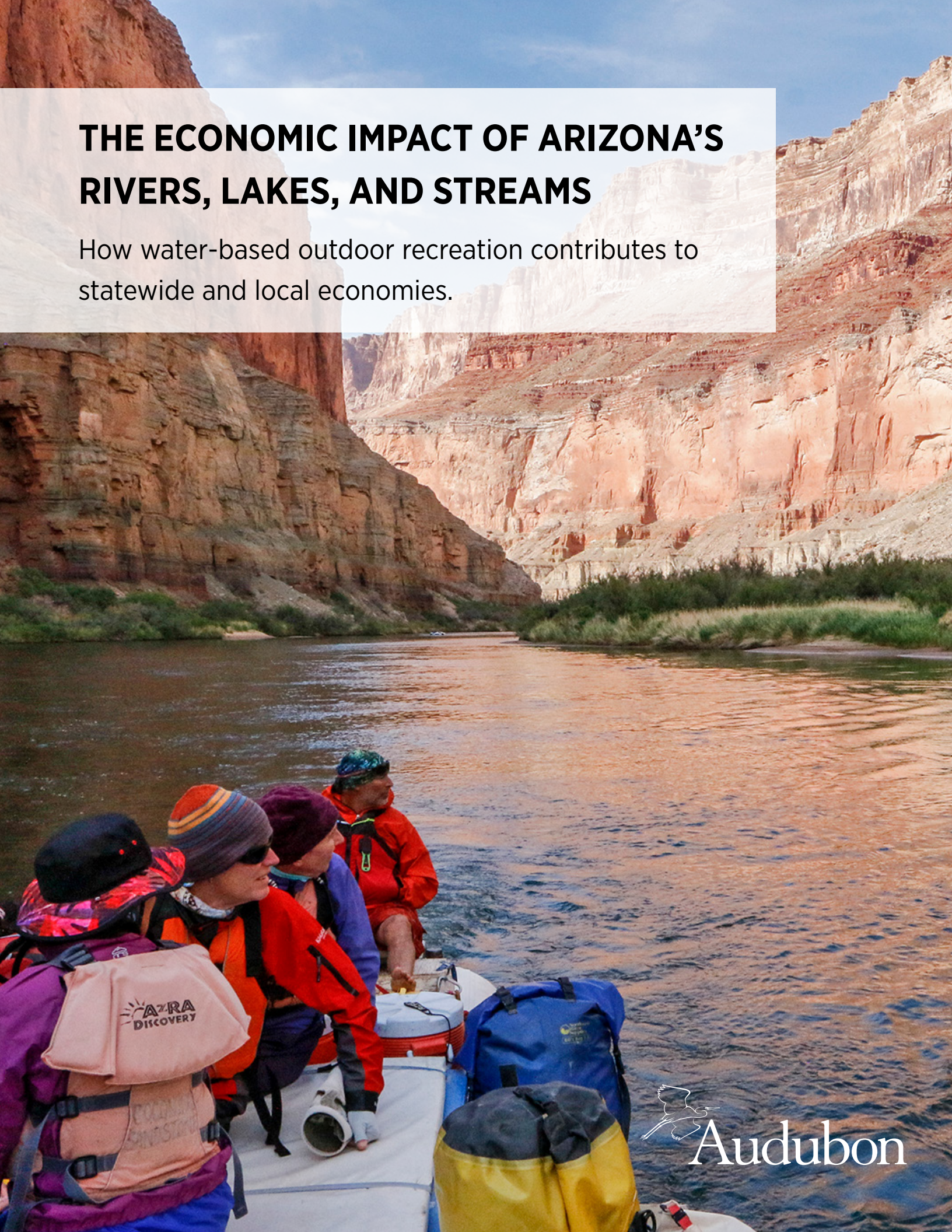
THE ECONOMIC IMPACT OF ARIZONA'S RIVERS, LAKES, AND STREAMS

How water-based outdoor recreation contributes to statewide and local economies.



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Fishing in Fossil Creek. Photo: Max Wilson/LesserPlaces.com

ECONOMICS OF OUTDOOR RECREATION ON WATERWAYS

Rivers, lakes, streams, and the habitat they support are critical for people, birds, fish, and other wildlife. Maintaining the integrity of our waterways is crucial to our way of life in the arid West. The water of the Colorado River and its tributaries supports more than 400 species of birds and hundreds of species of fish and wildlife, provides water to roughly 40 million people, and irrigates nearly six million acres of farms and ranches.

In order to conserve and protect the waterways we care about, we're making an economic case for why their demise—due to drought, diversions, and a changing climate—would be so devastating for Arizona.

We know that water is life in Arizona and we would not be here without it. The economic significance of our rivers and reservoirs is well known—just look at the large metropolitan areas, acres of agricultural production, and myriad industries supported by water in the West. What has been less studied, however, is **the economic contribution that water *in* rivers, lakes, reservoirs, and streams provides to our state and local economies.**

To better understand this, Audubon commissioned a report with guidance from business, civic, governmental, outdoor recreation, conservation, and tourism representatives. Economics research firm Southwick Associates conducted the analysis in late 2018. We used participation in outdoor recreation along waterways in Arizona to measure the economic activity generated annually from rivers, lakes, reservoirs, and streams and found that it is a **$13.5 billion industry**. Water-based outdoor recreation is a helpful way to measure the economic contribution generated from having water in rivers, lakes, reservoirs, and streams. Without water, part of this economic activity would be lost. People don't fish in dry lakes or kayak in dry river beds.

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TYPES OF OUTDOOR RECREATION ALONG WATERWAYS

Some 1.5 million Arizona residents participate in water-based outdoor recreational activities annually. These activities include:

- Bicycling
- Camping
- Fishing
- Hunting and shooting
- Picnicking or relaxing
- Snow sports
- Trail sports
- Water sports
- Wildlife watching

In 2018, the statewide retail spending by both residents and non-residents participating in water-based outdoor recreation, as well as the related multiplier effects, generated an estimated $13.5 billion in economic output. Outdoor recreation along water also supported 114,000 jobs, provided $4.5 billion in household income, and generated an estimated $1.8 billion in tax revenues.

Expenditures across waterway recreation types include fuel, food, admission fees, guides, lodging, equipment purchases, supplies, permits, apparel accessories, and other related expenses.

Water-based outdoor recreation as an industry ranks above mining and golf in terms of total economic output to the state.

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BY THE NUMBERS

1.5 MILLION	$13.5 BILLION	$7.1 BILLION	114,000	$4.5 BILLION	$1.8 BILLION
ARIZONA PARTICIPANTS	ECONOMIC OUTPUT	CONTRIBUTION TO ARIZONA'S GDP	JOBS	HOUSEHOLD INCOME	TAX REVENUES

Birding on the Santa Cruz River. Photo: Connie Williams/Corridor Keepers

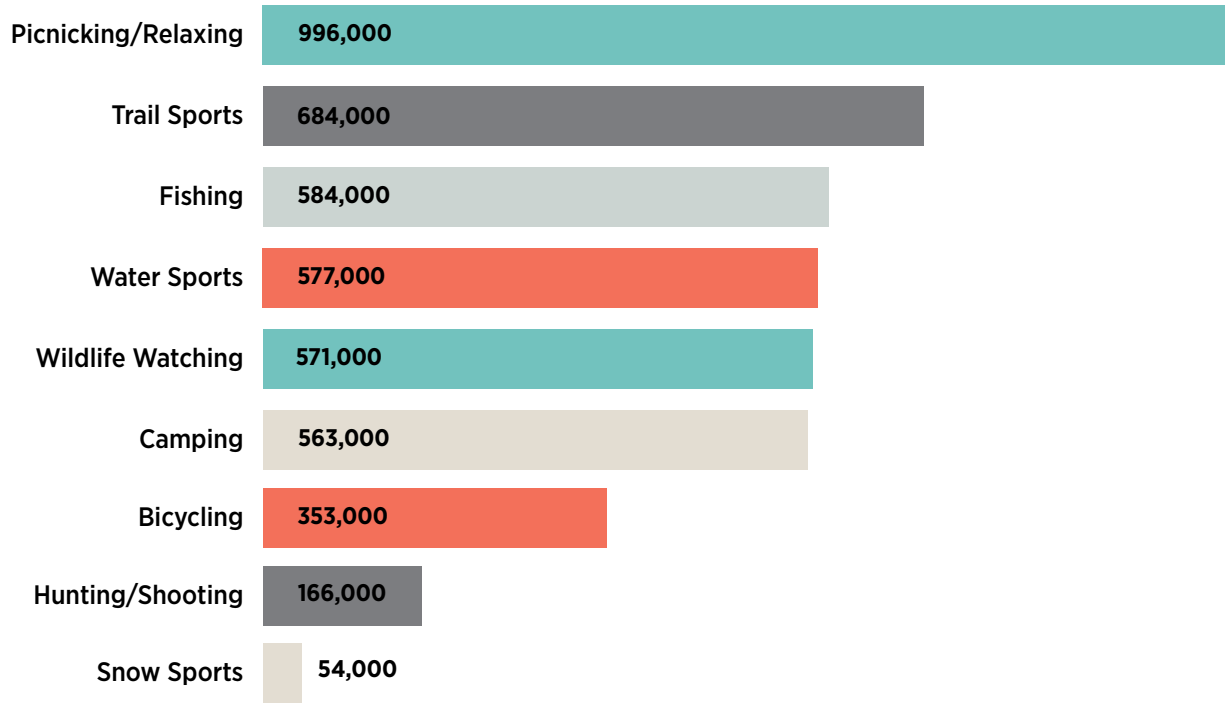
ACTIVITIES WE CHERISH IN THE PLACES WE LOVE

The most popular activities Arizona residents participated in varied by county, reflecting the diversity of the state and what it has to offer in terms of water-based outdoor recreation. For example, in Coconino County, where the Grand Canyon is located, the top three activities were camping, trail sports, and picnicking/relaxing. By contrast, in Cochise County, where the iconic San Pedro Riparian National Conservation Area is found, the top activities were wildlife watching, camping, and fishing.

Statewide, the top five outdoor recreation activities along water were picnicking or relaxing, trail related activities (like hiking or horseback riding), fishing, water sports, and wildlife watching.

Water is rooted in the experiences that so many enjoy in Arizona—it defines much of the region's history and culture.

Arizona Resident Participation by Activity



While we looked at the economics of outdoor recreation on Arizona's rivers, lakes, streams, and reservoirs, it is also important to note the significance of these places culturally, historically, and spiritually to generations of people. Those who have hiked the Grand Canyon and reached the Colorado River, watched thousands of Sandhill Cranes at the Whitewater Draw, or fished along the Black River, know that these are invaluable places that deserve to be protected. Water is rooted in the experiences that so many enjoy in Arizona—it defines much of the region's history and culture.

LOCAL IMPACT

In addition to being able to tell the statewide story of the economic significance of rivers, lakes, and streams in Arizona, we wanted to better understand the importance and impact that these waterways provide locally. The table below displays the economic activity that each county generates from water-based outdoor recreation within its boundaries.

Economic Contributions from Water-Based Outdoor Recreation by County

	AZ Resident Participants	Jobs	GDP	Federal Tax	State/Local Tax	Output
Apache	167,000	4,000	$222,000,000	$32,300,000	$25,700,000	$421,800,000
Cochise	78,000	2,000	$147,300,000	$21,400,000	$17,100,000	$279,300,000
Coconino	329,000	17,000	$1,040,000,000	$151,000,000	$121,100,000	$1,978,000,000
Gila	169,000	3,000	$202,500,000	$29,400,000	$23,500,000	$387,400,000
Graham	29,000	900	$52,300,000	$7,600,000	$6,100,000	$99,700,000
Greenlee	29,000	400	$25,500,000	$3,700,000	$3,000,000	$48,900,000
La Paz	44,000	2,000	$119,000,000	$17,400,000	$13,900,000	$227,600,000
Maricopa	743,000	44,000	$2,800,000,000	$400,900,000	$323,600,000	$5,400,000,000
Mohave	109,000	6,000	$371,700,000	$53,900,000	$43,200,000	$709,600,000
Navajo	118,000	4,000	$220,000,000	$31,900,000	$25,600,000	$420,400,000
Pima	222,000	12,000	$758,600,000	$109,400,000	$88,100,000	$1,500,000,000
Pinal	186,000	4,000	$247,100,000	$35,800,000	$28,800,000	$473,800,000
Santa Cruz	65,000	2,000	$99,300,000	$14,400,000	$11,500,000	$188,900,000
Yavapai	216,000	9,000	$567,500,000	$82,400,000	$66,200,000	$1,100,000,000
Yuma	92,000	3,000	$194,300,000	$28,100,000	$22,600,000	$372,000,000

Note: Numbers rounded. For precise numbers, read the full report available at audubon.org/AZRivers.

Playing along Horton Creek. Photo: Max Wilson/LesserPlaces.com

THANK YOU TO THE FOLLOWING ORGANIZATIONS FOR THEIR GUIDANCE AND PARTICIPATION

ABOUT AUDUBON

The National Audubon Society protects birds and the places they need, today and tomorrow. Audubon works throughout the Americas using, science, advocacy, education and on-the-ground conservation. State programs, nature centers, chapters, and partners give Audubon an unparalleled wingspan that reaches millions of people each year to inform, inspire, and unite diverse communities in conservation action. A nonprofit conservation organization since 1905, Audubon believes in a world in which people and wildlife thrive. Learn more and how to help at audubon.org and follow us on Twitter and Instagram at @audubonsociety.

Audubon's Western Water Initiative is a multi-state effort to protect the Colorado River and the West's network of Saline Lakes. Some 65,000 members strong and growing, the network advocates for science-based, non-partisan water policies and management that benefit rivers and lakes for the birds, wildlife, habitats, cities, and economies they support. To learn more, visit: audubon.org/AZRivers.

Cover Photo. Rafting the Colorado River in the Grand Canyon. Photo: Pete Arnold

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