

Economic Contributions of Outdoor Recreational Activities in Malheur County

for:



by:



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Executive Summary

The goal of this research is to estimate the economic contributions to the statewide Oregon economy generated by outdoor recreation that occurs within the Owyhee wilderness region of Malheur County. Using existing data sources, this study estimates the level of participation, spending and economic contributions from selected outdoor recreation activities in Malheur County, Oregon. By far, the most popular activities in the region are day hiking and backpacking (Table E1). Collectively, they draw tens of thousands of day and overnight visitors who take multiple trips to the area.

Table E 1. Participation and outdoor recreational activity in Malheur County, Oregon

Total activity among local & regional residents	Visitors		Trips	
	Day	Overnight	Day	Overnight
Fishing	27,097	4,288	127,571	23,382
Camping	154	12,855	-	89,868
Trail-related (day hiking & backpacking)	44,551	27,291	204,685	81,314
Water-related (kayaking, canoeing, rafting)	21,761	5,665	65,535	20,868
Hunting	7,274	2,563	37,000	12,408

Over the course of a recreational trip, local & regional visitors spend money on a variety of items from fuel to food to lodging. Findings show that this direct retail spending amounts to \$43.8 million made on purchases in Malheur County. Nonlocal visitors who are Oregon residents spend \$1.6 million on items outside of the county but within the state. Collectively, this spending supports more than 460 jobs with a combined income of \$12.9million dollars and is responsible for \$6.1 million in tax revenues.

The direct expenditures made by visitors cycle through the local and state economy, generating additional rounds of spending driven by businesses who provide supporting services and goods to the outdoor-related recreation industries. Collectively, the direct spending plus the indirect and induced (aka “multiplier”) effects support more than 725 full and part-time jobs with a combined income of more than \$23.5 million. The economic activity generates \$10.4 million in state, local, and federal tax revenue.

Table E 2. TOTAL economic contributions in Oregon associated outdoor related activity in Malheur County

	Activity					Total
	Fishing	Camping	Trail-related	Water-related	Hunting	
Total by activity (\$ vales in '000s)						
Total output	\$10,871	\$13,693	\$30,305	\$9,383	\$4,746	\$68,998
Employment	102	147	331	104	45	729
Income	\$3,549	\$4,678	\$10,474	\$3,248	\$1,550	\$23,499
Federal taxes	\$851	\$1,140	\$2,542	\$784	\$372	\$5,689
State & local taxes	\$671	\$998	\$2,209	\$669	\$293	\$4,841

The economic activity associated with visitors traveling distances farther than 150 miles are not included within these results. At this time, the level of visitation to the area by this group of travelers is unknown. As a result, these findings are likely a conservative estimate of total economic activity attributable to outdoor recreation in Malheur County.

Even these conservative estimates indicate that the economy associated with outdoor recreation can be a powerful economic engine for rural communities, generating additional spending, supporting and creating jobs, and building future investments in open spaces and recreational areas. Maintaining current levels of visitation, and realizing the full potential of expanded levels of visitation following a change in designation, requires active management strategies that sustain and conserve opportunities for future natural resource and wildlife-related recreational opportunities. These results show economic activity is generated far beyond the borders of Malheur County when people visit. And, by extension, circumstances that reduce visitation have broader economic implications as well.

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Introduction

This study was undertaken to quantify the economic contributions of outdoor recreational activity in Oregon's Malheur County. Ultimately, the goal of the study is to communicate the magnitude of spending by these recreationists and their associated contributions to the county's economy. It also aims to inform discussions among legislators, agency personnel, and other stakeholders to assist with strategic decision making associated with management of the area's natural resources. The economic contributions associated with recreational visitation can be a powerful economic engine for communities, generating additional spending, supporting and creating jobs, and building future investments in open spaces and wildlife areas.

Methodology

Malheur County, Oregon is located along the southeastern border of the state. It covers roughly 6.4 million acres, much of which is held as federal land holdings by the Bureau of Land Management (BLM) (Figure 1). The area is predominantly rural and its economy relies on both agriculture and outdoor recreational tourism.

Malheur County offers a wide variety of outdoor recreational opportunities for its visitors. The focus of this research is in a group of non-motorized activities. The activity types targeted through this research effort are the following:

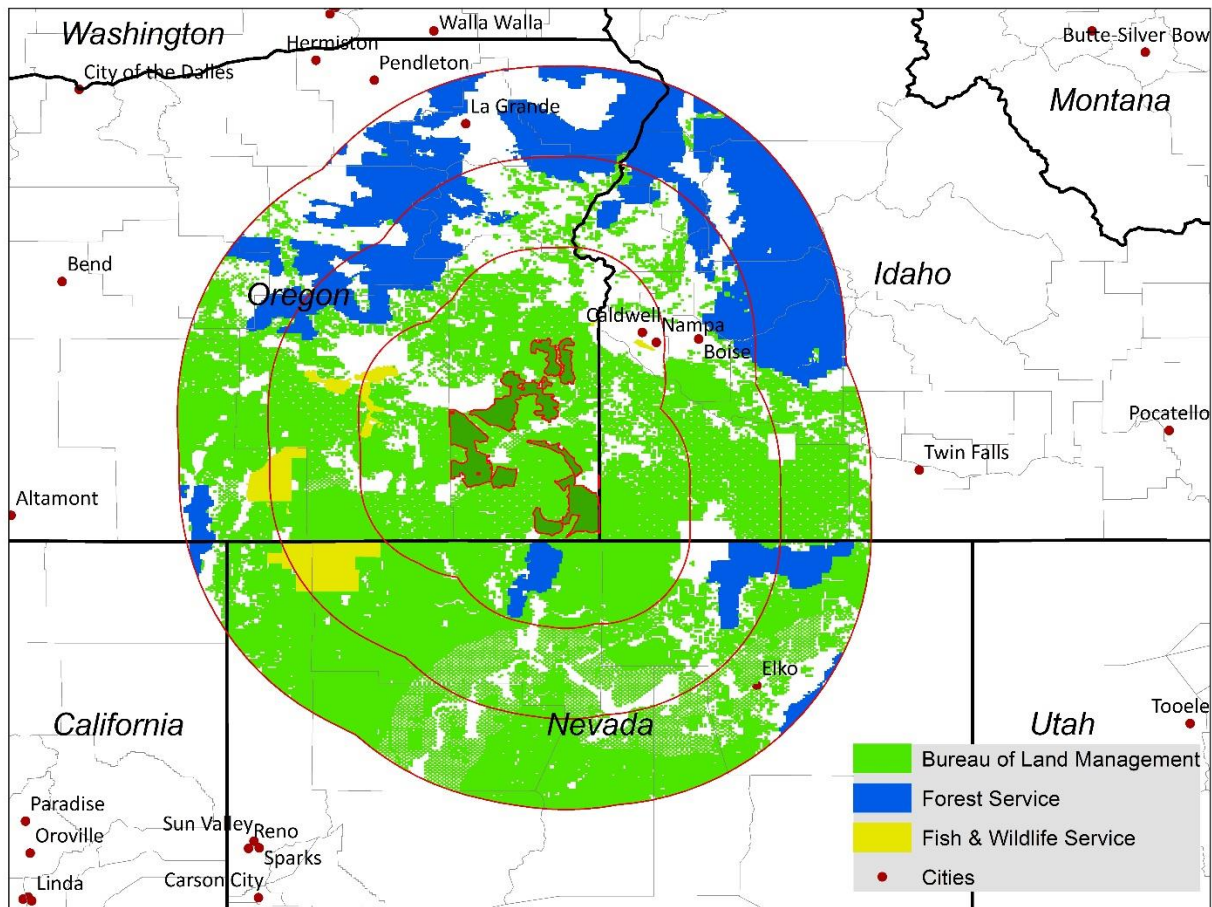
- Fishing
- Camping
- Hunting
- Trail-related (day hiking & backpacking)
- Water-related (kayaking, canoeing, and rafting)

Identifying the primary potential visitor market area

The landscape of recreational opportunities available in Malheur County draws visitors from across the region. While measuring the total visitation is beyond the scope of this effort, it does estimate visitation from a regional perspective. In order to estimate potential visitation, we define the market areas based on distance and alternative destinations.

Regionally, Malheur's primary recreational visitor market area draws from residents of Oregon, Idaho, and Nevada. For the purpose of this analysis, a maximum distance boundary of 150 miles defines the outer "rim" of the region. In addition to landownership types, Figure 1 shows geographical landmarks within the region as well as three "buffer" rings defining straight line distances from the current boundaries of BLM's Wilderness Study Areas in the county: 1) 0-50 miles, 2) 51-100 miles, and 3) 101-150 miles away.

Figure 1. Landownership and geographical characteristics of the area under study



Counties within each buffer ring are identified and assigned to one of the buffer rings (Table 1). When a county straddles a buffer boundary, the assignment is based on the geographical location of the majority of population centers. Similarly, a county is excluded from this analysis when the majority of population centers lie outside of the 150-mile buffer.

Table 1. Distance buffer assignment by county

State	Distance buffer categories		
	0-50 miles	51-100 miles	101-150 miles
Oregon	Malheur	Baker	Grant
		Harney	Union
			Wallowa
Idaho	Canyon Payette	Ada	Adams
		Boise	Elmore
		Gem	Valley
		Owyhee	
		Washington	
Nevada		Humboldt	Elko
			Lander
			Pershing

Note: The list of counties has been trimmed to reflect only those with the majority of population centers within the buffer ring.

Current total population estimates for each county are obtained from the U.S. Census Bureau. The majority of the regional potential visitor market resides in Idaho and the market areas with the largest population centers are in eastern Idaho (Ada and Canyon County) (Table 2).

Table 2. Estimated total population by state and distance

	Estimated total population by buffer distance		
	0-50 miles	51-100 miles	101-150 miles
Total population	246,907	494,360	143,420
Oregon	30,380	23,205	39,831
Idaho	216,527	454,107	39,683
Nevada	-	17,048	63,906

Source: U.S. Census Bureau 2015.

Determining the level of participation

Participation among the total population is estimated using rates of involvement in each activity determined from a survey of outdoor recreational activity (Southwick 2013).¹ Participation rates range between a high of 33% in day hiking and a low of 6% in kayaking (Table 3). The level of engagement in an activity is also defined using trip duration: day trips and overnight trips. The majority of participants take part in day trips, and make multiple day trips over the course of a year.

¹Participation in various outdoor recreational activities was determined in each of the nine U.S. Census regions.

Table 3. Participation rates by activity: Overall and by trip length

Activities	Overall	Day trip		Overnight trip	
	participation rate	% taking a day trip	# of day trips	% taking an overnight trip	# of overnight trips
Fishing	24%	78%	5.6	18%	5.5
Camping	26%	na	na	45%	7.0
Day hiking	33%	59%	5.3	67%	3.0
Rafting	7%	61%	3.6	22%	7.4
Backpacking	14%	80%	5.6	24%	3.1
Canoeing	7%	68%	2.7	38%	2.0
Kayaking	6%	87%	4.5	24%	2.5
Hunting	9%	60%	6.1	28%	4.8

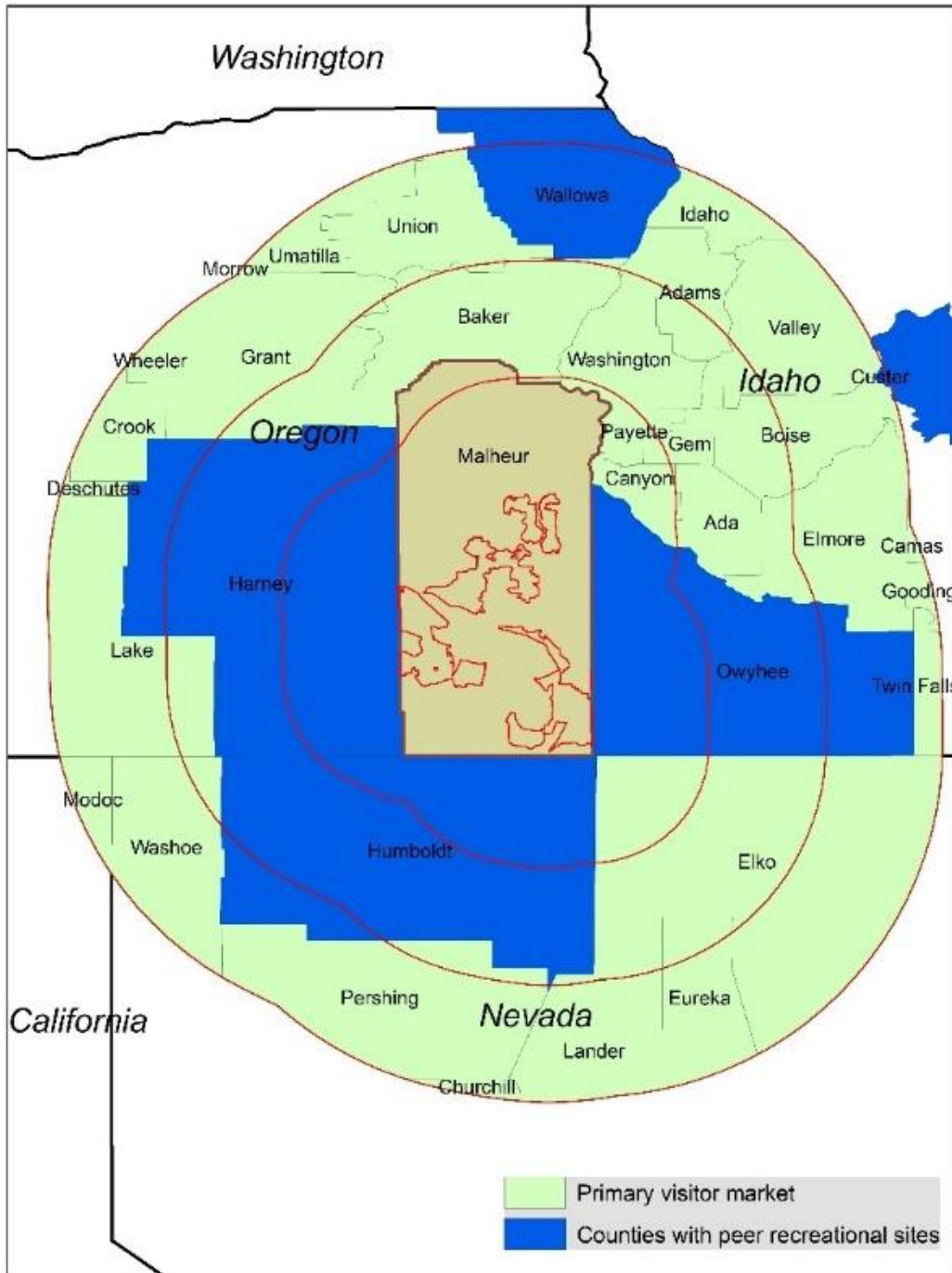
Sources: Southwick 2013a and b

Two adjustments are made to the estimated regional participation rates. First, the decision to visit a location is influenced by the travel distance to the destination. Only a proportion of potential visitors to Malheur County will travel from home to take part in an outdoor recreation activity. Trip duration is commonly a contributing factor to the maximum travel distance preference. For example, visitors planning a day trip more commonly prefer to travel shorter distances than overnight visitors. As a result, the total number of potential visitors is proportionally adjusted based on their distance buffer assignment. These proportional adjustments are derived from survey data collected from outdoor recreationalists and used in the development of an economic assessment tool (Southwick 2013b).

Second, the availability of and distance to substitute locations plays a part in the choice of destination. In a recent study by Headwater Economics (2013), they identify a number of counties as “peers” to Malheur. Characteristics specific to landscape, rurality, remoteness, and protected acres are used to identify counties with similar locales in six western states. Four of these counties either neighbor Malheur County or are within driving distance.

Visitors are likely to take into consideration the opportunities in these peer counties when making their plans to take part in outdoor recreation. As a result, regional participation rates are adjusted based on the number of potential competing peers. For each county, a simple probability is calculated based on the location of peers in relation to a country. For example, residents of Canyon County are determined to have two peer counties (Malheur and Owyhee Counties) to visit. The simple probability, 50% in this case, is applied the total number of potential visitors. This includes the residents of Malheur County.

Figure 2. Regional market area and “peer” counties to Malheur County, Oregon



Quantifying travel and equipment spending

Average expenditure profiles for each activity type are derived from two primary sources. First, for fishing and hunting activities, spending profiles were derived from the USFWS National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (2011). Second, for all other activities, spending profiles were derived from a national survey sponsored by the Outdoor Industry Association (Southwick 2013). Each profile was developed at a per-trip and a per-visitor level.

These expenditure profiles are categorized to include spending on both trip and equipment related items. Trip spending captures expenditures on items associated with travel itself (fuel and groceries). Over-night spending reflects expenses incurred during the whole trip and include lodging. Equipment spending captures annual expenditures on items associated with the activity itself (fishing rods, hiking gear, etc.).

Total direct spending is then adjusted based on where the spending is likely to occur from a geographical perspective, within Malheur County or within the state. Spending that typically takes place where the activity occurs (i.e., destination spending such as lodging, guide fees, etc.) is allocated in full to Malheur County. Spending that typically takes place closer to the fisher’s place of residence (i.e., rods, reels, backpacks, hiking boots, rifles, and other equipment) is assigned based on residency. In other words, equipment spending by residents of Malheur County were included among total direct spending occurring within the county. Equipment spending by nonlocal visitors who reside within the state of Oregon is included among total direct spending occurring at the state level. And, equipment spending by visitors who reside outside of Oregon was not included in total direct spending. Equipment spending by visitors who reside outside of Malheur County were not included in total direct spending.

Some spending takes place in both locations, the visitor’s place of residence and the destination where the activity occurs (i.e., groceries and fuel). For this hybrid spending, half of the spending is allocated using the destination spending methodology and half was allocated using the residential spending methodology to capture the fact that spending occurred in multiple places (Table 4).

Table 4. Allocation of travel and equipment spending by trip duration and distance

	Local (resides within 50 miles)	Non-local (resides beyond distance of 50 miles)		
		Oregon resident		Nonresident
		Spending in Malheur	Spending in state (outside of Malheur)	
Day trip	100% gas & food costs	50% of gas & food	50% of gas & food and other trip spending	50% of gas & food
Overnight trip	100% of gas, food, and lodging costs	50% of gas, food, and lodging costs	50% of gas & food and other trip spending	50% of gas & food and 100% of lodging
Annual equipment	Activity related equipment spending	na	Activity related equipment spending	na

Hunters who live locally are estimated to spend approximately \$70 per day trip on fuel, groceries, and other trip related costs such as equipment rental or other fees (Table 5). Anglers are estimated to spend roughly \$50 on their day trip. Local recreational users who make overnight trips are estimated to spend between \$422 (hunters) and \$98 (campers). All of this spending is assumed to take place in the local economy. Estimated annual equipment spending is highest among hunters (\$679) and lowest among water-related activity participants (\$73).

Table 5. Estimated per trip spending by distance and duration

	Spending in Malheur County*			Spending in Oregon**	
	Day	Per trip Overnight	Annual Equipment	Trip related (day and overnight)	Annual equipment
Local					
Fishing	\$50.11	\$360.34	\$421.20	na	na
Camping	\$0.00	\$98.98	\$207.80	na	na
Trail-related	\$63.45	\$156.78	\$101.21	na	na
Water-related	\$62.06	\$180.24	\$73.08	na	na
Hunting	\$69.94	\$421.90	\$679.19	na	na
Regional					
Fishing	\$14.43	\$168.31	na	\$35.68	\$421.20
Camping	\$0.00	\$86.24	na	\$24.32	\$207.80
Trail-related	\$31.73	\$122.29	na	\$31.73	\$101.21
Water-related	\$31.03	\$140.59	na	\$31.03	\$73.08
Hunting	\$20.96	\$121.56	na	\$39.50	\$679.19

*Does not include expenditures made “near” home for regional visitors.

**Captures the “near” home expenditures made by regional visitors who live in Oregon.

Source: US DOI 2011 and Southwick 2013

Spending among recreational users who live outside of the local area but within the region are likely to spend in a similar fashion. However, a portion of the spending occurs outside of the local area but may occur within Oregon. As a result, spending profiles for regional residents require a different allocation (Table 4).

With this in mind, approximately \$31 is spent locally for fuel and groceries by folks who live within the region and who visit to take part in trail or water-related activities. Anglers are estimated to spend roughly \$14 in the local area on their day trip. Recreational users who make overnight trips are estimated to spend between \$170 (anglers) and \$86 (campers) in the local economy.

Outside of the local economy, visitors to the Malheur who are state residents make trip and equipment related purchases to be used during their time spent recreating in Malheur. Hunters spend an estimated \$39 on food, fuel, and other items purchased “near” home while campers spend an estimated \$24 “near” home. The equipment purchases associated with the outdoor recreational activity is also included among the economic contributions within the larger state economy.

Measuring economic contributions

Estimates of economic benefits can be measured using a variety of approaches, some more restrictive than others. But, each provides an understanding of the economic activity associated with spending by recreational users. The approach implemented here is to measure economic contributions by capturing the business and financial activity resulting from the use of a resource by the targeted activity groups who are residents of the region. This includes residents and nonresidents of Malheur County.

The cycling of economic activity affects the economy in three different forms: direct, indirect and induced. A direct effect is defined as the economic contribution of the initial purchase made by the consumer (the original retail sale). Indirect effects are the secondary effects generated from a direct contribution, such as the retailer buying additional inventory, and the wholesaler and manufacturers buying additional raw materials. Indirect effects impact not only the industry being studied but also those industries that supply the first industry. An induced effect results from the spending of salaries and wages paid by the directly and indirectly effected industries. The employees of these industries spend their income on various goods and services. These expenditures are induced contributions, which, in turn, create a continual cycle of indirect and induced effects.

The direct, indirect, and induced effects sum together to provide the overall economic contribution of the activity under study. As the original retail purchase (direct effect) goes through round after round of indirect and induced effects, the economic contribution of the original purchase is multiplied, benefiting many industries and individuals. Likewise, the reverse is true. If a particular item or industry is removed from the economy, the economic loss is greater than the original lost retail sale.

Once an original retail purchase is made, each successive round of spending is smaller than the previous round. When the economic benefits are no longer measurable, the economic examination ends. In other words, the direct spending made by visitors cycles through the local county economy generating additional rounds of spending by businesses that provide supporting services and goods to visitors. This is known as the multiplier effect and includes indirect effects arising from additional spending within businesses supporting those businesses frequented by recreational users as well as induced contributions which result from household spending by employees of affected businesses. The total economic contributions reflect the collective effect of the direct retail spending as well as the indirect and the induced effect.

Five specific measures are presented in this report:

Direct spending: The initial spending associated with visitors. In this case it includes spending that is anticipated to occur in Malheur County.

Total output: The total value of business sale revenues. It includes both the value at the final purchase as well as the value of the intermediate inputs.

Employment: The number of full- and part-time jobs created or supported as a result of the economic activity.

Labor income: Total payroll, including salaries, wages and benefits paid to employees and business proprietors

Tax revenue (Federal and State & Local): All federal, state, and local taxes paid by individuals and businesses.

The next section reports the estimated level of visitation to Malheur County, direct spending attributable to visitors taking part in outdoor recreation, and the economic contributions to the local and state economy spurred by that spending. For simplicity, results are presented for two groups of potential visitors based on their distance from Malheur County:

Local: the population of visitors who live within 50 miles of the country (nearest buffer ring).

Regional: the population of visitors who live further than 50 miles but within 150 miles from the county (second and third buffer ring).

Findings

In general, people who live in or closer to Malheur County are more likely to take part in day trip activities. The two most popular activities among all day visitors are trail-related activities and fishing (Table 6). Trail-related activities such as backpacking or day hiking draws more than approximately 30,000 visitors from across the region. Fishing draws approximately 12,000 visitors. These day visitors make multiple trips through the year. In fact, trail-related users generate more than 200,000 days of recreational use and fishing generates more than 44,000 days of recreational use.

Trail-related activities continue to be very popular among overnight visitors, drawing more than 27,000 people from within the region who take more than 80,000 overnight trips. Camping is the second most popular activity, drawing more than 17,000 visitors who take more than 86,000 trips.

Table 6. Participants and activity in Malheur County

	Participation		Activity	
	Day visitors	Overnight visitors	Day trips	Overnight trips
Local (within 50 miles or less)				
Fishing	5,669	323	7,898	1,759
Camping	-	867	-	6,057
Trail-related	33,913	7,637	146,592	22,831
Water-related	13,725	1,368	38,205	5,365
Hunting	1,623	187	2,479	904
Regional (further than 50 miles but no more than 150 miles)				
Fishing	6,680	2,313	37,493	12,615
Camping	-	9,265	-	64,781
Trail-related	10,638	19,655	58,093	58,483
Water-related	8,036	4,297	27,330	15,503
Hunting	2,237	2,104	13,673	10,188

Source: U.S. Census Bureau 2014 & Southwick 2013

Recall that activity specific spending estimates are calculated but actual spending is attributed based on a visitor's county of residence to include only spending that is expected to occur within the Malheur County economy or within the state of Oregon.

Total direct spending occurring in Malheur on outdoor recreational activity by local residents accumulates to \$22.0 million and by visitors who live in the larger regional area accumulates to \$21.8 million (Table 7). And, direct spending occurring outside Malheur but within the state by Oregon and regional residents accumulates to \$1.6 million. Collectively, this spending supports 460 full and part-time jobs and \$12.9 million in income in the state. It also generates close to \$6.1 million in federal, state, and local taxes.

Table 7. DIRECT economic activity in Oregon associated with outdoor recreation within Malheur County (dollar values in '000s)

	Activity					Total
	Fishing	Camping	Trail-related	Water-related	Hunting	
Economic activity occurring in Malheur County by local residents						
Direct spending	\$6,119	\$2,241	\$8,972	\$2,449	\$2,254	\$22,035
Employment	42	26	103	29	16	216
Income	\$1,292	\$712	\$2,803	\$775	\$476	\$6,057
Federal taxes	\$308	\$174	\$683	\$187	\$114	\$1,466
State & local taxes	\$268	\$176	\$686	\$183	\$99	\$1,412
Economic activity occurring in Malheur County by regional residents						
Direct spending	\$2,664	\$5,587	\$8,995	\$3,028	\$1,525	\$21,799
Employment	18	65	103	36	11	233
Income	\$562	\$1,774	\$2,810	\$958	\$322	\$6,427
Federal taxes	\$134	\$434	\$685	\$231	\$77	\$1,561
State & local taxes	\$117	\$440	\$688	\$226	\$67	\$1,537
Economic activity occurring within Oregon but outside of Malheur County						
Direct spending	\$308	\$358	\$581	\$172	\$190	\$1,662
Employment	2	4	7	2	2	17
Income	\$65	\$114	\$181	\$54	\$51	\$466
Federal taxes	\$16	\$28	\$44	\$13	\$12	\$113
State & local taxes	\$13	\$28	\$44	\$13	\$11	\$110
Total economic activity						
Direct spending	\$9,091	\$8,185	\$18,548	\$5,649	\$4,023	\$45,496
Employment	63	95	213	67	28	465
Income	\$1,919	\$2,600	\$5,795	\$1,786	\$849	\$12,950
Federal taxes	\$458	\$636	\$1,412	\$432	\$203	\$3,140
State & local taxes	\$398	\$645	\$1,418	\$422	\$176	\$3,059

*Includes only spending in the local area by visitors who reside outside of the local area.

The direct spending taking place in the county and state in turn stimulates additional economic activity in the area. Total economic output occurring in Malheur associated with the direct spending on outdoor recreational activity by local residents accumulates to \$32.5 million and by visitors who live in the larger regional area accumulates to \$34.1 million (Table 8). And, total economic output occurring outside Malheur but within the state by regional and Oregon residents accumulates to \$2.4 million. Cycling of the direct spending within the economy multiplies its benefits and in turn supports 729 full and part-time jobs and \$23.5 million in income. It also generates close to \$10.4 million in federal, state, and local taxes.

Table 8. TOTAL economic activity including multiplier effects in Oregon associated with outdoor recreation within Malheur County (dollar values in '000s)

	Activity					Total
	Fishing	Camping	Trail-related	Water-related	Hunting	
Economic activity occurring in Malheur County by local residents						
Total output	\$7,317	\$3,748	\$14,659	\$4,068	\$2,696	\$32,488
Employment	69	40	160	45	25	340
Income	\$2,389	\$1,280	\$5,067	\$1,408	\$880	\$11,024
Federal taxes	\$573	\$312	\$1,230	\$340	\$211	\$2,666
State & local taxes	\$452	\$273	\$1,069	\$290	\$166	\$2,250
Economic activity occurring in Malheur County by regional residents						
Total output	\$3,186	\$9,346	\$14,697	\$5,030	\$1,824	\$34,081
Employment	30	101	160	56	17	364
Income	\$1,040	\$3,193	\$5,080	\$1,741	\$595	\$11,649
Federal taxes	\$249	\$778	\$1,233	\$420	\$143	\$2,823
State & local taxes	\$197	\$681	\$1,071	\$359	\$113	\$2,421
Economic activity occurring within Oregon but outside of Malheur County						
Total output	\$368	\$599	\$949	\$285	\$291	\$2,493
Employment	3	6	10	3	3	26
Income	\$120	\$205	\$328	\$99	\$95	\$847
Federal taxes	\$29	\$50	\$80	\$24	\$23	\$205
State & local taxes	\$23	\$44	\$69	\$20	\$14	\$174
Total economic activity						
Total output	\$10,871	\$13,693	\$30,305	\$9,383	\$4,810	\$69,062
Employment	102	147	331	104	45	729
Income	\$3,549	\$4,678	\$10,474	\$3,248	\$1,571	\$23,520
Federal taxes	\$851	\$1,140	\$2,542	\$784	\$377	\$5,694
State & local taxes	\$671	\$998	\$2,209	\$669	\$297	\$4,845

*Includes only spending in the local area by visitors who reside outside of the local area.

It can be helpful to place these results in context with other industries within in Malheur County. Table 9 takes a specific look at employment and income by sector for Malheur County. Using data from the Bureau of Economic Analysis (BEA), the proportional contributions of employment and income within the general travel & tourism economy, the outdoor recreational economy studied in this report, and other enterprises are calculated.

Travel and tourism enterprises include industries in the accommodation, restaurant, retail, arts and entertainment sectors. Non-travel and tourism enterprises include industries in sectors such as utilities, communication, healthcare, and finance.

As a whole, travel and tourism related enterprises support 15% of employment and 8% of income. Within that sector, the recreational economy measured through this report supports approximately 3% of employment and 2% of income. In addition to tourism, farm enterprises support 12% of employment and 8% of income. Non-travel and tourism related enterprises support more than half of all jobs and income within Malheur.

Table 9. Malheur County employment and income

Industry sectors	Employment by sector	Income by sector
Travel & tourism related enterprises*	15.5%	7.9%
Recreational economy (a segment of travel)	2.7%	1.9%
Non-travel & tourism related enterprises*	53.3%	52.5%
Farm enterprises**	12.1%	7.0%
Government and government enterprises**	19.2%	32.6%

*Source: Adapted from Headwaters 2016

**Source: Bureau of Economic Analysis

Usage projections

Evidence suggests that visitation to a region can vary following a change in designation of public land. The designation, such as Conservation Area, may communicate or signal a caliber of natural resources and wildlife-related opportunities, thereby motivating potential users to visit the area (BBC 2012). Based on this evidence, potential future visitation and economic contributions are modeled for Malheur County.

In a recent study of the Rio Grande del Norte in New Mexico, BBC Research and Consulting reports that visitation can experience substantial growth. This growth is largely dependent upon the site itself as well as the cultural climate in the United States. Factoring in the site characteristics and assuming no change in visitation by local residents, BBC estimates forecasts visitation to Rio Grande del Norte to increase by 200% among nonlocal residents, resulting in an increase of total direct spending of 85% (\$11.2 million to \$20.8 million).

Current direct spending associated with outdoor recreation in Malheur County is estimated to be \$45.4 million. Using the same approach, projected direct spending is estimated to be \$68.1 million, a 50% increase.

Conclusions

The goal of this effort is to help provide insight about jobs, tax revenues and other economic contributions at a county level that result from visits to Malheur County by people who take part in outdoor recreational activities. The region, and Malheur County in particular, draws thousands of visitors every year. This population is motivated to recreate outdoors and the available lands play an important role in their outdoor recreational activities.

Specifically, Malheur County hosts tens of thousands of visitors from the Idaho, Oregon, Nevada region who spend more than 200,000 day trips and 100,000 overnight trips in the area. Spending associated with these visits leads to significant economic contributions to the local economy. Direct spending associated with these visits is estimated at \$22.0 million among visitors who live in the local area and \$21.8 million among visitors who live outside the local area. And, direct spending occurring outside Malheur but within the state by regional and Oregon residents to \$1.6 million.

Direct retail spending by these visitors to Malheur County supports 465 jobs that provide labor income of \$12.9 million dollars and generates an estimated \$6.1 million in tax revenues. Incorporating direct and indirect economic contributions from spending in Malheur by both local and regional residents as well as spending occurring within Oregon, economic activity by visitors supports 729 full and part-time jobs and \$23.5 million of income. The total economic activity generates \$10.4 million in local, state and federal tax revenues.

These findings are a conservative estimate of total economic activity that can be attributed to outdoor recreation activities. Excluded from these results are the economic activity associated with visitors who reside farther than 150 miles away and travel to participate in this targeted group of activities. At this time, the level of visitation to the area by this group of travelers is unknown. Measuring participation levels among all visitors to Malheur County would require a larger research effort that, at a minimum, would include access point monitoring and intercept surveys.

Maintaining current level of visitation, and realizing the full potential of expanded levels of visitation following a change in designation, requires active management strategies that sustain and conserve opportunities for future natural resource and wildlife-related recreational opportunities. These results show economic activity is generated far beyond the borders of Malheur County when people visit. And, by extension, circumstances that reduce visitation have broader economic implications as well.

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