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# **Economic Significance of Outdoor Recreation in the Gila and San Francisco River Watersheds**

## **Final Report**

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## **Introduction**

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Southwick Associates, under contract to The Pew Charitable Trusts, conducted a study to estimate the economic contributions associated with water-related outdoor recreation in the Gila River and the San Francisco River watersheds located within southwestern New Mexico. The headwaters of the Gila River and the San Francisco River in New Mexico provide unique habitat to a large range of bird and mammal populations.

Recreational activity that occurs along the water within the designated river basins and the annual spending by visitors in pursuit of outdoor recreation generates economic activity in the region and throughout the statewide economy. This study documents the economic activity, jobs, income and tax revenues that accrue to the statewide New Mexico economy that are directly supported by the recreational spending. In addition to the direct economic measure, the study also reports the total economic contributions that include the multiplier effects as the recreational spending ripples across the businesses that are indirectly impacted.

## **Acknowledgements**

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Southwick Associates, Inc. of Fernandina Beach, FL conducted this study under contract to The Pew Charitable Trusts. The primary authors are Thomas Allen and Lisa Bragg. The authors wish to express their appreciation to Patrick Lane, Kevin He, Sarah Spell and Cliff Zukin of The Pew Charitable Trusts for their direction, assistance and support. We also express our thanks to John Bergstrom for his review of an earlier draft of this report. Expenditure data for outdoor recreation activities in New Mexico was collected under a contract to the Outdoor Industry Association and is used in this study with their permission. The views and conclusions expressed are those of the authors and Southwick Associates and do not necessarily reflect the views of The Pew Charitable Trusts.

## **Scope of Study**

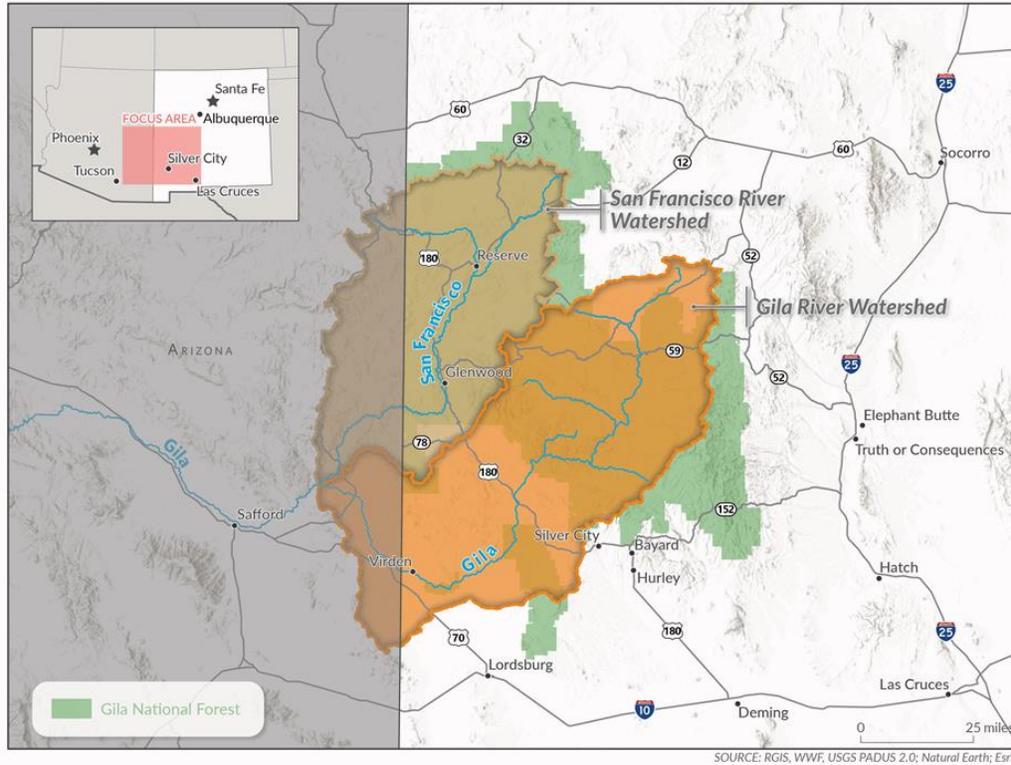
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This study examines the economic significance of non-motorized outdoor recreation that takes place on or along water within in the Gila River and San Francisco River watersheds. In this context, economic activity is stimulated by expenditures in New Mexico associated with the outdoor recreation that takes place in the watersheds. The direct expenditures for recreation include spending anywhere within the state of New Mexico for trip-related goods and services, and purchases of equipment and accessories used for the different types of recreation. The economic contributions are measured by the economic output, jobs, income, value-added and

tax revenues that are directly and indirectly (multiplier effect) associated with the direct spending by outdoor recreation participants.

The boundaries of the watersheds are defined along USGS 8-digit HUC (Hydrologic Unit Codes) (Figure 1).

**Figure 1. Boundaries of the Gila River and San Francisco River watersheds.**



## Target Population

The target population for the study are adults age 18+ who participated in outdoor recreation along water in either or both of the subject river watersheds. The Gila and San Francisco Rivers flow through southwest New Mexico and southeast Arizona. The survey participants were drawn from a stratified, random sample of the general populations of adult residents of New Mexico and Arizona. The sampling frame included all residential addresses in New Mexico and Arizona. The address-based, randomized sample was provided by Marketing Systems Group headquartered in Horsham, Pennsylvania.

## Recreational Activities

The choice of recreational activities was informed by previous national and state-level outdoor recreation studies conducted by Southwick Associates (Outdoor Industry Association, 2017; Southwick Associates, 2006, 2013, 2017, 2018 and 2019). Based on prior experience and discussions with The Pew Charitable Trusts' staff, the study includes seven types of recreational activities. While the final results do not present activity-specific economic contributions, the data collection was conducted at the activity level.

- Trail sports (day-hiking on trail, backpacking, climbing ice or rock, mountaineering, horseback riding, running 3+ miles)
- Bicycling (cycling on paved road or off-road, skateboarding)
- Camping (RV campsite, tent campsite, or at a rustic lodge)
- Water sports (swimming/canoeing/kayaking/rafting/paddle-boarding)
- Hunting & shooting (shotgun, rifle, or bow)
- Fishing (recreational fly and recreational non-fly)
- Wildlife-watching (viewing, feeding or photographing animals, bird watching)

## Methods

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Economic contributions from outdoor recreation are the result of retail purchases of goods and services that can be directly tied to recreation activities. In this study, we estimate the number of people who participate in outdoor recreation within the river watersheds and their total days of recreation activity. We then apply an average spending per day for outdoor recreation to the estimated days of activity to determine the total spending in New Mexico that is the result of outdoor recreation in the river watersheds. The estimated number of people and their days of activity were developed from a survey conducted specifically for this study. The average spending profiles of people who participate in outdoor recreation in New Mexico are taken from a prior nationwide study of outdoor recreation conducted for the Outdoor Industry Association (Southwick Associates 2017). Expenditures for fishing, hunting and wildlife viewing are drawn in part from a national survey conducted by the US Fish and Wildlife Service (USFWS 2011; USFWS 2014).

### Primary Data Source – Outdoor Recreation Survey

An online questionnaire was programmed, fielded and managed by Southwick Associates using the SurveyGizmo platform. Respondents were invited to participate in the survey via letters mailed to an address-based sample of households in New Mexico and Arizona. The front side of

the letter was printed in English; the reverse side of the letter provided a Spanish-language translation of the invitation. Each version included the web address for the questionnaire and an identification number that was unique to each addressee. A follow-up reminder letter was mailed to people who did not respond to the first mailing (see Appendix G for samples of the letters). The first letter was mailed on May 5, 2020; the reminder letter was mailed on May 15, 2020. By May 28<sup>th</sup>, the survey had generated 370 responses, or 4.4% of the deliverable mailed invitations.

The mail push-to-web approach yielded a lower response rate than was anticipated based on prior estimates. To boost response, a follow-up telephone-based campaign was conducted to remind people who were mailed letters of invitation to take the survey. A secondary goal of the telephone effort was to provide a basis for determining possible existence of non-response bias in the initial sample who responded to the mailed letters alone. Between June 10, 2020 and June 12, 2020 7,008 telephone calls were made to 5,056 unique telephone numbers of non-respondents that were included in the original address-based sample. The telephone campaign was conducted by Dynata. The telephone script sought first to confirm that the target had received the invitation letter, then asked the target to complete the online survey. Targets were provided with the survey URL and their unique identification number, if needed (see Appendix H for the telephone script). During the final day of calling, voice messages were left to describe the purpose of the call and offer the targets an opportunity to call a phone number to obtain their unique identification number, if needed. Of the 7,008 calls that were placed, only 29 resulted in a confirmation that the target had received the letter. The balance of calls resulted in no pick-up or target unavailable (3,858) or targets who refused the call (1,099). On the third day, voice messages were left on 1,062 calls (Table 1). The resulting number of people who responded to the survey as a result of the telephone call was deemed inadequate to determine the presence of recall non-response bias in the overall sample.

**Table 1. Disposition of calls made during the telephone reminder campaign.**

<b>Telephone follow-up</b>	
Unique Numbers	5,056
Calls Made	7,008
No answer / answering device	3,858
People unavailable/refused	1,099
People listened to the Intro+	110
Complete/partial response	35
Confirmed letter recv'd	29
Voice messages left	1,062

The survey was closed on June 30, 2020 with 487 survey responses, or 5.8% of the deliverable mail invitations. Data cleaning removed 27 responses for a final sample of 460 responses.

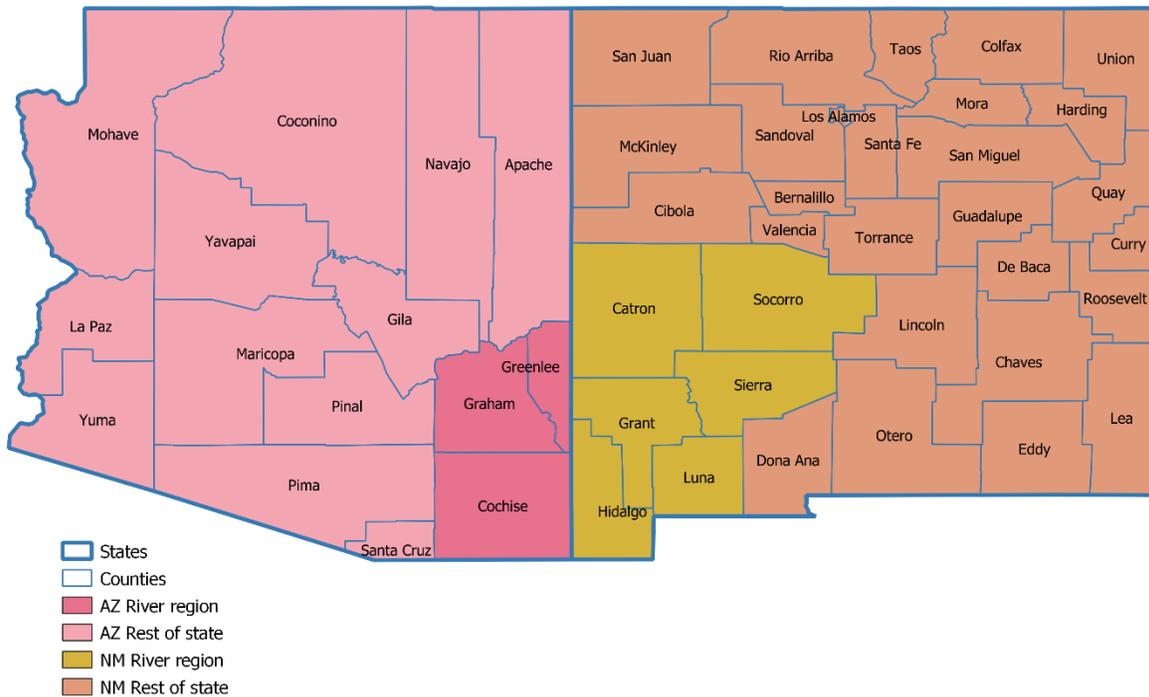
### Stratified Sampling

The sampling frame for the survey was the general adult populations of New Mexico and Arizona. To increase the likelihood of reaching people who may have used the rivers for outdoor recreation, the sample was stratified by state and by region within each state. Each state included a region defined along county boundaries that was closest to the river and a region that included the rest of the state (Figure 2). The sample was evenly divided across the 4 stratified regions with 2,250 letters mailed to households in each region. Post-survey weights were applied to the sample according the stratified design to ensure representative distribution across the two states, combined (Table 2).

**Table 2. Sample stratification and response, by stratum.**

	AZ-1 Rest of State	AZ-2 River Region	NM-1 Rest of State	NM-2 River Region	TOTAL
Mail out	2,250	2,250	2,250	2,250	9,000
Undeliverable	149	138	145	167	599
<b>Net mailout</b>	<b>2,101</b>	<b>2,112</b>	<b>2,105</b>	<b>2,083</b>	<b>8,401</b>
Reponses	96	110	113	160	487
<b>Response rate</b>	<b>4.6%</b>	<b>5.2%</b>	<b>5.4%</b>	<b>7.7%</b>	<b>5.8%</b>
<b>Usable responses</b>	<b>90</b>	<b>106</b>	<b>110</b>	<b>153</b>	<b>460</b>
	20%	23%	24%	33%	100%

**Figure 2. County-based, geographic regions defined for sample stratification.**



### Sample Weighting and Representativeness

In addition to weights to address the pre-determined geographic stratification of the sample, the demographic characteristics of the respondents were compared to US Census information for the general adult populations of New Mexico and Arizona. Specifically, distributions of the sample on the basis of age, gender and household income were used to compute weights to ensure representativeness of the sample. A rake weighting procedure in SPSS (version 18) was used to produce a single weight variable across geographic strata, age, gender and income (Table 3). Both proportional and expansion weights were generated for the sample.

**Table 3. Sample distribution across geographic and demographic dimensions.**

		The Pew Charitable Trusts Survey Sample		US. Census Benchmarks
		Count	Unweighted %	
<b>Region</b>	AZ Rest of State	90	19.6%	74.3%
	AZ River region	106	23.1%	2.0%
	NM Rest of State	110	24.0%	22.6%
	NM River region	153	33.3%	1.1%
	<b>Total</b>	<b>459</b>	<b>100.0%</b>	<b>100.0%</b>
<b>AgeCat</b>	18 to 44	91	19.8%	47.1%
	45 to 64	184	40.0%	32.1%
	65 and older	185	40.2%	20.8%
	<b>Total</b>	<b>460</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Gender</b>	Male	270	58.7%	49.3%
	Female	190	41.3%	50.7%
	<b>Total</b>	<b>460</b>	<b>100.0%</b>	<b>100.0%</b>
<b>HHinc</b>	Less than \$35,000	134	29.1%	36.0%
	\$35,000 to \$74,999	143	31.1%	31.9%
	\$75,000 and over	183	39.8%	32.2%
	<b>Total</b>	<b>460</b>	<b>100.0%</b>	<b>100.0%</b>

Despite weighting to account for stratification and differential distributions across selected demographic features, the sample still could include a bias toward respondents who were more likely to participate in outdoor recreation or to have visited the river regions for outdoor recreation. The letter invited recipients to participate in the survey regardless of whether they engaged in outdoor recreation or visited the river watersheds. However, the letter indicated the purpose of the study was to determine “economic importance of the Gila River and San Francisco River watersheds for outdoor recreation”. This language could lead people who engage in outdoor recreation or who have visited the rivers to be more likely to take the survey than other people. In fact, based on available data for comparison, the sample exhibits slightly elevated rates of participation in outdoor recreation and river visitation, but the differences are not statistically significant at the 95% level of confidence<sup>1</sup>. To address this potential bias, all

<sup>1</sup> A comparison of participation rates for individual activities with results of the 2017 OIA study find no statistically significant differences in five of the seven recreation activities. A 2019 study of water-related outdoor recreation in Arizona by Southwick Associates included usage of the Gila River in Arizona and a

tables include results based on the mean reported values along with lower-bound estimates based on a 95% confidence interval as conservative estimates.

This study includes the lower bound to be conservative because we believe a disproportionate share of a certain kind of user responded. In addition, other factors may have played a role in the final figures, which could result in lower estimates relative to what the state actually might be experiencing. For example, the study 1) looks at a subset of only seven specific outdoor activities while other outdoor activities may also take place in the watersheds, 2) draws only on a subset of the user types, and 3) excludes users outside of New Mexico and Arizona. While the estimate is robust there is likely an unknown element of uncertainty, so we advise caution.

### **Prioritizing Activities in Survey Questions**

Because each qualified respondent was asked follow-up questions for each activity in which they participated in 2019, the follow-up questions were limited to no more than three different activities to reduce survey burden and minimize respondent dropout. Since some activities are much less common than others, selecting three activities at random for follow-up questions would lead to untenably low sample sizes for some activities. For this reason, we applied a prioritization method for choosing activities for follow-up questions where the lowest current sample size among eligible activities was selected. This insured that lower response activities would always be prioritized. This approach was considered to be a reasonable compromise since it is unlikely to introduce bias in the results.

### **Sample Size**

Of the 9,000 letters mailed to households drawn for the survey, 599 were returned as undeliverable<sup>2</sup>. After removing incomplete and unusable responses, the final sample included 460 responses across the four survey regions.

Results concerning participation in outdoor recreation, generally, and use of the rivers for outdoor recreation are presented with associated margins of sampling error, adjusted for the weighting effect resulting from the stratified sampling design and post-survey weighting. Generally, these basic questions have a margin of error of no more than +/-4.6% at the 95% confidence level. Readers should note that most tables present statistical results based on

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general population panel survey was commissioned by Southwick Associates during the planning stages of this study to estimate river usage for both rivers among New Mexico residents. While not directly comparable, the overall river visitation rates are not statistically different from those in this study.

<sup>2</sup> The number of undeliverable letters was unexpectedly high. US Postal Service certified software was used by Southwick Associates to process the address list during development of the sample to ensure deliverability and account for any change of address. The same step was taken by the print/mail contractor used for the survey prior to mailing the letters.

weighted response data. The margins of error reported in the results take into account the effects of weighting.

Estimates of the days of recreation in the river watersheds are a function of multiple values calculated from more than one question in the survey. As a result, the margins of error associated with those results are compounded by the propagation of sampling errors across multiple variables. The final estimates exhibit wide range of values for the number of days and associated recreation spending. The input-output models used to determine the economic contributions from recreation spending are built primarily on data from several US government sources. To the extent those data come from economic surveys, the models also contain an unknown margin of error in their estimate of economic contributions.

### Secondary Data Source – Expenditures

Estimating consumer spending via surveys was beyond the scope of this study. Instead, the study relies on secondary data to estimate this spending. In 2017, Southwick Associates conducted a nationwide survey under contract to the Outdoor Industry Association of more than 61,000 people to estimate the economic contributions of outdoor recreation within each of the 50 U.S. states and the District of Columbia. Rather than conduct another spending survey, this study relies on the average spending profiles for each of the seven recreation activities developed in the 2017 study adjusted for inflation for people who participated in outdoor recreation in New Mexico. That study included a general population panel sample of 1,175 residents of New Mexico, plus non-residents who visited New Mexico for outdoor recreation.

Expenditure categories in the OIA survey are grouped into three types, including motorized vehicles used in outdoor recreation (e.g., ATVs, snowmobiles). Because this study examines only non-motorized recreation, we omitted expenditures for motorized vehicles and included only two of the three spending categories (Table 4).

**Table 4. Outdoor recreation expenditure categories.**

Trip-related expenditures	Equipment & accessories
Food and Drink	Apparel and footwear
Transportation	Equipment
Lodging ( <i>only included for overnight trips</i> )	Accessories
Recreation, Entertainment, and Activities	Services
Souvenirs, gifts, other miscellaneous	Other fees
Other fees associated with travel	
Entrance or registration fees	

The OIA study created separate expenditure profiles for each recreation activity. For purposes of this study, trip-related spending in the OIA survey for New Mexico was converted to a per-day basis for each recreation activity. The resulting spending per day of activity was applied to the total days in the river watershed for each type of activity. Some trip-related expenditures take place close to home while others occur near the site of the activity. For example, some people may fill a cooler with food purchased locally for a trip away from home, and/or buy more food at their destination. Likewise, many people will fill their car with gasoline prior to leaving home and then fill it again prior to leaving their destination. We estimate the spending for those items that occurred in New Mexico by including all trip-related spending by New Mexico residents and only one-half of food and fuel spending for the people who are residents of Arizona.

As is typical, the OIA study estimated average annual spending for equipment and accessories per person (rather than per-trip or per-day). The OIA study provides an estimate of total statewide spending on outdoor equipment and accessories. The statewide spending on equipment and accessories was allocated to activity in the river watersheds base on the watersheds' share to total recreation days in New Mexico. Since people tend to purchase equipment and accessories near their place of residence rather than where they travel for recreation, we further discount the equipment spending to include only people who are residents of New Mexico to capture only spending that likely occurred in New Mexico. This was done by applying the percentage of visitors to the region who are New Mexico residents (32%) to the estimated total equipment spending by visitors to the river watersheds.

## **Economic contributions analysis**

Economic contributions consist of gross activity in a region's existing economy that can be attributed to a given industry, event, or policy. Contributions are estimated by tracking how dollars spent on an industry (or several industries) cycle through a region's economy. For outdoor recreation, the stimulus that triggers the flow of dollars is a retail purchase made by someone for goods and services that are directly tied to their recreation activity. Economic contributions are also tied to a specific economic geography. The spending data from the 2017 OIA study does not provide sub-state details of where the spending occurred. Therefore, we cannot estimate the spending that occurred directly within the river watersheds and must define the spending associated with recreation activity in the river watersheds as having occurred anywhere within New Mexico. For example, a mountain bike used for recreation in the Gila River watershed may have been purchased outside of the region (e.g., Santa Fe). Similarly, gasoline purchased for a trip to fish the San Francisco River may have been purchased in Albuquerque. To the extent that these purchases were directly tied to recreation in the river watersheds they are included in the economic estimates.

“Economic contributions” are distinct from “economic impacts” (Watson et al. 2007). 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, it is generally agreed that economic impact comes from spending by visitors to the region. The focus of this study is the total economic activity associated with outdoor recreation in the river watersheds as a measure of its overall contribution to the New Mexico economy. Therefore, it includes both residents and non-residents of New Mexico.

Economic contribution analysis is most typically carried out with input-output models that track the flow of dollars across all industries and institutions in a specified economic geography. In this study, the IMPLAN© economic software platform was used to model the New Mexico economy<sup>3</sup>. The resulting economic contributions can be divided into three types: direct effects, indirect effects and induced effects. Together, the indirect and induced effects are often referred to as the multiplier effect (See Appendix E a more detailed discussion of economic contributions). The economic contributions are measured in terms of economic output (sales of affected businesses), jobs, earned income, value-added and tax revenues to the local, state and federal governments.

The **direct effect** refers to the initial stimulus to the economy. In this study, it refers specifically to the dollars spent in New Mexico by people participating in outdoor recreation in the river watersheds. The **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 in turn uses a portion of the \$100 to purchase boat fuel, equipment, bait, utilities, etc. 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.

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<sup>3</sup> See Appendix F for Implan sector assignments of consumer spending for outdoor recreation activities.

## Results

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Across the seven type of outdoor recreation, nearly one-half of the respondents participated in at least one type of outdoor recreation in New Mexico (Table). The study's focus on outdoor recreation in New Mexico means that all respondents, including residents of Arizona and New Mexico, were asked about their participation in outdoor recreation that took place *in New Mexico*. The results in Table 5 should not be interpreted as rates of participation in outdoor recreation, generally. Respondents who are residents of Arizona likely participate at relatively lower rates when the location of the activity is specific to New Mexico. Likewise, New Mexico residents have higher rates of outdoor recreation activity than shown in the table<sup>4</sup>.

The river watersheds enjoy significant usage for outdoor recreation. Across the populations of New Mexico and Arizona, 16.8% of adults annually visit at least one of the watersheds for outdoor recreation. This translates into 913,000 to 1.1 million annual visitors (Table 5).

**Table 5. Usage of the Gila River and San Francisco River watersheds for outdoor recreation.**

	Unweighted Count	Visitation Rate (weighted)	Outdoor Recreation Participants	Participants Lower Bound
Gila River	173	15.2%	1,037,165	812,618
San Francisco River	123	12.6%	860,381	652,949
Combined rivers	189	16.8%	1,147,082	912,951

People who visited the rivers for outdoor recreation spent 18.7 days in the Gila River watershed and 13.8 days in the San Francisco watershed, on average. The respondents exhibited overlap in the usage of the rivers whereby an individual person reported using both watersheds in 2019. Including both rivers as a single region, people engaged in outdoor recreation an average of 26.6 days in the region. Total days of activity in the region range from 4.4 million to 30.5 million (Table 6).

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<sup>4</sup> Among respondents who are residents of New Mexico, 78% participated in at least one type of activity within New Mexico.

**Table 6. Days of outdoor recreation activity in the Gila River and San Francisco River watersheds**

River Watershed	Participants		Average Days of Activity		Total Days of Activity	
	Mean value	Lower bound	Mean value	Lower bound	Mean value	Lower bound
Gila River	1,037,165	812,618	18.7	3.3	19,410,856	2,647,299
San Francisco River	860,381	652,949	13.8	1.5	11,857,581	988,234
Combined Rivers	1,147,082	912,951	26.6	4.8	30,502,930	4,365,896

Based on data from the 2017 nationwide survey of outdoor recreation conducted for OIA, participants in the specified outdoor recreation activities spent the equivalent of \$98.43 per day on trip-related goods and services and \$100.93 per participant per year on associated equipment and accessories<sup>5</sup>. Accounting for inflation, this translates to \$3.1 billion spent on outdoor recreation in the combined river region<sup>6</sup>. This spending stimulates economic activity that directly supports at least 28,504 jobs in New Mexico that provide \$661.4 million of income. The spending is associated with \$1.0 billion of value-added to the economy along with \$165.1 million of state and local tax revenues. Including the multiplier effect of the initial spending, outdoor recreation activity in the region supports nearly 38,000 jobs and \$1.0 billion of income, provides \$1.8 billion of value added and generates \$250.8 million of state and local tax revenues (Table 7).

**Table 7. Mean estimated economic contributions to the New Mexico economy from outdoor recreation in the combined rivers watershed.**

Total Recreation Spending: \$3,061.6						
Impact Type	Employment	Labor Income	Value Added	Output	State/Local Taxes	Federal Taxes
Direct Effect	28,504	\$661.4	\$1,029.4	\$2,132.6	\$165.1	\$149.5
Multiplier Effect	9,452	\$377.7	\$729.6	\$1,339.4	\$85.7	\$95.2
Total Effect	37,956	\$1,039.1	\$1,759.0	\$3,472.0	\$250.8	\$244.7

*All dollar values in \$millions.*

<sup>5</sup> See Appendix for detailed breakdown of trip and equipment spending. These survey data are courtesy of Outdoor Industry Association, 2017, and not publicly available.

<sup>6</sup> Approximately two-thirds of the combined New Mexico and Arizona residents who visited the region live in Arizona. The spending that is included in the impact analysis is adjusted to reflect that selected expenditures by Arizona residents do not take place in New Mexico.

**Table 8. Lower bound of estimated economic contributions to the New Mexico economy from outdoor recreation in the combined rivers watershed.**

Total Recreation Spending: \$427.8						
Impact Type	Employment	Labor Income	Value Added	Output	State/Local Taxes	Federal Taxes
Direct Effect	3,983	\$92.4	\$143.9	\$298.0	\$23.1	\$20.9
Multiplier Effect	1,321	\$52.8	\$102.0	\$187.2	\$12.0	\$13.3
Total Effect	5,304	\$145.2	\$245.8	\$485.2	\$35.0	\$34.2

All dollar values in \$millions.

### Gila River

**Table 9. Mean estimated economic contributions to the New Mexico economy from outdoor recreation in the Gila River watershed.**

Total Recreation Spending: \$1,943.6						
Impact Type	Employment	Labor Income	Value Added	Output	State/Local Taxes	Federal Taxes
Direct Effect	18,095	\$419.9	\$653.5	\$1,353.8	\$104.8	\$94.9
Multiplier Effect	6,000	\$239.8	\$463.2	\$850.3	\$54.4	\$60.5
Total Effect	24,095	\$659.7	\$1,116.6	\$2,204.1	\$159.2	\$155.4

All dollar values in \$millions.

**Table 10. Lower bound of estimated economic contributions to the New Mexico economy from outdoor recreation in the Gila River watershed.**

Total Recreation Spending: \$330.8						
Impact Type	Employment	Labor Income	Value Added	Output	State/Local Taxes	Federal Taxes
Direct Effect	3,080	\$71.5	\$111.2	\$230.5	\$17.8	\$16.2
Multiplier Effect	1,021	\$40.8	\$78.8	\$144.7	\$9.3	\$10.3
Total Effect	4,102	\$112.3	\$190.1	\$375.2	\$27.1	\$26.4

All dollar values in \$millions.

## San Francisco River

**Table 11. Mean estimated economic contributions to the New Mexico economy from outdoor recreation in the San Francisco River watershed.**

Total Recreation Spending: \$1,220.1						
Impact Type	Employment	Labor Income	Value Added	Output	State/Local Taxes	Federal Taxes
Direct Effect	11,360	\$263.6	\$410.2	\$849.9	\$65.8	\$59.6
Multiplier Effect	3,767	\$150.5	\$290.8	\$533.8	\$34.1	\$38.0
Total Effect	15,127	\$414.1	\$701.0	\$1,383.7	\$99.9	\$97.5

*All dollar values in \$millions.*

**Table 12. Lower bound of estimated economic contributions to the New Mexico economy from outdoor recreation in the San Francisco River watershed.**

Total Recreation Spending: \$82.9						
Impact Type	Employment	Labor Income	Value Added	Output	State/Local Taxes	Federal Taxes
Direct Effect	772	\$17.9	\$27.9	\$57.8	\$4.5	\$4.1
Multiplier Effect	256	\$10.2	\$19.8	\$36.3	\$2.3	\$2.6
Total Effect	1,028	\$28.2	\$47.7	\$94.1	\$6.8	\$6.6

*All dollar values in \$millions.*

## Effect of reduced flows

Similar to many rivers in the Western US, the Gila and San Francisco rivers are subject to future developments, such as dams or diversions, that could impact water flows and affect recreational use of the rivers. Survey respondents who had participated in one of the listed forms of outdoor recreation in either of the river basins during 2019 were presented with two images of the same location with different water flow rates (see below -- Gila river where it meets the Mogollon Creek) and asked how such a permanent change in overall flow might impact their future use of the rivers. Over one-half (51.1%) of past river users would probably use the river fewer days; nearly one-quarter of past users said they would probably use the river more days. Based on the users' reported change in usage, the net results would lead to 1.3 million fewer days of outdoor recreation in the river watersheds and a reduced spending and associated economic contributions to the New Mexico economy (Table 13).

**Figure 3. Gila River at Mogolon Creek with different water levels.**



**Table 13. Effect of lower flows on future recreation activity by current users.**

Activity	Unweighted count	Percent	Potential Users	Lower Bound	Std Error @ 95%
No, I would use the river for the SAME number of days each year	70	25.5%	292,506	175,306	6.3%
Yes, I would probably use the river MORE days each year	24	23.4%	268,417	157,781	6.1%
Yes, I would probably use the river FEWER days each year	90	51.1%	586,159	400,576	7.2%
<b>Total</b>	<b>184</b>	<b>100.0%</b>			

Those who reported that the lower flows would impact their use of the river were asked to estimate how many more or fewer days they would use the river as a results of reduced flows. While some respondents indicated their usage would increase, the net effect would be 1.3 million fewer days of recreation in the river watersheds (Table 14) if the river experienced chronic reduced flows comparable to those depicted in the images.

**Table 14. Estimated change in recreational river use with reduced water flows.**

Potential change in days	Mean Estimate	Lower Bound
More Days	1,890,566	881,670
Fewer Days	-3,227,929	-322,488
<b>Net change</b>	<b>-1,337,364</b>	<b>559,182</b>

Assuming a direct relationship between days of use and spending by river users, we can estimate the economic effects of reduced water flows on the New Mexico economy. Table 15 and Table 16 show that the estimated effect on spending could range from a loss of \$134.2 million in recreation spending to an increase of \$56.1million. Depending on the exact actual results, the reduced flows could result in as much as 1,664 fewer recreation-related jobs.

**Table 15. Mean estimate of economic effects of reduced water flows.**

Change in Recreation Spending: \$-134.2 million						
Impact Type	Employment	Labor Income	Value Added	Output	State/Local Taxes	Federal Taxes
Direct Effect	-1,250	-\$29.0	-\$45.1	-\$93.5	-\$7.2	-\$6.6
Multiplier Effect	-414	-\$16.6	-\$32.0	-\$58.7	-\$3.8	-\$4.2
Total Effect	-1,664	-\$45.6	-\$77.1	-\$152.2	-\$11.0	-\$10.7

*All dollar values in \$millions.*

**Table 16. Lower bound estimate of economic effects of reduced water flows.**

Total Recreation Spending: \$56.1 million						
Impact Type	Employment	Labor Income	Value Added	Output	State/Local Taxes	Federal Taxes
Direct Effect	523	\$12.1	\$18.9	\$39.1	\$3.0	\$2.7
Multiplier Effect	173	\$6.9	\$13.4	\$24.6	\$1.6	\$1.7
Total Effect	696	\$19.0	\$32.2	\$63.6	\$4.6	\$4.5

*All dollar values in \$millions.*

**Effect of Wild or Scenic River designation on usage by current visitors.**

The National Wild and Scenic Rivers System (W&S) was created by the U.S. Congress to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for present and future generations. Designation will protect a river's traditional values and permanently protect its free-flowing nature. It does not condemn private land or affect how private landowners use their land, nor does it limit public access, or affect grazing permits or existing valid water rights. Current users of the rivers were asked how the designation would affect their future use of the river.

A large percentage of current users (45.7%) reported that they would likely spend more days on the rivers with a change in designation. Since the application of a W&S designation to the rivers is unlikely to impact the river experience of current users, the high percentage is surprising unless current users fear potential developments along the river and view the W&S designation as protecting their future experiences (Table 17).

**Table 17. Effect of Wild or Scenic River designation on future recreation activity by current users.**

Activity	Unweighted count	Percent	Potential Users	Lower Bound	Std Error @ 95%
I would likely spend MORE days on or along the river	72	45.7%	523,217	410,257	9.9%
I would likely spend FEWER days on or along the river	23	13.8%	158,517	80,210	6.8%
I would spend the SAME number of days on or along the river	89	40.5%	463,615	352,307	9.7%
<b>Total</b>	<b>184</b>	<b>100.0%</b>	<b>1,145,349</b>		

People who reported that the W&S designation would have an effect on their use of the river were asked to estimate how many more or fewer days they would use the river as a results of the designation. While a small percentage of respondents indicated their usage would decrease with the designation, the net effect could be as high as 3.8 million more user days. Even a more conservative estimate anticipates 1.4 million more user-days as a result of the W&S designation (Table 18).

**Table 18. Estimated change in river usage by current visitors under Wild or Scenic River designation.**

Potential change in days	Mean Estimate	Lower Bound
More Days	4,374,462	1,342,677
Fewer Days	525,392	93,670
<b>Net change</b>	<b>3,849,070</b>	<b>1,436,347</b>

Assuming a direct relationship between days of use and spending by river users, we can estimate the economic effects of a W&S designation. Table 19 and Table 20 show that the recreation spending by users of the river could increase from \$144.2 million to \$386.3 million. Depending on the exact actual results, the reduced flows could result in as many as 3,597 more recreation-related jobs tied to the increased river usage.

**Table 19. Mean estimate of economic effects of Wild or Scenic designation.**

Change in Recreation Spending: \$386.3 million						
Impact Type	Employment	Labor Income	Value Added	Output	State/Local Taxes	Federal Taxes
Direct Effect	3,597	\$83.5	\$129.9	\$269.1	\$20.8	\$18.9
Multiplier Effect	1,193	\$47.7	\$92.1	\$169.0	\$10.8	\$12.0
Total Effect	4,790	\$131.1	\$222.0	\$438.1	\$31.6	\$30.9

**Table 20. Lower bound estimate of economic effects of Wild or Scenic designation.**

Change in Recreation Spending: \$144.2 million						
Impact Type	Employment	Labor Income	Value Added	Output	State/Local Taxes	Federal Taxes
Direct Effect	1,342	\$31.1	\$48.5	\$100.4	\$7.8	\$7.0
Multiplier Effect	445	\$17.8	\$34.4	\$63.1	\$4.0	\$4.5
Total Effect	1,787	\$48.9	\$82.8	\$163.5	\$11.8	\$11.5

### Effect of Wild or Scenic River designation on usage by new users

People who participate in outdoor recreation but had not previously visited the Gila or San Francisco river watersheds were asked if designation as a Wild or Scenic River would affect the likelihood of their visiting those rivers in the future. Nearly one quarter of those people responded that they would definitely visit the rivers. Combined with the respondents who would probably visit the rivers if they were designated as Wild or Scenic, the river watersheds could attract between 648,000 and 960,000 new people who have never before visited the rivers for outdoor recreation (Table 21).

**Table 21. Estimated new recreational visitors to the Gila River and San Francisco River watersheds under Wild or Scenic River designation.**

Activity	Unweighted count	Percent	Potential Users	Lower Bound	Std Error @ 95%
It would have no effect. I still would not travel to those rivers for outdoor recreation	13	17.7%	317,156	181,506	7.6%
It would have a small effect. I might travel to those rivers for outdoor recreation	41	28.6%	511,871	351,673	8.9%
It would have a modest effect. I probably would travel to those rivers for outdoor recreation	21	30.6%	547,980	384,294	9.1%
It would have a strong effect. I definitely would travel to those rivers for outdoor recreation	23	23.1%	412,399	264,032	8.3%
<b>Total</b>	<b>98</b>	<b>100.0%</b>	<b>1,789,407</b>		

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## Appendix A: Detailed outdoor recreation participation in New Mexico

**Table A1. Participation in selected outdoor recreation activities in New Mexico by residents of Arizona and New Mexico.**

Activity	Weighted Participation Rate	Outdoor Recreation Participants	Participants Lower Bound
Trail sports	32.9%	2,249,037	1,955,200
Bicycling	14.5%	992,581	772,308
Camping	26.9%	1,843,059	1,565,564
Water sports	10.5%	721,866	529,723
Hunting & shooting	9.1%	620,189	440,619
Fishing	11.9%	811,722	609,471
Wildlife-watching	25.6%	1,753,703	1,480,612
Any Activity	46.7%	3,198,834	2,886,697

*Unweighted N = 460*

**Table A2. Days of recreation activity in New Mexico by residents of Arizona and New Mexico.**

	Average Days	Total Days in New Mexico	Days Lower Bound
Trail sports	5.7	39,023,206	24,022,402
Bicycling	3.3	22,720,136	7,990,875
Camping	2.1	14,445,937	10,219,626
Water sports	1.2	8,499,253	4,467,872
Hunting & shooting	.6	3,947,898	2,228,607
Fishing	1.1	7,428,514	2,976,264
Wildlife-watching	7.6	51,853,806	26,367,771
All activities	21.6	147,918,751	103,277,403

*Unweighted N = 460*

**Table A3. Percentage of outdoor recreation participants who visit the river regions for recreation activities**

	Gila River		San Francisco River		Either River	
	N	% of participants	N	% of participants	N	% of participants
Trail sports	119	36.9%	81	29.9%	122	37.9%
Biking	52	35.1%	35	28.5%	52	35.1%
Camping	115	34.4%	91	32.8%	125	38.3%
Water sports	66	57.5%	53	43.0%	69	59.3%
Hunting	58	41.8%	43	29.1%	63	44.2%
Fishing	70	34.2%	53	32.4%	76	37.9%
Wildlife viewing	126	36.3%	93	33.3%	135	40.0%
Any activity	173	32.4%	123	26.9%	189	35.9%

**Table A4. Mean days of outdoor recreation activity in the Gila River watershed.**

Gila River	Unweighted N	Minimum	Maximum	Mean	
				Statistic	Std. Error
Trail sports	69	0	150	<b>5.8</b>	1.4
Bicycling	46	0	80	<b>3.5</b>	1.5
Camping	72	0	100	<b>6.4</b>	2.7
Water sports	63	0	65	<b>4.7</b>	1.9
Hunting & shooting	47	0	75	<b>2.7</b>	1.8
Fishing	56	0	100	<b>6.8</b>	3.8
Wildlife-watching	79	0	365	<b>7.6</b>	4.5

**Table A5. Mean days of outdoor recreation activity in the San Francisco River watershed.**

San Francisco River	Unweighted N	Minimum	Maximum	Mean	
				Statistic	Std. Error
Trail sports	44	0	32	<b>2.5</b>	.7
Bicycling	30	0	30	<b>3.9</b>	1.0
Camping	53	0	90	<b>4.7</b>	2.8
Water sports	50	0	90	<b>4.7</b>	2.1
Hunting & shooting	40	0	120	<b>4.4</b>	1.9
Fishing	40	0	90	<b>6.4</b>	4.3
Wildlife-watching	53	0	200	<b>4.0</b>	2.4

**Table A6. Mean days of outdoor recreation activity in the combined river watershed.**

Combined Rivers	Unweighted N	Minimum	Maximum	Mean	
				Statistic	Std. Error
Trail sports	72	0	150	<b>7.7</b>	1.5
Bicycling	46	0	80	<b>6.7</b>	2.2
Camping	80	0	180	<b>9.3</b>	4.6
Water sports	66	0	155	<b>8.0</b>	2.8
Hunting & shooting	59	0	120	<b>4.5</b>	1.6
Fishing	62	0	160	<b>11.5</b>	6.8
Wildlife-watching	86	0	565	<b>9.8</b>	5.6

**Table A7. Total participation in outdoor recreation activity in the Gila River watershed.**

Gila River	Total Participants Who Visited the Region	Average Days of Activity in the Region	Total Days of Activity in the Region
Trail sports	830,722	5.8	4,783,120
Bicycling	348,655	3.5	1,209,524
Camping	633,414	6.4	4,042,352
Water sports	415,350	4.7	1,954,974
Hunting & shooting	258,963	2.7	692,623
Fishing	277,946	6.8	1,884,744
Wildlife-watching	635,723	7.6	4,843,505
Any Activity	1,037,164	18.7	19,410,842

**Table A8. Total participation in outdoor recreation activity in the San Francisco River watershed.**

<b>San Francisco River</b>	<b>Total Participants Who Visited the Region</b>	<b>Average Days of Activity in the Region</b>	<b>Total Days of Activity in the Region</b>
Trail sports	672,837	2.5	1,653,003
Bicycling	282,713	3.9	1,111,289
Camping	604,816	4.7	2,824,705
Water sports	310,368	4.7	1,458,013
Hunting & shooting	180,544	4.4	802,005
Fishing	262,975	6.4	1,688,080
Wildlife-watching	584,776	4.0	2,320,487
Any Activity	860,381	13.8	11,857,581

**Table A9. Total participation in outdoor recreation activity in the combined river watershed.**

<b>Combined River</b>	<b>Total Participants Who Visited the Region</b>	<b>Average Days of Activity in the Region</b>	<b>Total Days of Activity in the Region</b>
Trail sports	851,799	7.7	6,516,458
Bicycling	348,655	6.7	2,330,759
Camping	705,186	9.3	6,593,133
Water sports	428,056	8.0	3,408,347
Hunting & shooting	274,223	4.5	1,228,918
Fishing	307,397	11.5	3,546,985
Wildlife-watching	700,680	9.8	6,878,330
Any Activity	1,147,082	26.6	30,502,930

## Appendix B: Expenditures for outdoor recreation participation in the Gila River and San Francisco River watersheds.

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**Table B1. Mean expenditures per day and annual expenditures per participant for outdoor recreation in New Mexico.**

	Trip-related per day	Equipment & Accessories per participant*
Trail sports	\$104.64	\$17.41
Bicycling	\$44.86	\$13.76
Camping	\$250.63	\$51.47
Water sports	\$33.53	\$26.72
Hunting & shooting	\$117.64	\$68.34
Fishing	\$35.28	\$69.37
Wildlife-watching	\$26.12	\$5.79
<b>Weighted average</b>	<b>\$98.43</b>	<b>\$100.93</b>

Source: Survey data courtesy of Outdoor Industry Association, 2017. Adjusted for inflation to \$2019 (Bureau of Labor Statistics).

\*Equipment expenditures are total spending in New Mexico pro-rated for the percentage of total days that occur in the river watersheds.

Average expenditure profiles from survey data provided by the Outdoor Industry Association were applied to the numbers of participants and total days of activity in the river watersheds. However, portions of the spending likely take place outside of New Mexico. Generally, consumer purchase durable equipment closer to their place of residence. Therefore, we omit equipment purchases made by residents of Arizona. For trip spending we omit one-half of food and transportation spending by Arizona residents (people typically fill their automobile fuel tank and stock a cooler with food before leaving home).

**Table B2. Total expenditures in New Mexico for outdoor recreation activities in the river watersheds.**

	<b>Total Spending</b>	<b>AZ Residents</b>	<b>NM Residents</b>	<b>Spending in New Mexico</b>
<b>Trip-related</b>				
Food	\$123,075,506	\$41,874,301	\$39,326,905	\$81,201,205
Transportation	\$114,425,664	\$38,931,342	\$36,562,979	\$75,494,322
Recreation & Entertainment	\$57,279,175	\$38,976,487	\$18,302,689	\$57,279,175
Souvenirs, Gifts & Other	\$31,323,581	\$21,314,607	\$10,008,973	\$31,323,581
Lodging	\$78,123,034	\$53,160,008	\$24,963,027	\$78,123,034
Misc	\$10,502,777	\$7,146,774	\$3,356,002	\$10,502,777
<b>Sub-total</b>	<b>\$414,729,737</b>	<b>\$201,403,519</b>	<b>\$132,520,576</b>	<b>\$333,924,094</b>
<b>Equipment and accessories</b>				
Apparel & Footwear	\$4,002,898	\$-	\$1,279,065	\$1,279,065
Equipment	\$4,257,853	\$-	\$1,360,532	\$1,360,532
Accessories	\$1,804,977	\$-	\$576,753	\$576,753
Services	\$1,267,859	\$-	\$405,125	\$405,125
Other	\$1,781,996	\$-	\$569,410	\$569,410
<b>Sub-total</b>	<b>\$13,115,583</b>	<b>\$-</b>	<b>\$4,190,885</b>	<b>\$4,190,885</b>
<b>Total</b>	<b>\$427,845,320</b>	<b>\$201,403,519</b>	<b>\$136,711,460</b>	<b>\$338,114,979</b>

## Appendix C: Effects of reduced water flow, additional details

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**Table C1. Effect on reduced water flows on river usage for outdoor recreation.**

Activity	Unweighted count	Percent	Users	Std Error @ 95%
No, I would use the river for the SAME number of days each year	70	25.5%	292,506	6.3%
Yes, I would probably use the river MORE days each year	24	23.4%	268,417	6.1%
Yes, I would probably use the river FEWER days each year	90	51.1%	586,159	7.2%
<b>Total</b>	<b>184</b>	<b>100.0%</b>	<b>1,147,082</b>	

**Table C2. Mean change in days of river usage for outdoor recreation as a result of reduced water flow.**

	Unweighted N	Minimum	Maximum	Mean	Std. Error
Approximately how many MORE days might you use the river(s) each year?	24	0	21	7.0	.7
Approximately how many FEWER days might you use the river(s) each year?	80	0	200	5.5	2.4

## Appendix D: Effects of reduced federal designation as a Wild or Scenic River, additional details

**Table D1. Effect on designation as a Wild or Scenic River on river usage for outdoor recreation by current users of the rivers.**

Activity	Unweighted count	Percent	Potential Users	Std Error @ 95%
Yes, I would likely spend MORE days on or along the river	72	45.7%	523,217	9.9%
Yes, I would likely spend FEWER days on or along the river	23	13.8%	158,517	6.8%
No, I would spend the SAME number of days on or along the river	89	40.5%	463,615	9.7%
<b>Total</b>	<b>184</b>	<b>100.0%</b>	<b>1,145,349</b>	

**Table D2. Mean change in days of river usage for outdoor recreation as a result of designation as a Wild or Scenic River.**

	Unweighted N	Minimum	Maximum	Mean	Std. Error
Approximately how many MORE days might you use the river(s) each year?	66	1	175	8.4	2.6
Approximately how many FEWER days might you use the river(s) each year?	20	0	65	3.3	2.3

**Table D3. Effect on designation as a Wild or Scenic River on river usage for outdoor recreation by current non-users of the rivers.**

Activity	Unweighted count	Percent	Potential Users	Std Error @ 95%
It would have no effect. I still would not travel to those rivers for outdoor recreation	13	17.7%	317,156	7.6%
It would have a small effect. I might travel to those rivers for outdoor recreation	41	28.6%	511,871	8.9%
It would have a modest effect. I probably would travel to those rivers for outdoor recreation	21	30.6%	547,980	9.1%
It would have a strong effect. I definitely would travel to those rivers for outdoor recreation	23	23.1%	412,399	8.3%
<b>Total</b>	<b>98</b>	<b>100.0%</b>	<b>1,789,407</b>	

## Appendix E: Economic Definitions

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**Economic benefits** can be estimated by two types of economic measures: economic contributions and economic values. An **economic contribution** addresses the business and financial activity resulting from the use of a resource. **Economic value**, on the other hand, is a non-business measure that estimates the value people receive from an activity after subtracting for their costs and expenditures. This concept is also known as consumer surplus (Willig, 1976).

There are three types of economic contribution: direct, indirect and induced. A **direct contribution** is defined as the economic contribution of the initial purchase made by the consumer (the original retail sale). **Indirect contributions** are the secondary effects generated from a direct contribution, such as the retailer buying additional inventory, and the wholesaler and manufacturers buying additional materials. Indirect contributions affect not only the industry being studied, but also the industries that supply the first industry and other industries in the value chain. An **induced contribution** results from the 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 contribution effects sum together to provide the overall economic contribution of the activity under study. As the original retail purchase (direct contribution) 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. Through each successive round, a portion of the economic activity leaks outside of the local economy and each successive round of spending is smaller than the previous round. When the economic benefits are no longer measurable, the multiplier effect is complete.

This study presents several metrics to represent the economic contributions from outdoor recreation. With the exception of retail sales, each of these measures includes direct, indirect and induced components.

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

**Output** – This measure reports the volume of economic activity within the local economy that is related to outdoor recreation. The sum of the direct, indirect and induced shows the total

volume of activity and is sometime called. 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.

**Salaries & Wages** – This figure reports the total salaries and wages paid in all sectors of the local economy as a result of the activity under study. These are not just the paychecks of those employees directly serving recreationists 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 apportion of the dollars earned by the truck driver who delivers food to the restaurants serving recreationists and the accountants who manage the books for companies down the supply chain, etc.

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

**GDP Contribution (Gross Domestic Product)** – This represents the total “value added” contribution of economic output made by the industries involved in the production of outdoor recreation goods and services. For a given industry, value added equals the difference between gross output (sales and other income) and intermediate inputs (goods and services imported or purchased from other industries). It represents the contribution to GDP in a given industry for production related to outdoor recreation. Unlike the measure of output, this metric accounts for the flow of materials though the value chain to avoid the potential for double-counting.

**Federal, State, and Local Tax Revenues** – Using standardized tax tables that consider the typical taxes paid by companies and individuals in all economic sectors or industries in each state, the IMPLAN model also projects the tax revenues earned by the state and federal government as a result of the initial expenditures in question.

## Appendix F: Implan Sector Assignments

**Table F1. Implan Sectoring**

<b>Impact Type</b>	<b>Expenditure Category</b>	<b>Implan Sector</b>	<b>Portion</b>
Comm	Food - Groceries	Various	Various
Ind	Food - Restaurant	501	45.7%
Ind	Food - Restaurant	502	48.6%
Ind	Food - Restaurant	503	5.6%
Comm	Transportation - Gas	156	97.7%
Comm	Transportation - Oil	159	2.3%
Ind	Transportation - Local	412	100.0%
Ind	Transportation - Air	408	100.0%
Ind	Rec - Spectator sports	489	31.3%
Ind	Rec - Spectator sports	490	2.1%
Ind	Rec - Amusements	494	13.1%
Ind	Rec - Amusements	495	20.3%
Ind	Rec - Other	496	33.3%
Comm	Souvenirs	405	100.0%
Ind	Lodging - hotels	499	50.0%
Ind	Lodging - campgrounds	500	50.0%
Comm	Miscellaneous	405	100.0%
Comm	Vehicles - new	343	100.0%
Comm	Vehicles - used dealer	396	100.0%
Comm	Vehicles - used private	527	100.0%
Comm	Parts	350	12.3%
Comm	Parts	351	8.2%
Comm	Parts	352	10.9%
Comm	Parts	353	18.1%
Comm	Parts	354	11.9%
Comm	Parts	355	11.8%
Comm	Parts	356	26.9%
Ind	Maintenance	504	100.0%
Ind	Insurance	437	100.0%
Ind	Registration	531	34.0%
Ind	Registration	533	66.0%
Ind	Storage - self storage	461	50.0%
Ind	Storage - marinas	496	50.0%
Comm	Apparel - mens	127	33.3%
Comm	Apparel - women	128	33.3%
Comm	Apparel - footwear	132	33.3%
Comm	Equipment - bikes	365	100.0%
Comm	Equipment - boats	364	100.0%
Comm	Equipment - misc	385	100.0%
Comm	Accessories	385	100.0%
Ind	Services - guides	496	50.0%
Ind	Services - repair	508	50.0%
Comm	Other - retail	405	100.0%

## Appendix G: Mail invitations to participate in the survey.

---

### Initial invitation



April 2020

Dear Resident:

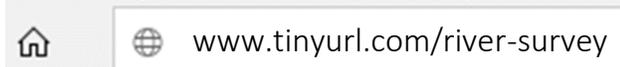
Our firm, Southwick Associates, Inc. ([www.SouthwickAssociates.com](http://www.SouthwickAssociates.com)) has been contracted to conduct a study of the economic importance of the Gila River and San Francisco River watersheds for outdoor recreation. The project is being conducted to provide objective, accurate information for these rivers.

You have been randomly selected among residents of Arizona and New Mexico to be a part of this study. Even if you did not participate in outdoor recreation or visit those rivers in the past year, it is important that we receive your response in order to provide an accurate estimate of how many people visit those rivers. The survey should take about 5-7 minutes to complete.

The information that you provide will be kept strictly confidential and will be used only to produce summary estimates of the economic importance of recreation on those rivers. Your response will never be connected to specific results, and we will never share your information with anyone outside of the project team.

The survey is available via your computer or mobile device and can be accessed in two steps.

Step 1: Enter the http URL in the address bar of your web browser as shown below.



Step 2: Enter your unique Access Code for the online survey when prompted.

Your Unique Access Code is [ACCESS CODE].

*Please do not share this code with anyone else as it can only be used once by you.*

To show our appreciation for your participation, all respondents 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 the project manager at Tom@SouthwickAssociates.com or 904-277-9765. I would like to thank you in advance for agreeing to participate in this important study.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Rob Southwick', with a long horizontal flourish extending to the right.

Rob Southwick  
President

**Reminder invitation**



April 2020

Dear Resident:

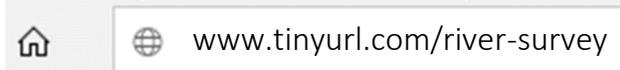
Recently, we invited you to participate in a survey about recreation activity in the Gila River and San Francisco River watersheds. If you have already responded, please accept our sincere thanks! If you have not yet responded, please consider doing so today. Our firm, Southwick Associates, Inc. ([www.SouthwickAssociates.com](http://www.SouthwickAssociates.com)) has been contracted to conduct a study of the economic importance of the Gila River and San Francisco River watersheds for outdoor recreation.

You have been selected in our random sampling of people to represent the residents of Arizona and New Mexico. Even if you did not participate in outdoor recreation or visit those rivers in the past year, it is very important that we receive your response to provide an accurate estimate of how many people visit those rivers. The survey should take less than 5-7 minutes to complete.

The information that you provide will be kept strictly confidential. Your response will never be connected to specific results and we will never share your information with anyone else.

The survey is available via your computer or mobile device and can be accessed in two steps.

Step 1: Enter the http URL in the address bar of your web browser as shown below.



Step 2: Enter your unique Access Code for the online survey when prompted.

Your Unique Access Code is **[ACCESS CODE]**.

*Please do not share this code with anyone else as it can only be used once by you.*

To show our appreciation for your participation, all respondents 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 the project manager at Tom@[SouthwickAssociates.com](mailto:SouthwickAssociates.com) or 904-277-9765. I would like to thank you in advance for agreeing to participate in this important study.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Rob Southwick', with a long, sweeping horizontal line extending to the right.

Rob Southwick  
President

## Appendix H: Telephone script for follow to non-responders

---

Hello,

I am calling today regarding a letter that you may have recently received about a survey of outdoor recreation in Arizona and New Mexico. Our records indicate that you haven't had a chance to respond and I am calling with a quick reminder about the survey. The survey is very brief and completing it will enter you into a drawing for a \$500 gift certificate. To complete the survey, you will need the address for the website and the personal ID number that was included in the letter that you received. Do you still have the letter?

**[IF THEY RESPOND THAT THEY DID NOT RECEIVE ANY LETTERS]** I'm sorry. I may have reached a wrong number. Have a nice day.

**[IF YES]** The survey will be closing in a few days. Please take a few minutes today to follow the instructions included in the letter to participate in this important study even if you don't do outdoor recreation. Thank you and have a nice day.

**[IF NO]** Would you like me to provide you with the website address and your personal ID number?

**[IF YES]** The address for the survey is [tinyurl.com/river-survey](https://tinyurl.com/river-survey)

Your unique ID number is [XXXXXXX] (The survey will ask you for this number when you open it online.)

The survey is closing soon. Please take a few minutes to complete the survey in the next day or two even if you don't do outdoor recreation. Thank you and have a nice day.

**[IF NO]** Thank you for your time. Have a nice day.

**[FOR VM ON CALLBACKS]** I am calling today with a brief reminder about our research study of outdoor recreation in Arizona and New Mexico. You may have received a letter in the mail recently about the survey. The survey is very brief and completing it will enter you into a drawing for a \$500 gift certificate. To complete the survey, you will need the address for the website and

the personal ID number that was included in the letter that you received. If you no longer have the letter, we can provide you with the needed information if you call us at (xxx)-xxx-xxxx. This is not a sales call and you will not be asked to answer any survey questions over the phone. Thank you and have a nice day.

## **FAQs**

- **Who is doing this survey/study? Why?**
  - A market research firm named Southwick Associates has been hired to conduct this study to learn about the economic importance of recreation on the Gila and San Francisco rivers in New Mexico.
- **What is this about?**
  - This study is being done to understand the economic importance of recreation on the Gila and San Francisco rivers in New Mexico.
- **What are you going to do with my information?**
  - Your information will be used only for this study. Your name will never be shared with anyone or any businesses and you will never be contacted outside of this study as a result of taking the survey.
- **How did you get my name/address/phone number?**
  - Your mailing address comes from a standard US Postal Service database that is widely used by marketing firms and for research purposes. Your name and phone number were connected to your address by a company that provides that service for a fee. Your name was randomly drawn to participate in this study.

## Appendix I: Survey Questionnaire

---

The online survey was conducted via the SurveyGizmo platform. Survey logic was designed to limit water-shed specific follow-up questions to no more than three different recreation activities.

**Page exit logic:** Skip / Disqualify Logic**IF:** Question "Please enter your Unique Access Code"  
**THEN:** Disqualify and display: "Sorry, your code is not valid, or you do not qualify to take this survey."

**Login/Password action:** Please enter your Unique Access Code

**Login Type:** Individual (one-time-use)

---

### Outdoor Activities

**Page exit logic:** Skip / Disqualify Logic**IF:** Question "Did you participate in any of the following recreational activities in New Mexico during 2019 (January 1, 2019 through December 31, 2019)? Check all that apply:" is not one of the following answers ("Trail sports (day-hiking on trail, backpacking, climbing ice or rock, mountaineering, horseback riding, running 3+ miles)", "Bicycling (cycling on paved road or off-road, skateboarding)", "Camping (RV campsite, tent campsite, or at a rustic lodge)", "Water sports (swimming/canoeing/kayaking/rafting/paddle-boarding)", "Hunting & shooting (shotgun, rifle, or bow)", "Fishing (recreational fly and recreational non-fly)", "Wildlife-watching (viewing, feeding or photographing animals, bird watching)") **THEN:** Jump to [page 12 - Demographics](#)

**Logic:** Show/hide trigger exists.

**Did you participate in any of the following recreational activities in New Mexico during 2019 (January 1, 2019 through December 31, 2019)? Check all that apply:\***

- Trail sports (day-hiking on trail, backpacking, climbing ice or rock, mountaineering, horseback riding, running 3+ miles)
- Bicycling (cycling on paved road or off-road, skateboarding)

- Camping (RV campsite, tent campsite, or at a rustic lodge)
- Water sports (swimming/canoeing/kayaking/rafting/paddle-boarding)
- Hunting & shooting (shotgun, rifle, or bow)
- Fishing (recreational fly and recreational non-fly)
- Wildlife-watching (viewing, feeding or photographing animals, bird watching)
- Team competitive sports (softball/baseball, volleyball, soccer, ultimate frisbee)
- Off-roading with ATVs, 4x4 trucks
- Individual competitive sports (golf, tennis)
- Motorcycling (on-road, off-road)
- Playground activities
- I didn't participate in any of these activities

---

**(untitled)**

**Page exit logic:** Skip / Disqualify Logic**IF:** (((((( Question "How many **total days** did you take part in trail sports (day-hiking on trail, backpacking, climbing ice or rock, mountaineering, horseback riding, running 3+ miles) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is exactly equal to "0" OR Question "How many **total days** did you take part in trail sports (day-hiking on trail, backpacking, climbing ice or rock, mountaineering, horseback riding, running 3+ miles) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." ) AND ( Question "How many **total days** did you take part in bicycling (cycling on paved road or off-road, skateboarding) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is exactly equal to "0" OR Question "How many **total days** did you take part in bicycling (cycling on paved road or off-road, skateboarding) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." )) AND ( Question "How many **total days** did you take part in camping (RV campsite, tent campsite, or at a rustic lodge) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is exactly equal to "0" OR Question "How many **total days** did you take part in camping (RV campsite, tent campsite, or at a rustic lodge) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." )) AND ( Question

"How many **total days** did you take part in water sports (swimming/canoeing/kayaking/rafting/paddle-boarding) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is exactly equal to "0" OR Question "How many **total days** did you take part in water sports (swimming/canoeing/kayaking/rafting/paddle-boarding) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." )) AND ( Question "How many **total days** did you take part in hunting & shooting (shotgun, rifle, or bow) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is exactly equal to "0" OR Question "How many **total days** did you take part in hunting & shooting (shotgun, rifle, or bow) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." )) AND ( Question "How many **total days** did you take part in fishing (recreational fly and recreational non-fly) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is exactly equal to "0" OR Question "How many **total days** did you take part in fishing (recreational fly and recreational non-fly) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." )) AND ( Question "How many **total days** did you take part in wildlife-watching (viewing, feeding or photographing animals, bird watching) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is exactly equal to "0" OR Question "How many **total days** did you take part in wildlife-watching (viewing, feeding or photographing animals, bird watching) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." )) **THEN:** Jump to [page 12 - Demographics](#)

**Logic: Hidden unless: Question "Did you participate in any of the following recreational activities in New Mexico during 2019 (January 1, 2019 through December 31, 2019)? Check all that apply:" is one of the following answers ("Trail sports (day-hiking on trail, backpacking, climbing ice or rock, mountaineering, horseback riding, running 3+ miles))"**

**How many total days did you take part in trail sports (day-hiking on trail, backpacking, climbing ice or rock, mountaineering, horseback riding, running 3+ miles) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing.\***

**Logic: Hidden unless: Question "Did you participate in any of the following recreational activities in New Mexico during 2019 (January 1, 2019 through December 31, 2019)? Check all that apply:" is one of the following answers ("Bicycling (cycling on paved road or off-road, skateboarding))"**

**How many total days did you take part in bicycling (cycling on paved road or off-road, skateboarding) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing.\***

**Logic: Hidden unless: Question "Did you participate in any of the following recreational activities in New Mexico during 2019 (January 1, 2019 through December 31, 2019)? Check all that apply:" is one of the following answers ("Camping (RV campsite, tent campsite, or at a rustic lodge)")**

**How many total days did you take part in camping (RV campsite, tent campsite, or at a rustic lodge) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing.\***

**Logic: Hidden unless: Question "Did you participate in any of the following recreational activities in New Mexico during 2019 (January 1, 2019 through December 31, 2019)? Check all that apply:" is one of the following answers ("Water sports (swimming/canoeing/kayaking/rafting/paddle-boarding)")**

**How many total days did you take part in water sports (swimming/canoeing/kayaking/rafting/paddle-boarding) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing.\***

**Logic: Hidden unless: Question "Did you participate in any of the following recreational activities in New Mexico during 2019 (January 1, 2019 through December 31, 2019)? Check all that apply:" is one of the following answers ("Hunting & shooting (shotgun, rifle, or bow)")**

**How many total days did you take part in hunting & shooting (shotgun, rifle, or bow) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing.\***

**Logic: Hidden unless: Question "Did you participate in any of the following recreational activities in New Mexico during 2019 (January 1, 2019 through December 31, 2019)? Check all that apply:" is one of the following answers ("Fishing (recreational fly and recreational non-fly)")**

**How many total days did you take part in fishing (recreational fly and recreational non-fly) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing.\***

**Logic: Hidden unless: Question "Did you participate in any of the following recreational activities in New Mexico during 2019 (January 1, 2019 through December 31, 2019)? Check all that apply:" is one of the following answers ("Wildlife-watching (viewing, feeding or photographing animals, bird watching)")**

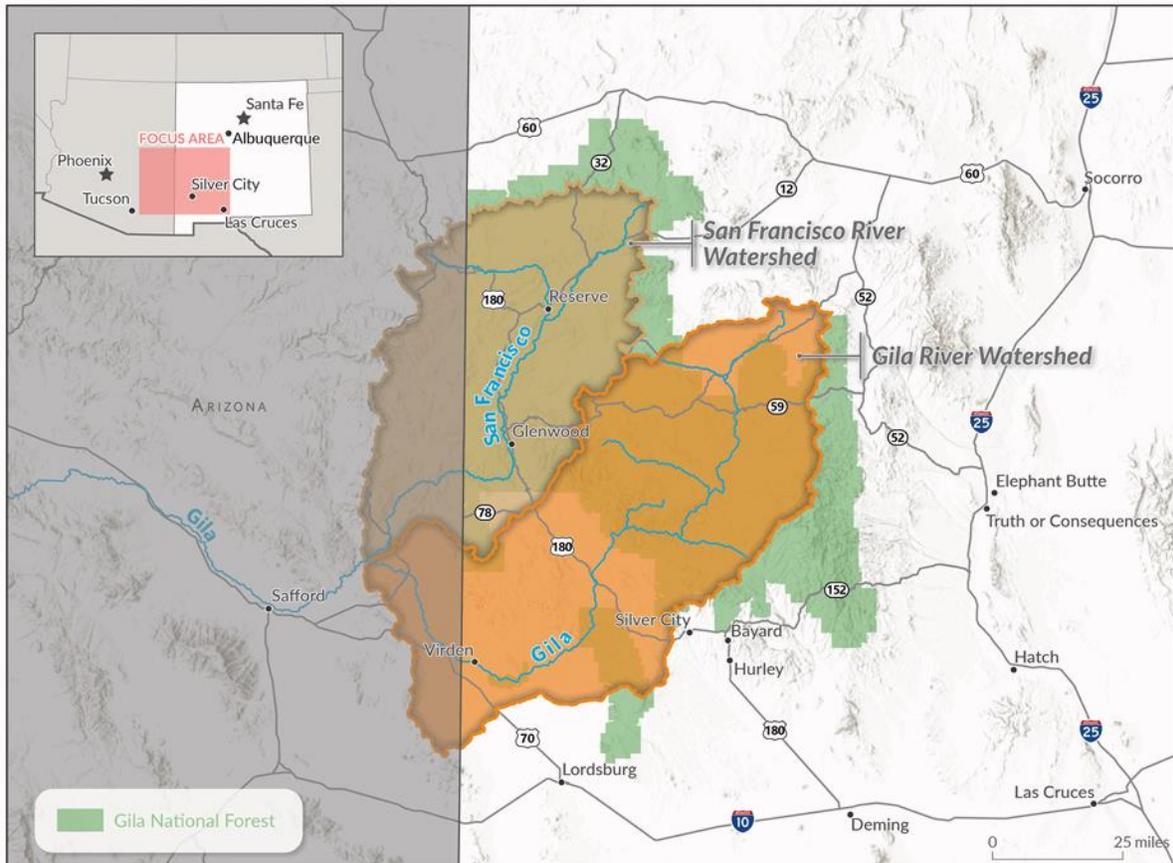
**How many total days did you take part in wildlife-watching (viewing, feeding or photographing animals, bird watching) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing.\***

---

**Page entry logic:** This page will show when: (((((( Question "How many **total days** did you take part in trail sports (day-hiking on trail, backpacking, climbing ice or rock, mountaineering, horseback riding, running 3+ miles) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is greater than "0" OR Question "How many **total days** did you take part in bicycling (cycling on paved road or off-road, skateboarding) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is greater than "0") OR Question "How many **total days** did you take part in camping (RV campsite, tent campsite, or at a rustic lodge) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is greater than "0") OR Question "How many **total days** did you take part in water sports (swimming/canoeing/kayaking/rafting/paddle-boarding) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is greater than "0") OR Question "How many **total days** did you take part in hunting & shooting (shotgun, rifle, or bow) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is greater than "0") OR Question "How many **total days** did you take part in fishing (recreational fly and recreational non-fly) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is greater than "0") OR Question "How many **total days** did you take part in wildlife-watching (viewing, feeding or photographing animals, bird watching) in New Mexico during 2019? Please count only those days when this activity was the **primary reason** for your outing." is greater than "0")

**Portions of the Gila River and the San Francisco River and their tributaries can be found in southwestern New Mexico. Using the maps shown below, please tell us if any of your outdoor recreation activities in 2019 occurred in either of the Gila River (orange area) or San Francisco River (brown area) watersheds.**

## Gila and San Francisco River Watershed Region, New Mexico



### Gila River Watershed\*

- Yes
- No

### San Francisco Watershed\*

- Yes
- No

**Action: Custom Script: Custom Script Attempt**

**Action: JavaScript: Auto Page Submit (Java)**

**Logic: Hidden by default**

**Checkbox array for custom script**

- Trail Sports
- Bicycling
- Camping
- Water Sports
- Hunting/Shooting
- Fishing
- Wildlife watching

**Logic: Hidden by default**

**Radio button for custom script**

- Trail Sports
- Bicycling
- Camping
- Water Sports
- Hunting/shooting
- Fishing
- Wildlife watching

**Logic: Hidden by default**

**Radio button 2 for custom script**

- Trail Sports
- Bicycling
- Camping
- Water Sports
- Hunting/shooting
- Fishing
- Wildlife watching

**Logic: Hidden by default**

### **Radio button 3 for custom script**

- Trail Sports
- Bicycling
- Camping
- Water Sports
- Hunting/shooting
- Fishing
- Wildlife watching

---

**Page entry logic:** This page will show when: Question "Gila River Watershed" is one of the following answers ("Yes")

### **Recreation in the Gila River Watershed**

**Logic: Show/hide trigger exists. Hidden unless:** ( Question "How many total days did you take part in trail sports (day-hiking on trail, backpacking, climbing ice or rock, mountaineering, horseback riding, running 3+ miles) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Trail Sports") OR Question "Radio button 2 for custom script" is one of the

following answers ("Trail Sports")) OR Question "Radio button 3 for custom script" is one of the following answers ("Trail Sports"))

Of your [question('value'), id='3'] trail sports days in New Mexico during 2019, how many total days did you take part in trail sports on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River\*

Logic: Show/hide trigger exists. Hidden unless: ( Question "How many total days did you take part in bicycling (cycling on paved road or off-road, skateboarding) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Bicycling") OR Question "Radio button 2 for custom script" is one of the following answers ("Bicycling")) OR Question "Radio button 3 for custom script" is one of the following answers ("Bicycling"))))

Of your [question('value'), id='4'] bicycling days in New Mexico during 2019, how many total days did you take part in bicycling on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River\*

Logic: Hidden unless: ( Question "How many total days did you take part in camping (RV campsite, tent campsite, or at a rustic lodge) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Camping") OR Question "Radio button 2 for custom script" is one of the following answers ("Camping")) OR Question "Radio button 3 for custom script" is one of the following answers ("Camping"))))

Of your [question('value'), id='5'] camping days in New Mexico during 2019, how many total days did you take part in camping on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River\*

Logic: Show/hide trigger exists. Hidden unless: ( Question "How many total days did you take part in water sports (swimming/canoeing/kayaking/rafting/paddle-boarding) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Water Sports") OR Question "Radio button 2 for

custom script" is one of the following answers ("Water Sports")) OR Question "Radio button 3 for custom script" is one of the following answers ("Water Sports"))

Of your [question('value'), id='6'] water sports days in New Mexico during 2019, how many total days did you take part in water sports on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River\*

Logic: Show/hide trigger exists. Hidden unless: ( Question "How many total days did you take part in hunting & shooting (shotgun, rifle, or bow) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Hunting/shooting") OR Question "Radio button 2 for custom script" is one of the following answers ("Hunting/shooting")) OR Question "Radio button 3 for custom script" is one of the following answers ("Hunting/shooting"))

Of your [question('value'), id='7'] hunting and shooting days in New Mexico during 2019, how many total days did you take part in hunting and shooting on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River\*

Logic: Show/hide trigger exists. Hidden unless: ( Question "How many total days did you take part in fishing (recreational fly and recreational non-fly) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Fishing") OR Question "Radio button 2 for custom script" is one of the following answers ("Fishing")) OR Question "Radio button 3 for custom script" is one of the following answers ("Fishing"))

Of your [question('value'), id='8'] fishing days in New Mexico during 2019, how many total days did you take part in fishing on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River\*

Logic: Show/hide trigger exists. Hidden unless: ( Question "How many total days did you take part in wildlife-watching (viewing, feeding or photographing animals, bird watching) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Wildlife watching") OR Question "Radio button 2 for custom script" is one of the following answers ("Wildlife watching")) OR

Question "Radio button 3 for custom script" is one of the following answers ("Wildlife watching"))

Of your [question('value'), id='9'] wildlife-watching days in New Mexico during 2019, how many total days did you take part in wildlife-watching on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River\*

---

**Page entry logic:** This page will show when: Question "Gila River Watershed" is one of the following answers ("Yes")

**Logic: Hidden unless:** Question "Of your [question('value'), id='3'] trail sports days in New Mexico during 2019, how many total days did you take part in trail sports on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River" is greater than "0"

Of your [question('value'), id='13'] trail sports days on or along the water in the Gila River watershed, how many days were part of an overnight trip (versus day trips)?\*

**Logic: Hidden unless:** Question "Of your [question('value'), id='4'] bicycling days in New Mexico during 2019, how many total days did you take part in bicycling on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River" is greater than "0"

Of your [question('value'), id='15'] bicycling days on or along the water in the Gila River watershed, how many days were part of an overnight trip (versus day trips)?\*

**Logic: Hidden unless:** Question "Of your [question('value'), id='6'] water sports days in New Mexico during 2019, how many total days did you take part in water sports on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River" is greater than "0"

Of your [question('value'), id='50'] water sports days on or along the water in the Gila River watershed, how many days were part of an overnight trip (versus day trips)?\*

**Logic: Hidden unless: Question "Of your [question('value'), id='7'] hunting and shooting days in New Mexico during 2019, how many total days did you take part in hunting and shooting on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River" is greater than "0"**

**Of your [question('value'), id='19'] hunting and shooting days on or along the water in the Gila River watershed, how many days were part of an overnight trip (versus day trips)?\***

**Logic: Hidden unless: Question "Of your [question('value'), id='8'] fishing days in New Mexico during 2019, how many total days did you take part in fishing on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River" is greater than "0"**

**Of your [question('value'), id='51'] fishing days on or along the water in the Gila River watershed, how many days were part of an overnight trip (versus day trips)?\***

**Logic: Hidden unless: Question "Of your [question('value'), id='9'] wildlife-watching days in New Mexico during 2019, how many total days did you take part in wildlife-watching on or along the water in the Gila River watershed? Please enter zero if you did not participate in this activity along the Gila River" is greater than "0"**

**Of your [question('value'), id='21'] wildlife-watching days on or along the water in the Gila River watershed, how many days were part of an overnight trip (versus day trips)?\***

---

**Page entry logic:** This page will show when: Question "San Francisco Watershed" is one of the following answers ("Yes")

## **Recreation in the San Francisco Watershed**

**Logic: Show/hide trigger exists. Hidden unless: ( Question "How many total days did you take part in trail sports (day-hiking on trail, backpacking, climbing ice or rock, mountaineering, horseback riding, running 3+ miles) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Trail Sports") OR Question "Radio button 2 for custom script" is one of the following answers ("Trail Sports")) OR Question "Radio button 3 for custom script" is one of the following answers ("Trail Sports"))))**

Of your [question('value'), id='3'] trail sports days in New Mexico during 2019, how many total days did you take part in trail sports on or along the water in the San Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed\*

Logic: Show/hide trigger exists. Hidden unless: ( Question "How many total days did you take part in bicycling (cycling on paved road or off-road, skateboarding) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Bicycling")) OR Question "Radio button 2 for custom script" is one of the following answers ("Bicycling")) OR Question "Radio button 3 for custom script" is one of the following answers ("Bicycling"))))

Of your [question('value'), id='4'] bicycling days in New Mexico during 2019, how many total days did you take part in bicycling on or along the water in the San Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed\*

Logic: Hidden unless: ( Question "How many total days did you take part in camping (RV campsite, tent campsite, or at a rustic lodge) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Camping")) OR Question "Radio button 2 for custom script" is one of the following answers ("Camping")) OR Question "Radio button 3 for custom script" is one of the following answers ("Camping"))))

Of your [question('value'), id='5'] camping days in New Mexico during 2019, how many total days did you take part in camping on or along the water in the San Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed\*

Logic: Show/hide trigger exists. Hidden unless: ( Question "How many total days did you take part in water sports (swimming/canoeing/kayaking/rafting/paddle-boarding) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Water Sports")) OR Question "Radio button 2 for custom script" is one of the following answers ("Water Sports")) OR Question "Radio button 3 for custom script" is one of the following answers ("Water Sports"))))

Of your [question('value'), id='6'] water sports days in New Mexico during 2019, how many total days did you take part in water sports on or along the water in the San

Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed\*

Logic: Show/hide trigger exists. Hidden unless: ( Question "How many total days did you take part in hunting & shooting (shotgun, rifle, or bow) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" OR (( Question "Radio button for custom script" is one of the following answers ("Hunting/shooting") OR Question "Radio button 2 for custom script" is one of the following answers ("Hunting/shooting")) OR Question "Radio button 3 for custom script" is one of the following answers ("Hunting/shooting"))))

Of your [question('value'), id='7'] hunting and shooting days in New Mexico during 2019, how many total days did you take part in hunting and shooting on or along the water in the San Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed\*

Logic: Show/hide trigger exists. Hidden unless: ( Question "How many total days did you take part in fishing (recreational fly and recreational non-fly) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Fishing") OR Question "Radio button 2 for custom script" is one of the following answers ("Fishing")) OR Question "Radio button 3 for custom script" is one of the following answers ("Fishing"))))

Of your [question('value'), id='8'] fishing days in New Mexico during 2019, how many total days did you take part in fishing on or along the water in the San Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed\*

Logic: Show/hide trigger exists. Hidden unless: ( Question "How many total days did you take part in wildlife-watching (viewing, feeding or photographing animals, bird watching) in New Mexico during 2019? Please count only those days when this activity was the primary reason for your outing." is greater than "0" AND (( Question "Radio button for custom script" is one of the following answers ("Wildlife watching") OR Question "Radio button 2 for custom script" is one of the following answers ("Wildlife watching")) OR Question "Radio button 3 for custom script" is one of the following answers ("Wildlife watching"))))

Of your [question('value'), id='9'] wildlife-watching days in New Mexico during 2019, how many total days did you take part in wildlife-watching on or along the water in the San

**Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed\***

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**Page entry logic:** This page will show when: Question "San Francisco Watershed" is one of the following answers ("Yes")

**Logic: Hidden unless: Question "Of your [question('value'), id='3'] trail sports days in New Mexico during 2019, how many total days did you take part in trail sports on or along the water in the San Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed" is greater than "0"**

**Of your [question('value'), id='23'] trail sports days on or along the water in the San Francisco River watershed, how many days were part of an overnight trip (versus day trips)?\***

**Logic: Hidden unless: Question "Of your [question('value'), id='4'] bicycling days in New Mexico during 2019, how many total days did you take part in bicycling on or along the water in the San Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed" is greater than "0"**

**Of your [question('value'), id='24'] bicycling days on or along the water in the San Francisco River watershed, how many days were part of an overnight trip (versus day trips)?\***

**Logic: Hidden unless: Question "Of your [question('value'), id='6'] water sports days in New Mexico during 2019, how many total days did you take part in water sports on or along the water in the San Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed" is greater than "0"**

**Of your [question('value'), id='61'] water sports days on or along the water in the San Francisco River watershed, how many days were part of an overnight trip (versus day trips)?\***

**Logic: Hidden unless: Question "Of your [question('value'), id='7'] hunting and shooting days in New Mexico during 2019, how many total days did you take part in hunting and**

shooting on or along the water in the San Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed" is greater than "0"

Of your [question('value'), id='26'] hunting and shooting days on or along the water in the San Francisco River watershed, how many days were part of an overnight trip (versus day trips)?\*

**Logic: Hidden unless:** Question "Of your [question('value'), id='8'] fishing days in New Mexico during 2019, how many total days did you take part in fishing on or along the water in the San Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed" is greater than "0"

Of your [question('value'), id='62'] fishing days on or along the water in the San Francisco River watershed, how many days were part of an overnight trip (versus day trips)?\*

**Logic: Hidden unless:** Question "Of your [question('value'), id='9'] wildlife-watching days in New Mexico during 2019, how many total days did you take part in wildlife-watching on or along the water in the San Francisco watershed? Please enter zero if you did not participate in this activity along the San Francisco watershed" is greater than "0"

Of your [question('value'), id='27'] wildlife-watching on or along the water in the San Francisco River watershed, how many days were part of an overnight trip (versus day trips)?\*

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**Page entry logic:** This page will show when: ( Question "Gila River Watershed" is one of the following answers ("Yes") OR Question "San Francisco Watershed" is one of the following answers ("Yes"))

**Future developments, such as dams or diversions, could impact the annual water flows of the Gila and San Francisco rivers leading to reduced flows in some locations at certain times of the year.**

**Please compare the two images below and assume they represent the potential change in river flow *where and when* you normally use the rivers for recreation.**



**Logic: Show/hide trigger exists.**

**Once the threat of Covid-19 has passed would your overall usage of the river for recreation change as a result of the reduced flow?\***

- Yes, I would probably use the river **FEWER** days each year.
- No, I would use the river for the **SAME** number of days each year.
- Yes, I would probably use the river **MORE** days each year.

**Logic: Hidden unless: Question "Once the threat of Covid-19 has passed would your overall usage of the river for recreation change as a result of the reduced flow?" is one of the following answers ("Yes, I would probably use the river MORE days each year.")**

**Approximately how many MORE days might you use the river(s) each year?\***

**Logic: Hidden unless: Question "Once the threat of Covid-19 has passed would your overall usage of the river for recreation change as a result of the reduced flow?" is one of the following answers ("Yes, I would probably use the river FEWER days each year.")**

**Approximately how many FEWER days might you use the river(s) each year?\***

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**(untitled)**

**The National Wild and Scenic Rivers System was created by the U.S. Congress to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for present and future generations. Designation will protect a river's traditional values and permanently protect its free-flowing nature. It does not condemn private land or affect how private landowners use their land, nor does it limit public access, or affect grazing permits or existing valid water rights.**

**Logic: Show/hide trigger exists. Hidden unless: ( Question "Gila River Watershed" is one of the following answers ("Yes") OR Question "San Francisco Watershed" is one of the following answers ("Yes"))**

**The Gila and San Francisco rivers are being considered for federal designation as a Wild or Scenic River. If those rivers received designation as a Wild or Scenic River, would that affect your usage of the rivers for outdoor recreation once the threat of Covid-19 has passed?\***

- Yes, I would likely spend **FEWER** days on or along the river.
- No, I would spend the **SAME** number of days on or along the river.
- Yes, I would likely spend **MORE** days on or along the river.

**Logic: Hidden unless: Question "The Gila and San Francisco rivers are being considered for federal designation as a Wild or Scenic River. If those rivers received designation as a Wild or Scenic River, would that affect your usage of the rivers for outdoor recreation once the threat of Covid-19 has passed?" is one of the following answers ("Yes, I would likely spend MORE days on or along the river.")**

**Approximately how many MORE days might you use these rivers each year?\***

**Logic: Hidden unless: Question "The Gila and San Francisco rivers are being considered for federal designation as a Wild or Scenic River. If those rivers received designation as a Wild or Scenic River, would that affect your usage of the rivers for outdoor recreation once the threat of Covid-19 has passed?" is one of the following answers ("Yes, I would likely spend FEWER days on or along the river.")**

**Approximately how many FEWER days might you use these rivers each year?\***

**Logic: Hidden unless: ( Question "Gila River Watershed" is one of the following answers ("No") AND Question "San Francisco Watershed" is one of the following answers ("No"))**

**The Gila and San Francisco rivers are being considered for federal designation as a Wild or Scenic River. If those rivers received designation as a Wild or Scenic River, would it affect your likelihood of visiting them specifically to engage in outdoor recreation in the year following designation, assuming the threat of Covid-19 has passed by then?\***

- It would have no effect. I still would not travel to those rivers for outdoor recreation.
- It would have a small effect. I might travel to those rivers for outdoor recreation.
- It would have a modest effect. I probably would travel to those rivers for outdoor recreation.
- It would have a strong effect. I definitely would travel to those rivers for outdoor recreation.

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## **Demographics**

**Tell us a little about yourself:**

**What is your age?\***

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

**What is your gender?\***

- Male
- Female
- Other
- Prefer not to answer

**What is your household income?**

- Less than \$25,000
- \$25,000 to \$34,999
- \$35,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$124,999
- \$125,000 to \$149,999
- \$150,000 or more

**Please select the choice that best describes your race.\***

- Asian
- Native Hawaiian or Other Pacific Islander
- Black/African-American
- White
- American Indian/Alaska Native
- Other:
- Prefer not to answer

**Generally speaking, do you think of yourself as a Republican, a Democrat, an Independent, or a member of a political party not in this list?**

- Republican
  - Democrat
  - Independent
  - Member of a political party not listed here
  - Prefer not to answer
- 

**Thank You!**

**Thank you for taking our survey. Your response is very important to us.**

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