

Economic Analysis of Outdoor Recreation in Washington State

2025 Update





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1 Executive Summary

Outdoor recreation is central to Washington's economy and way of life, fueling local businesses, supporting jobs in both urban and rural communities, and offering residents and visitors a deeper connection to nature. This report builds on the 2020 economic assessment,¹ highlighting the significance of outdoor recreation in Washington's economy.

National data show that while more people are recreating outside, they are doing so less often (Outdoor Foundation, 2022; Outdoor Foundation and Outdoor Industry Association, 2023, 2024). This shift has contributed to lower average spending per trip, even as equipment and gear purchases have grown—a trend reflected in this report's findings. In 2024, outdoor recreationists spent \$25.2 billion in the state. Of this, \$14.6 billion was spent on visits to public and private lands for activities such as walking, mountain biking, sea kayaking, and much more. Recreationists spent an additional \$10.5 billion on equipment, recreation gear, and repair and maintenance services. Such expenditures support more than 237,000 jobs across the state; on average, every \$1 million of recreation spending sustains 9 jobs. Outdoor recreation is a major employer, representing 5.4 percent of Washington's total employment (BLS, 2025). The average wage is \$42,600 per year, totaling \$10.1 billion for all recreation workers.

The total economic contribution of outdoor recreation captures both visitor spending and subsequent transactions rippling through local economies. Spending on lodging, equipment, and permits drives more spending when local businesses buy supplies and services, and their workers spend their wages locally. These direct and secondary impacts amount to \$33.1 billion. Each dollar of recreation spending supports \$1.31 of economic activity statewide. All this spending added \$20.5 billion to Washington's 2024 gross domestic product of \$854.7 billion (BEA, 2025), or roughly 2.4 percent of the state's economic production, underscoring its significance among other major industries.

Washington's natural capital—forests, rivers, and parks—deliver additional nonmarket benefits, the value of which is rarely fully reflected in markets. Known as ecosystem services, these include filtering air and water, reducing flooding, wildlife habitat, scenic beauty, and the value of recreational experiences beyond the costs of participation (known as consumer surplus). In 2024, the consumer surplus of outdoor recreation in Washington totaled \$33.7 billion, and benefited both residents and out-of-state visitors. Other ecosystem services produced by public lands are valued at \$20 billion–\$148 billion per year.

New methods were used in this update, which resulted in an improved report, chiefly with the use of mobile device data to capture visitation on public and private lands supporting recreation, and a better understanding of how visitor spending affects state and local economies. Additional improvements include minimizing overlaps between activity-based participation and site-level visitation counts, and a better understanding of how participation was distributed. Together, these changes provide an updated baseline to track trends and evaluate the future of Washington's outdoor recreation economy.

This report also includes a discussion of communities with substantial outdoor recreation assets that are underused, and therefore are underserved by the recreation economy. This analysis explores how factors such as infrastructure, accessibility, investment, and public awareness shape the extent to which communities benefit from recreational spending. These findings highlight opportunities to better balance recreation economies across the state. Recognizing and investing in outdoor recreation is essential to strengthening Washington's economy, supporting communities, and enhancing access to recreational opportunities statewide.

1 The 2020 report analyzed visitation in 2019. This report is based on 2024 visitation to the state's outdoor recreational areas.



OUTDOOR RECREATION SPENDING

TOTALS

\$25.2 BILLION

AND SUPPORTS **\$33.1 BILLION**
IN ECONOMIC CONTRIBUTIONS

Introduction

The State's inaugural economic report on outdoor recreation, released by the Recreation and Conservation Office (RCO) in 2015, captured a baseline of Washington's recreation economy, estimating \$21.6 billion in annual spending. The 2020 update revealed \$26.5 billion in annual spending, which has been corrected to \$21.9 billion in spending, as explained later in this section. The number of outdoor participants has increased since 2019, while individual participation rates—the number of outings per person—have declined (Outdoor Foundation, 2022; Outdoor Foundation and Outdoor Industry Association, 2023, 2024). This shift has contributed to lower average spending per trip, while spending on gear and equipment has continued to rise, as highlighted in this report.

The aim of this update is to provide a current, data-driven picture of the outdoor recreation industry in Washington—capturing total spending, jobs, wages, and tax contributions. It also extends beyond traditional economic measures to estimate the value of public benefits, such as consumer surplus and other environmental services. This analysis improves previous reporting by using anonymized mobile device location data to fill in gaps for previously unmeasured visitation on private lands.

Report Overview

This report estimates both the economic contribution of outdoor recreation and the ecosystem services associated with lands that support recreation. It is structured as follows: Section 3 describes the conceptual framework and methodologies used to measure the economic contribution of outdoor recreation and the broader benefits provided by those lands; Section 4 presents estimates of outdoor recreation participation, spending, and resulting economic contributions; Section 5 explores and values the ecosystem services of lands that support recreation; Section 6 highlights costs of recreation to governments, residents, and environments; Section 7 discusses the challenges some communities face expanding their outdoor recreation economies, despite having abundant outdoor recreation opportunities nearby; finally, Section 8 summarizes the findings and offers concluding insights.



How This Study Differs from 2015 and 2020 Reports

This report draws comparisons to the 2015 and 2020 studies to highlight changes in outdoor recreation and its economic impacts. While the overall approach remains consistent, this update incorporates newer data sources and more sophisticated modeling techniques. As a result, individual data points—such as activity- or county-level results—should not be directly compared across reports without accounting for methodological differences.

Methodological Improvements and Corrections

The 2025 update introduces greater location-sensitive rigor through the following two key improvements:

- 1) **Mobile device location data** was used to model visitation to lands managed by the Washington Department of Natural Resources and the Washington Department of Fish and Wildlife, and to estimate visitor origins—such as out-of-state visitors—where direct data is lacking.
- 2) **The 2023 Washington State Recreation and Conservation Plan** (also known as SCORP), by RCO, guides Washington State investments in outdoor recreation and public land conservation through planning, funding, and policy recommendations. The plan includes data from several surveys that assess outdoor recreation participation and trends. It is used in this report to estimate activity participation. This report refined recreation participation to avoid overcounting recreation on public lands, particularly for activities on public waters. For example, when visitors are counted at a public site like a state park, researchers now only include responses indicating use of private access (e.g., a private boat launch) to public waters, because those accessing the land through public means are included in other visitation counts.²

Another update ensures activity participation rates from the plan are applied only to adults who recreate rather than the state's entire adult population. This is done by adjusting participation by the percent of adults who indicated they had recreated outdoors within a year of that survey.

Due to data limitations at the time, the 2020 report reported local park visitation at about 43 percent of all recreation visits, which was an overestimation. In this update, improved methods support more accurate estimates. SCORP survey data provided a statewide benchmark for local park visitation, while mobile device data helped allocate that visitation between city and county parks based on patterns observed throughout the state. Using this combined approach, the 2025 update estimates that local parks account for roughly 30 percent of total outdoor recreation visitation.

To minimize potential overcounting, this update assumes different spending profiles for overlapping activities (e.g. inner tubing, floating, motorized boats). These activities involve different spending patterns; for example, individuals floating without boats typically spend less than those using motorized boats. Had such distinctions been included in the 2020 report, those visitation and spending estimates likely would have been lower.

Looking back to 2020, mobile device data cannot be used to reliably estimate the scale of visitation to individual sites, because not every visitor carries a mobile device or opts to share their data. Yet mobile device data can still be used to estimate proportions of local and nonlocal or out-of-state visitors. This allows us to adjust the earlier SCORP-based analyses to better support “apples-to-apples” comparisons with the current report, especially regarding access points for recreation on public waters.

2 A limitation of this approach is that a SCORP respondent may have answered multiple land manager types (e.g., Tribal, federal, state, private) for a single activity and associated days. This method does not provide a way to distinguish how many days should be attributed to each land manager.

Comparing to 2020 Report Results

In the 2020 report, it was estimated that in 2019 participants spent 600 million days recreating in Washington, spending \$26.5 billion on trips and equipment. Using the 2025 report’s methodology (without mobile device data) on the 2020 report’s estimates results in 113.3 million fewer participant days and \$4.6 billion less spending in 2019 (see Table 1). Most of the decrease is accounted for under the public waters category, with the remainder from other activities on private lands, such as leisure and camping.

For the most direct comparison, the estimated recreation spending of \$25.2 billion in 2024 should be compared to the newly adjusted \$21.9 billion in 2019. Readers interested in methodological details not mentioned here may consult the original 2015 report for more information.

Table 1. Comparing Participation and Spending in 2019, Using the Original Methods from the 2020 Report and Methods from the Present Study (2019 U.S. Dollars).

METHODOLOGY	PUBLIC WATERS PARTICIPANT-DAYS (2019)	PUBLIC WATERS TOTAL SPENDING (2019)	TOTAL PARTICIPANT-DAYS (2019)	TOTAL SPENDING (2019)
Reported 2020 Values	123,720,000	\$6,890,000,000	581,500,000	\$26,480,000,000
Corrected 2020 Values	37,050,000	\$2,760,000,000	468,157,000	\$21,860,000,000
Difference	-86,670,000	-\$4,130,000,000	-113,343,000	-\$4,620,000,000



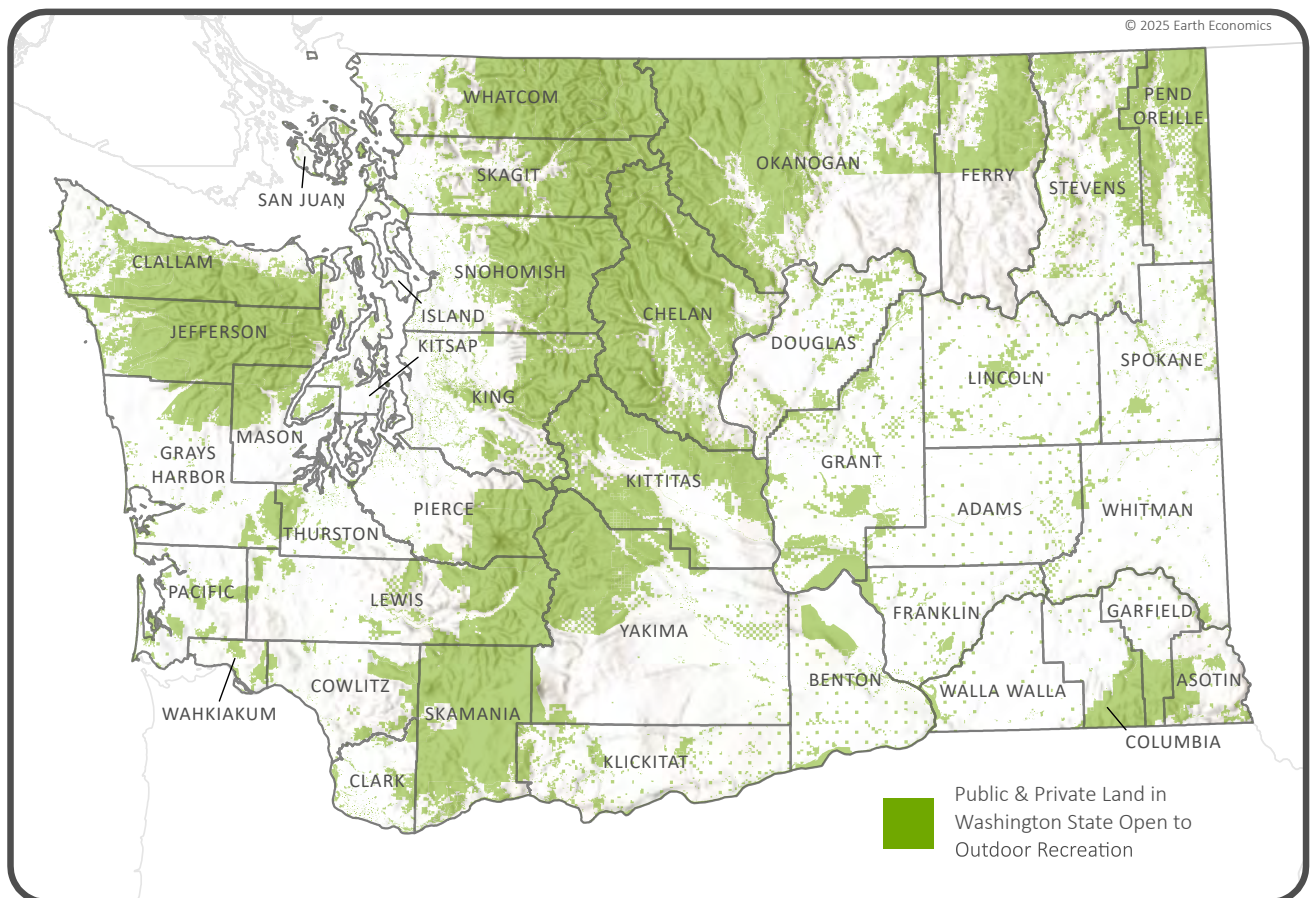


3 Concepts and Methods

Washington landscapes offer a wealth of opportunities for outdoor recreation, attracting both residents and visitors. Whether mountain biking along forested trails, kayaking in the Puget Sound, mushroom foraging in the Olympic foothills, snowshoeing in alpine meadows, or hunting in eastern Washington's rolling hills, the state offers recreational experiences for nearly every interest and skill level. From high-adrenaline activities like off-road riding and rock climbing, to more leisurely pursuits like beachcombing and birdwatching, outdoor recreation is central to Washington's lifestyle and economy.

In this report, outdoor recreation is defined as "activities pursued primarily for personal enjoyment in outdoor settings." These experiences connect people with nature while stimulating local economies. Spending on trip-related expenses, gear, and equipment flows directly into communities—supporting jobs, boosting income, and generating local and state tax revenues. This analysis applies well-established methods to estimate the economic contributions of outdoor recreation, as summarized below. For a more extensive discussion of these methods, refer to the 2015 report.

Figure 1. Lands Supporting Outdoor Recreation, Washington State



The Outdoor Recreation Economy

Outdoor Recreation Expenditures

Spending on outdoor recreation in Washington was measured by analyzing both participation levels and spending behaviors, with total spending equal to the number of recreation days at each site, multiplied by the average spending per visitor. Per-person spending varies based on several factors, including the manager of each site (e.g., federal, state, county, municipal, private) and the distance visitors traveled to reach the site. Local recreationists often spend less on travel, lodging, and food compared to nonlocal visitors, who typically pay more, especially when visiting for more than a single day.

To capture the full scope of outdoor recreation in Washington, this analysis organizes participation and spending data into two broad categories: publicly managed lands and privately held land. Public lands are overseen by federal, state, and local governments. Private lands also play a crucial role, with spaces like timberlands and ski areas contributing significantly to the state's diversity of outdoor opportunities. Although many ski resorts operate in national forests, they are privately managed under special use permits. Because the U.S. Forest Service's National Visitor Use Monitoring survey reports downhill skiing and snowboarding visits separately, these activities were excluded from public lands totals and instead categorized under private lands to avoid double counting.

Emerging data sources can enable more refined analyses. Key methods updates in this report include improved estimates of visitation to public waters, adjusted to account for overlapping water-based activities, and the inclusion of schools as sites for field sports (grouped under "Athletics" in Appendix D). These refinements were introduced to minimize overcounting where visitors may participate in multiple activities at one site. In past reports, it was not possible to determine whether recreationists accessed public waters through public lands (e.g., state or municipal parks), or private sites (e.g., docks or marinas). This meant that water-based recreation was captured both as an activity, and as visitation to access sites. This overlap meant that visitation to public waters was overcounted, a challenge that was well-documented in the 2015 analysis, and carried over to the 2020 study. Because both methods and data have since improved, it is now possible to separate public and private water access, reducing overcounts to produce more precise estimates. Accordingly, this report reflects lower overall visitation and trip-related spending, even as the number of participants and equipment spending have increased.

Local park visitation was estimated using a combination of SCORP survey data and mobile device location data to better reflect actual use patterns across Washington. SCORP provided a statewide benchmark for the share of overall outdoor recreation in local parks, while mobile device data allowed for that visitation to be apportioned between city and county parks. The analysis found that about 77 percent of local park visitors recreate in municipal parks, with the remaining 23 percent visit county parks. Overall, roughly 30 percent of all outdoor recreation visits in Washington were to local parks.

These improvements provide a more accurate and comprehensive view of outdoor recreation across Washington State. This analysis establishes a stronger baseline for future studies, enabling more precise tracking of trends and outcomes in Washington's outdoor recreation economy.

The distance visitors travel to recreate is a major factor in their spending. For example, local parks and neighborhood green spaces tend to attract day users with lower overall spending. In contrast, destinations like national parks and more remote areas draw nonlocal visitors who often stay overnight, leading to higher spending on lodging, dining, and other trip-related expenses. These patterns—who visits, how far they travel, and how long they stay—provide valuable insight into the spending behaviors associated with each type of recreational site. These factors are key in estimating the broader economic contribution of outdoor recreation throughout Washington State.

Outdoor Recreation Visitor Spending Effects

Money spent on outdoor recreation, including trips and gear, goes directly to businesses such as bait shops, restaurants, and outdoor retailers, sustaining jobs and generating tax revenues. These initial expenditures then recirculate in the local economy, supporting additional employment and taxes. Research indicates that diversified economies experience lower unemployment and recover more quickly from economic downturns. For many areas throughout the state, outdoor recreation presents a valuable opportunity for maintaining economic diversity.

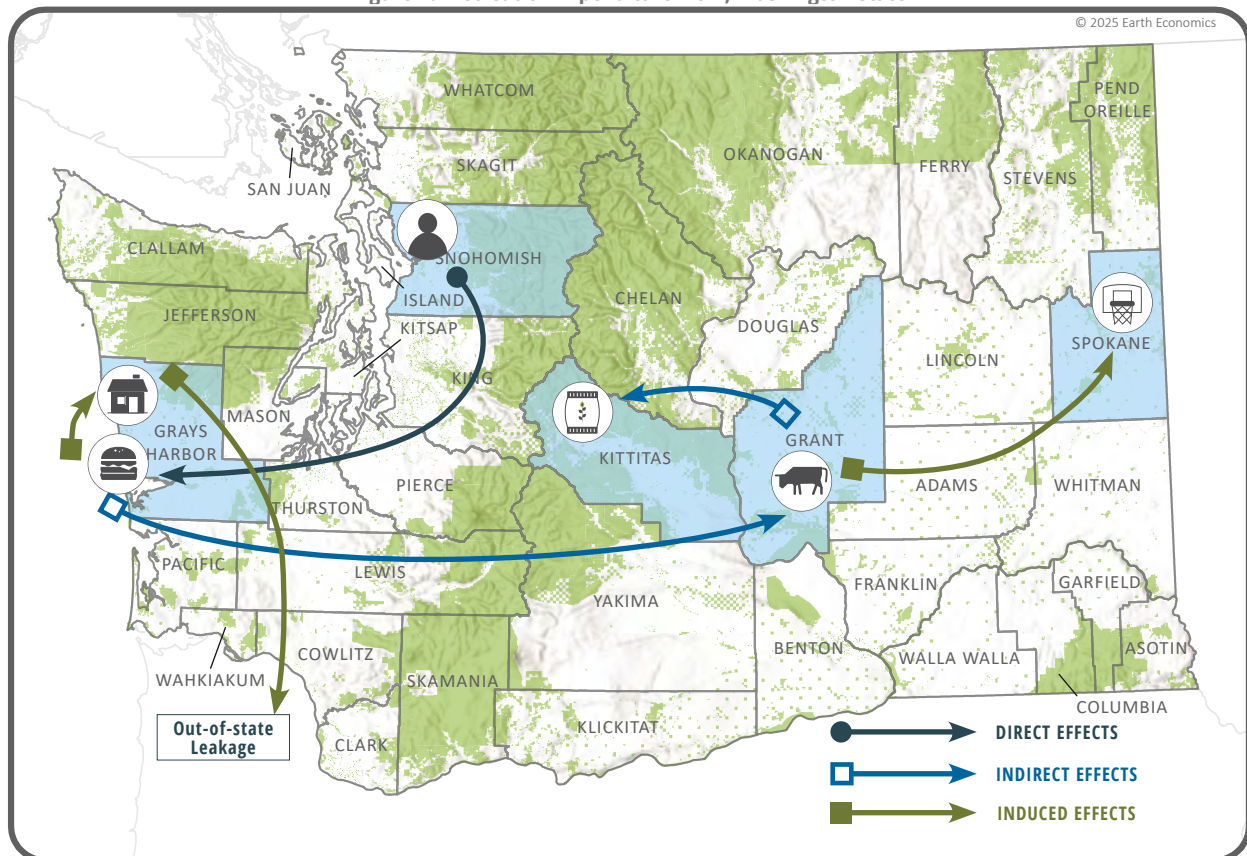
These benefits were estimated by conducting an economic contribution analysis, which applies input-output modeling of the financial links between industries within regional economies. A multi-regional input-output model further estimates how economic activity in one part of Washington ripples across the state. These relationships are based on data from the Bureau of Economic Analysis. The analysis was conducted using IMPLAN, the industry-standard input-output modeling platform.

IMPLAN models estimate the effects of initial expenditures on the total economic contribution, value-added to gross domestic product, jobs, wages, and tax revenue, each categorized as direct or secondary economic effects. Direct effects measure the economic activity of industries supported directly by consumer spending (e.g., hotels, retail stores, recreation services, restaurants). Secondary effects reflect shifts in the economy spurred by that initial spending, and are further categorized as either *indirect* or *induced* effects.

Indirect effects capture the subsequent economic activity generated in the supply chains that serve direct-spending industries. For example, when recreationists dine out, restaurants then buy supplies and services from supporting industries (e.g., farmers, ranchers, accountants) to continue meeting customer needs. In this way, outdoor recreation spending indirectly supports a much broader range of businesses beyond those most clearly related to outdoor recreation.

Induced effects represent the economic impact of household spending by those employed by businesses that are directly or indirectly affected by recreation spending. When those workers go on to pay for rent, groceries, fuel, or other local goods and services, their spending further stimulates regional economies. For example, a marina employee's paycheck may support grocers, gas stations, and landlords. The extent to which these dollars continue circulating locally depends on the interconnectedness of the state and local economies, with each transaction generating additional economic activity until the money ultimately exits each region.

Figure 2. Recreation Expenditure Flow, Washington State



The Ecosystem Services Benefits of Recreation

In addition to the measurable economic contributions, lands supporting outdoor recreation provide a range of benefits not captured by conventional economic metrics. These are known as nonmarket benefits, as their value is rarely fully reflected in prices or direct transactions. Recreational lands produce a host of environmental benefits (known as *ecosystem services*), including the value recreationists are willing to pay for their experiences, beyond what it actually costs them to participate (known as *consumer surplus*).

Consumer Surplus

Beyond market benefits, outdoor recreation enhances quality of life, making Washington a more vibrant and livable state. This report estimates the value of consumer surplus by calculating the difference between what participants are willing to pay for recreational experiences and what they actually spend. For example, a person who values a three-day backpacking trip in the Olympic National Forest at \$500 but only spends \$200 on travel, permits, and fees, has a consumer surplus of \$300.

These outdoor recreation consumer surplus estimates were provided by the Recreational Use Values Dataset, developed by Dr. Randall Rosenberger, professor of environmental economics at Oregon State University (Rosenberger, 2016). The consumer surplus values used here were chosen based on relevance to outdoor recreation in Washington State. The dataset compiles research based on both stated and revealed preferences, specifically willingness-to-pay and travel cost methods. Consumer surplus estimates have been converted to unit values (e.g., surplus/person/day), and then scaled by the visitation estimates used in the contribution analysis.

Other Ecosystem Goods and Services

Forests, which support hiking and backpacking also sequester carbon, store freshwater, retain soil, and provide critical habitat for wildlife. Forests and other ecosystems deliver a wealth of services to communities across Washington—services that would be costly, if not impossible, to replace with built infrastructure. Using a variety of economic methods, this report translates these environmental benefits—known as ecosystem goods and services—into economic terms. Ecosystem services are fundamental to human health, support community resilience, and provide a foundation for economic prosperity.

This report applies a framework adapted from the Millennium Ecosystem Assessment (Alcamo et al., 2003), which groups services into the following categories:

Provisioning services—extractable materials, energy, and other resources, including food, water, timber, and medicinal and ornamental resources.

Regulating services—ecosystem functions that maintain ecological and chemical cycles can deliver benefits locally (e.g., air and water quality), regionally (e.g., disaster risk reduction), and globally (e.g., carbon sequestration and storage).

Supporting or habitat services—ecosystems support plants and animals and provide nesting or feeding opportunities, maintaining biological diversity at all levels, from populations, to species, to landscapes.

Informational services—natural environments provide aesthetic benefits, recreational opportunities, and both cultural and scientific benefits.

Figure 3. Examples of Natural Capital, Ecosystem Functions, and Ecosystems Goods and Services



Economists have developed a variety of approaches to estimate the value of ecosystem goods and services. Because the full value of the benefits produced by a given ecosystem rarely are included in market prices (e.g., real estate sales), economic value must sometimes be assessed indirectly, using a range of methods, which include the following:

Replacement Cost: The cost to replace an ecosystem service with an engineered alternative (e.g., levees and dams to replace natural flood risk reduction capabilities).

Avoided Cost: The losses expected to happen when a natural ecosystem is removed or its function has been impaired significantly (e.g., flooding following wetland degradation or removal).

Production Approaches: Many ecosystem functions support and enhance market outputs (e.g., regular moderate rainfall can increase crop productivity).

Travel Cost: For experiences that require travel, the cost of getting there represents the lowest value that individuals are willing to pay to access those experiences. (e.g., recreation and tourism).

Hedonic Pricing: Property values often vary by proximity to certain natural features (e.g., homes with water views often sell for higher prices than similar homes without such views).

Contingent Valuation: Surveys can elicit the value respondents assign to certain ecosystem services (e.g., willingness to pay to protect water quality).



This report expands on the results and methodologies presented in 2020, in which benefit transfer methods were applied to estimate the nonmarket value of ecosystem services produced by Washington’s lands that support recreation. This well-established approach is similar to how off-market real estate is appraised based on recent sales of comparable homes, and is widely used in ecosystem services valuation. There are three major updates made to the 2020 methodology:

1. **Inclusion of new data.** Because new valuation research is published each year, it is possible to improve site-specific estimates and fill key gaps in ecosystem services values. This may make the range or average of certain ecosystem services lower or higher than in the 2020 report depending on how the values of the new studies compare to those used previously.
2. **Distinguishing between the locational contexts of ecosystems.** The best practices for the application of benefit transfer methods continue to evolve, enabling more precise value transfers. This report refines previous methods by incorporating spatial attributes that use additional data to describe the locational context of study sites in the valuation literature. Doing so improves the accuracy of applying ecosystem service estimates to recreational lands by noting differences in the value of ecosystem services that may be affected based on where they are being produced (e.g., forests along waterways tend to be more ecologically productive than upland forests). This report included two spatial attributes: climate zones and urban areas. Including other spatial attributes, such as whether ecosystems occur in coastal and riparian areas, could influence results, particularly for services like habitat provision. Future studies may benefit from incorporating these features to better capture their full ecological contributions.
3. **Function transfer.** There are two main approaches to benefit transfer methods: point transfers and function transfers. Point transfers use unit values from primary research (e.g. cost/acre/year), which are then scaled by the extent of that unit in the study area. By contrast, function transfers substitute transfer site data for the variables in the original models to generate new estimates tailored to the transfer site. This approach has been shown to produce smaller errors than point transfer approaches, all else being equal (Kaul et al., 2013). In addition to the traditional point transfer approach, function transfers generate Washington-specific values to address key gaps in the relevant ecosystem services literature.

All ecosystem services estimates from the literature were converted to cost/acre/year unit values and adjusted to 2024 dollars using the Consumer Price Index (Bureau of Labor Statistics Data, 2025). Each estimate is associated with ecological (i.e., landcover) and spatial contexts, and these unit values then were scaled by the extent of each context across Washington lands that support recreation to estimate the annual value of ecosystem services benefits.



Expenditures and Economic Contributions

OF OUTDOOR RECREATION IN WASHINGTON STATE

In 2024, Washington residents and visitors logged an estimated 437 million days of outdoor recreation. This is less than the previous report, which, once corrected, estimated 468 million days in 2019. This reflects national trends—while the COVID-19 pandemic initially sparked a surge in outdoor recreation, participation patterns shifted in the following years—more people recreated outdoors and they tended to do so less frequently (Outdoor Foundation, 2022; Outdoor Foundation and Outdoor Industry Association, 2023, 2024). As a result, overall recreational participation declined. Additionally, improvements in methods and data have helped to reduce overcounting in the previous reports, which were unable to separate public versus private access to public waters and used less granular methods for estimating local recreation. As such, visitation was overestimated in both the 2015 and 2020 reports. This limitation was described in detail in the 2015 report.

Roughly 66 percent of the 437 million days occurred on public lands. While federal- and state-managed lands attracted large numbers of recreationists, city and county parks accounted for a third of total activity. Overall, outdoor recreation generated an estimated \$14.6 billion in trip-related spending on lodging, restaurants, gas stations, grocers, and gear shops, often located in last-stop, gateway communities. Activities with the highest average daily spending included snow sports, scuba diving, and boating; local city parks were associated with lower daily spending. See Table 3 for full spending details by land manager.

Beyond trip-related expenses, an estimated \$10.5 billion was spent on outdoor gear, equipment, and repairs. These figures include industry-level data for hunting, fishing, and wildlife watching from the Washington Department of Fish and Wildlife's *Participation and Expenditures in 2022* report (Van Deynze, 2024). The largest share of these expenditures went to buying household goods—including equipment repairs—followed by significant spending on sporting goods and apparel. The other activities with attributable equipment expenses include jogging and running, walking and hiking, swimming, horseback riding, cross-country skiing, bicycling (Prey et al., 2013), and scuba diving and snorkeling (Wallmo et al., 2021).

Table 2. 2024 Spending on Outdoor Recreation

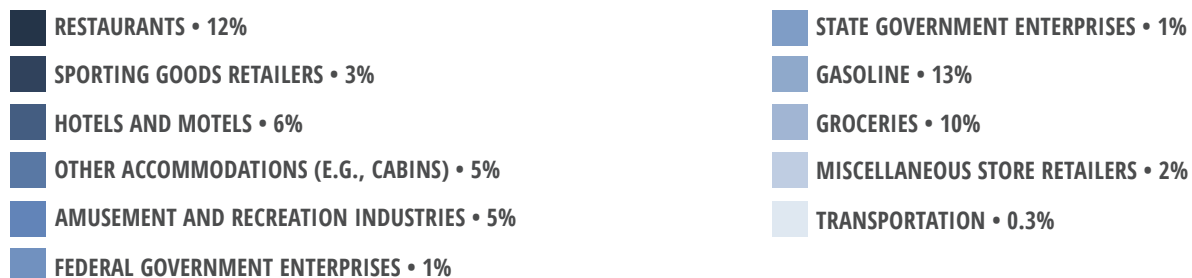
CATEGORY	SPENDING
Trip-Related	\$14,630,024,359
Equipment	\$10,523,642,190
Total Spending	\$25,153,666,549



Figure 4. Outdoor Recreation Expenditures by Industry



TRIP-RELATED EXPENDITURES • \$14,630,024,000



EQUIPMENT EXPENDITURES • \$10,523,642,000



Table 3. 2024 Visitation and Trip-Related Expenditures by Land Manager

OWNERSHIP	MANAGEMENT	PARTICIPANT-DAYS	DOLLARS PER PARTICIPANT-DAY	TOTAL SPENDING
Federal	Bureau of Land Management	2,010,000	\$34	\$69,064,000
Federal	National Parks Service	9,782,000	\$73	\$716,239,000
Federal	National Wildlife Refuges	1,197,000	\$103	\$123,219,000
Federal	U.S. Army Corps of Engineers	6,017,000	\$17	\$102,084,000
Federal	U.S. Forest Service	19,771,000	\$39	\$768,032,000
State	State Parks	44,589,000	\$42	\$1,857,833,000
State	Washington Department of Fish and Wildlife	45,386,000	\$48	\$2,180,803,000
State	Washington Department of Natural Resources	27,703,000	\$48	\$1,321,818,000
Local	City Parks*	100,115,000	\$9	\$862,737,000
Local	County Parks*	29,325,000	\$9	\$252,704,000
Public	Golf Courses*	1,354,000	\$111	\$150,514,000
Private	Water Access*	30,054,000	\$27 - \$161	\$2,127,375,000
Private	Land Access*	120,017,000	\$10 - \$164	\$4,097,602,000
Total**		437,320,000		\$14,630,024,000

* Various managers throughout the state

** Totals may vary due to rounding

Table 4. 2024 Economic Contributions of All Outdoor Recreation Spending

IMPACT	JOB	LABOR INCOME	VALUE-ADDED	OUTPUT
Direct	191,214	7,270,680,000	14,724,980,000	22,211,955,000
Indirect	26,550	1,697,037,000	3,250,172,000	6,902,536,000
Induced	19,912	1,149,398,000	2,536,015,000	3,983,684,000
Grand Total	237,676	10,117,115,000	20,511,166 ,000	33,098,175,000

Table 5. Taxes Supported by All Outdoor Recreation Spending

IMPACT	STATE AND LOCAL TAXES
Direct	\$4,306,905,000
Indirect	\$413,529,000
Induced	\$331,871,000
Grand Total	\$5,052,305,000

Figure 5. Population Weighted 2024 Participant Days, Weighted by County Population (Participant Days/Resident)

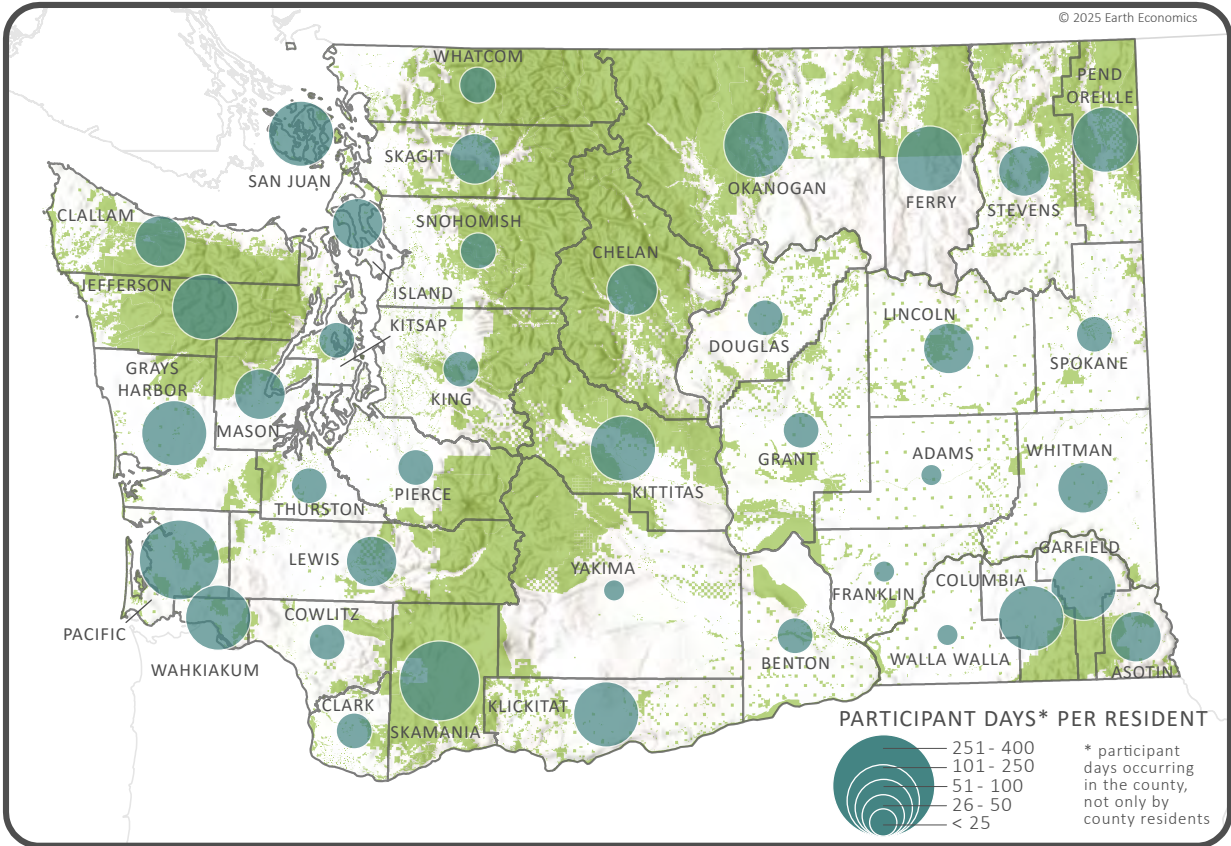


Figure 6. Percentage of Jobs Supported by Outdoor Recreation in 2024, by County

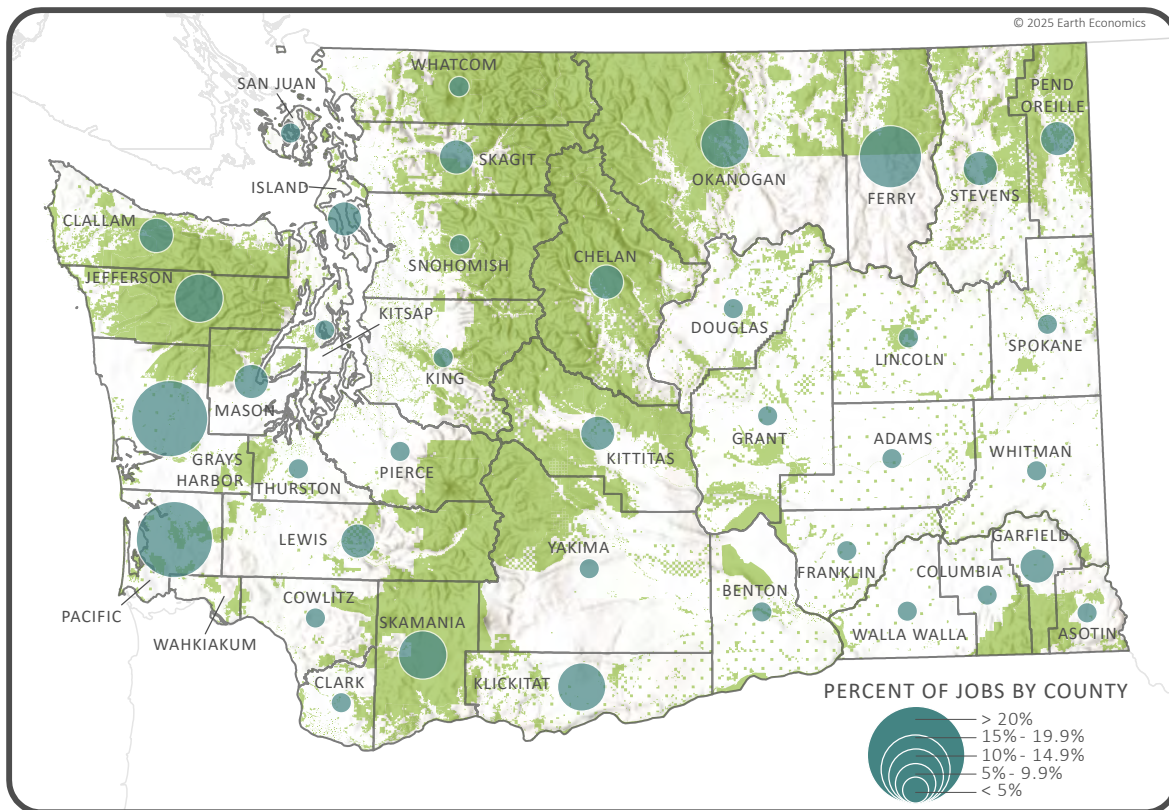
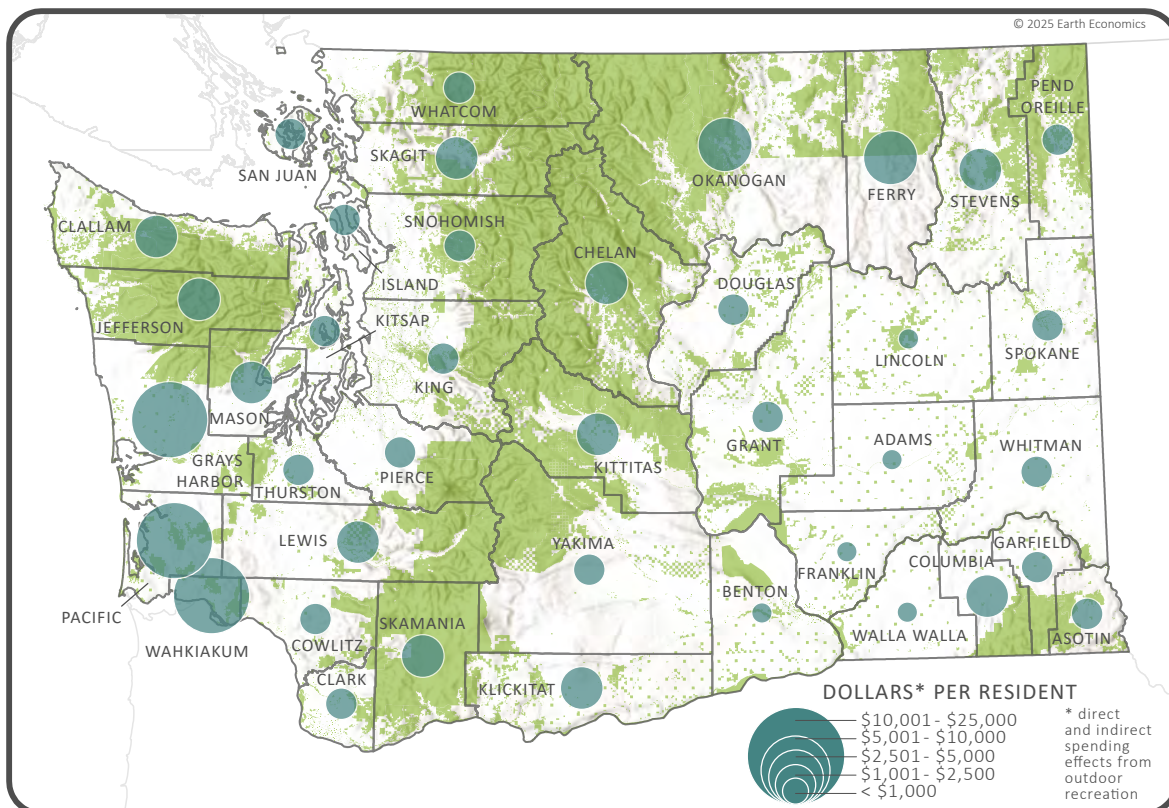


Figure 7. Economic Contribution of Outdoor Recreation, Weighted by County Population (\$/Resident)



The Contribution of Outdoor Recreation on Public Lands

Outdoor recreation on public lands continues to be a cornerstone of Washington’s economy. In 2024, outdoor recreation on public lands supported an estimated \$8.4 billion in trip-related expenditures. This spending supported more than 85,000 jobs statewide.³ Of these, about 65,000 (77 percent) were directly tied to recreation trip-related purchases—such as lodging, food, entrance fees, and transportation. As this spending rippled through the broader economy, an additional 20,000 jobs were sustained through indirect and induced effects. The average annual labor income for all supported jobs was \$47,400, amounting to total wages of \$4.1 billion for workers across the state.

Recreation on public lands also generated significant overall economic activity. The industry supported goods and services—both direct and secondary—valued at \$12.7 billion in total output. This includes primary trip and gear expenditures as well as secondary spending supported by the outdoor recreation economy. In practical terms, this means that for every \$1 spent by participants on public land recreation, about \$1.50 in economic activity was generated.

A key subset of this total contribution is value-added (also known as gross domestic product) which reflects the new goods and services added to the economy as a result of recreation activity. Table 6 presents the full breakdown of economic effects for public lands recreation.

Recreation on public lands also generated substantial state and local tax revenue. Taxes on production and imports, particularly sales taxes, were the largest contributors. In total, spending on public land recreation generated \$1.5 billion in state and local tax revenue, with 73.2 percent from trip-related purchases.

Table 6. 2024 Economic Contributions of Public Land Outdoor Recreation Spending⁴

IMPACT	JOBS	LABOR INCOME	VALUE-ADDED	OUTPUT
Direct	65,697	\$2,631,673,000	\$4,692,685,000	\$7,076,132,000
Indirect	10,760	\$853,193,000	\$1,796,796,000	\$3,780,088,000
Induced	9,144	\$572,603,000	\$1,204,595,000	\$1,881,539,000
Grand Total	85,601	\$4,057,468,000	\$7,694,076,000	\$12,737,759,000

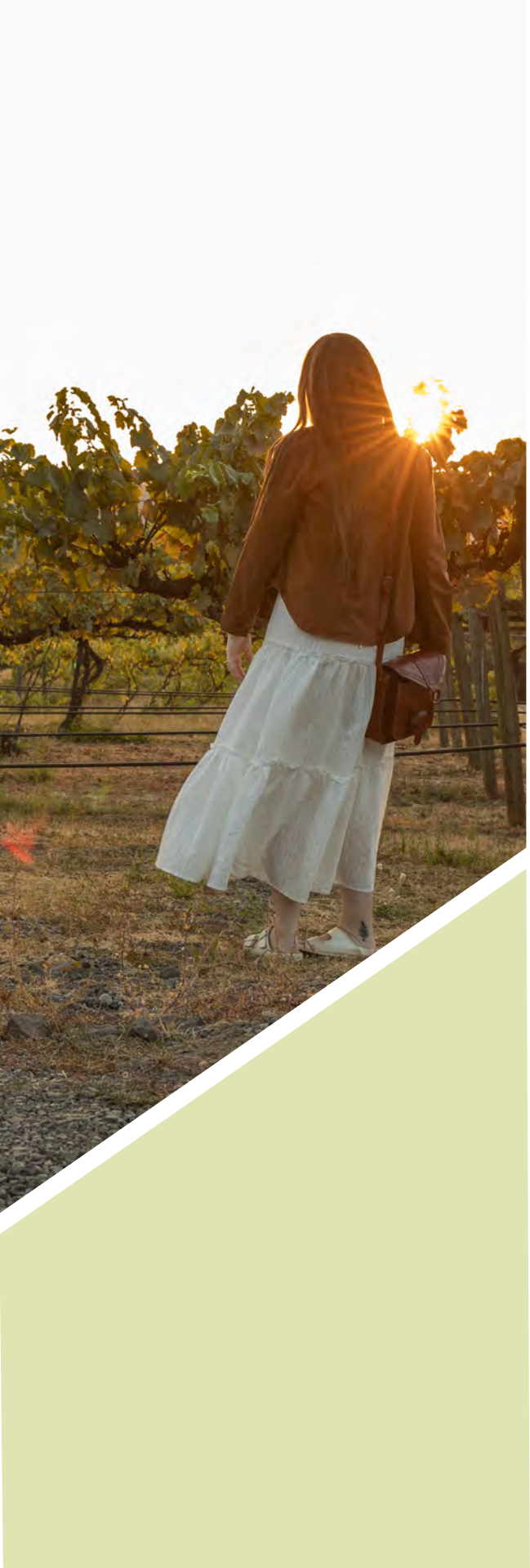
Table 7. Taxes Supported by Public Land Outdoor Recreation Trip-Related Spending⁴

IMPACT	STATE AND LOCAL TAXES
Direct	\$1,096,758,000
Indirect	\$251,756,000
Induced	\$150,484,000
Grand Total	\$1,498,997,000

3 Jobs adjusted for seasonality using job-years, where 1 job-year = 1 job for 12 months = 2 jobs for 6 months, and so on.

4 Does not include equipment expenditures, as those could not be allocated to different land types.





The Contribution of Outdoor Recreation on Private Lands

Though smaller in scale, recreation on private lands also plays a key role in Washington's outdoor economy, accounting for \$6.2 billion in 2024 spending (Table 8). Activities like exploring privately owned forests, skiing at privately operated resorts, and golfing at private resorts contributed an estimated \$5.9 billion (of the \$6.2 billion) in spending that could be included in the contribution analysis. The remaining \$350 million was spent on trips to recreate on private lands, but could not be attributed to a particular area and was not included in the economic contribution analysis. Recreation on private lands supported more than 57,000 jobs, with 47,800 linked directly to recreation-related purchases and 9,400 supported through secondary economic activity.

The total economic output tied to recreation on private land reached \$6.6 billion. These dollars flowed through rural economies and outdoor recreation hubs alike, benefiting sectors from hospitality to retail and transportation. On average, each dollar spent by participants recreating on private lands returned about \$1.06 in broader economic value.

Value-added, or gross domestic product contribution, from private land recreation totaled \$4.1 billion. This metric reflects the net value of goods and services created, offering a clearer picture of how private land recreation supports statewide economic growth. Table 9 displays the economic effects by jobs, labor income, value-added, and overall contribution.

Tax revenues associated with private land recreation totaled \$946 million. These contributions help support local infrastructure, public safety, and other public benefits, especially in rural areas with significant private land access.

Table 8. 2024 Private Access to Waters and Lands

OWNERSHIP	ACTIVITY	PARTICIPANT-DAYS	DOLLARS PER PARTICIPANT-DAY	TOTAL SPENDING
Private Access to Waters	Fishing	5,118,000	\$57	\$289,590,000
Private Access to Waters	Inner Tubing/Floating	1,161,000	\$49	\$56,945,000
Private Access to Waters	Motorboats (including water skiing)	5,580,000	\$116	\$645,270,000
Private Access to Waters	Paddle Sports (whitewater, canoes, kayaks, stand-up-paddle boards, rowing)	3,130,000	\$102	\$319,592,000
Private Access to Waters	Personal Watercraft (Jet Ski, WaveRunner)	898,000	\$116	\$103,910,000
Private Access to Waters	Sailboating	1,287,000	\$116	\$148,821,000
Private Access to Waters	Snorkeling or Scuba Diving	1,259,000	\$161	\$202,981,000
Private Access to Waters	Surfing, Windsurfing, or Kiteboarding	611,000	\$102	\$62,432,000
Private Access to Waters	Swimming (natural settings)	6,239,000	\$27	\$168,840,000
Private Access to Waters	Swimming (outdoor pools)	4,766,000	\$27	\$128,990,000
Private Lands	Athletics	69,670,000	\$27	\$1,858,889,000
Private Lands	Golf Courses	6,705,000	\$111	\$745,402,000
Private Lands	Land Conservancies, Land Trusts, and Nonprofit lands	140,000	\$13	\$1,860,000
Private Lands	Private Campgrounds	11,727,000	\$59	\$692,374,000
Private Lands	Private Horseback Riding	1,945,000	\$10	\$19,148,000
Private Lands	Ski Area	1,372,000	\$164	\$225,143,000
Private Lands	Timberlands	5,744,000	\$35	\$198,724,000
Private Lands	Uncategorized Private Lands	11,000	\$13	\$145,000
Private Lands	Wildlife/Nature Viewing	22,698,000	\$16	\$355,912,000
Total*		150,071,000		\$6,224,976,000

* Totals may vary due to rounding

Table 9. 2024 Economic Contributions of Private Land Outdoor Recreation Spending⁵

IMPACT	JOBS	LABOR INCOME	VALUE-ADDED	OUTPUT
Direct	47,827	\$1,657,198,000	\$3,016,492,000	\$4,612,181,000
Indirect	5,225	\$305,090,000	\$563,773,000	\$1,170,626,000
Induced	4,139	\$235,900,000	\$522,438,000	\$823,942,000
Grand Total	57,191	\$2,198,188,000	\$4,102,704,000	\$6,606,749,000

Table 10. Taxes Supported by Private Land Outdoor Recreation Spending⁵

IMPACT	STATE AND LOCAL TAXES
Direct	\$807,073,000
Indirect	\$69,474,000
Induced	\$69,520,000
Grand Total	\$946,067,000

⁵ Does not include equipment expenditures, as those could not be allocated to different land types.

The Contribution of Outdoor Recreation by Out-of-State Visitors

While Washington residents make up most of the of outdoor recreation participants, out-of-state visitors play a critical role in fueling local economics—particularly in tourism-dependent communities. Their spending introduces new money into the state, supporting small businesses, seasonal jobs, and rural livelihoods that depend on visitor traffic.

Out-of-state visitors also tend to have higher daily spending than residents, driven by costs for overnight lodging, dining, guiding experiences, and other travel-related purchases. This higher per-visit economic impact makes them a valuable segment for destination marketing and recreation infrastructure investment.

At the same time, balancing increased visitation with environmental stewardship is an ongoing challenge for popular destinations. Managing visitor impacts while sustaining the economic benefits of outdoor tourism will remain a key policy consideration for Washington in the years ahead.

In 2024, visitors from outside Washington spent an estimated \$1.6 billion while participating in activities such as skiing at White Pass or fishing in the Columbia River. This spending supported about 18,400 jobs statewide. Of these, 14,500 were direct jobs tied to purchases like lodging, meals, and recreation services, while 3,800 additional jobs were sustained through indirect and induced economic activity.

Out-of-state visitor spending generated total economic output of \$2.4 billion. This means each dollar spent by out-of-state visitors creates about \$1.53 in economic value as spending rippled through local economies—particularly in rural gateway communities near popular recreation destinations.

Labor income generated from out-of-state visitor recreation totaled almost \$826 million, with an average wage of \$44,900 per job-year. This spending also contributed \$1.5 billion in value added to Washington’s gross domestic product, reflecting the new goods and services produced as a result of tourism-related outdoor recreation. Table 11 provides a detailed summary of jobs, income, gross domestic product contribution, and total economic output from out-of-state visitors.

Additionally, spending by out-of-state visitors generated \$290 million in state and local tax revenue, most of which came from sales taxes on lodging, dining, fuel, and retail purchases.

Table 11. 2024 Economic Contributions from Out-of-State Visitor Outdoor Recreation Spending⁶

IMPACT	JOBS	LABOR INCOME	VALUE-ADDED	OUTPUT
Direct	14,568	\$564,091,000	\$949,224,000	\$1,407,133,000
Indirect	1,999	\$150,208,000	\$297,522,000	\$612,637,000
Induced	1,827	\$112,146,000	\$238,228,000	\$373,081,000
Grand Total*	18,394	\$826,445,000	\$1,484,975,000	\$2,392,852,000

*Total may vary due to rounding.

Table 12. Taxes Supported by Out-of-State Visitor Outdoor Recreation Spending⁶

IMPACT	STATE & LOCAL TAXES
Direct	\$224,331,000
Indirect	\$36,071,000
Induced	\$30,026,000
Grand Total*	\$290,429,000

*Total may vary due to rounding.

6 Does not include equipment expenditures, as those could not be allocated to different land types.

Figure 8. Percent of Jobs Supported By Out-Of-State Visitors in 2024, by County

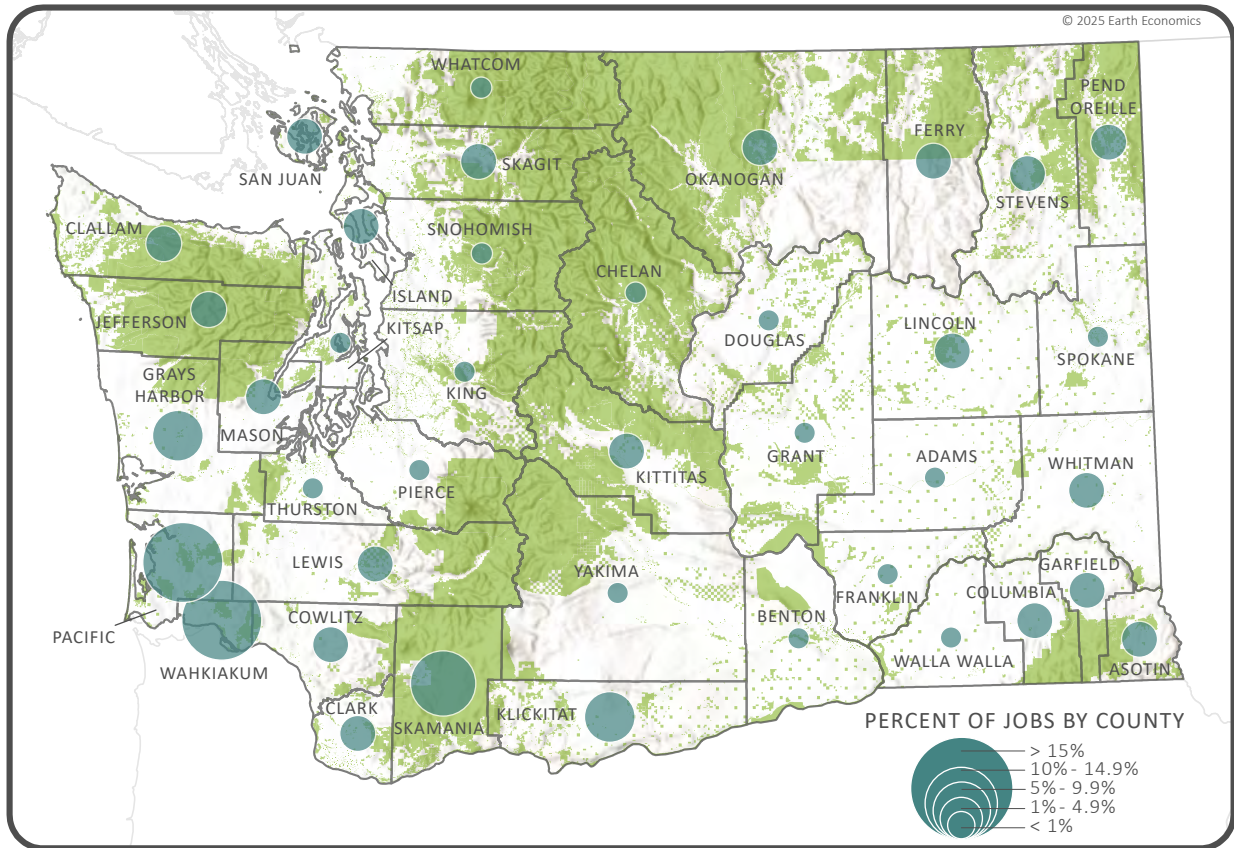
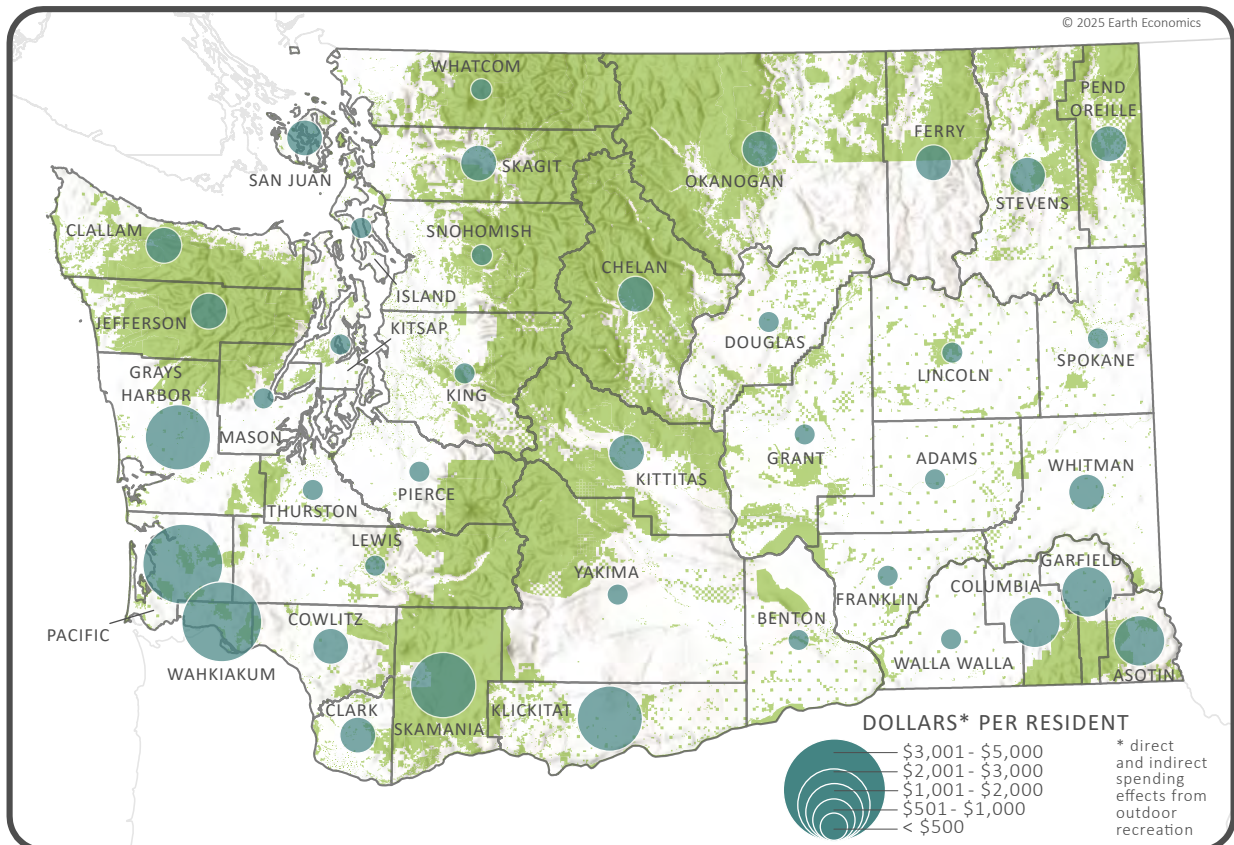


Figure 9. Economic Contribution of Recreation by Out-Of-State Visitors, weighted by County Population (\$/Resident)



Economic Value of Ecosystem Services

FROM LANDS SUPPORTING OUTDOOR RECREATION

The focus of this section is on the economic value of these additional nonmarket ecosystem services that Washington lands provide.

Consumer Surplus and Outdoor Recreation

Outdoor recreation may be considered an ecosystem service. Nonmarket valuation of recreation recognizes that many people value outdoor recreation experiences beyond what they actually pay to participate. Recreation contributes to overall well-being in ways that extend beyond traditional economic measures—such as promoting physical health, mental well-being, and connection to nature. This additional value that participants receive beyond their actual costs is known as consumer surplus.

The first step in estimating consumer surplus from outdoor recreation was to identify average unit values per participant day associated with the relevant agencies and activities. These values were drawn from peer-reviewed literature and represent the average benefit recreation participants receive beyond what they pay. To estimate total consumer surplus, these values were multiplied by the number of participant days for each agency or activity.

Updated visitation data from the 2023 SCORP no longer includes participant-per-day data for “Events,” which had been captured in the 2018 SCORP. Additionally, the previous data did not include visitation to private golf courses. To address this gap, the consumer surplus value for “Local Municipal Golf” was applied to private golf courses, based on the assumption that the recreational value would be comparable, as both activities occur in outdoor golf settings.

The annual consumer surplus value of outdoor recreation, based on these methodologies, was estimated at \$33.7 billion in 2024. Table 13 presents the average per-day consumer surplus value, along with the total consumer surplus for visits to Washington’s public and private lands that offer recreation opportunities.



Table 13. Economic Benefits as a Measure of Consumer Surplus (2024 U.S. Dollars).

OWNERSHIP	AGENCY	DOLLARS PER PARTICIPANT- DAY	CONSUMER SURPLUS
Federal	Bureau of Land Management	\$92	\$185,108,000
Federal	National Parks Service	\$92	\$901,003,000
Federal	National Wildlife Refuges	\$81	\$97,068,000
Federal	U.S. Army Corps of Engineers	\$92	\$554,231,000
Federal	U.S. Forest Service	\$92	\$1,821,090,000
State	Washington Department of Natural Resources	\$98	\$2,721,853,000
State	State Parks	\$92	\$4,107,053,000
State	Washington Department of Fish and Wildlife Game Management Units (Hunting)	\$103	\$4,682,504,000
Local	City Parks	\$66	\$6,639,650,000
Local	County Parks	\$66	\$1,944,819,000
Local	Municipal Golf	\$87	\$118,076,000
Private	Athletics (Total Days)	\$66	\$4,620,543,000
Private Access to Public Waters	Fishing (Total Days)	\$95	\$483,726,000
Private Access to Public Waters	Inner Tubing or Floating (Total Days)	\$87	\$101,257,000
Private Access to Public Waters	Motorized Boating and Sailing (Total Days)	\$79	\$438,663,000
Private Access to Public Waters	Non-Motorized Paddle Sports (Total Days)	\$146	\$457,522,000
Private Access to Public Waters	Non-Motorized Windsurfing/Surfing (Total Days)	\$146	\$89,377,000
Private Access to Public Waters	Swimming in Outdoor Pools (Total Days)	\$87	\$415,668,000
Private Access to Public Waters	Swimming In Natural Waters (Total Days)	\$87	\$544,084,000
Private Access to Public Waters	Scuba Diving (Total Days)	\$146	\$184,110,000
Private	Skiing (Total Days)	\$111	\$151,707,000
Private	Wildlife Watching (Total Days)	\$81	\$1,839,941,000
Private	Golf Courses (Total Days)	\$87	\$584,756,000
Total			\$33,683,809,000



Additional Ecosystem Services

Table 14 identifies the ecosystem services that were valued based on data availability. The updated results include 15 of 21 ecosystem service categories and represent a more in-depth account of the nonmarket benefits provided by lands supporting outdoor recreation. These services deliver a range of benefits to a range of groups, including homeowners, visitors, and even individuals who may never visit lands supporting outdoor recreation but still value their protection. Compared to the previous report, four new ecosystem services have been included: biological control, pollination, soil quality, and temperature regulation.

Table 14. Ecosystem Services Valued in this Report

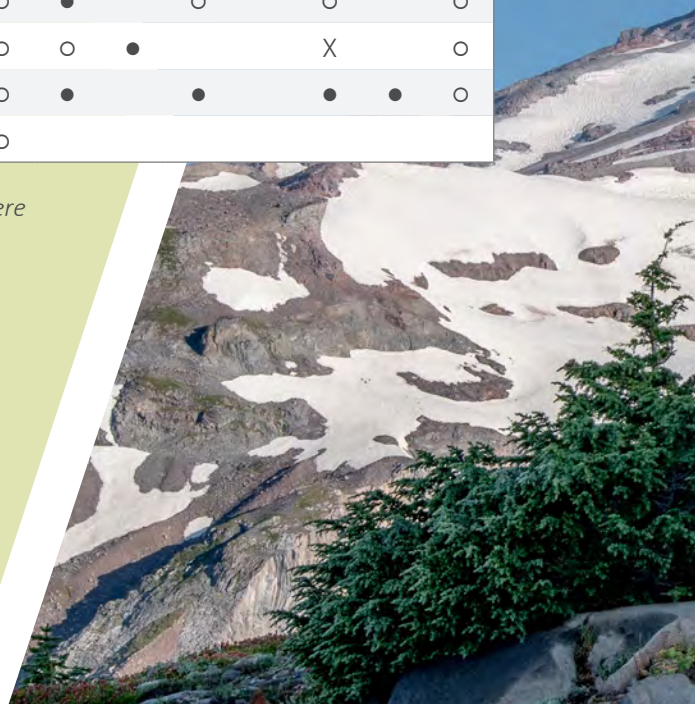
ECOSYSTEM	SERVICE	CULTIVATED	FOREST	GRASSLAND	LAKE	MARINE/ESTUARY	PASTURE	RIVER	SHRUBLAND	WETLAND
Provisioning	Food	●	○	●		●				
Regulating	Air Quality		○	●					●	
	Biological Control	●		●						
	Disaster Risk Reduction			●						○
	Climate Stability (Carbon Sequestration)	●	○	○		●	●		○	○
	Climate Stability (Temperature Regulation)		●							
	Pollination, Seed Dispersal	●								
	Soil Quality			●						
	Soil Retention	●	○	●						
	Temperature Regulation		●							
	Water Supply		○	●				X		○
	Water Quality		○	○		●				○
Supporting	Habitat		○	●		○		○		○
Information	Aesthetic Information		○	○	●			X		○
	Existence Value	●	○	●		●		●	●	○
	Science, Education		○							

Key:

X Valued in 2020 report, not valued in 2025 report. Some values were removed due to methodological differences between reports.

○ Valued in 2020 report and in 2025 report

● Valued in 2025 report



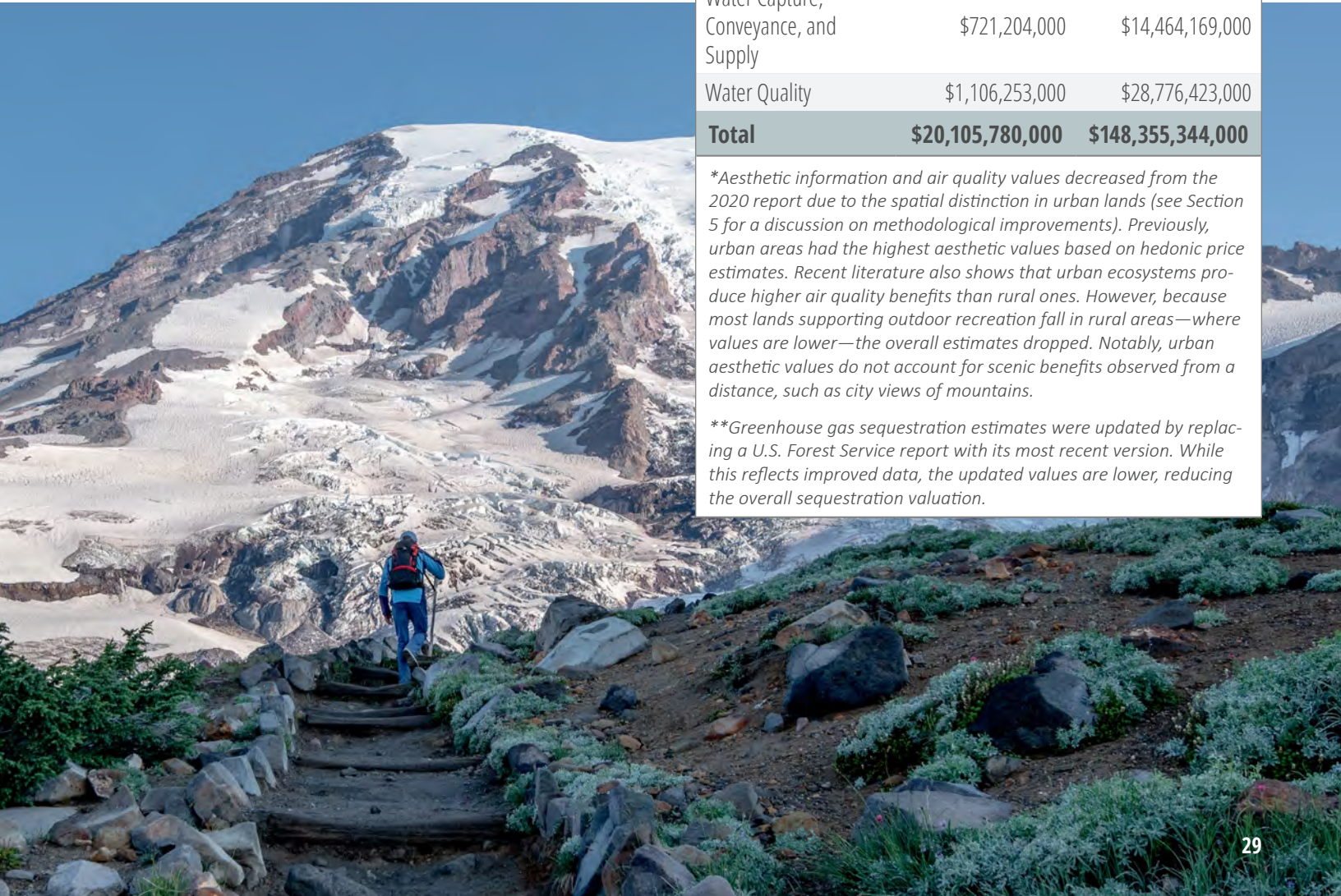
The total ecosystem service benefits provided by lands supporting outdoor recreation is \$20 billion to \$148 billion each year (Table 15). On average, this is larger than the total economic contributions of recreation activities on these lands, demonstrating the fact that lands supporting outdoor recreation deliver extraordinary value far beyond their recreational use. These benefits include supporting public health, prosperity of economic sectors such as agriculture, and environmental resilience across the state. Furthermore, these services form the foundation that makes recreation possible in the first place, such as providing habitat for recreationally important species and sought-after views. The following sections describe examples of how these benefits accrue to recreationists and non-recreationists alike.

Table 15. Total Ecosystem Service Benefits of Outdoor Lands Supporting Outdoor Recreation in Washington State (2024 USD)

ECOSYSTEM SERVICE	LOW ESTIMATE	HIGH ESTIMATE
Aesthetic Information*	\$5,246,045,000	\$80,924,575,000
Air Quality*	\$463,376,000	\$1,043,244,000
Biological Control	\$21,500,000	\$274,763,000
Cultural Value	\$539,359,000	\$591,575,000
Disaster Risk Reduction	\$3,850,125,000	\$4,926,350,000
Food	\$70,580,000	\$1,229,721,000
Greenhouse Gas Sequestration**	\$6,300,439,000	\$7,463,939,000
Habitat	\$461,705,000	\$5,224,816,000
Pollination and Seed Dispersal	\$55,000	\$55,000
Science and Education	\$141,000	\$55,985,000
Soil Quality	\$595,712,000	\$595,712,000
Soil Retention	\$127,539,000	\$1,433,480,000
Temperature Regulation	\$601,747,000	\$1,350,537,000
Water Capture, Conveyance, and Supply	\$721,204,000	\$14,464,169,000
Water Quality	\$1,106,253,000	\$28,776,423,000
Total	\$20,105,780,000	\$148,355,344,000

*Aesthetic information and air quality values decreased from the 2020 report due to the spatial distinction in urban lands (see Section 5 for a discussion on methodological improvements). Previously, urban areas had the highest aesthetic values based on hedonic price estimates. Recent literature also shows that urban ecosystems produce higher air quality benefits than rural ones. However, because most lands supporting outdoor recreation fall in rural areas—where values are lower—the overall estimates dropped. Notably, urban aesthetic values do not account for scenic benefits observed from a distance, such as city views of mountains.

**Greenhouse gas sequestration estimates were updated by replacing a U.S. Forest Service report with its most recent version. While this reflects improved data, the updated values are lower, reducing the overall sequestration valuation.



Food Provisioning

Food production is one of the most vital services provided by ecosystems. Agriculture, fishing, and wild harvests depend on healthy soils, clean water, and functioning natural systems to sustain food supplies. Beyond commercial industries, natural areas also offer opportunities for foraging, connecting people to local, seasonal foods. Washington lands with recreation opportunities support a wide variety of food-related activities, including clam and oyster harvesting along Hood Canal and Willapa Bay; trout and steelhead fishing in the Yakima and Skagit River systems; deer hunting in northeastern Washington; wild mushroom gathering in the Olympic and Gifford Pinchot National Forests; and picking wild blueberries, thimbleberries, and serviceberries in alpine meadows and subalpine slopes throughout the Cascades.

Air Quality

Natural ecosystems play a critical role in improving air quality by filtering pollutants and removing particulate matter from the atmosphere. Cleaner air reduces the risk of respiratory and cardiovascular illnesses, lowering health care costs associated with pollution-related diseases. Washington's lands supporting outdoor recreation provide valuable air quality benefits, offering residents and visitors the opportunity to experience cleaner, fresher air than what is often available in urban environments. Many seek out these natural spaces—whether walking among the towering trees of Lewis and Clark State Park, hiking in the Wenatchee National Forest, or exploring the temperate rainforests of Olympic National Park—to enjoy the health and sensory benefits of breathing forest-filtered air.

Biological Control

Biological control helps suppress pest, weed, and disease populations through the activity of predators, parasites, and pathogens. In Washington State, diverse landcover types support a variety of beneficial organisms that contribute to pest control. Native plants along streams and forest edges provide nectar, pollen, and shelter for insects that naturally regulate pest populations, improving their survival and effectiveness. On farms, maintaining hedgerows and cover crops can create habitat for these helpful species, reducing the need for pesticides while promoting sustainable crop production. By conserving

natural vegetation and integrating diverse plant species on lands supporting outdoor recreation, Washington's ecosystems can support biological control and strengthen resilience against pest and disease.

Disaster Risk Reduction

Healthy ecosystems often reduce the impact of natural disturbances such as floods, storms, landslides, and fires. For example, undeveloped lands absorb, regulate, and store large amounts of water during storms. Natural areas benefit people living and working downstream by reducing the risk of flooding to houses, factories, and more, which can in turn reduce property damage, lost work time, and casualties. Washington lands supporting recreation, like the complex estuarine ecosystems of the Billy Frank Jr. Nisqually National Wildlife Refuge, help to protect against the risks presented by sea-level rise.

Climate Stability

Natural ecosystems regulate climates at both the local and global levels. At the global level, this is facilitated by the capture and long-term storage of atmospheric carbon, which mitigates the drivers of climate change. Locally, green spaces provide shade and reduce air temperatures, resulting in lower cooling costs to residents and reduced heat-related illness.

Lands supporting outdoor recreation in Washington State contribute to climate stability by regulating temperature, air quality, and weather patterns. Forests, wetlands, and coastal ecosystems absorb carbon dioxide, provide shade, and release moisture, which cools the surrounding environment and reduces temperature extremes. These natural processes play an important role in maintaining a balanced climate and reducing the impacts of climate change across Washington.

Pollination

Pollination is an important ecosystem service that supports agriculture, ecosystems, and people. Up to 75 percent of cultivated crops globally depend on insect pollination, making it essential for the production of fruits, vegetables, and nuts (Bartomeus et al., 2014). The economic value of pollination is significant, contributing between \$235 billion and \$577 billion annually to global food production (FA, 2016). Beyond its direct agricultural benefits,

pollination enhances biodiversity by sustaining habitats for plants and other wildlife, which in turn supports healthy ecosystems.

Soil Quality

Soil quality helps sustain the health and productivity of Washington State's diverse landscape by maintaining soil fertility and enhancing the capacity to process waste. Forested trails and planted areas along waterways help retain soil moisture and prevent erosion, while grasslands and wetlands support microbial communities that break down organic matter and filter pollutants. In coastal environments, salt marshes and estuarine habitat trap sediments and improve soil structure, enhancing the land's ability to absorb and process nutrients.

Erosion Control

Plants play an important role in building soils, reducing erosion, and reducing landslide risk. By limiting the sediment entering waterways, trees and other plants also improve water quality. Because soils are sources of plant nutrients, reducing erosion is critical to the forestry industry. The state's iconic forests require healthy soils to thrive, but also ensure that those soils are kept healthy and in place.

Water Supply

Freshwater is critical to all life. Watersheds provide water for drinking and irrigation, which support the health and activities of people, economies, and ecosystems downstream. Both Tacoma's and Seattle's primary water supplies are watersheds upstream of these cities: the Green River and Cedar River, respectively. Natural infrastructure plays a crucial role in recharging the Spokane Valley-Rathdrum Prairie Aquifer—the key source of Spokane's drinking water. Washington's lands supporting outdoor recreation, like those at Mount Baker that play host to mountaineering activities on the glacial peaks, also provide meltwater that feeds into the drinking water sources of large portions of Whatcom and Skagit Counties' populations.

Water Quality

Natural lands like wetlands and forests improve water quality by removing pollutants and sediment from lakes and rivers or preventing these from entering water systems in the first place. Cleaner water

enhances recreational activities such as swimming and fishing, supports a clean water supply, and enhances the beauty of the landscape.

Habitat

Ecosystems provide shelter from predators, food, water, and habitat for animals and plants that are critical not only to recreation, but to other ecosystem services as well. By providing a home for wildlife, habitats support activities such as wildlife watching, fishing, and pollination, benefiting nearby residents, as well as visitors.

Aesthetic Value

Nature's beauty is itself a valuable ecosystem service—whether experienced by admiring a mountain view, walking along a shoreline, or taking in a scenic drive. Aesthetic enjoyment plays a vital role in attracting visitors to Washington's lands supporting outdoor recreation. Across the state, iconic destinations like Diablo Lake, Palouse Falls, Lake Chelan, Hurricane Ridge, and the Hoh Rainforest draw people seeking remarkable landscapes. This aesthetic value can be observed in property markets: homes near desirable natural features—such as a pristine lake, riverfront, or wooded park—tend to command higher prices than similar properties farther from these amenities, an effect known as hedonic valuation.

Existence Value

Many people derive value simply from knowing that a natural ecosystem exists, even if they never visit it. This concept, known as existence value, is recognized as a cultural ecosystem service across multiple environmental frameworks. People may feel satisfaction or a sense of stewardship tied to the preservation of landscapes, historical landmarks, or natural habitats that hold cultural or emotional significance. In Washington, this sense of connection is deeply rooted; the state's identity is closely intertwined with its iconic outdoor places, reflecting the importance of preserving lands supporting outdoor recreation not only for use, but for the value they hold by simply existing.

Science and Education

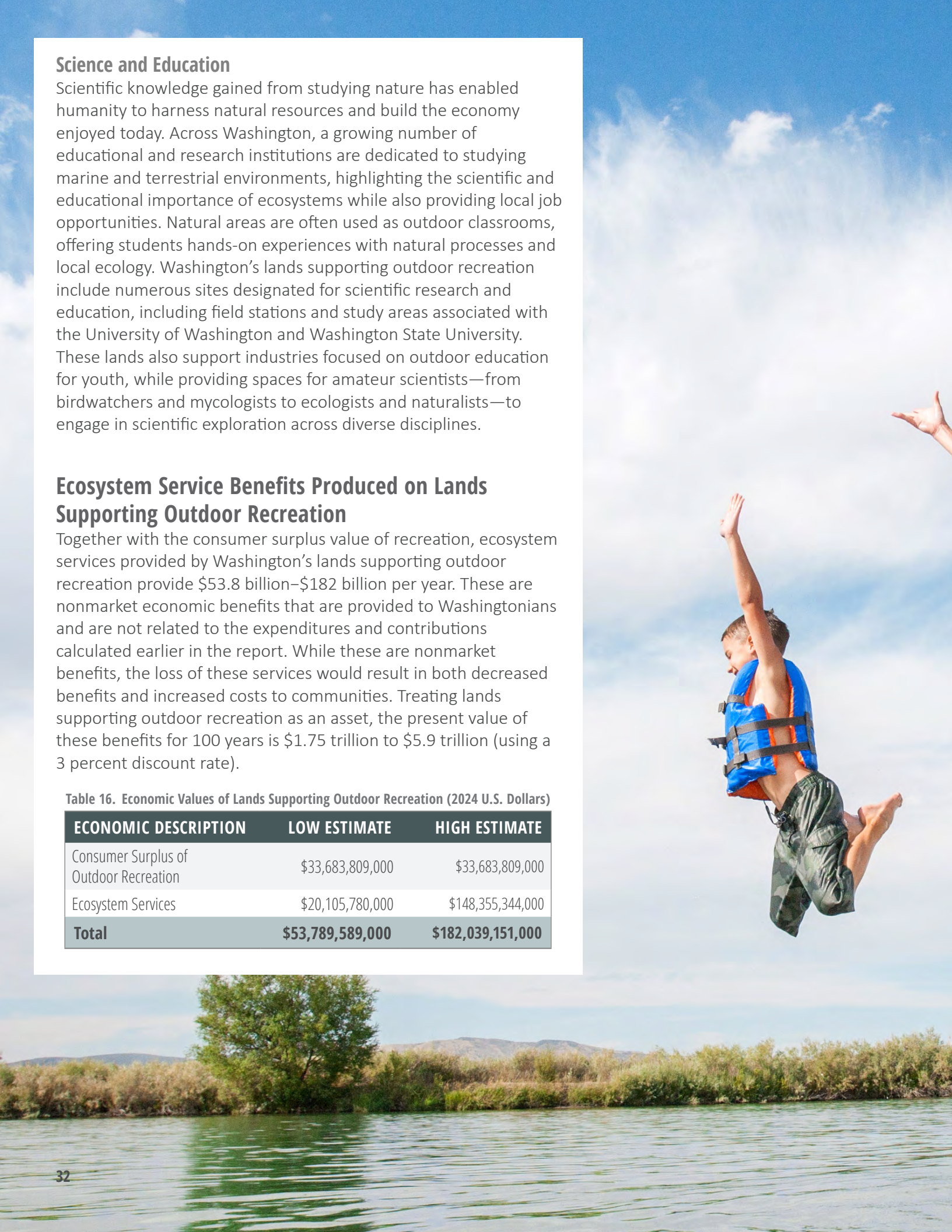
Scientific knowledge gained from studying nature has enabled humanity to harness natural resources and build the economy enjoyed today. Across Washington, a growing number of educational and research institutions are dedicated to studying marine and terrestrial environments, highlighting the scientific and educational importance of ecosystems while also providing local job opportunities. Natural areas are often used as outdoor classrooms, offering students hands-on experiences with natural processes and local ecology. Washington’s lands supporting outdoor recreation include numerous sites designated for scientific research and education, including field stations and study areas associated with the University of Washington and Washington State University. These lands also support industries focused on outdoor education for youth, while providing spaces for amateur scientists—from birdwatchers and mycologists to ecologists and naturalists—to engage in scientific exploration across diverse disciplines.

Ecosystem Service Benefits Produced on Lands Supporting Outdoor Recreation

Together with the consumer surplus value of recreation, ecosystem services provided by Washington’s lands supporting outdoor recreation provide \$53.8 billion–\$182 billion per year. These are nonmarket economic benefits that are provided to Washingtonians and are not related to the expenditures and contributions calculated earlier in the report. While these are nonmarket benefits, the loss of these services would result in both decreased benefits and increased costs to communities. Treating lands supporting outdoor recreation as an asset, the present value of these benefits for 100 years is \$1.75 trillion to \$5.9 trillion (using a 3 percent discount rate).

Table 16. Economic Values of Lands Supporting Outdoor Recreation (2024 U.S. Dollars)

ECONOMIC DESCRIPTION	LOW ESTIMATE	HIGH ESTIMATE
Consumer Surplus of Outdoor Recreation	\$33,683,809,000	\$33,683,809,000
Ecosystem Services	\$20,105,780,000	\$148,355,344,000
Total	\$53,789,589,000	\$182,039,151,000



**NATURAL CAPITAL PERFORMS
CRITICAL FUNCTIONS THAT PROVIDE
ESSENTIAL GOODS AND
SERVICES TO PEOPLE**

VALUED AT MORE THAN

\$20 BILLION PER YEAR

**FROM LANDS SUPPORTING
OUTDOOR RECREATION**



Costs of Recreation

Costs to Governments

While outdoor recreation produces considerable economic benefits, sustaining outdoor recreational spaces often necessitates large public expenditures on trails, roads, restrooms, parking lots and other supporting infrastructure—costs that largely are borne by governments. Washington State Parks’ 2023-2025 budget reports general operating costs of \$244.9 million to care for 124 parks covering 138,000 acres (Washington State Parks, 2025), translating to a rough annual management estimate of \$887 per acre. A legislative audit (Connolly et al, 2015) found that the average annual cost to manage specific recreation sites varies widely, with parks costing between \$14 and \$16,500 per acre and wildlife areas costing between \$3 and \$100 per acre.

The U.S. Census estimated that state and local agencies spent \$1.6 billion on parks and recreation staffing and capital costs in 2022, but only brought in \$234 million⁷ in direct revenue for state and local governments (U.S. Census, 2024). However, context is important: outdoor recreation spending as whole supported an estimated \$5.1 billion in state and local tax revenues across Washington in 2024 (see Table 5).

As illustrated in Section 5, natural and open space areas are particularly important to maintaining—and *growing*—a healthy recreation economy to sustain tax revenues in perpetuity. To link some of these costs to demand, both state and local governments commonly raise revenue via lodging and excise taxes, as well as user fees. Earmarking tourist revenues for environmental maintenance could be one way for governments to sustain their recreation economies.

Costs to Residents and Environments

Investing in outdoor recreation produces widely positive outcomes. However, outdoor recreation is also associated with ecosystem disservices, including habitat disturbance, infrastructure strain, and degradation of culturally significant landscapes.

Unfortunately, where demand for outdoor recreation opportunities grows, the negative impacts of high

⁷ These have been adjusted to 2024 dollars to facilitate comparison with more recent visitor spending contributions.



visitation increase as well. These are not limited to visitor experiences—higher visitation is correlated with higher wildfire risk (Jenkins et al, 2023) and even moderate human presence may affect wildlife (Machowicz et al, 2022).

Land managers should work with the recreational community to reduce and mitigate the impacts on resources. Further, land managers need to manage recreation in a way that protects cultural and natural resources and preserves Tribal Treaty Rights. Just as the magnitude of these challenges varies by location and amenity, access to the resources necessary to address them fully is uneven (including the ability to divert demand to nearby “substitutes”). While larger parks may be able to close trails and campsites for seasonal maintenance, these options are not always available—and even when they are, temporary closures may increase impacts on other park assets (Lucas, 2020). Where closures are unplanned (e.g., wildfires), sudden shifts in demand may stretch limited operational resources for nearby alternatives.

Overcrowding, safety hazards, and noise can impact visitor experiences and harm local quality of life. Trail degradation, waste management, and public safety (e.g., emergency vehicle access blocked by parked cars) are all challenges in Washington State (Port of Seattle et al, 2023). Mount Rainier National Park recently began implementing timed entry, after a 40 percent increase in visitation in the past decade led to long entrance lines and damaged roads and parking lots (National Park Service 2025).

Given the breadth of visitor impacts, the most appropriate response is highly context dependent. Some municipalities have found workable solutions to combat negative environmental effects, such as Hawai’i, which recently passed a tax on lodging for tourists that will help protect the local environment and address climate change impacts (Honoré, 2025). Considerable progress also has been made by voluntary efforts to instill an ethic of low-impact visitation (Leave No Trace, 2024). Yet even well-meaning recreationists can create challenges, especially when their numbers overwhelm park and local resources. Maintaining (or increasing) investment in outdoor recreational spaces and amenities may be important, but is not always sufficient by itself. Land managers and communities also need to monitor and track demand and impacts (Cole, 2006; Marion, 1995). Higher monitoring and maintenance costs may be partially offset by user fees or excise taxes on equipment, but these must be designed to ensure that burdens and benefits are equitably shared (Pohl and Lawson, 2017). Although this report does not quantify these disservices, their prevalence and significance are well-documented (Monz et al, 2010; Pegler et al, 2024). Future studies could help Washington better understand the tradeoffs and true net value of its outdoor recreation economy.



7 Barriers and Opportunities

IN COMMUNITIES UNDERSERVED BY THE RECREATION ECONOMY

Washington State communities do not benefit equally from the outdoor recreation economy, even when they are surrounded by abundant recreation assets. This section explores the concept of communities underserved by the recreation economy: places that possess strong natural potential for recreation, but where recreational demand—and the accompanying economic activity—remains limited.

The type, quality, and diversity of natural landscapes play a foundational role in shaping a community's recreation potential. Lakes, mountains, rivers, forests, deserts, and open spaces each offer unique opportunities for recreation—from water sports and hiking, to hunting, wildlife viewing, and scenic drives. Communities underserved by the recreation economy are not necessarily lacking in natural beauty or access to outdoor spaces. Instead, they may face challenges with visibility, accessibility, infrastructure, investment or local capacity, and interest that prevent them from fully participating in the recreation economy. By looking at these communities through the lens of outdoor recreation *potential*, we can better understand the structural and contextual factors that shape participation and economic impact across the state.

Several key factors shape whether a community is able to convert natural assets into meaningful recreation-based economic activity. These factors are interrelated, and their combined influence can either amplify or inhibit local recreation economies.

Infrastructure and Amenities

Even when high-quality natural assets are nearby, a community's ability to attract and support outdoor recreation depends heavily on the presence of supporting infrastructure and amenities. Roads, trailheads, signs, equipment rentals, lodging, dining, and visitor services all play a role in translating natural opportunity into economic impact. Realizing that impact requires investment in both the supporting amenities and the small, local businesses that build and sustain a growing recreation economy.

Investments in both recreation and tourism infrastructure, can create a seamless experience for visitors. Well-marked trails, maintained public access points, bike and gear rentals, and walkable amenities can allow people to recreate and stay in a community year-round. A range of lodging options and a strong food, beverage, and retail scene support longer visitor stays. This combination of infrastructure and access can make a city a destination not only for outdoor recreation, but also for festivals, events, and cultural tourism—enabling a diversified and resilient local economy. Communities with less active recreation economies, by contrast, may have access to outdoor recreation opportunities, but lack the built infrastructure to support recreation tourism at scale. Trail access may be limited, signs and visitor information may be sparse, and amenities such as rentals, lodging, and local guide services may be minimal or unavailable. Without those supporting elements, it becomes more difficult to attract nonlocal recreationists or convert assets into sustained economic benefit. This contrast illustrates how investment in infrastructure can help a community fully realize its recreation potential.

Access and Proximity to Population Centers

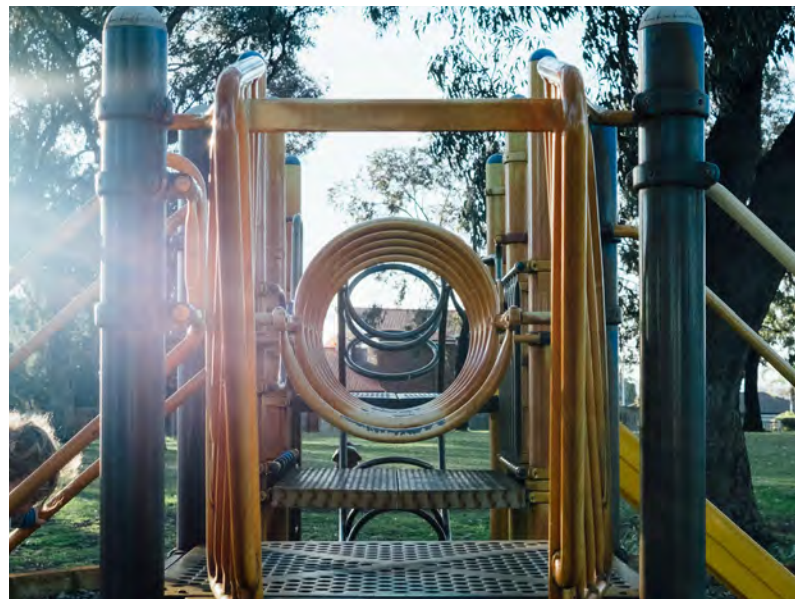
Communities that are easily reached by major highways, public transportation, or regional airports have a competitive advantage when it comes to attracting recreation visitors. Easy transportation access lowers the barrier to entry for both day-trippers and overnight tourists, making it easier for people to spontaneously visit or plan extended stays.

Communities near the Interstate 5 corridor benefit from regional connectivity and can draw visitors from the entire Puget Sound region. They serve as both destinations and points of interest while traveling through. In contrast, towns off major highways are less visible and can have limited lodging, food services, rental shops, and guide services. Additionally, these communities' relative remoteness can increase operating costs for local businesses, making recreation-related services less competitive than those in communities closer to population centers. These access barriers not only reduce visitation but also make it more difficult for the community to attract private investment and develop year-round tourism infrastructure.

Seasonality and Year-Round Appeal

The ability to support recreation throughout the year can play a major role in the stability and resilience of a local recreation economy. Some communities have developed offerings that attract visitors year-round, while others experience sharp fluctuations tied to weather and seasonal access.

Communities in the eastern Cascade Mountains enjoy warm, dry summers ideal for hiking, climbing, and river recreation, while reliable snowfall in winter supports a thriving snow sports scene, including cross-country skiing and snowshoeing. Spring and fall also draw visitors for wildflower hikes, harvest festivals, and scenic drives. This climate, along with consistent trail and road access, can allow for steady recreational use across the year. In contrast, coastal communities may experience more intense seasonality due to their location. While summer brings high visitation for beach trips or national park access, the fall and winter months are marked by heavy rainfall and muddy trails. These conditions can make many recreation opportunities less appealing during parts of the year.



Management and Jurisdictional Complexity

Differences in permitting and quotas also impact how economies are structured, with jurisdictional and ownership factors including fees and tour opportunities. Coordinated signs, well-communicated permit systems, and centralized visitor resources can make it easier for visitors to understand how to access and enjoy lands supporting outdoor recreation. These strategies reduce barriers for recreationists and helps sustain steady visitation. Proactive coordination, marketing, and visitor services can help communities navigate complex management systems and translate recreation assets into economic opportunity.

Socioeconomic Conditions, Local Capacity, and Local Support

A community's ability to build and sustain a recreation economy is influenced not only by its natural assets, but also by its socioeconomic context. Factors such as local standards of living, available tax base, workforce availability, access to capital, and the presence of tourism-related training programs all shape how effectively a community can support recreation-based economic development.

In some communities, much of the trail maintenance is done by volunteers, and the local workforce might have limited access to formal training or certification programs in outdoor tourism, hospitality, and recreation management. There may be fewer private sector investments in recreation infrastructure (e.g., gear rentals, guide services, destination lodging), limiting the ability to scale and professionalize the local recreation economy.

In contrast, communities with higher income levels, a more tourism-oriented workforce, stronger connections to education, and training programs focused on hospitality and ecotourism are positioned to support a more robust recreation economy. They also may attract sustained investment in various lodging, dining, and visitor amenities. These factors combine to create a recreation economy that, even if seasonal, can be more developed and economically resilient than in communities with fewer financial and workforce resources. Targeted support for workforce development, grants, and small business incubation

in lower-income communities could help bridge this gap and unlock untapped potential in areas.

It is also important to note that not all communities want recreation as a primary industry. Some may prefer to enjoy their natural assets more privately, not investing in destination recreation infrastructure or the supporting amenities that attract tourists. Those communities may choose to invest time, money, and energy into other sectors of their local economy.

Marketing, Branding, and Digital Connectivity

Public awareness is a key driver of outdoor recreation use. Even in communities with abundant natural assets, visitation often depends on how well those opportunities are communicated to the public. Branding, storytelling, and digital connectivity all shape the perception of a place and whether potential visitors see it as a viable destination for outdoor activity.

Some communities have well-developed trail systems, parks, and water access points, but they aren't widely promoted, meaning the recreational identity remains underdeveloped. Without clear signage, consolidated online information, or targeted marketing campaigns, natural features may get little visitation. Robust digital infrastructure, including high-speed internet and reliable cell coverage also contribute to a modern recreation experience, including broader social awareness of recreational sites, as influenced by social media (Mackenzie et al, 2024; Wichman, 2024). This level of connectivity enhances visitor comfort and planning, supports the increasing trend of remote work blended with recreation travel, and gives a town a competitive edge in attracting both tourists and long-stay visitors.

As visitation continues to be shaped by social media, online planning tools, and traveler expectations of connectivity, communities that invest in marketing and digital infrastructure are more likely to translate their outdoor assets into economic activity. While social media may drive shifts in the popularity of recreational sites, it also offers a means of helping to "balance" demand in the face of overcrowding (Mackenzie, 2023).



Summary

Many communities across Washington possess significant outdoor recreation assets but remain underrepresented in the broader recreation economy. Whether due to visibility, access limitations, infrastructure gaps, or socioeconomic barriers, these communities represent potential—for economic growth, tourism development, and community well-being.

Further analysis could help identify additional opportunities to strengthen local recreation economies—if doing so aligns with community goals. By better understanding the conditions that support or constrain outdoor recreation, Washington can continue to build a more inclusive, resilient, and regionally balanced recreation economy—one that ensures the benefits of access to nature are widely shared.

Washington's outdoor recreation economy has continued to evolve, shaped by changing participation patterns, shifting demographics, continued investments in the outdoors, and advancements in data collection. This report estimates that outdoor recreation spending in Washington totals \$25.2 billion annually, supporting more than 237,000 direct and indirect jobs across the state. These figures provide a snapshot of the sector's economic contribution, reflecting both the latest participation data and improvements in measurement techniques. In total, outdoor recreation generates an estimated \$33.1 billion in economic output, underscoring its continued importance to Washington's economy.

New methodological advancements distinguish this analysis from earlier efforts. By leveraging mobile device data, this analysis improves how recreation is quantified across lands managed by Washington Department of Fish and Wildlife and Washington Department of Natural Resources, local parks, and public waters—including athletic use of school grounds—while reducing duplication across land types. These innovations not only provide a more precise assessment of outdoor recreation's economic footprint but also establish a stronger baseline for monitoring future trends and impacts. While this may have resulted in lower reported visitation or spending in comparison to past reports, these refinements encourage greater confidence in the present findings.

Beyond measurable economic contributions, Washington's lands supporting outdoor recreation continue to deliver significant nonmarket benefits. This report expands the valuation of ecosystem services to include previously unmeasured benefits such as climate regulation, disaster risk reduction, and soil retention. Each year, outdoor lands supporting outdoor recreation provide \$20.1 billion–\$148 billion in environmental benefits, including clean water, carbon sequestration, and other critical ecosystem services. Additionally, the consumer surplus of outdoor recreation—the value recreationists are willing to pay for such experiences, minus what they actually spend—was estimated at \$33.7 billion, highlighting the meaningful personal and societal value of access to outdoor spaces.

At the same time, it is important recognize that not all communities benefit equally from Washington's recreation economy. Despite proximity to high-quality natural assets, barriers such as limited infrastructure, insufficient regional connectivity, a lack of local funding or interest in recreation continue to limit participation and economic opportunity for some communities. Addressing these factors is necessary when discussing the future of the recreation economy across all of Washington.

While this analysis offers a comprehensive view of the economic and environmental value of outdoor recreation, some important benefits were not captured in this report. These include health-related outcomes such as improved physical and mental well-being, as well as developmental benefits for children. Future research can build on this foundation by exploring these outcomes to better reflect the full societal value of outdoor recreation. It also can expand to further consider the costs of providing and maintaining recreation opportunities, including capital and operational expenses related to recreation infrastructure and efforts to build local business capacity.

Ultimately, outdoor recreation in Washington represents more than an economic sector—it is an integral part of the state's culture, identity, and heritage. While economic and environmental metrics help benchmark changes over time, the full value of outdoor recreation lies in its ability to support healthier communities, resilient ecosystems, and inclusive local economies. These findings underscore the importance of continued investment in recreation access, infrastructure, and stewardship to ensure that all Washingtonians can benefit from the state's outdoor assets—today and into the future.



References

- Alcamo, J., Ash, N. J., Butler, C. D., Callicott, J. B., Capistrano, D., Carpenter, S. R., Castilla, J. C., Chambers, R., Chopra, K., Cropper, A., Daily, G. C., Dasgupta, P., De Groot, R., Dietz, T., Duraipapp, A. K., Gadgil, M., Hamilton, K., Hassan, R., Lambin, E. F., ... Zurek, M. B. (2003). *Ecosystems and Human Well-being: A Framework for Assessment*. Island Press.
- An Act Relating to Providing State Funding for Essential Affordable Housing Programs, SB 5576, Washington State Senate 2025–26 (2025). Mar 11: 1st substitute bill substituted (WM 25), floor amendment(s) adopted. Rules suspended. Placed on Third Reading. Third reading, passed; yeas, 27; nays, 21; absent, 0; excused, 1. <https://app.leg.wa.gov/BillSummary/?BillNumber=5576+&Year=2025&Initiative=false>
- Bartomeus, I., Potts, S. G., Steffan-Dewenter, I., Vaissiere, B. E., Woyciechowski, M., Krewenka, K. M., Tscheulin, T., Roberts, S. P. M., Szentgyorgyi, H., Westphal, C., and Bommarco, R. (2014). Contribution of insect pollinators to crop yield and quality varies with agricultural intensification. *PeerJ*, 2(e328). <https://doi.org/10.7717/peerj.328>
- Betz, C. J., English, D. B. K., and Cordell, H. K. (1999). Outdoor recreation resources. In *Outdoor recreation in American life: A national assessment of demand and supply trends* (pp. 39–182). Sagamore Publishing. <https://research.fs.usda.gov/treesearch/783>
- Bureau of Labor Statistics. (2024, April 24). More than 11 million people volunteered on an average day in 2022. *The Economics Daily*. www.bls.gov/opub/ted/2024/more-than-11-million-people-volunteered-on-an-average-day-in-2022.htm
- Bureau of Labor Statistics. (2025). *Local Area Unemployment Statistics* (Dataset LASST5300000000000006). <https://data.bls.gov/pdq/SurveyOutputServlet>
- Carver, E., and Caudill, J. (2019). *Banking on Nature 2017: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation* (Banking on Nature, p. 36). U.S. Fish and Wildlife Service, Division of Economics.
- Chang, W.-H., Propst, D. B., Styne, D. J., and Jackson, R. S. (2003). *Recreation Visitor Spending Profiles and Economic Benefit to Corps of Engineers Projects* (No. TR-03-21; p. 119). Recreation Management Support Program, USACE. <https://apps.dtic.mil/sti/tr/pdf/ADA420574.pdf>
- Cole, D. N. (2006). Visitor and Recreation Impact Monitoring: Is It Lost in the Gulf between Science and Management? *The George Wright Forum*, 23(2), 11–16. https://www.fs.usda.gov/rm/pubs/other/rmrs_2006_cole_d001.pdf
- Connolly, R., Hoffman, S., McCord, R., Wooley, J., and Konopaski, K. (2015). *JLARC Final Report: State Recreation and Habitat Lands* (No. 15–1). Joint Legislative Audit and Review Committee. <https://leg.wa.gov/jlarc/reports/publicLandsInv/f/default.htm>
- CREST, The Travel Foundation, Better Destinations, SMG Consulting, Triple Point Consulting, and Civitas. (2023). *Lake Tahoe Destination Stewardship Plan: Taking Care of Tahoe*. <https://stewardshiptahoe.org/wp-content/uploads/2023/06/Lake-Tahoe-Stewardship-Plan-6-19-23-FINAL.pdf>
- Day, D. (2022, March 10). Indigenous relics evoke questions of ownership amid Skagit dam relicensing. *MyNorthwest.Com*. <https://mynorthwest.com/local/skagit-river-tribes-artifacts-relicensing-seattle-city-light/3386346>
- Fyr, M., and Koontz, L. (2024). *2023 National Park Visitor Spending Effects Economic Contributions to Local Communities, States, and the Nation*. National Parks Service. <https://irma.nps.gov/DataStore/Reference/Profile/2305351>

- Gill, A., Beattie, M., Theophilus, A., Tolbert, B., Sherman, J., Schad, J., and Reznowski, G. (2024). *Housing Market Conditions in Tourism-Dependent Municipalities* (p. 65) [Report to the Washington State Legislature Engrossed Substitute Senate Bill 5950, Section. 603.(48)]. Washington State University, Metropolitan Center for Applied Research and Extension. <https://metrocenter.wsu.edu/housing-in-tourism-dependent-municipalities>
- Gramann, J. H., and Burdge, R. J. (1984). Crowding perception determinants at intensively developed outdoor recreation sites. *Leisure Sciences*, 6(2), 167–186. <https://doi.org/10.1080/01490408409513029>
- Graefe, A. R., and Todd, S. L. (2001). *Economic impacts of scuba diving on New York's Great Lakes*. North Carolina Coastal Plains Paddle Trails Initiative Conference Proceedings. New York Sea Grant.
- High Peak Strategy, LLC. (2023). *Technology Sector Economic Outlook in Washington State and the Greater Seattle Region* (p. 47). Washington Technology Industry Association. <https://www.washingtontechnology.org/wp-content/uploads/2023/08/2023-Technology-Sector-Economic-Outlook-in-Washington-State-and-the-Greater-Seattle-Region.pdf>
- Honoré, M. (2025, May 27). Hawai'i Becomes First State To Charge Tourists A "Green Fee" [Online newspaper]. *Honolulu Civil Beat*. <https://www.civilbeat.org/2025/05/hawaii-becomes-first-state-to-charge-tourists-to-protect-the-environment/>
- Independent Sector. (2024). *2024 Value of Volunteer Time Report* (p. 1) [Factsheet]. Independent Sector. <https://independentsector.org/wp-content/uploads/2024/04/is-vovt-report-2024-v2.pdf>
- Jenkins, J. S., Abatzoglou, J. T., Rupp, D. E., and Fleishman, E. (2023). Human and climatic influences on wildfires ignited by recreational activities in national forests in Washington, Oregon, and California. *Environmental Research Communications*, 5, 12. <https://iopscience.iop.org/article/10.1088/2515-7620/acf4e2/pdf>
- Kaul, S., Boyle, K. J., Kuminoff, N. V., Parmeter, C. F., and Pope, J. C. (2013). What can we learn from benefit transfer errors? Evidence from 20 years of research on convergent validity. *Journal of Environmental Economics and Management*, 66(1), 90–104. <https://doi.org/10.1016/j.jeem.2013.03.001>
- KOMO News. (2025, February 21). Quileute Tribe recovers stolen totem poles. *KOMO News*. <https://komonews.com/news/local/quileute-tribe-recovers-stolen-totem-poles-forks-washington-seattle-art-community-indigenous-native-detective-investigation-theft-pnw-puget-sound>
- Lawson, M., and Smith, K. (2023). *The Amenity Trap: How high-amenity communities can avoid being loved to death* (p. 37). Headwaters Economics. <https://headwaterseconomics.org/outdoor-recreation/amenity-trap/>
- Leave No Trace. (2024). *Leave No Trace Research Bibliography* (p. 81) [Annotated bibliography]. Leave No Trace. <https://lnt.org/wp-content/uploads/2025/04/Leave-No-Trace-Research-Bibliography-Nov-2024.pdf>
- Lucas, E. (2020). A review of trail-related fragmentation, unauthorized trails, and other aspects of recreation ecology in protected areas. *California Fish and Wildlife Journal, Effects of Non-consumptive Recreation on Wildlife in California*, 95–125. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=178956&inline>
- Machowicz, A., Vanbianchi, C., and Windell, R. (2022). *Recreation and wildlife in Washington: Considerations for conservation—A report on current knowledge* (p. 115). Home Range Wildlife Research, with Conservation Northwest. <https://conservationnw.org/wp-content/uploads/2022/09/Recreation-and-wildlife-in-Washington-Considerations-for-conservation-FINALreduced.pdf>
- Mackenzie, A. L. (2023). *Understanding the New Outdoor Recreation Paradigm in the Era of Social Media and Increasing Public Health Advisories* [Doctoral dissertation, Oregon State University]. <https://ir.library.oregonstate.edu/concern/graduate-thesis-or-dissertations/db78tm55c>

- Mackenzie, A. L., Dundas, S. J., and Zhao, B. (2024). The Instagram Effect: Is Social Media Influencing Visitation to Public Lands? *Land Economics*, 100(2), 256–277. <https://doi.org/10.3368/le.100.2.122920-0192R1>
- Marion, J. L. (1995). Capabilities and management utility of recreation impact monitoring programs. *Environmental Management*, 19(5), 763–771. <https://doi.org/10.1007/BF02471958>
- McLean, D. (2025, February 10). *How 4 cities are advancing affordable housing despite NIMBYs* [Online magazine]. SmartCitiesDive. www.smartcitiesdive.com/news/cities-advancing-affordable-housing-despite-nimbys/739690/
- Monz, C. A., Marion, J. L., Goonan, K. A., Manning, R. E., Wimpey, J., and Carr, C. (2010). Assessment and Monitoring of Recreation Impacts and Resource Conditions on Mountain Summits: Examples From the Northern Forest, USA. *Mountain Research and Development*, 30(4), 332–343. <https://doi.org/10.1659/MRD-JOURNAL-D-09-00078.1>
- More, T. A. (2002). “The Parks Are Being Loved To Death” and Other Frauds and Deceits in Recreation Management. *Journal of Leisure Research*, 34(1), 52–78. <https://doi.org/10.1080/00222216.2002.11949960>
- National Golf Foundation. (2024, February 15). Golf Participation Update—Bigger, Younger and Cooler. *Short Game*. <https://www.ngf.org/short-game/golf-participation-update-bigger-younger-and-cooler/>
- National Park Service. (2025). *Timed Entry Reservations*. Mount Rainier National Park. www.nps.gov/mora/planyourvisit/timed-entry-reservations.htm
- NWCCOG, CAST, US EDA, and CDLA. (2021). *The Mountain Migration Report: Are COVID Impacts on Housing and Services Hear to Stay?* (p. 70). Northwest Colorado Council of Governments, with Colorado Association of Ski Towns, the US Economic Development Administration, and the Colorado Department of Local Affairs. https://newspack-coloradosun.s3.amazonaws.com/wp-content/uploads/2021/06/21041-Mtn-Migration-Report_v2-1.pdf
- Outdoor Foundation and Outdoor Industry Association. (2023). *2023 Outdoor Participation Trends Report* (p. 73). Outdoor Foundation. https://www.outdoorsmen.com/images/2023_OIA_Participation_Report.pdf
- Outdoor Foundation and Outdoor Industry Association. (2024). *2024 Outdoor Participation Trends Report—Executive Summary* (p. 22). Outdoor Foundation. <https://outdoorindustry.org/article/2024-outdoor-participation-trends-report/>
- Outdoor Foundation. (2022). *2022 Outdoor Participation Trends Report* (p. 50). Outdoor Foundation. <https://outdoorindustry.org/wp-content/uploads/2015/03/2022-Outdoor-Participation-Trends-Report-1.pdf>
- Pegler, G. F., de Lemos, C. C., and Ranieri, V. E. L. (2024). Exploring the application of environmental impact assessment to tourism and recreation in protected areas: A systematic literature review. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-024-04532-6>
- Pohl, K., and Lawson, M. (2017). *State Funding Mechanisms for Outdoor Recreation* (p. 48). Outdoor Industry Association.
- Port of Seattle, The Travel Foundation, and Tourism Cares. (2023). *Responsible travel handbook: Washington tourism organizations* (p. 98). Port of Seattle. www.portseattle.org/sites/default/files/2023-10/Responsible_Travel_Handbook.pdf
- Ray, K. (2021). Recreation Counties and Available Housing in Rural Oregon. *Cityscape*, 23(3), 313–322. www.huduser.gov/portal/periodicals/cityscpe/vol23num3/ch13.pdf
- Rosenberger, R. S. (2016). *Recreation Use Values Database* [Dataset]. College of Forestry, Oregon State University. <http://recvaluation.forestry.oregonstate.edu/database>
- Smillie, J. (2014, August 10). Tribe offers reward for info on Tamanowas Rock vandalism. *Peninsula Daily News*. www.peninsuladailynews.com/news/tribe-offers-reward-for-info-on-tamanowas-rock-vandalism-2/

- Shultz, S. (2009). *Economic and social values of recreational floating on the Niobrara National Scenic River: Final report*. University of Nebraska at Omaha.
- Taylor, M. (2017). *Improving State's Approach to Park User Fees* (p. 24). Legislative Analyst's Office (LAO). <https://lao.ca.gov/Publications/Report/3527>
- U.S. Army Corps of Engineers, Institute for Water Resources. (2024). *Value to the nation fast facts: USACE recreation 2023 state report, Washington* (No. RN 735-17c; p. 1). US Army Corps of Engineers, Institute for Water Resources. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/15865/rec/4>
- U.S. Bureau of Economic Analysis. (2025). *Gross Domestic Product: All Industry Total in Washington (WANGSP)* [Spreadsheet; Excel]. Federal Reserve Bank of St. Louis. <https://fred.stlouisfed.org/series/WANGSP>
- US Census Bureau. (2024). *2022 State and Local Government Finance Historical Datasets and Tables* [Spreadsheet]. Census.gov. www.census.gov/data/datasets/2022/econ/local/public-use-datasets.html
- US Census Bureau. (2025). *County Population Totals and Components of Change: 2020-2024* [Spreadsheet]. www.census.gov/data/tables/time-series/demo/popest/2020s-counties-total.html
- Van Dam, A. (2023, February 10). The mystery of the disappearing vacation day: US workers aren't taking week-long vacations anymore. What happened? *The Washington Post*. <https://www.washingtonpost.com/business/2023/02/10/disappearing-vacation-days/>
- Van Deynze, B. (2024). *Fishing, Hunting, and Wildlife Associated Recreation in Washington Participation and Expenditures in 2022*. Washington Department of Fish and Wildlife. <https://wdfw.wa.gov/sites/default/files/publications/02466/wdfw02466.pdf>
- Washington State Parks. (2024). *Operating Budget Request 2025-2027* (Financial Update No. E-2; p. 165). Washington State Parks and Recreation Commission. <https://parks.wa.gov/sites/default/files/2024-09/2025-27%20Operating%20Budget%20Request.pdf>
- Washington State Parks. (2025). *Financial Update—Report* (Financial Update No. E-2; p. 5). Washington State Parks and Recreation Commission. <https://parks.wa.gov/sites/default/files/2025-04/Item%20E-2%20Financial%20Update%20-%20Report%20April%202025.pdf>
- White, E. M. (2017). *Spending Patterns of Outdoor Recreation Visitors to National Forests* (No. PNW-GTR-961; General Technical Report, p. 76). Pacific Northwest Research Station.
- Wichman, C. J. (2024). Social media influences National Park visitation. *Proceedings of the National Academy of Sciences*, 121(15), e2310417121. <https://doi.org/10.1073/pnas.2310417121>



Appendix A. County-Level Results

(ALL RECREATION)

The following table presents county-level spending and resulting total economic effects from outdoor recreation participation. These estimates do not include equipment expenditures or activity-based expenditures, due to a lack of data on where purchases occur.

Table 17. County-Level Results—All Recreation

COUNTY	TOTAL EXPENDITURES	ECONOMIC CONTRIBUTION	MULTIPLIER	JOBS*	STATE AND LOCAL TAXES
Adams	\$11,262,000	\$16,608,000	1.47	102	\$2,208,000
Asotin	\$39,093,000	\$49,865,000	1.28	336	\$5,567,000
Benton	\$120,172,000	\$199,155,000	1.66	1,691	\$25,942,000
Chelan	\$258,622,000	\$405,161,000	1.57	2,809	\$41,195,000
Clallam	\$214,222,000	\$316,478,000	1.48	2,366	\$40,807,000
Clark	\$671,253,000	\$921,939,000	1.37	7,620	\$115,973,000
Columbia	\$9,060,000	\$13,016,000	1.44	73	\$1,592,000
Cowlitz	\$164,165,000	\$244,095,000	1.49	1,697	\$31,991,000
Douglas	\$69,913,000	\$101,975,000	1.46	561	\$12,500,000
Ferry	\$27,650,000	\$38,957,000	1.41	304	\$4,965,000
Franklin	\$45,214,000	\$70,519,000	1.56	461	\$8,492,000
Garfield	\$4,725,000	\$5,650,000	1.20	42	\$879,000
Grant	\$129,649,000	\$196,841,000	1.52	1,304	\$23,605,000
Grays Harbor	\$555,360,000	\$842,472,000	1.52	6,054	\$99,506,000
Island	\$123,553,000	\$186,965,000	1.51	1,543	\$21,451,000
Jefferson	\$97,477,000	\$139,242,000	1.43	1,000	\$16,793,000
King	\$1,995,231,000	\$3,080,985,000	1.54	20,268	\$337,504,000
Kitsap	\$261,376,000	\$407,518,000	1.56	3,159	\$49,009,000
Kittitas	\$165,325,000	\$244,327,000	1.48	1,427	\$28,197,000
Klickitat	\$86,426,000	\$123,284,000	1.43	899	\$16,080,000
Lewis	\$221,210,000	\$323,897,000	1.46	1,816	\$41,854,000
Lincoln	\$7,776,000	\$10,843,000	1.39	76	\$1,436,000
Mason	\$130,709,000	\$189,699,000	1.45	1,172	\$24,010,000
Okanogan	\$198,136,000	\$295,617,000	1.49	2,095	\$35,074,000
Pacific	\$232,636,000	\$336,700,000	1.45	2,466	\$47,891,000
Pend Oreille	\$24,983,000	\$34,337,000	1.37	210	\$3,705,000
Pierce	\$851,148,000	\$1,388,681,000	1.63	10,473	\$161,641,000
San Juan	\$32,629,000	\$46,349,000	1.42	299	\$5,682,000

COUNTY	TOTAL EXPENDITURES	ECONOMIC CONTRIBUTION	MULTIPLIER	JOBS*	STATE AND LOCAL TAXES
Skagit	\$369,694,000	\$564,742,000	1.53	3,803	\$68,602,000
Skamania	\$35,864,000	\$48,294,000	1.35	349	\$5,412,000
Snohomish	\$696,750,000	\$1,055,855,000	1.52	6,558	\$111,184,000
Spokane	\$486,911,000	\$796,345,000	1.64	5,664	\$89,971,000
Stevens	\$104,932,000	\$159,996,000	1.52	1,155	\$20,734,000
Thurston	\$349,600,000	\$576,217,000	1.65	4,196	\$71,593,000
Wahkiakum	\$86,162,000	\$118,948,000	1.38	1,745	\$13,373,000
Walla Walla	\$34,353,000	\$52,468,000	1.53	372	\$6,839,000
Whatcom	\$331,709,000	\$507,024,000	1.53	3,185	\$59,227,000
Whitman	\$48,247,000	\$72,856,000	1.51	579	\$9,884,000
Yakima	\$281,120,000	\$441,215,000	1.57	3,006	\$52,183,000

* Jobs supported does not necessarily reflect on-the-ground realities because IMPLAN uses a linear model that does not constrain jobs supported by the actual employment data for a county.



Appendix B. County-Level Results

(PUBLIC LANDS RECREATION)

The following table presents county-level spending and resulting economic effects from outdoor recreation participation on public lands. These estimates do not include equipment expenditures or activity-based expenditures due to lack of data of where purchases occur.

Table 18. County-Level Results—Public Land Recreation

COUNTY	TOTAL EXPENDITURES	ECONOMIC CONTRIBUTION	MULTIPLIER	JOBS*	STATE AND LOCAL TAXES
Adams	\$11,262,000	\$16,608,000	1.47	102	\$2,208,000
Asotin	\$39,093,000	\$49,865,000	1.28	336	\$5,567,000
Benton	\$79,532,000	\$126,233,000	1.59	819	\$15,555,000
Chelan	\$190,261,000	\$299,421,000	1.57	2,090	\$34,989,000
Clallam	\$202,983,000	\$299,867,000	1.48	2,248	\$38,774,000
Clark	\$556,191,000	\$749,856,000	1.35	5,450	\$90,171,000
Columbia	\$7,396,000	\$10,696,000	1.45	63	\$1,538,000
Cowlitz	\$144,298,000	\$214,776,000	1.49	1,492	\$28,007,000
Douglas	\$63,055,000	\$91,586,000	1.45	494	\$11,596,000
Ferry	\$24,916,000	\$34,957,000	1.40	274	\$4,363,000
Franklin	\$32,845,000	\$50,256,000	1.53	292	\$5,896,000
Garfield	\$4,559,000	\$5,445,000	1.19	42	\$888,000
Grant	\$127,824,000	\$194,121,000	1.52	1,289	\$23,427,000
Grays Harbor	\$526,508,000	\$798,486,000	1.52	5,716	\$93,532,000
Island	\$123,095,000	\$186,280,000	1.51	1,538	\$21,356,000
Jefferson	\$92,405,000	\$131,875,000	1.43	949	\$15,810,000
King	\$1,670,809,000	\$2,550,041,000	1.53	15,328	\$277,163,000
Kitsap	\$255,538,000	\$397,823,000	1.56	3,054	\$47,599,000
Kittitas	\$146,984,000	\$216,394,000	1.47	1,228	\$26,821,000
Klickitat	\$78,373,000	\$111,725,000	1.43	815	\$14,480,000
Lewis	\$191,773,000	\$279,261,000	1.46	1,539	\$37,485,000
Lincoln	\$7,654,000	\$10,672,000	1.39	74	\$1,410,000
Mason	\$118,552,000	\$172,024,000	1.45	1,046	\$21,632,000
Okanogan	\$184,910,000	\$276,275,000	1.49	1,976	\$33,589,000
Pacific	\$217,773,000	\$315,534,000	1.45	2,297	\$44,703,000
Pend Oreille	\$14,138,000	\$19,259,000	1.36	113	\$2,291,000
Pierce	\$610,502,000	\$969,436,000	1.59	6,198	\$110,176,000
San Juan	\$32,219,000	\$45,790,000	1.42	295	\$5,606,000

COUNTY	TOTAL EXPENDITURES	ECONOMIC CONTRIBUTION	MULTIPLIER	JOBS*	STATE AND LOCAL TAXES
Skagit	\$360,292,000	\$550,642,000	1.53	3,713	\$66,800,000
Skamania	\$32,195,000	\$43,418,000	1.35	318	\$4,831,000
Snohomish	\$658,454,000	\$994,196,000	1.51	6,072	\$107,061,000
Spokane	\$464,119,000	\$758,106,000	1.63	5,356	\$86,954,000
Stevens	\$73,247,000	\$112,641,000	1.54	839	\$15,096,000
Thurston	\$315,100,000	\$514,946,000	1.63	3,553	\$63,075,000
Wahkiakum	\$86,162,000	\$118,948,000	1.38	1,745	\$13,373,000
Walla Walla	\$31,781,000	\$48,669,000	1.53	349	\$6,504,000
Whatcom	\$315,798,000	\$483,523,000	1.53	3,062	\$57,816,000
Whitman	\$48,231,000	\$72,834,000	1.51	579	\$9,885,000
Yakima	\$264,222,000	\$415,272,000	1.57	2,858	\$50,970,000

* Jobs supported does not necessarily reflect on-the-ground realities because IMPLAN uses a linear model that does not constrain jobs supported by the actual employment data for a county.



Appendix C. County-Level Results

(OUT-OF-STATE)

The following table presents county-level economic effects of outdoor recreation spending by out-of-state visitors. These estimates do not include equipment expenditures or activity-based expenditures due to lack of data of where such purchases occur.

Table 19. County-Level Results—Out-of-State Visitors

COUNTY	TOTAL EXPENDITURES	ECONOMIC CONTRIBUTION	MULTIPLIER	JOB ^S *	STATE AND LOCAL TAXES
Adams	\$2,598,000	\$3,828,000	1.47	29	\$437,000
Asotin	\$18,256,000	\$24,265,000	1.33	171	\$2,912,000
Benton	\$17,586,000	\$29,437,000	1.67	251	\$3,845,000
Chelan	\$29,987,000	\$47,645,000	1.59	342	\$5,479,000
Clallam	\$32,702,000	\$49,567,000	1.52	414	\$6,484,000
Clark	\$212,897,000	\$296,997,000	1.40	2,579	\$39,800,000
Columbia	\$3,600,000	\$5,209,000	1.45	32	\$711,000
Cowlitz	\$38,716,000	\$58,641,000	1.51	452	\$7,605,000
Douglas	\$7,953,000	\$11,955,000	1.50	79	\$1,331,000
Ferry	\$2,807,000	\$4,107,000	1.46	36	\$562,000
Franklin	\$7,886,000	\$12,417,000	1.57	84	\$1,490,000
Garfield	\$2,510,000	\$3,068,000	1.22	23	\$395,000
Grant	\$13,015,000	\$20,044,000	1.54	141	\$2,429,000
Grays Harbor	\$109,811,000	\$168,378,000	1.53	1,268	\$19,965,000
Island	\$15,297,000	\$23,418,000	1.53	203	\$2,911,000
Jefferson	\$18,663,000	\$27,233,000	1.46	238	\$2,899,000
King	\$262,109,000	\$412,055,000	1.57	2,846	\$46,993,000
Kitsap	\$29,149,000	\$46,311,000	1.59	390	\$5,828,000
Kittitas	\$23,985,000	\$35,993,000	1.50	237	\$4,127,000
Klickitat	\$36,435,000	\$52,882,000	1.45	434	\$7,081,000
Lewis	\$28,739,000	\$43,632,000	1.52	311	\$5,179,000
Lincoln	\$3,077,000	\$4,207,000	1.37	42	\$381,000
Mason	\$18,822,000	\$27,325,000	1.45	187	\$3,136,000
Okanogan	\$20,835,000	\$31,442,000	1.51	236	\$3,794,000
Pacific	\$81,601,000	\$119,356,000	1.46	1,006	\$15,239,000
Pend Oreille	\$6,051,000	\$8,375,000	1.38	59	\$785,000
Pierce	\$102,882,000	\$170,905,000	1.66	1,372	\$21,384,000
San Juan	\$8,340,000	\$11,795,000	1.41	92	\$1,307,000
Skagit	\$55,530,000	\$86,012,000	1.55	624	\$10,268,000

COUNTY	TOTAL EXPENDITURES	ECONOMIC CONTRIBUTION	MULTIPLIER	JOBS*	STATE AND LOCAL TAXES
Skamania	\$22,719,000	\$30,765,000	1.35	271	\$3,059,000
Snohomish	\$62,088,000	\$95,842,000	1.54	643	\$10,688,000
Spokane	\$85,989,000	\$143,707,000	1.67	1,046	\$16,887,000
Stevens	\$16,235,000	\$25,411,000	1.57	216	\$3,204,000
Thurston	\$38,998,000	\$65,625,000	1.68	513	\$8,224,000
Wahkiakum	\$11,303,000	\$16,830,000	1.49	198	\$2,096,000
Walla Walla	\$7,067,000	\$10,996,000	1.56	85	\$1,457,000
Whatcom	\$43,328,000	\$68,289,000	1.58	480	\$7,514,000
Whitman	\$24,042,000	\$36,157,000	1.50	304	\$4,866,000
Yakima	\$39,222,000	\$62,732,000	1.60	459	\$7,677,000

* Jobs supported does not necessarily reflect on-the-ground realities because IMPLAN uses a linear model that does not constrain jobs supported by the actual employment data for a county.



Appendix D. Spending by Activity

Table 20. Participants, Participant-Days, and Estimated Total Spending by Activity*

ACTIVITY	TOTAL PARTICIPANTS	TOTAL PARTICIPANT DAYS		TOTAL SPENDING (000S)	
		LOW	HIGH	LOW	HIGH
Camping Activities	8,031,499	24,668,280	85,756,199	\$1,456,415,000	\$5,063,045,000
Tent Camping (developed)	2,191,266	7,228,053	19,283,142	\$426,744,000	\$1,138,477,000
Tent Camping (undeveloped)	1,945,173	6,759,090	20,229,799	\$399,057,000	\$1,194,367,000
RV/Motorhome/Trailer Camping (developed)	1,530,303	5,532,378	20,965,155	\$326,632,000	\$1,237,783,000
RV/Motorhome/Trailer Camping (undeveloped)	1,017,374	2,136,633	12,208,483	\$126,147,000	\$720,789,000
Cabin or Yurt	1,347,384	3,012,126	13,069,620	\$177,836,000	\$771,630,000
Trails and Road-Based Activities	20,741,597	308,052,390	517,325,213	\$3,031,235,000	\$5,090,480,000
Walking (or using mobility device) on roads/sidewalks	4,863,404	138,904,127	166,328,413	\$1,366,817,000	\$1,636,672,000
Walking/Day Hiking (or using mobility device) on trails	4,836,060	109,915,553	132,024,444	\$1,081,569,000	\$1,299,121,000
Jogging or Running on roads/sidewalks	1,723,595	13,551,908	45,675,264	\$133,351,000	\$449,445,000
Jogging or Running on trails	1,528,418	8,881,466	33,778,028	\$87,394,000	\$332,376,000
Backpacking	2,113,950	9,924,190	27,269,949	\$97,654,000	\$268,336,000
Road Cycling	2,015,889	14,522,668	41,930,500	\$142,903,000	\$412,596,000
Mountain Biking	1,361,527	6,509,338	27,775,147	\$64,052,000	\$273,307,000
Gravel Road Cycling (e.g., bikepacking)	1,047,546	2,878,417	16,027,452	\$28,324,000	\$157,710,000
Stock or Horseback Trail Riding	510,101	921,422	10,508,083	\$9,067,000	\$103,400,000
Electric Bicycling	741,108	2,043,301	16,007,934	\$20,106,000	\$157,518,000
Land-Based Motorized Vehicle Activities	3,726,284	8,877,134	74,500,219	\$524,105,000	\$4,398,492,000
Motorcycling	742,051	2,280,204	17,883,428	\$134,623,000	\$1,055,838,000
ATVs	647,762	1,304,552	11,724,499	\$77,021,000	\$692,214,000
4WDs	1,018,316	3,159,652	18,024,201	\$186,546,000	\$1,064,149,000
Side-by-Sides	528,016	913,054	10,085,104	\$53,907,000	\$595,425,000
Snowmobiling	505,387	909,794	10,461,504	\$53,714,000	\$617,647,000
Tracked ORVs	284,751	309,877	6,321,482	\$18,295,000	\$373,220,000
Water Activities	12,342,372	55,603,994	167,695,597	\$3,668,566,000	\$12,759,274,000
Swimming (public pools)	1,531,246	6,245,827	23,734,316	\$169,012,000	\$642,251,000

ACTIVITY	TOTAL PARTICIPANTS	TOTAL PARTICIPANT DAYS		TOTAL SPENDING (000S)	
		LOW	HIGH	LOW	HIGH
Swimming (natural settings)	3,061,550	20,196,751	38,269,369	\$546,524,000	\$1,035,569,000
Motorboats (inc. water skiing)	1,651,936	7,067,773	24,944,227	\$817,176,000	\$2,884,052,000
Sailboating	595,904	910,513	8,878,965	\$105,274,000	\$1,026,586,000
Paddle Sports (whitewater, canoes, kayaks, stand-up-paddle boards, rowing)	2,641,023	15,621,449	34,333,293	\$1,594,794,000	\$3,505,086,000
Personal Watercraft (Jet Ski, WaveRunner)	478,986	655,452	7,951,166	\$75,783,000	\$919,314,000
Snorkeling or Scuba Diving	615,704	897,166	8,496,719	\$144,560	\$1,369,076,000
Surfing, Windsurfing, or Kiteboarding	318,695	355,156	6,469,515	\$36,258	\$660,473,000
Inner Tubing/Floating	1,447,329	3,653,856	14,618,027	\$179,185,000	\$716,868,000
Snow and Ice Activities	7,101,814	17,226,247	92,169,330	\$2,293,747,000	\$12,049,733,000
Fat Tire Biking on Snow	360,182	382,508	6,195,136	\$14,115,000	\$228,601,000
Cross-Country or Nordic	1,197,465	3,979,324	19,279,182	\$814,249,000	\$3,944,906,000
Skiing (alpine/tele) or Snowboarding at developed facility	1,247,438	3,885,735	18,087,846	\$795,099,000	\$3,701,135,000
Backcountry Skiing or Snowboarding	627,019	962,933	8,966,371	\$197,035,000	\$1,834,699,000
Sledding, Inner Tubing, or other Snow Play	1,386,985	3,020,192	12,621,561	\$178,312,000	\$745,177,000
Snowshoeing	1,623,649	4,324,074	15,424,665	\$255,293,000	\$910,672,000
Outdoor Ice Skating	413,927	445,956	6,250,294	\$26,329,000	\$369,017,000
Ice Climbing	245,150	225,526	5,344,276	\$13,315,000	\$315,526,000
Nature and Culture-Based Activities	15,954,567	169,746,888	264,656,672	\$14,014,296,000	\$19,414,141,000
Wildlife/Nature Viewing	4,379,704	77,371,569	102,923,034	\$7,137,527,000	\$9,494,650,000
Gathering/Collection (anything in nature)	2,367,586	13,881,511	34,093,234	\$221,965,000	\$545,151,000
Scenic Driving (sightseeing)	4,334,445	55,903,173	74,985,900	\$5,813,930,000	\$7,798,534,000
Volunteering (restoration projects, citizen science, etc.)	1,778,282	7,398,703	24,184,638	\$0	\$0
Visiting Outdoor Cultural/ Historical Facility (includes cultural events)	3,094,551	15,191,931	28,469,865	\$840,873,000	\$1,575,807,000
Hunting, Fishing, and Shooting Sports	7,300,763	17,708,125	110,123,757	\$994,047,000	\$6,360,216,000
Fishing from bank/dock/pier/jetty	1,376,613	4,389,613	18,584,275	\$248,364,000	\$1,051,498,000
Fishing from boat	1,212,551	3,774,902	18,067,008	\$213,584,000	\$1,022,231,000
Fly Fishing	658,134	1,188,289	10,530,146	\$67,233,000	\$595,796,000
Shellfishing	892,913	1,652,055	10,804,243	\$93,473,000	\$611,304,000
Hunting	769,395	1,903,725	14,387,680	\$181,330,000	\$1,370,427,000

ACTIVITY	TOTAL PARTICIPANTS	TOTAL PARTICIPANT DAYS		TOTAL SPENDING (000S)	
		LOW	HIGH	LOW	HIGH
Trapping	238,550	222,102	5,415,086	\$21,155,000	\$515,787,000
Paintball	282,866	270,719	5,572,454	\$9,990,000	\$205,624,000
Target Shooting or Archery at developed range	873,112	1,954,280	13,009,370	\$72,113,000	\$480,046,000
Target Shooting or Archery in a natural area	996,630	2,352,441	13,753,495	\$86,805,000	\$507,504,000
Leisure Activities in Parks	20,119,293	107,353,032	261,614,546	\$2,129,347,000	\$5,839,725,00
Splash Pad or Spray Park	880,655	1,577,287	10,391,731	\$42,681,000	\$281,200,000
Community Gardens, Farmers' Markets	3,216,183	20,192,218	36,664,483	\$273,201,000	\$496,070,000
Outdoor Concerts, Special Events	2,352,500	7,795,538	19,290,496	\$748,372,000	\$1,851,888,000
Picnic, BBQ, or Cookout	3,295,385	19,127,492	33,612,929	\$258,795,000	\$454,783,000
Playground	1,919,715	10,145,777	30,715,441	\$137,272,000	\$415,580,000
Hanging Out	3,333,101	32,814,648	57,329,330	\$443,982,000	\$775,666,000
Dog Park	1,539,732	6,244,012	23,557,902	\$6,244,000	\$23,558,000
Disc Golf	571,389	830,000	8,456,552	\$30,627,000	\$312,047,000
Yard Games (beanbag toss, horseshoes, etc.)	1,750,939	6,378,824	21,186,356	\$86,305,000	\$286,651,000
Technology-based Games (geocaching, virtual reality, etc.)	678,878	1,427,117	12,219,797	\$52,661,000	\$450,911,000
Drones, Gliders, or Model Aircraft	580,818	820,119	8,189,527	\$49,207,000	\$491,372,000
Athletics	8,763,179	15,101,146	158,195,176	\$486,435,000	\$4,487,396,000
BMX or Pump Track	540,273	747,155	8,050,074	\$27,570,000	\$297,048,000
Soccer	675,106	1,632,300	14,042,207	\$16,062,000	\$138,175,000
Football	420,527	664,488	9,209,541	\$6,539,000	\$90,622,000
Lacrosse	252,693	245,364	5,660,331	\$2,414,000	\$55,698,000
Rugby	240,436	233,403	5,650,242	\$2,297,000	\$55,598,000
Ultimate Frisbee	372,440	461,521	7,225,332	\$4,541,000	\$71,097,000
Track	470,500	753,250	9,315,898	\$7,412,000	\$91,668,000
Ballfield Sports (baseball, softball, etc.)	618,533	1,212,158	11,381,006	\$11,928,000	\$111,989,000
Golf	871,226	2,233,409	14,897,970	\$212,017,000	\$1,414,264,000
Ice Sports (hockey, figure skating, etc.)	385,640	476,692	7,211,472	\$28,144,000	\$425,765,000
Skateboarding	414,870	535,377	7,509,141	\$19,755,000	\$277,087,000
Basketball	696,792	1,464,777	12,263,547	\$14,413,000	\$120,673,000
Tennis	595,904	979,171	9,534,459	\$9,635,000	\$93,819,000
Pickleball	613,819	1,058,193	10,005,242	\$10,413,000	\$98,452,000
Volleyball	454,471	655,341	8,407,711	\$6,449,000	\$82,732,000

ACTIVITY	TOTAL PARTICIPANTS	TOTAL PARTICIPANT DAYS		TOTAL SPENDING (000S)	
		LOW	HIGH	LOW	HIGH
Inline Skating, Roller Skating, Longboarding, or Roller Skiing	576,103	850,104	8,583,936	\$31,369,000	\$316,747,000
Scooter Riding	563,846	898,443	9,247,068	\$72,477,000	\$745,961,000
Outdoor Adventures	3,664,053	4,931,508	56,120,173	\$379,769,000	\$4,714,161,000
Rock Climbing	658,134	1,054,070	9,345,505	\$62,232,000	\$551,759,000
Mountaineering	870,283	1,676,329	11,226,656	\$98,970,000	\$662,822,000
Caving	448,814	476,160	6,193,627	\$28,112,000	\$365,672,000
Canyoneering	396,955	455,459	6,668,841	\$122,519,000	\$1,793,918,000
Hang Gliding, Sky Diving, or Paragliding	247,979	224,431	5,257,153	\$36,163,000	\$847,085,000
Ziplining or Ropes Course	435,613	438,225	5,837,216	\$16,171,000	\$215,393,000
Obstacle Course or Adventure Race	343,210	355,919	6,040,502	\$13,133,000	\$222,895,000
Parkour	263,065	250,916	5,550,673	\$2,469,000	\$54,619,000
Grand Total	107,745,423	729,268,694	1,788,156,882	\$28,974,966,000	\$80,176,667,000

*Totals may vary due to rounding.



Appendix E. Studies Used to Value Ecosystem Services

- Armstrong, D. A., Rooper, C., and Gunderson, D. (2003). Estuarine production of juvenile dungeness crab (cancer magister) and contribution to the Oregon-Washington coastal fishery. *Estuaries*, 26, 1174–1188. <https://doi.org/10.1007/BF02803372>
- Bolitzer, B., and Netusil, N. (2000). The impact of open spaces on property values in Portland, Oregon. *Journal of Environmental Management*, 59, 185–193.
- Bridgeham, S. D., Megonigal, J. P., Keller, J. K., Bliss, N. B., and Trettin, C. (2006). The carbon balance of North American wetlands. *Wetlands*, 26(4), 889–916. [https://doi.org/10.1672/0277-5212\(2006\)26\[889:TCBONA\]2.0.CO;2](https://doi.org/10.1672/0277-5212(2006)26[889:TCBONA]2.0.CO;2)
- Bulte, E. H., and van Kooten, G. C. (1999). How much primary coastal temperate rain forest should society retain? Carbon uptake, recreation, and other values. *Canadian Journal of Soil Science*, 29(1), 1879–1890.
- Cedar River Group, Mundy Associates, LLC, and Beyers, W. B. (2002). *Evaluation of Blanchard Mountain Social, Ecological and Financial Values* (p. 79). Washington State Department of Natural Resources. https://www.dnr.wa.gov/Publications/lm_blmt_aug02_report_values.pdf
- Ciecko, L., Tenneson, K., Dilley, J., and Wolf, K. (2012). *Seattle's Forest Ecosystem Values: Analysis of the Structure, Function, and Economic Benefits* (p. 26). Green Cities Research Alliance.
- Clucas, B., Rabotyagov, S., and Marzluff, J. M. (2014). How much is that birdie in my backyard? A cross-continental economic valuation of native urban songbirds. *Urban Ecosystems*, 18, 251–266. <https://doi.org/10.1007/s11252-014-0392-x>
- Comello, S. D., Maltais-Landry, G., Schwegler, B. R., and Lepech, M. D. (2014). Firm-level ecosystem service valuation using mechanistic biogeochemical modeling and functional substitutability. *Ecological Economics*, 100, 63–73. <https://doi.org/10.1016/j.ecolecon.2014.01.014>
- Crooks, S., Rybczyk, J., O'Connell, K., Devier, D. L., Poppe, K., and Emmett-Mattox, S. (2014). *Coastal blue carbon opportunity assessment for the Snohomish Estuary: The Climate Benefits of Estuary Restoration* (p. 102). Environmental Science Associates, Western Washington University, EarthCorps, and Restore America's Estuaries.
- DiSalvo, A., Fukuda, J., and Ramsey, J. (2017). *Street Tree Inventory Report: City of Portland* (ver. 4/14/2017; p. 43). Portland Parks and Recreation Urban Forestry.
- Donovan, G. H., and Butry, D. T. (2010). Trees in the city: Valuing street trees in Portland, Oregon. *Landscape and Urban Planning*, 94(2), 77–83. <https://doi.org/10.1016/j.landurbplan.2009.07.019>
- Duarte, C. M., Middelburg, J. J., and Caraco, N. (2005). Major role of marine vegetation on the oceanic carbon cycle. *Biogeosciences*, 2, 1–8.
- Ehlers, T., and Hobby, T. (2010). The chanterelle mushroom harvest on northern Vancouver Island, British Columbia: Factors relating to successful commercial development. *BC Journal of Ecosystems and Management*, 11(1–2), 72–83.

- Erckmann, J., Chinn, A., Flagor, S., Kurko, K., Freeman, J., Little, R., Schneider, G., and Vanderhoof, J. (2000). *Cedar River Watershed Habitat Conservation Plan: For the issuance of a permit to allow incidental take of threatened and endangered species* (p. 26). City of Seattle. www.seattle.gov/documents/Departments/SPU/EnvironmentConservation/HCP/CoverPagesTableofContents.pdf
- Faux, J., and Perry, G. M. (1999). Estimating Irrigation Water Value Using Hedonic Price Analysis: A Case Study in Malheur County, Oregon. *Land Economics*, 75(3), 440–452. <https://doi.org/10.2307/3147189>
- Ghermandi, A., van den Bergh, J. C. J. M., Brander, L. M., de Groot, H. L. F., and Nunes, P. A. L. D. (2010). Values of natural and human-made wetlands: A meta-analysis. *Water Resources Research*, 46(12). <https://doi.org/10.1029/2010WR009071>
- Gopalakrishnan, V., Hirabayashi, S., Ziv, G., and Bakshi, B. R. (2018). Air quality and human health impacts of grasslands and shrublands in the United States. *Atmospheric Environment*, 182, 193–199.
- Hill, B. H., Kolka, R. K., McCormick, F. H., and Starry, M. A. (2014). A synoptic survey of ecosystem services from headwater catchments in the United States. *Ecosystem Services*, 7, 106–115.
- Hoover, C. M., Bagdon, B., and Gagnon, A. (2021). *Standard estimates of forest ecosystem carbon for forest types of the United States* (pp. 106–115) [General Technical Report]. U.S. Department of Agriculture, Forest Service, Northern Research Station. <https://www.fs.usda.gov/research/treesearch/63638>
- Kline, J. D., Alig, R. J., and Johnson, R. L. (2000). Forest owner incentives to protect riparian habitat. *Ecological Economics*, 33(1), 29–43. [https://doi.org/10.1016/S0921-8009\(99\)00116-0](https://doi.org/10.1016/S0921-8009(99)00116-0)
- Knowler, D., and Dust, K. (2008). *The Economics of Protecting Old Growth Forest: An Analysis of Spotted Owl Habitat in the Fraser Timber Supply Area of British Columbia*. Simon Fraser University. <https://davidssuzuki.org/wp-content/uploads/2008/09/economics-protecting-old-growth-forests-analysis-spotted-owl-habitat-fraser-timber-supply-area-british-columbia.pdf>
- Knowler, D. J., MacGregor, B. W., Bradford, M. J., and Peterman, R. M. (2003). Valuing freshwater salmon habitat on the west coast of Canada. *Journal of Environmental Management*, 69, 261–273.
- Knowler, D., Page, A., Cooper, A., and Araujo, A. H. (2016). Valuing a Logging Externality: Loss of the Water Purification Service of Temperate Coastal Rainforests. *Water Economics and Policy*, 3(2), 1–29. <https://doi.org/10.1142/S2382624X16500326>
- Lal, R., Smith, P., Jungkunst, H. F., Mitsch, W. J., Lehmann, J., Nair, P. K. R., McBratney, A. B., Sá, J. C. D. M., Schneider, J., Zinn, Y. L., Skorupa, A. L. A., Zhang, H. L., Minasny, B., Srinivasrao, C., and Ravindranath, N. H. (2018). The carbon sequestration potential of terrestrial ecosystems. *Journal of Soil and Water Conservation*, 73(6), 145A–152A. <https://doi.org/10.2489/jswc.73.6.145A>
- Leschine, T. M., Wellman, K., and Green, T. H. (1997). *The Economic Value of Wetlands: Wetlands' Role in Flood Protection in Western Washington* (Ecology Publication No. 97-100; p. 62). Washington State Department of Ecology.
- Liu, S., Liu, J., Young, C. J., Werner, J. M., Wu, Y., Li, Z., Dahal, D., Oeding, J., Schmidt, G. L., Sohl, T. L., Hawbaker, T. J., and Sleeter, B. M. (2012). Chapter 5: Baseline Carbon Storage, Carbon Sequestration, and Greenhouse-Gas Fluxes in Terrestrial Ecosystems of the Western United States. In *Baseline and Projected Future Carbon Storage and Greenhouse-Gas Fluxes in Ecosystems of the Western United States* (p. 24). US Geological Survey. <https://pubs.usgs.gov/pp/1797/>

- Loomis, J., and Feldman, M. (2003). Estimating the benefits of maintaining adequate lake levels to homeowners using the hedonic property method. *Water Resources Research*, 39(9), 1259. <https://doi.org/10.1029/2002WR001799>
- Mahan, B. L. (1997). *Valuing urban wetlands: A property pricing approach* (IWR Report 97-R-1; p. 82). U.S. Army Corps of Engineers.
- Maher, A. T., Maczko, K. A., Taylor, D. T., and Tanaka, J. A. (2020). *National and State Economic Values of Cattle Ranching and Farming-Based Ecosystem Services on Federal and Private Lands in the U.S.* (B-1367; p. 154). Sustainable Rangelands Roundtable.
- Mansfield, C., Van Houtven, G., Hendershott, A., Chen, P., Porter, J., Nourani, V., and Kilambi, V. (2012). *Klamath River Basin Restoration Nonuse Value Survey: Final Report*. RTI International.
- McPherson, E. G., and Simpson, J. R. (2002). A Comparison of Municipal Forest Benefits and Costs in Modesto and Santa Monica, California, USA. *Urban Forestry and Urban Greening*, 1, 61-74. https://www.fs.usda.gov/psw/topics/urban_forestry/products/cufr_196_EM02_82.pdf
- McPherson, E. G., Simpson, J. R., Peper, P. J., and Xiao, Q. (1999). Benefits-cost analysis of Modesto's municipal urban forest. *Journal of Arboriculture*, 25(5), 235–248.
- McPherson, E. G., van Doorn, N., and de Goede, J. (2016). Structure, function and value of street trees in California, USA. *Urban Forestry and Urban Greening*, 17, 104–115. <https://doi.org/10.1016/j.ufug.2016.03.013>
- McPherson, G., Simpson, J. R., Peper, P. J., Maco, S. E., and Xiao, Q. (2005). Municipal forest benefits and costs in five US cities. *Journal of Forestry*, 103(8), 411–416.
- Morandin, L. A., Long, R. F., and Kremen, C. (2016). Pest control and pollination cost–benefit analysis of hedgerow restoration in a simplified agricultural landscape. *Journal of Economic Entomology*, 109(3), 1020–1027.
- Nielsen-Pincus, M., Sussman, P., Bennett, D. E., Gosnell, H., and Parker, R. (2017). The Influence of Place on the Willingness to Pay for Ecosystem Services. *Society and Natural Resources*, 30(12), 1423–1441. <https://doi.org/10.1080/08941920.2017.1347976>
- Nowak, D. J., Crane, D. E., and Dwyer, J. F. (2002). Compensatory value of urban trees in the United States. *Journal of Arboriculture*, 28(4), 194–199.
- Nowak, D. J., Crane, D. E., and Stevens, J. C. (2006). Air pollution removal by urban trees and shrubs in the United States. *Urban Forestry and Urban Greening*, 4, 115–123. <https://doi.org/10.1016/j.ufug.2006.01.007>
- Nowak, D. J., Hirabayashi, S., Bodine, A., and Greenfield, E. (2014). Tree and forest effects on air quality and human health in the United States. *Environmental Pollution*, 193, 119–129.
- O'Higgins, T. G., Ferraro, S. P., Dantin, D. D., Jordan, S. J., and Chintala, M. M. (2010). Habitat scale mapping of fisheries ecosystem service values in estuaries. *Ecology and Society*, 15(4), 7.
- Petrie, M., Collins, S., Swann, A., Ford, P., and Litvak, M. (2015). Grassland to Shrubland State Transitions Enhance Carbon Sequestration in the Northern Chihuahuan Desert. *Global Change Biology*, 21, 1226–1235. <https://doi.org/10.1111/gcb.12743>
- Phillips, D., Burdick, C., Merja, B., and Brown, N. (2011). *Assessment of Ecosystem Services Provided by Urban Trees: Public Lands Within the Urban Growth Boundary of Corvallis, Oregon* (p. 18). U.S. Environmental Protection Agency.
- Pimentel, D. (1998, May 10-13). *Economic and Environmental Benefits of Biological Diversity in the State of Maryland*. Conservation of Biological Diversity: A Key to the Restoration of the Chesapeake Bay Ecosystem and Beyond, Annapolis, MD.

- Pimentel, D., Harvey, C., Resosudarmo, P., Sinclair, K., Kurz, D., McNair, M., Crist, S., Shpritz, L., Fitton, L., Saffouri, R., and Blair, R. (1995). Environmental and Economic Costs of Soil Erosion and Conservation Benefits. *Science*, 267(5201), 1117–1123. <https://doi.org/10.1126/science.267.5201.1117>
- Podolak, K., Edelson, S., Kruse, S., Aylward, B., Zimring, M., and Wobbrock, N. (2015). *Estimating the Water Supply Benefits from Forest Restoration in the Northern Sierra Nevada*. (p. 20). The Nature Conservancy and Ecosystem Economics. www.placerair.org/DocumentCenter/View/2102/03-2015-Estimating-the-Water-Supply-Benefits-from-Forest-Restoration-in-the-Northern-Sierra-Nevada-PDF
- Post, W. M., and Kwon, K. C. (2000). Soil carbon sequestration and land-use change: Processes and potential. *Global Change Biology*, 6(3), 317–327. <https://doi.org/10.1046/j.1365-2486.2000.00308.x>
- Prey, J., Marcouiller, D. W., and Kim, D. (2023). *Economic Impacts of the Wisconsin State Park System: Connections to Gateway Communities* (PR-487-2013). Wisconsin Department of Natural Resources.
- Rein, F. A. (1999). An Economic Analysis of Vegetative Buffer Strip Implementation. Case Study: Elkhorn Slough, Monterey Bay, California. *Coastal Management*, 27(4), 377–390. <https://doi.org/10.1080/089207599263785>
- Richardson, R. B. (2005). *The Economic Benefits of California Desert Wildlands: 10 Years Since the California Desert Protection Act of 1994* (p. 59). The Wilderness Society.
- Richer, J. (1995). Willingness to Pay for Desert Protection. *Contemporary Economic Policy*, 13(4), 93–104. <https://doi.org/10.1111/j.1465-7287.1995.tb00735.x>
- Shaw, M. R., Pendleton, L., Cameron, D., Morris, B., Bratman, G., Bachelet, D., Klausmeyer, K., MacKenzie, J., Conklyn, D., Lenihan, J., Haunreiter, E., and Daly, C. (2009). *The Impact of Climate Change on California's Ecosystem Services* (CEC-500-2009-025-F; p. 78). California Climate Change Center.
- Simpson, R. D., Sedjo, R. A., and Reid, J. W. (1996). Valuing Biodiversity for Use in Pharmaceutical Research. *Journal of Political Economy*, 104(1), 163–185. <https://doi.org/10.1086/262021>
- Srivastava, L., Hand, M., Kim, J., Sánchez, J. J., Lupi, F., Garnache, C., Drapek, R. J., and Quinn, J. F. (2020). How Will Climate Change Affect the Provision and Value of Water from Public Lands in Southern California Through the 21st Century? *Agricultural and Resource Economics Review*, 49(1), 117–149. <https://doi.org/10.1017/age.2020.3>
- Trust for Public Land. (2011). *The Economic Benefits of Seattle's Park and Recreation System*. Trust for Public Land Center for City Park Excellence.
- Wallmo, K., and Kosaka, R. (2017). Using choice models to inform large marine protected area design. *Marine Policy*, 83, 111–117. <https://doi.org/10.1016/j.marpol.2017.05.034>
- Wallmo, K., Edwards, P., Steinbeck, S., Wusinich-Mendez, D., and Allen, M. (2021). *Economic Impact Analysis of Snorkeling and SCUBA Diving on Florida Reefs* (NOAA Technical Memorandum CRCP 42). NOAA National Ocean Service, National Coral Reef Conservation Program. <https://doi.org/10.25923/g8ex-r982>
- Walls, T. (2013). Appendix C: Salmon Productivity Calculations for Smith Island Restoration Project. In *Smith Island Restoration Project Final Environmental Impact Statement*. Snohomish County Public Works.
- Weinerman, M., Buckley, M., and Reich, S. (2012). *Socioeconomic Benefits of the Fisher Slough Restoration Project* (p. 19). ECONorthwest.
- Yuan, Y., Boyle, K. J., and You, W. (2015). Sample selection, individual heterogeneity, and regional heterogeneity in valuing farmland conservation easements. *Land Economics*, 91(4), 627–649.

Appendix F. Data and Methods

2015, 2020, AND 2025

LEVEL	MANAGER	YEAR	VISITATION METHODS AND DATA	SPENDING DATA
Federal	Bureau of Land Management	2015	Freedom of Information Act Data Request for visitor data.	White et al. (2013), adjusted to 2014 dollars.
		2020	Regional visitation data (Oregon and Washington) from Bureau of Land Management (2015), 25 percent allocated to Washington, based on the extent of BLM lands across both states.	White (2017), adjusted to 2019 dollars.
		2025	Regional visitation data (Oregon and Washington) from Bureau of Land Management (2024), 25 percent allocated to Washington, based on the extent of Bureau of Land Management lands across both states. Site-level shares follow prior report's distribution. Overnight stay converted to trip days by adding one.	White (2017), adjusted to 2024 dollars. Per-trip values converted to dollars/person/day using party size and number of nights.
Federal	National Park Service	2015	Visitation and group size from National Park Service (2014), split by spatial extent to counties and legislative districts. Final visitation is an underestimate, due to revised NPS data.	Thomas et al. (2014)
		2020	National Park Service (2019, by park).	Thomas et al. (2019)
		2025	National Park Service (2024, by park).	Thomas et al. (2019). New National Historical Parks in 2024 (Ebey's Landing, Lewis and Clark, Nez Perce) use same profile as other NHPs. Adjusted to 2024 dollars.
Federal	National Wildlife Refuge System	2015	Caudill and Henderson (2005), Carver and Caudill (2007, 2013), allocated to counties and legislative districts by spatial extent.	Caudill and Henderson (2005), Carver and Caudill (2007, 2013), adjusted to 2014 dollars.
		2020	Visitation from Caudill and Henderson (2005), Carver and Caudill (2007, 2013, 2019).	Caudill and Henderson (2005), adjusted to 2019 dollars.
		2025	No new data for most National Wildlife Refuges. Umatilla site updated with 2023 data directly from USFS.	Caudill and Henderson (2005), adjusted to 2024 dollars.
Federal	U.S. Army Corps of Engineers	2015	Direct from U.S. Army Corps of Engineers (Gehrt, 2014), including Lake Wallula/Umatilla Dam from Oregon, allocated by spatial extent to counties and legislative districts.	Chang et al. (2003), adjusted to 2014 dollars.
		2020	U.S. Army Corps of Engineers visitation from digital library (Institute for Water Resources, 2020a, 2020b, 2020c, 2020d, 2020e, 2020f, 2020g, 2020h, 2020i).	Chang et al. (2003), adjusted to 2019 dollars.
		2025	U.S. Army Corps of Engineers visitation from digital library (Institute for Water Resources 2024a, 2024b, 2024c, 2024d, 2024e, 2024f, 2024g, 2024h, 2024i). For dams spanning Washington and Oregon, GIS-based land shares were used to allocate visitation by state.	Chang et al. (2003), adjusted to 2024 dollars.

LEVEL	MANAGER	YEAR	VISITATION METHODS AND DATA	SPENDING DATA
Federal	U.S. Forest Service	2015	U.S. Forest Service National Visitor Use Monitoring reports (2010a, 2010b, 2010c, 2011a, 2011b, 2012, 2014a, 2014b), allocated to counties and legislative districts by spatial extent.	Stynes and White (2005), adjusted to 2014 dollars.
		2020	U.S. Forest Service National Visitor Use Monitoring reports (2015a, 2015b, 2015c, 2015d, 2016a, 2016b, 2016c, 2019a, 2019b, 2019c), allocated to counties and legislative districts by spatial extent.	Stynes and White (2005), adjusted to 2019 dollars.
		2025	U.S. Forest Service National Visitor Use Monitoring reports (2020a, 2020b, 2020c, 2021a, 2021b, 2024). Visits (not visitor-days) converted using White (2017) trip durations. Skiing visits excluded and handled under private lands. Nights converted to days by adding 1.	White (2017), adjusted to 2024 dollars. Idaho Panhandle added, uses Mt. Baker profile.
State	State Parks	2015	Park-level data provided by State Parks, allocated to counties and legislative districts by spatial extent, as needed.	Dean Runyan Associates (2002), adjusted to 2014 dollars.
		2020	Park-level data provided by State Parks, allocated to counties and legislative districts by spatial extent, as needed.	Dean Runyan Associates (2002), adjusted to 2019 dollars.
		2025	Park-level data provided by State Parks, allocated to counties by spatial extent, as needed.	Spending profiles developed at the regional level from the State Parks' 2020 Visitor Survey that included questions regarding visitor expenditures during visits to state parks in 2019. Adjusted to 2024 dollars.
State	Washington Department of Fish and Wildlife	2015	U.S. Fish and Wildlife Service (2011). Large and small game hunting days calculated with separate rates, totaled per Game Management Unit, then converted to counties and legislative districts by land area using GIS. Estimated 4 million visitors allocated using Huff Model (Washington Department of Fish and Wildlife areas, acreage-based).	National Visitor Use Monitoring; Caudill and Henderson (2005)
		2020	U.S. Fish and Wildlife Service (2017). Large and small game hunting days calculated with separate rates, totaled per Game Management Unit, then converted to counties and legislative districts by land area using GIS.	National Visitor Use Monitoring; Caudill and Henderson (2005), adjusted to 2019 dollars.
		2025	Visitation modeled based on mobile device data and State Parks data (Fletcher-Munoz et al., 2025).	National Visitor Use Monitoring; Caudill and Henderson (2005), adjusted to 2024 dollars.
State	Washington Department of Natural Resources	2015	Washington Department of Natural Resources data (Milliern, 2014); 10.2 million visitor-days allocated using GIS Huff Model with Washington Department of Natural Resources tract polygons.	Stynes and White (2005), adjusted to 2014 dollars.
		2020	Washington Department of Natural Resources data. 13.9 million visitor-days allocated using GIS Huff Model with Washington Department of Natural Resources tract polygons.	Stynes and White (2005), adjusted to 2019 dollars.
		2025	Visitation is modeled based on mobile device data and State Parks data (Fletcher-Munoz et al., 2025).	White (2017), adjusted to 2024 dollars.

LEVEL	MANAGER	YEAR	VISITATION METHODS AND DATA	SPENDING DATA
Local	City Parks	2015	From a Herbert Research study of Tacoma MetroParks (2010). A conservative estimate of 22 participant days per-capita was applied to all municipal park systems (including special districts), scaled by population.	Longwoods (2000), adjusted to 2014 dollars.
		2020	From a Herbert Research study of Tacoma MetroParks (2010). A conservative estimate of 22 participant days per-capita was applied to all municipal park systems (including special districts), scaled by population.	Longwoods (2000), adjusted to 2019 dollars.
		2025	Based on mobile device data (minimums), scaled using SCORP (Jostad et al. 2022) proportions to estimate final totals.	Longwoods (2000), adjusted to 2024 dollars.
Local	County Parks	2015	All counties were solicited for data and 5 responded (King, Pacific, Pierce, Snohomish, and Whatcom) with a weighted average of 4.15 visits per adult (total participation divided by total population); each county was attributed visitation based on the adult population.	Longwoods (2000), adjusted to 2014 dollars.
		2020	Five counties solicited during the 2015 report had provided averages of 4.15 visits per-adult, applied to adult population of all counties. This average was applied to 2019 population data.	Longwoods (2000), adjusted to 2019 dollars.
		2025	Based on mobile device data (minimums), scaled using SCORP proportions (Jostad et al. 2022).	Longwoods (2000), adjusted to 2024 dollars.
Public	Golf Courses	2015	All golf courses mapped in GIS. Participant-days estimated directly from SCORP, with 16.8 percent of all golf days attributed to municipal courses based on SCORP responses (Washington State Recreation and Conservation Office 2013a, 2013b).	Donaldson et al. (2011), adjusted to 2014 dollars.
		2020	All golf courses mapped in GIS. Participant-days estimated from SCORP (Washington State Recreation and Conservation Office 2017), with 16.8 percent of all golf days attributed to municipal courses based on previous SCORP survey (Washington State Recreation and Conservation Office 2013a, 2013b).	Donaldson et al. (2011), adjusted to 2019 dollars.
		2025	All golf courses mapped in GIS. Participant-days estimated from the National Golf Foundation (2024), with 16.8 percent of all golf days were attributed to municipal courses, based on SCORP survey (Washington State Recreation and Conservation Office 2013a, 2013b).	Donaldson et al. (2011), adjusted to 2024 dollars.

LEVEL	MANAGER	YEAR	VISITATION METHODS AND DATA	SPENDING DATA
Private Water Access	Fishing	2015	Fishing days from Washington Department of Fish and Wildlife licenses and SCORP survey (Washington State Recreation and Conservation Office 2013a, 2013b), reduced 25.9 percent (OIA 2012) to avoid overlap with boating. Allocated to counties based on 1-day license ratios and legislative districts by boat launch distribution.	Uses spending profiles for each activity from other states where literature is available.
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	Spending profiles for Private Access to Water from 2015 report, adjusted to 2019 dollars.
		2025	Visitation from SCORP survey (Jostad et al. 2022), fishing on private lands. Only boat and bank fishing were included (flyfishing and shellfishing were excluded). Totals reduced 26 percent to avoid overcounting.	Spending profiles for Private Access to Water from 2015 report, adjusted to 2024 dollars.
Private Water Access	Inner Tubing/ Floating	2015	SCORP survey activity days (Washington State Recreation and Conservation Office 2013a, 2013b) allocated by county and legislative districts using GIS Huff Model, based on RCO and Washington Department of Fish and Wildlife boat launches within 0.25 mile of rivers or streams.	Schultz (2009), adjusted to 2014 dollars.
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	Schultz (2009), adjusted to 2019 dollars.
		2025	SCORP survey (Jostad et al. 2022), limited to respondents who did not also report motorized boating, to limit overcounting.	Schultz (2009), adjusted to 2024 dollars.
Private Water Access	Motorboats (including water skiing)	2015	SCORP survey (Washington State Recreation and Conservation Office 2013a, 2013b), with counties allocated by boat registration ratios, and legislative districts by Huff Model using RCO and Washington Department of Fish and Wildlife boat launch data.	U.S. Army Corps of Engineers (2005), adjusted to 2014 dollars.
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	U.S. Army Corps of Engineers (2005), adjusted to 2019 dollars.
		2025	SCORP survey (Jostad et al. 2022), limited to respondents who did not report inner tubing/floating to limit overcounting.	U.S. Army Corps of Engineers (2005), adjusted to 2024 dollars.
Private Water Access	Paddle Sports (whitewater, canoes, kayaks, stand-up-paddle boards, rowing)	2015	SCORP activity days (Washington State Recreation and Conservation Office 2013a, 2013b) allocated to counties and legislative districts using Huff Model and combined RCO and Washington Department of Fish and Wildlife boat launch dataset.	Schultz (2009), adjusted to 2014 dollars.
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	Schultz (2009), adjusted to 2019 dollars.
		2025	Due to high participation rates reported in SCORP survey (45 percent), a more conservative national rate of 7.6 percent was applied instead.	Schultz (2009), adjusted to 2024 dollars.

LEVEL	MANAGER	YEAR	VISITATION METHODS AND DATA	SPENDING DATA
Private Water Access	Personal Watercraft (Jet Ski, WaveRunner)	2015	Not assessed	U.S. Army Corps of Engineers (2005), adjusted to 2014 dollars.
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	U.S. Army Corps of Engineers (2005), adjusted to 2019 dollars.
		2025	SCORP survey (Jostad et al. 2022), limited to private lands.	U.S. Army Corps of Engineers (2005), adjusted to 2024 dollars.
Private Water Access	Sailboating	2015	Boating days from SCORP (Washington State Recreation and Conservation Office 2013a, 2013b); allocated to counties by boat registration ratios, and legislative districts by Huff Model, using RCO and Washington Department of Fish and Wildlife boat launch data.	U.S. Army Corps of Engineers (2005), adjusted to 2014 dollars.
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	U.S. Army Corps of Engineers (2005), adjusted to 2019 dollars.
		2025	SCORP survey (Jostad et al. 2022), limited to private lands.	U.S. Army Corps of Engineers (2005), adjusted to 2024 dollars.
Private Water Access	Snorkeling or Scuba Diving	2015	Participation from SCORP survey (Washington State Recreation and Conservation Office 2013a, 2013b), allocated via Huff Model to geocoded dive sites.	Graefe, A. R., & Todd, S. L. (2001), adjusted to 2014 dollars.
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	Graefe, A. R., & Todd, S. L. (2001), adjusted to 2019 dollars.
		2025	SCORP survey (Jostad et al. 2022), assumed not to overcount with motorized boating (SCORP estimates used as-is).	Graefe, A. R., & Todd, S. L. (2001), adjusted to 2024 dollars.
Private Water Access	Surfing, Windsurfing, or Kiteboarding	2015	Windsurfing and surfing days from SCORP survey (Washington State Recreation and Conservation Office 2013a, 2013b), allocated to counties and legislative districts by recreation site counts.	LaFranchi, C., & Daugherty, C. (2011), adjusted to 2014 dollars.
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	LaFranchi, C., & Daugherty, C. (2011), adjusted to 2019 dollars.
		2025	SCORP survey (Jostad et al. 2022).	LaFranchi, C., & Daugherty, C. (2011), adjusted to 2024 dollars.
Private Water Access	Swimming (natural settings)	2015	Swimming days from SCORP survey (Washington State Recreation and Conservation Office 2013a, 2013b), allocated to counties and legislative districts using Huff Model and RCO and Washington Department of Fish and Wildlife boat launch dataset.	Wisconsin Department of Natural Resources. (2013), adjusted to 2014 dollars.
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	Wisconsin Department of Natural Resources. (2013), adjusted to 2019 dollars.
		2025	SCORP survey (Jostad et al. 2022).	Wisconsin Department of Natural Resources. (2013), adjusted to 2024 dollars.

LEVEL	MANAGER	YEAR	VISITATION METHODS AND DATA	SPENDING DATA
Private Water Access	Swimming (outdoor pools)	2015	Swimming days from SCORP survey (Washington State Recreation and Conservation Office 2013a, 2013b), allocated to county and legislative districts based on population	Wisconsin Department of Natural Resources. (2013), adjusted to 2014 dollars.
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	Wisconsin Department of Natural Resources. (2013), adjusted to 2019 dollars.
		2025	SCORP survey (Jostad et al. 2022).	Wisconsin Department of Natural Resources. (2013), adjusted to 2024 dollars.
Private Lands	Athletics	2015	Not assessed	Not assessed
		2020	SCORP survey “Outdoor Sports” activity (Washington State Recreation and Conservation Office 2017).	Smith, S. B., & Tisdale, A. (2012), adjusted to 2019 dollars.
		2025	SCORP survey “Outdoor Sports” activity, limited to private lands (Jostad et al. 2022).	Smith, S. B., & Tisdale, A. (2012), adjusted to 2019 dollars.
Private Lands	Golf Courses	2015	All golf courses mapped in GIS. Participant-days estimated directly from SCORP, with 83.2 percent of all golf days attributed to private courses based on SCORP responses (Washington State Recreation and Conservation Office 2013a, 2013b).	Donaldson et al. (2011), adjusted to 2014 dollars.
		2020	All golf courses mapped in GIS. Participant-days estimated from SCORP (Washington State Recreation and Conservation Office 2017), with 83.2 percent of all golf days attributed to private courses based on previous SCORP survey (Washington State Recreation and Conservation Office 2013a, 2013b).	Donaldson et al. (2011), adjusted to 2019 dollars.
		2025	All golf courses mapped in GIS. Participant-days estimated from the National Golf Foundation (2024), with 83.2 percent of all golf days attributed to private courses based on previous SCORP survey (Washington State Recreation and Conservation Office 2013a, 2013b).	Donaldson et al. (2011), adjusted to 2024 dollars.
Private Lands	Land Conservancies, Land Trusts, and Nonprofit lands	2015	Not assessed	Not assessed
		2020	Not assessed	Not assessed
		2025	SCORP survey (Jostad et al. 2022), limited to private lands.	Not assessed
Private Lands	Private Campgrounds	2015	Not assessed	Not assessed
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	Not assessed
		2025	SCORP survey (Jostad et al. 2022), limited to private lands.	Not assessed

LEVEL	MANAGER	YEAR	VISITATION METHODS AND DATA	SPENDING DATA
Private Lands	Private Horseback Riding	2015	Horseback riding days from SCORP survey (Washington State Recreation and Conservation Office 2013a, 2013b), allocated via Huff Model to Top 200 riding businesses (SOURCE) geocoded from Google Earth.	Wisconsin Department of Natural Resources. (2013), adjusted to 2014 dollars.
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	Wisconsin Department of Natural Resources. (2013), adjusted to 2019 dollars.
		2025	SCORP survey (Jostad et al. 2022), limited to private lands.	Wisconsin Department of Natural Resources. (2013), adjusted to 2024 dollars.
Private Lands	Uncategorized Private Lands	2015	Not assessed	Not assessed
		2020	Not assessed	Not assessed
		2025	SCORP survey (Jostad et al. 2022), limited to private lands.	Not assessed
Private Lands	Ski Area	2015	Northwest Ski Areas Association 2013 (thirteen resort sites), allocated using GIS data for all ski sites.	White, E. M., & Stynes, D. J. (2010), adjusted to 2014 dollars.
		2020	Northwest Ski Areas Association	White (2017), adjusted to 2019 dollars.
		2025	State of Washington Tourism, with mobile device data to estimate site-level shares; totals allocated by proportion across ski areas. Overnight stays converted to days by adding one.	White (2017). Lift ticket prices gathered from Washington resorts to estimate low, average, and high spending. Per-trip spending converted to dollars/person/day. Dollar values adjusted to 2024 dollars.
Private Lands	Timberlands	2015	Weyerhaeuser data on permit rate per acre applied to 3.1 million of 9.4 million acres of private timberland. Assumed 25.7 days/permit; allocated by private timberland share per county and legislative district.	White, E. M., & Stynes, D. J. (2010), adjusted to 2014 dollars.
		2020	Weyerhaeuser data on permit rate per acre applied to 3 million timberland acres. Assumed 25.7 days/permit; allocated by private timberland share per county and legislative district.	White (2017) adjusted to 2019 dollars.
		2025	Weyerhaeuser data on permit rate per acre applied to 3.6 million acres of timberland. Assumed 25.7 days/permit. User days per acre applied to GIS-derived recreation lands. Overnight stays converted to days by adding one.	White (2017). Per-trip values converted to dollars/person/day using party size and number of nights. All adjusted to 2024 dollars.
Private Lands	Wildlife/Nature Viewing	2015	Not assessed	Not assessed
		2020	SCORP survey (Washington State Recreation and Conservation Office 2017).	Not assessed
		2025	SCORP survey (Jostad et al. 2022), limited to private lands.	Not assessed

Data and Methods References

- Bureau of Land Management. (2015). *Public Land Statistics 2014* (No. BLM/OC/ST-15/005+1165; Volume 199, p. 280). Bureau of Land Management. www.blm.gov/sites/blm.gov/files/pls2014.pdf
- Bureau of Land Management. (2024). *Public Land Statistics 2023* (No. BLM/OC/ST-23/006+1165; Volume 208, p. 268). Bureau of Land Management. www.blm.gov/sites/default/files/docs/2024-08/Public-Land-Statistics-2023_508.pdf
- Carver, E., and Caudill, J. (2007). *Banking on Nature 2006: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation* (Banking on Nature, p. 382). US Fish and Wildlife Service, Division of Economics. <http://npshistory.com/brochures/nwr/banking-on-nature-2007.pdf>
- Carver, E., and Caudill, J. (2013). *Banking on Nature 2013: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation* (Banking on Nature, p. 373). US Fish and Wildlife Service, Division of Economics. <https://npshistory.com/brochures/nwr/banking-on-nature-2013.pdf>
- Carver, E., and Caudill, J. (2019). *Banking on Nature 2017: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation* (Banking on Nature, p. 36). US Fish and Wildlife Service, Division of Economics. <https://npshistory.com/brochures/nwr/banking-on-nature-2017.pdf>
- Caudill, J., and Henderson, E. (2005). *Banking on Nature 2004: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation* (Banking on Nature, p. 442). US Fish and Wildlife Service, Division of Economics. <https://npshistory.com/brochures/nwr/banking-on-nature-2005.pdf>
- Chang, W.-H., Propst, D. B., Stynes, D. J., & Jackson, R. S. (2003). *Recreation Visitor Spending Profiles and Economic Benefit to Corps of Engineers Projects* (No. TR-03-21; p. 119). Recreation Management Support Program, USACE. <https://apps.dtic.mil/sti/tr/pdf/ADA420574.pdf>
- Dean Runyan Associates. (2002). *Economic Impacts of Visitors to Washington State Parks* (p. 23). Prepared for Washington State Parks and Recreation Commission.
- Donaldson, J., Kazmierski, B., & Marcouiller, D. (2011). *Local economic impacts of golfing: A case study of the Luck Golf Course in Polk County, Wisconsin* (Extension Report 11-1). University of Wisconsin–Madison/Extension, Department of Urban & Regional Planning. <https://dpla.wisc.edu/wp-content/uploads/sites/1021/2017/06/11-01.pdf>
- Fletcher-Munoz, A., Lin, A., Cousins, K., Koefod, C., Mackey, E., Ketu, Y., (2025). Addendum: Outdoor Recreation on State Lands in Washington. Prepared for Washington State Parks Department, the Washington Department of Fish and Wildlife, and Washington Department of Natural Resources. Earth Economics, Tacoma, WA. <https://www.eartheconomics.org/outdoor-recreation-on-washington-state-lands>
- Gehrt, Susanna. Operations Project Manager, Clinton and Hillsdale Projects, US Army Corps of Engineers “FW: Some economic data available for Corps Lakes (UNCLASSIFIED)” Message to Greg Schundler (Earth Economics). Attached: “Res by Zip Code WA State CY2013 PII Info Removed.xlsx”, October 16, 2014.
- Graefe, A. R., & Todd, S. L. (2001). *Economic impacts of scuba diving on New York’s Great Lakes*. In *North Carolina Coastal Plains Paddle Trails Initiative Conference Proceedings* (Fall 2001). New York Sea Grant Institute. <https://www.seagrantsunysb.edu/glunderwater/pdfs/NYE-colmpactsofScubaDiving.pdf>
- Hawley, Frank. Budget and Policy Manager WDFW-Licensing “RE: WDFW Visitor Data” Message to Greg Schundler (Earth Economics). Attached: “Copy of 01 LIC STATS REPORT FY14 Control Site (3).xlsx”, October 9, 2014.
- Herbert, J., Turner, R., and Hakam, H. (2010). *Economic Impact Analysis* [Executive Summary]. Herbert Research, Inc.

Institute for Water Resources. (2020a). *USACE recreation 2019 lake report, Chief Joseph Dam* (USACE Recreation 2019 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. U.S. Army Corps of Engineers, Institute for Water Resources. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/6259/rec/2>

Institute for Water Resources. (2024a). *USACE recreation 2023 lake report, Chief Joseph Dam* (USACE Recreation 2023 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. US Army Corps of Engineers. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/15866/rec/4>

Institute for Water Resources. (2020b). *USACE recreation 2019 lake report, Ice Harbor Lock and Dam* (USACE Recreation 2019 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. U.S. Army Corps of Engineers, Institute for Water Resources. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/6554/rec/2>

Institute for Water Resources. (2024b). *USACE recreation 2023 lake report, Ice Harbor Lock and Dam* (USACE Recreation 2023 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. US Army Corps of Engineers. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/15867/rec/4>

Institute for Water Resources. (2020c). *USACE recreation 2019 lake report, Lake Crocket (Keystone Harbor)* (USACE Recreation 2019 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. U.S. Army Corps of Engineers, Institute for Water Resources. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/6261/rec/2>

Institute for Water Resources. (2024c). *USACE recreation 2023 lake report, Lake Crocket (Keystone Harbor)* (USACE Recreation 2023 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. US Army Corps of Engineers. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/15868/rec/4>

Institute for Water Resources. (2020d). *USACE recreation 2019 lake report, Lake Washington Ship Canal* (USACE Recreation 2019 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. U.S. Army Corps of Engineers, Institute for Water Resources. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/6262/rec/2>

Institute for Water Resources. (2024d). *USACE recreation 2023 lake report, Lake Washington Ship Canal* (USACE Recreation 2023 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. US Army Corps of Engineers. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/15869/rec/4>

Institute for Water Resources. (2020e). *USACE recreation 2019 lake report, Little Goose Lock and Dam* (USACE Recreation 2019 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. U.S. Army Corps of Engineers, Institute for Water Resources. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/6263/rec/2>

Institute for Water Resources. (2024e). *USACE recreation 2023 lake report, Little Goose Lock and Dam* (USACE Recreation 2023 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. US Army Corps of Engineers. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/15870/rec/4>

Institute for Water Resources. (2020f). *USACE recreation 2019 lake report, Lower Granite Lock and Dam* (USACE Recreation 2019 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. U.S. Army Corps of Engineers, Institute for Water Resources. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/6264/rec/2>

Institute for Water Resources. (2024f). *USACE recreation 2023 lake report, Lower Granite Lock and Dam* (USACE Recreation 2023 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. US Army Corps of Engineers. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/15871/rec/4>

- Institute for Water Resources. (2020g). *USACE recreation 2019 lake report, Lower Monumental Lock and Dam* (USACE Recreation 2019 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. U.S. Army Corps of Engineers, Institute for Water Resources. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/6265/rec/2>
- Institute for Water Resources. (2024g). *USACE recreation 2023 lake report, Lower Monumental Lock and Dam* (USACE Recreation 2023 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. US Army Corps of Engineers. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/15872/rec/4>
- Institute for Water Resources. (2020h). *USACE recreation 2019 lake report, Mill Creek, WA* (USACE Recreation 2019 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. U.S. Army Corps of Engineers, Institute for Water Resources. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/6266/rec/2>
- Institute for Water Resources. (2024h). *USACE recreation 2023 lake report, Mill Creek WA* (USACE Recreation 2023 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. US Army Corps of Engineers. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/15873/rec/4>
- Institute for Water Resources. (2020i). *USACE recreation 2019 lake report, Mud Mountain Dam* (USACE Recreation 2019 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. U.S. Army Corps of Engineers, Institute for Water Resources. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/6267/rec/2>
- Institute for Water Resources. (2024i). *USACE recreation 2023 lake report, Mud Mountain Dam* (USACE Recreation 2023 State Report, Washington, p. 10) [Value to the Nation: Fast Facts]. US Army Corps of Engineers. <https://usace.contentdm.oclc.org/digital/collection/p16021coll2/id/15874/rec/4>
- Jostad, J., Schultz, J., & Chase, M. (2022). *State of Washington 2022 Assessment of Outdoor Recreation Demand Report*. Eastern Washington University.
- LaFranchi, C., & Daugherty, C. (2011). *Non-consumptive ocean recreation in Oregon: Human uses, economic impacts & spatial data*. Surfrider Foundation, Natural Equity, & Ecotrust. https://surfridercdn.surfrider.org/images/uploads/publications/OR_rec_study.pdf
- Millern, Brock. Statewide Recreation Manager, Conservation Recreation and Transactions Division, Washington Department of Natural Resources “RE: RCO/Blue Ribbon Task Force Outdoor Recreation” Message to Greg Schundler (Earth Economics) and Jessica Payne (WA DNR), October 15, 2014.
- National Golf Foundation. (2024). *Golf in Washington 2024: 2023 year-end numbers* [Infographic]. <https://www.ngf.org/state-report/washington/>
- National Park Service. (2024a). *Annual Park Recreation Visitation: Lake Chelan NRA (1990—Last Calendar Year)* [Spreadsheet]. Stats Report Viewer. [https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=NOCA](https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=NOCA)
- National Park Service. (2024b). *Annual Park Recreation Visitation: Lake Roosevelt NRA (1941—Last Calendar Year)* [Spreadsheet]. Stats Report Viewer. [https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=NOCA](https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=NOCA)
- National Park Service. (2024c). *Annual Park Recreation Visitation: Mount Rainier NP (1904—Last Calendar Year)* [Spreadsheet]. Stats Report Viewer. [https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=NOCA](https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=NOCA)

- National Park Service. (2024d). *Annual Park Recreation Visitation: Mount Ross Lake NRA (1990—Last Calendar Year)* [Spreadsheet]. Stats Report Viewer. [https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=NOCA](https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=NOCA)
- National Park Service. (2024e). *Annual Park Recreation Visitation: North Cascades NP (1970—Last Calendar Year)* [Spreadsheet]. Stats Report Viewer. [https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=NOCA](https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=NOCA)
- National Park Service. (2024f). *Annual Park Recreation Visitation: Olympic NP (1935—Last Calendar Year)* [Spreadsheet]. Stats Report Viewer. [https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=NOCA](https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=NOCA)
- National Park Service. (2024g). *Annual Park Recreation Visitation: San Juan Island NHP (1941—Last Calendar Year)* [Spreadsheet]. Stats Report Viewer. [https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=NOCA](https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=NOCA)
- National Park Service. (2024h). *Annual Park Recreation Visitation: Whitman Mission NHS (1941—Last Calendar Year)* [Spreadsheet]. Stats Report Viewer. [https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=NOCA](https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=NOCA)
- Outdoor Industry Association. (2012). *The outdoor recreation economy. Outdoor Industry Association*. https://www.asla.org/uploadedfiles/cms/government_affairs/federal_government_affairs/oia_outdoorreconomyreport2012.pdf
- Shultz, S. (2009). *Economic & social values of recreational floating on the Niobrara National Scenic River: Final report*. Nebraska Game and Parks Commission. https://www.swmpc.org/downloads/small_boat_study_main_report.pdf
- Smith, S. B., & Tisdale, A. (2012). *Game on! The impact of youth sports on a regional economy*. Traverse City Area Chamber of Commerce & Traverse Bay Area Youth Soccer. <https://www.sportsdestinations.com/management/economics/game-youth-sports-regional-economy-12224>
- Stynes, D. J., & White, E. M. (2005). *Spending Profiles of National Forest Visitors, NVUM Four Year Report* (Joint Venture Agreement Nos. 01-JV-11130149–203; p. 44). Department of Park, Recreation and Tourism Resources, Michigan State University. www.fs.usda.gov/recreation/programs/nvum/NVUM4YrSpending.pdf
- Thomas, C. M. C., Huber, C. C., and Koontz, L. (2014). 2013 National Park visitor spending effects: Economic contributions to local communities, states, and the nation. In *Natural Resource Report* (No. NPS/NRSS/EQD/NRR--2014/824). National Park Service. <https://pubs.usgs.gov/publication/70129161>
- Thomas, C., Koontz, L., and Cornachione, E. (2019). *2018 National Park Visitor Spending Effects: Economic Contributions to Local Communities, States, and the Nation* (Natural Resource Report NPS/NRSS/EQD/NRR—2019/1922). U.S. Department of the Interior, National Park Service, Natural Resource Stewardship and Science directorate. www.nps.gov/nature/customcf/NPS_Data_Visualization/docs/NPS_2018_Visitor_Spending_Effects.pdf
- U.S. Army Corps of Engineers. (2005). *Great Lakes Recreational Boating*. https://www.swmpc.org/downloads/small_boat_study_main_report.pdf
- U.S. Forest Service. (2010a). *Visitor Use Report: Mt Baker-Snoqualmie NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 51). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2010_A06005_Master_Report.pdf

- U.S. Forest Service. (2010b). *Visitor Use Report: Okanogan NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 52). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2010_A06008_Master_Report.pdf
- U.S. Forest Service. (2010c). *Visitor Use Report: Olympic NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 55). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2010_A06009_Master_Report.pdf
- U.S. Forest Service. (2011a). *Visitor Use Report: Columbia River Gorge National Scenic Area* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 55). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2011_A06022_Master_Report.pdf
- U.S. Forest Service. (2011b). *Visitor Use Report: Gifford Pinchot NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 53). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2011_A06003_Master_Report.pdf
- U.S. Forest Service. (2012). *Visitor Use Report: Lewis and Clark NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 52). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2012_A01015_Master_Report.pdf
- U.S. Forest Service. (2014a). *Visitor Use Report: Colville NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 48). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2014_A06021_Master_Report.pdf
- U.S. Forest Service. (2014b). *Visitor Use Report: Umatilla NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 48). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2014_A06014_Master_Report.pdf
- U.S. Forest Service. (2015a). *Visitor Use Report: Mt Baker-Snoqualmie NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 52). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2015_A06005_Master_Report.pdf
- U.S. Forest Service. (2015b). *Visitor Use Report: Okanogan (Okanogan-Wenatchee NF)* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 49). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2015_U0611701_Master_Report.pdf
- U.S. Forest Service. (2015c). *Visitor Use Report: Olympic NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 52). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2015_A06009_Master_Report.pdf
- U.S. Forest Service. (2015d). *Visitor Use Report: Wenatchee (Okanogan-Wenatchee NF)* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 50). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2015_U0611702_Master_Report.pdf
- U.S. Forest Service. (2016a). *Visitor Use Report: Columbia River Gorge National Scenic Area* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 63). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2016_A06022_Master_Report.pdf
- U.S. Forest Service. (2016b). *Visitor Use Report: Gifford Pinchot (non-NVM) (Gifford Pinchot NF)* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 54). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2016_U0600302_Master_Report.pdf
- U.S. Forest Service. (2016c). *Visitor Use Report: Mt St Helens NVM (Gifford Pinchot NF)* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 48). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2016_U0600301_Master_Report.pdf

- U.S. Forest Service. (2019a). *Visitor Use Report: Colville NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 48). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2019_A06021_Master_Report.pdf
- U.S. Forest Service. (2019b). *Visitor Use Report: Los Padres NF USDA Forest Service Region 5* (National Visitor Use Monitoring Program). U.S. Department of Agriculture. https://apps.fs.usda.gov/nvum/results/ReportCache/2019_R05_Master_Report.pdf
- U.S. Forest Service. (2019c). *Visitor Use Report: Umatilla NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 46). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2019_A06014_Master_Report.pdf
- U.S. Forest Service. (2020a). *Visitor Use Report: Mt Baker-Snoqualmie NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 52). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2020_A06005_Master_Report.pdf
- U.S. Forest Service. (2020b). *Visitor Use Report: Olympic NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 51). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2020_A06009_Master_Report.pdf
- U.S. Forest Service. (2020c). *Visitor Use Report: Wenatchee (Okanogan-Wenatchee NF)* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 51). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2020_U0611702_Master_Report.pdf
- U.S. Forest Service. (2021a). *Visitor Use Report: Columbia River Gorge National Scenic Area* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 47). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2021_A06022_Master_Report.pdf
- U.S. Forest Service. (2021b). *Visitor Use Report: Gifford Pinchot NF* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 47). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2021_A06003_Master_Report.pdf
- U.S. Forest Service. (2024). *Visitor Use Report: Okanogan (Okanogan-Wenatchee NF)* (USDA Forest Service Region 6; National Visitor Use Monitoring, p. 49). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2020_U0611701_Master_Report.pdf
- U.S. Forest Service. (2012). *Visitor Use Report: Lewis and Clark NF* (USDA Forest Service Region 1; National Visitor Use Monitoring, p. 52). National Visitor Use Monitoring Program. https://apps.fs.usda.gov/nvum/results/ReportCache/2012_A01015_Master_Report.pdf
- Washington State Recreation and Conservation Office. (2013a). *Outdoor Recreation in Washington: The 2013 State Comprehensive Outdoor Recreation Plan*. Washington State Recreation and Conservation Office.
- Washington State Recreation and Conservation Office. (2013b). *Washington State Comprehensive Outdoor Recreation Plan: Executive Summary 2013-2018*. Washington State Recreation and Conservation Office.
- Washington State Recreation and Conservation Office. (2017). *2018 Washington State Recreation and Conservation Plan*. Washington State Recreation and Conservation Office.
- White, E., Goodding, D. B., & Stynes, D. J. (2013). *Estimation of National Forest Visitor Spending Average From National Visitor Use Monitoring: Round 2* (General Technical Report No. PNW-GTR883). U.S. Department of Agriculture. https://www.fs.usda.gov/pnw/pubs/pnw_gtr883.pdf
- White, E. M. (2017). *Spending Patterns of Outdoor Recreation Visitors to National Forests* (No. PNW-GTR-961; General Technical Report, p. 76). Pacific Northwest Research Station.

White, E. M., & Stynes, D. J. (2010). *Updated spending profiles for National Forest recreation visitors by activity*. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. <https://www.coloradotpa.org/wp-content/uploads/2022/11/2010-USFS-PNW-OregonState-Spending-Profiles-NF-Visitors.pdf>

Wisconsin Department of Natural Resources. (2013). *Economic impacts of the Wisconsin State Park System: Connections to gateway communities* (Report No. PR-487-2013). https://outdoor-recreation.wi.gov/Documents/Research%20Library%20Page%20files/Wisconsin/Economic%20Impacts%20of%20the%20WI%20State%20Park%20System_2013.pdf

