties, however, there is a clear trend of unemployment falling in the summer months of June through August, and rising again in the fall and winter. Those core summer months coincide with the high-use season for floating on the Middle Fork, The Main Salmon and other shorter trips on the Salmon River.

Overall, the employment profile for Custer and Lemhi Counties shows local economic areas that are disproportionately dependent on tourism spending, and also that have a relatively concentrated period of tourism related activity during the summer months—the months associated with peak river-related recreation.



# ECONOMIC SIGNIFICANCE OF MIDDLE FORK RIVER-RELATED SPENDING ON LOCAL ECONOMIES

In an economic region as closely tied to tourism dollars for economic vitality as is the region including the Middle Fork of the Salmon and Custer and Lemhi Counties, single large economic drivers, such as recreational visitation to the Middle Fork, play a disproportionately large role in the strength and performance of the regional economy.

A traditional regional economic analysis of the significance of spending by Middle Fork outfitters, their clients, and private boaters on the economies of Custer and Lemhi Counties would begin with a detailed survey of river floaters. Such a survey would ask how much visitors to the river spend in the local economic area. This information would form the basis of the analysis.

Conducting a visitor survey is time-consuming and expensive. However, a more general analysis can be done using existing information and data from past surveys of Middle Fork users, outfitter revenue records, and data from other similar river settings in the western U.S.

In this analysis I have relied on a 1997 study of Middle Fork Commercial Client spending per trip<sup>5</sup>, Estimates of 2015 total Middle Fork outfitter revenue<sup>6</sup>, Estimated relationships between per trip whitewater spending for commercial vs. private boaters<sup>7</sup>, USFS records of 2005-2015 Middle Fork floater use<sup>8</sup>, and regional economic activity multipliers from similar western economic areas<sup>9</sup>.

## MIDDLE FORK OUTFITTERS WITH SUMMER BUSINESS OPERATIONS IN CUSTER OR LEMHI COUNTIES

While several Middle Fork Outfitters have business homes located outside of the Custer-Lemhi region, nearly all outfitters have warehouses or guide quarters or both in areas near the river. Overall, 92.6% of Middle fork outfitters have summer

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<sup>5</sup> D. English and J. Bowker. 1996. "Economic impacts of guided whitewater rafting: a study of five rivers." Water Resources Bulletin. Vol 32, No. 6. Pp. 1319-1328

<sup>6</sup> Personal Communication, various Middle Fork Outfitters, and data on USFS use fees paid in 2015.

<sup>7</sup> E. Hjerpe and Yeon-Su Kim. 2007. "Regional economic impacts of Grand Canyon river runners." Journal of Environmental Management. Vol 85 (2007) pp. 137-149.

<sup>8</sup> Data accessed at <http://www.fs.usda.gov/detail/scnf/recreation/wateractivities/?cid=stelprd3830283>.

<sup>9</sup> Multipliers from Coconino County AZ (Grand Canyon), and West Yellowstone, MT (Yellowstone NP Visitors) were estimated from IMPLAN Input-output economic models and data for these similar communities.

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***Overall, 92.6% of Middle Fork outfitters have summer bases of operation in Stanley, Salmon, or Challis, the three major communities in the 2-county region***

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bases of operation in Stanley, Salmon, or Challis, the three major communities in the 2-county region (Table 2).

**Table 2. 2015 Middle Fork Salmon Outfitters and their Primary Summer Season Business Headquarters.**

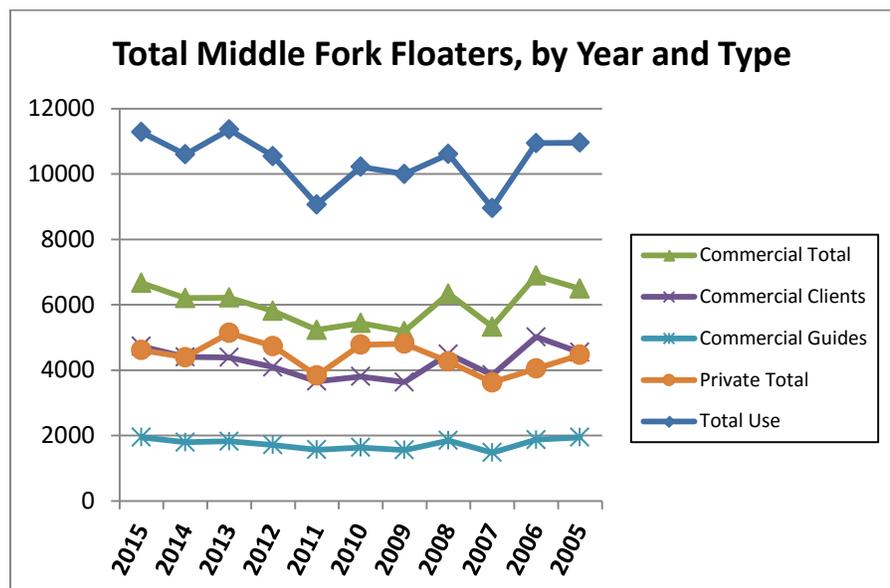
OUTFITTER	Operational/Seasonal Headquarters				
	STANLEY	SALMON	MCCALL	CHALLIS	KETCHUM
ARTA		YES			
Boundary Exp.		YES			
Adventure Sun Valley		YES			
Aggipah		YES			
Canyons River Co.			YES		
Custom River Tours	YES				
Dean Helfrich & Sons		YES			
Far & Away (Lentz)					YES
Helfrich Outfitters (Ken)		YES			
Hughes River Exp.	YES				
Idaho River Adventures		YES			
Idaho River Journeys		YES			
Idaho Wilderness Co.				YES	
Mackay Wilderness River	YES				
Middle Fork Adventures		YES			
Middle Fork Rapid Transit	YES				
Middle Fork River Exp.	YES				
Middle Fork River Tours		YES			
Middle Fork Wilderness Outfit.		YES			
Mountain Travel Sobek		YES			
NW Rafting Co (Echo)		YES			
Oars/Dories		YES			
Rocky Mountain River Tours	YES				
ROW		YES			
Solitude River Trips		YES			
Tight Lines (Jeff Helfrich)		YES			
Wilderness River Outfitters		YES			
<b>Total Outfitters</b>	<b>6</b>	<b>18</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>% of Outfitters</b>	<b>22.2%</b>	<b>66.7%</b>	<b>3.7%</b>	<b>3.7%</b>	<b>3.7%</b>

## MIDDLE FORK FLOAT USE LEVELS

Table 3 details both Commercial and Private Middle Fork float use levels from 2005-2015. Over this time period non-guide use has been fairly evenly split between an average of 4,240 commercial clients and an average of 4,430 private floaters per year. In addition to these, there has been about one guide/staff person floating for every 2.4 paying commercial clients.

**Table 3. Middle Fork Salmon Float Use, 2005-2015. (USFS use statistics)**

Year	Commercial Total	Commercial Clients	Commercial Guides	Private Total	Total Use
2015	6,670	4,730	1,946	4,614	11,284
2014	6,204	4,406	1,798	4,397	10,601
2013	6,219	4,393	1,826	5,141	11,360
2012	5,811	4,096	1,715	4,735	10,546
2011	5,232	3,663	1,569	3,837	9,069
2010	5,440	3,805	1,635	4,782	10,222
2009	5,194	3,636	1,558	4,809	10,003
2008	6,342	4,492	1,850	4,266	10,608
2007	5,332	3,853	1,479	3,627	8,959
2006	6,894	5,020	1,874	4,052	10,946
2005	6,492	4,546	1,946	4,467	10,959
<b>Average</b>	<b>5,985</b>	<b>4,240</b>	<b>1,745</b>	<b>4,430</b>	<b>10,414</b>



## LOCAL AREA SPENDING AND EMPLOYMENT IMPACTS OF MIDDLE FORK FLOAT USE

The estimation of the local area (2-county) significance of spending related to Middle Fork floating is outlined in Table 4. This table draws on values, relationships, and ratios from prior studies of Middle Fork outfitting, Grand Canyon floating and characteristics of western economies similar in complexity and setting to the Custer-Lemhi County region.

### FLOATER SPENDING IN THE 2-COUNTY REGION

Estimation of direct floater spending in the 2-county region begins with an estimate of total Middle Fork outfitter revenue for the 2015 float season. Based on conversations with outfitters and records of commercial use fees paid by outfitters to the USFS, it is estimated that total 2015 client Middle Fork payments to outfitters was between 8.26 and 8.55 million dollars.

Two adjustments were made to this total in recognition that not all of this money is spent in the 2-county region by the outfitters providing the trips. First the total client fees is multiplied by 92.59% to recognize that roughly 7% of the Middle Fork outfitters have Summer bases of operation outside the 2-county area. These outfitters and their clients likely still spend money in the 2-county area, but they are excluded to be conservative.

A second key adjustment is recognition that even the outfitters with operation centers in the 2-counties (in Salmon, Challis, or Stanley) likely spend a significant portion of their gross revenue outside the counties. Custer and Lemhi counties are very small economic areas with limited business diversity. Therefore, outfitters need to make purchases from businesses outside the economic area. There is no hard data on the extent to which Middle Fork outfitter revenue “leaks” out of the counties and is lost in terms of this spending further increasing local area economic activity. For this analysis I have assumed a range for this revenue “leakage” based on the relative size and complexity of the 2-county area and estimates of similar expenditure leakage from other western tourism economies<sup>10</sup> from a high of 50% leakage of total revenue to a low of 25% leakage of total revenue.

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<sup>10</sup> Hjerpe and Kim (2007) estimated a “leakage of roughly 13% from Coconino County AZ for spending by commercial Grand Canyon floaters, and English and Bowker (1996) reported 23% of Middle Fork Outfitter client spending that occurs in the state actually impacts final demand for goods and services. As the 2-county economy is much smaller than the state, I have assumed a range of spending leakage of between 25% and 50%.

Once outfitter revenue is adjusted for out-of-area purchases (or leakages), it needs to be further adjusted for the fact that Middle Fork clients spend significant amounts of money in the area on top of what is paid to the outfitters. In their study of Grand Canyon commercial floaters, English and Bowker (1996) estimated that only 76.5% of total local area client spending was for outfitter fees. Therefore in Table 4, adjusted outfitter revenue is inflated (divided by 0.765) to include these non-outfitter purchases made in the region.

Based on 2015 commercial client use levels, it is estimated that between \$1,057 and \$1,642 per client is spent on final demand goods and services in the 2-county region.

In their study of Grand Canyon floaters, Hjerpe and Kim (2007) estimated that private floaters spent 68% of what commercial clients spent in the local economic region (Coconino County in that study). I have adjusted estimated Middle Fork commercial client spending per person by 68% to adjust for this difference. In further recognition that many private parties purchase and pack their food and equipment substantially outside the local area, I have further adjusted per person spending by private floaters by between 50% and 75%. After adjustments it is estimated that the average private Middle Fork floater spends between \$359 and \$837 on goods and services in the 2-county economic area.

In economic significance or impact analyses, there are three components to total industrial output: direct expenditures, indirect expenditures, and induced expenditures. So far I have described the estimated direct expenditures made by commercial and private floaters within the Custer and Lemhi county region. These direct expenditures total between \$6.7 and \$11.7 million dollars (2015). Indirect spending is spending by businesses that serve the floaters in the area, and induced spending is spending by employees who are employed as a result of the direct floater spending (such as guides, or other service workers). Based on data from similar sized western counties, the indirect and induced effects multiplier for the 2-county area would be expected to range between 1.2 and 1.3.<sup>11</sup> Considering indirect and induced spending effects, the total economic impact of Middle Fork-related spending is estimated to be between \$8.0 and \$15.1 million in the 2-county area. Using standard ratios of total output in the amusement and recreation services economic sector of approximately \$75,000 output per full-time equivalent job, it is estimated that Middle Fork related spending supports between 107 and 202 full time equivalent jobs in the two counties.

While these employment numbers do not seem excessively large, they are quite substantial in terms of the small size of the 2-county economy. Overall, this

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***The 2015 total economic impact of Middle Fork-related spending is estimated to be between \$8.0 and \$15.1 million in the 2-county area. This spending supports between 107 and 202 full time equivalent jobs in the two counties.***

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<sup>11</sup> English and Bowker (1996) estimated indirect and induced multipliers for Middle Fork commercial client expenditures to be between 1.9 and 2.38 for the entire state of Idaho, depending on the measure of economic activity.

Middle Fork related employment constitutes between 19% and 35% of all travel and tourism related employment in the two counties. Further the Middle Fork River experience supports between 4.2% and 8.0% of all private employment in the counties.

*Middle Fork-related employment constitutes between 20% and 38% of all travel and tourism related employment in the two counties. Further, the Middle Fork River experience supports between 4.6% and 8.6% of all private employment in the counties.*

**Table 4. Estimated total Regional Economic Significance of Middle Fork Salmon Commercial and Private Floater spending on Output and Employment in the Custer and Lemhi County Economic Region.**

<b>Estimate/Calculation</b>	<b>Low Estimate</b>	<b>High Estimate</b>
Total Commercial Client Trip Payments	\$ 8,260,000	\$ 8,555,000
Percent of Outfitters Substantially Conducting Business in Custer and Lemhi Counties	92.59%	92.59%
Percent of Client fees spent in Custer & Lemhi Co.	50.00%	75.00%
Share of total client spending that is payments to outfitters	76.50%	76.50%
Estimated regional spending by Outfitted clients providing final demand impetus to the local economic area	\$ 4,998,790	\$ 7,765,977
2015 Commercial Clients	4,730	4,730
Average local direct spending per client	\$ 1,057	\$ 1,642
Private floater per trip spending as a percentage of Commercial floater spending	68.00%	68.00%
Average local direct spending per private floater	\$ 719	\$ 1,116
Additional adjustment for trip supplies purchased out of area	50%	75%
Adjusted local direct spending per private floater	\$ 359	\$ 837
2015 Private Floaters	4,614	4,614
Estimated Local area Private floater direct Spending in 2-county region	\$ 1,657,907	\$ 3,863,516
Estimated total Private and Commercial Direct Spending in the 2-county Economy	\$ 6,656,697	\$ 11,629,493
Average Small County total demand multiplier (includes indirect and induced spending)	1.20	1.30
Estimated total Economic significance of Middle Fork floater spending in 2-county area (Direct, Indirect, and Induced)	\$ 7,988,036	\$ 15,118,341
Implied full-time equivalent jobs	107	202
<b>Share of Tourism and Travel employment in Custer and Lemhi County Area</b>	<b>20.2%</b>	<b>38.3%</b>
<b>Share of total private employment in area</b>	<b>4.6%</b>	<b>8.6%</b>

#### OUTFITTER REVENUE AND FLOATER USE FEES

An important component of Middle Fork spending is the financial support commercial and private user fees provide for the USFS. Commercial outfitters pay 3% of revenue to the local USFS district as a condition of their permits. In 2015,

this fee amounted to \$256,700. Additionally, per day user fees are assessed on both commercial and private floaters. These per day recreation fees totaled over \$222,000 in 2015. In total, outfitter and floater fees to the USFS totaled \$479,000 in 2015. These fees provide important operating capital for use in managing the river and the recreational use it attracts.

## CONCLUSIONS

This analysis is based on existing readily available data. Collection of original survey data from commercial and private Middle Fork floaters would narrow the estimated range of impacts associated with Middle Fork spending on the 2-county economic region. However, even given the uncertainty in the estimates presented, it is clear that spending in the Custer and Lemhi County region that is directly attributable to Middle Fork floaters is a very important component of the health and vitality of the local economy. This conclusion is underscored by the compressed nature of the Middle Fork floating season and the fact that most of these impacts are concentrated during the 3-month Summer season, rather than distributed across the year.

The overarching conclusion of this analysis is that Travel and Tourism spending is a disproportionately important component of the economy of the Custer and Lemhi County region, and Middle Fork-related spending is a very large and important component of the Travel and Tourism sector in these counties, accounting for between 20% and 38% of all tourism-related employment in the counties.

## LIMITATIONS

This analysis is intended to present a representative and general picture of the economic importance of Middle Fork River-related spending to the local area economy. As such, it relies on data and statistics from both past Middle Fork studies and studies from other similar western communities and counties. Estimates are presented in ranges to reflect the inherent uncertainties associated with combining data from different study locations and times to produce 2015 estimates.

## AUTHOR

Chris Neher is a natural resource economist living in Stevensville, Montana. For the past 27 years he has worked for a private consulting firm in Missoula, MT and through the University of Montana on a broad range of natural resource economic issues. He also guided the Middle Fork from 1979-1989. Questions on this report can be sent to [Neher@montana.com](mailto:Neher@montana.com).