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The Economic Impact of Outdoor Recreation in Iowa

March 2025

Prepared for Iowa's County Conservation System by Scioto Analysis

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Executive Summary

Outdoor recreation in Iowa generates significant economic benefits to the state, **contributing an estimated $4.6 billion to the state's gross domestic product** in 2024. This impact comes from over $8 billion in total economic output, **supporting more than 60,000 jobs** and **providing $2.1 billion in earnings** across state industries. The most significant contributors are state parks and rivers, which together add over $3.4 billion to the state economy and support nearly 45,000 jobs. Other key assets like lakes, county parks, and trails further bolster local economies by attracting visitors, driving spending, and supporting businesses in hospitality, retail, and outdoor recreation industries.

Beyond its economic value, outdoor recreation produces health benefits by reducing the prevalence of chronic diseases and improving overall well-being. Increased access to outdoor spaces is linked to lower rates of diabetes, obesity, high blood pressure, and mental health conditions, translating into significant healthcare cost savings. If greenspace access were expanded by 10%, **the state could save approximately $80 million in annual healthcare costs, including $19 million in Medicaid expenditures**. Trails, parks, and other recreation areas promote physical activity, which reduces the burden of preventable diseases, ultimately benefiting both individuals and public health systems.

To sustain and expand natural assets across the state that allow residents of Iowa to participate in outdoor recreation, policymakers have a range of finance options. While Iowa voters approved a dedicated sales tax to support the Natural Resources and Outdoor Recreation Trust Fund in 2010, the legislature has yet to implement it. General public funds, such as sales taxes and state appropriations, offer stable funding, while direct and indirect user fees ensure visitors contribute through permits, lodging taxes, and outdoor equipment fees. Natural asset programs, including carbon credit sales and conservation license plates, could generate revenue from environmental benefits. Public-private partnerships and Pigouvian taxes provide additional funding by leveraging business investment and offsetting environmental costs. A balanced mix of these strategies would support Iowa’s outdoor assets while delivering lasting economic and health benefits.

Economic Impacts of Natural Resources and Outdoor Amenities in Iowa

In this section, we estimate the economic impact of lakes, state parks, county parks, city parks, soil and water conservation investments, rivers and streams, and multiuse trails in the state of Iowa. We utilize the best available estimates for visitation and per-visit spending to estimate total spending and the multipliers from the RIMS II economic impact model procured from the U.S. Bureau of Economic Analysis to estimate total value added, output, employment, and earnings impacts due to outdoor activity.

Overall Impacts

We estimate **outdoor recreation contributed $4.6 billion to Iowa's gross state product in 2024**. This came from over $8 billion of economic output, 60,000 jobs supported, and $2.1 billion in earnings generated through outdoor recreation activities associated with the state's natural assets.

Asset Type	Value Added	Output	Employment	Earnings
Lakes	$404,657,932	$712,037,086	5,365	$191,038,428
State Parks	$1,941,976,119	$3,417,105,923	25,746	$916,804,131
County Parks	$361,574,569	$636,227,496	4,794	$170,698,834
City Parks	$2,667,998	$4,694,617	35	$1,259,558
Soil and Water Conservation	$70,861,250	$132,003,410	771	$41,820,090
Rivers and Streams	$1,437,331,450	$2,529,131,932	19,055	$678,562,109
Trails	$348,508,339	$613,236,124	4,620	$164,530,285
Total:	**$4,567,577,657**	**$8,044,436,588**	**60,386**	**$2,164,713,435**

Table 1: Overall economic impact of outdoor recreation

The economic impacts of outdoor recreation in Iowa show significant variation across different assets. State parks and rivers/streams generate the largest contributions to the state economy. State parks lead all assets with approximately $1.94 billion in value added to Iowa's economy and support over 25,700 jobs. This is followed by rivers and streams, which contributes about $1.44 billion in value added and supports more than 19,000 jobs statewide. Lakes represent the third largest sector, generating $404 million for Iowa's economy, not including lakes within county and state parks.

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$2,732,174,658	$4,821,580,571	42,185	$1,277,178,138
Professional and Administrative Services	$868,967,091	$1,389,043,592	7,932	$375,945,835
Trade	$368,640,895	$629,994,111	3,852	$172,747,770
Education and Social Services	$204,489,125	$327,401,602	2,815	$141,396,642
Manufacturing	$139,820,398	$405,589,113	1,073	$68,695,107
Energy, Utilities, and Construction	$152,040,593	$257,264,374	833	$61,227,383
Other Services	$60,559,849	$108,824,241	1,180	$45,895,678
Agriculture, forestry, fishing, and hunting	$38,516,336	$104,738,983	341	$19,258,168
Household Spending	$2,368,714	$0	174	$2,368,714
Total	**$4,567,577,658**	**$8,044,436,588**	**60,386**	**$2,164,713,435**

Table 2: Economic Impact of Outdoor Recreation by Industry

When examining industry-specific impacts, the hospitality and leisure sector emerges as the overwhelming beneficiary across all outdoor recreation categories. Across all sectors (state parks, lakes, rivers/streams, county parks, city parks, trails, and soil/water conservation), the hospitality and leisure industry receives approximately $2.7 billion in value added and supports over 42,000 jobs. For state parks alone, this sector receives nearly $1.2 billion in value added, supporting over 18,000 jobs, while rivers and streams contribute another $870 million in value added and 13,000 jobs to this sector. Professional and administrative services also see substantial benefits across all outdoor recreation types, with total impacts across sectors exceeding $860 million in value added.

County parks and trails, while smaller in economic impact, still contribute significantly to Iowa's economy with $362 million and $349 million in value added respectively. City parks and soil/water conservation projects generate more modest economic impacts of $2.7 million and $70.9 million in value added. For city parks, this can partially be explained by the conservative spending assumption we made due to the absence of credible per-visit spending data.

Another way to look at the economic impacts is by examining the impact of outdoor recreation at Iowa’s county parks, lakes, and trails, which can together be considered the state’s “county conservation system.”

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$1,059,734,605	$1,870,162,400	$16,360	$495,361,795
Professional and Administrative Services	$333,312,367	$532,757,816	$3,043	$144,164,374
Trade	$139,105,974	$237,744,756	$1,453	$65,217,217
Education and Social Services	$77,863,214	$124,653,406	$1,072	$53,835,819
Manufacturing	$51,848,590	$151,029,344	$398	$25,472,652
Energy, Utilities, and Construction	$44,260,992	$72,262,844	$160	$13,910,597
Other Services	$23,124,110	$41,551,135	$451	$17,523,740
Agriculture, forestry, fishing, and hunting	$14,813,883	$40,286,535	$131	$7,406,941
Household Spending	$903,286	$0	$66	$903,286
Total	**$1,744,967,023**	**$3,070,448,236**	**23,134**	**$823,796,420**

Table 3: Economic Impact of Outdoor Recreation in Iowa's County Parks, Lakes, and Trails

Lakes

The Iowa Department of Natural Resources inventories a list of 1,082 natural and man-made lakes covering 286,000 acres of surface area in Iowa.[1] Figure 1 illustrates where lakes are located.

[1] Iowa Department of Natural Resources. "Lakes Ponds & Reservoirs." Accessed January 28, 2025. https://www.iowadnr.gov/Fishing/Where-to-Fish/Lakes-Ponds-Reservoirs

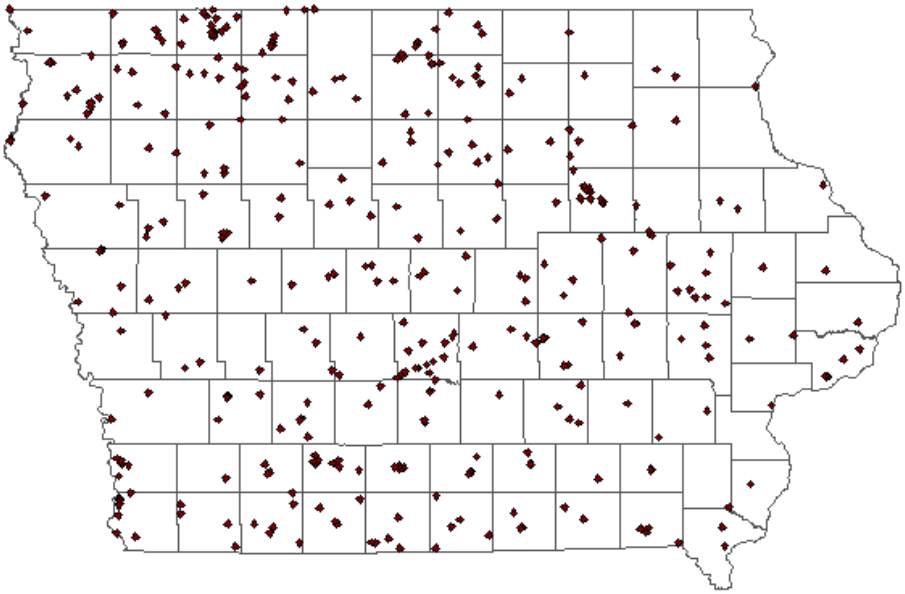

Figure 1: Lakes in Iowa

Researchers with the Iowa Lakes Project have studied visitation patterns at Iowa's lakes and estimated the value that households in Iowa place on improvements to water quality. Researchers conducted surveys of Iowans and their use of lakes for recreation in 2002, 2003, 2004, 2005, 2009, 2014, and 2019.[2]

The most recent 2019 Iowa Lakes Survey documented significant economic activity generated by Iowa's lakes, with total direct spending totaling $1.3 billion across 139 lakes, an average of around $7.4 million per lake. The survey found that 65% of Iowans made at least one visit to a lake in Iowa in 2019, with an average of 7.8 single-day trips and 2.1 overnight trips among those who visited lakes. The costs of these trips varied considerably, with Iowa residents reporting average single-day trip expenses to be about $35, and overnight trip expenses of $135. These expenses covered categories such as food, fishing gear, and camping costs.

The study also revealed insights about citizen's lake usage patterns and preferences. The most visited lakes in 2019 were Clear Lake, Saylorville Reservoire, and Ada Hayden Lake, with Clear Lake alone generating over $86 million in direct spending. For the first time, this 2019 study also included information about visitation from residents of neighboring states, finding that approximately 22% of respondents had made single-day trips, while about 9% had taken at least one overnight trip.

[2] Iowa State University. "Iowa Lakes Project." Accessed January 28, 2025. https://lakes.card.iastate.edu/reports

Researchers at the Iowa Lakes Project estimate there are 8.8 million annual recreational visits to Iowa lakes.[3] They also estimate there is about $1 billion in annual direct spending by visitors to lakes. We use the Bureau of Labor Statistics's consumer price index to estimate that value in 2024 numbers, which brings the total to $1.3 billion. This value is down from 2009 numbers reported in the 2012 version of this report, which reported direct spending at $1.2 billion, or $1.8 billion in 2024 dollars.[4]

We use the RIMS II model to estimate value added, output, employment, and earnings generated by spending on lakes in Iowa.

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$744,300,770	$1,313,501,802	11,491	$347,915,566
Professional and Administrative Services	$234,100,736	$374,180,527	2,137	$101,253,327
Trade	$97,700,578	$166,979,170	1,020	$45,805,076
Education and Social Services	$54,686,947	$87,549,869	753	$37,811,393
Manufacturing	$36,415,670	$106,074,914	279	$17,890,625
Energy, Utilities, and Construction	$31,086,548	$50,753,547	112	$9,770,058
Other Services	$16,241,135	$29,183,290	317	$12,307,735
Agriculture, forestry, fishing, and hunting	$10,404,477	$28,295,103	92	$5,202,239
Household Spending	$634,419	$0	46	$634,419
Total	**$1,225,571,281**	**$2,156,518,221**	**16,248**	**$578,590,438**
Lakes in State Parks	$630,226,182	$1,108,947,530	8,355	$297,528,874
Lakes in County Parks	$190,687,167	$335,533,604	2,528	$90,023,137
Total for Lakes Outside of State and County Parks	**$404,657,932**	**$712,037,086**	**5,365**	**$191,038,428**

Table 4: Summary of spending impact, Iowa lakes, 2024

The sector that benefits the most from spending at Iowa lakes is the hospitality and leisure sector, which enjoy three quarters of a billion dollars in value added and nearly 12,000 jobs

[3] Iowa Lakes Project. "Interactive Maps." January 28, 2025. https://lakes.card.iastate.edu/interactive-maps
[4] Bureau of Labor Statistics. "CPI Inflation Calculator." Accessed January 28, 2025. https://data.bls.gov/cgi-bin/cpicalc.pl?cost1=1.2&year1=200912&year2=202412

supported by lakes spending. The professional and administrative services sector also benefits from almost $240 million in value added and nearly 2,200 jobs supported.

The values reported in the table for lake use overlap with the state and county park estimates in instances where the lakes are a part of a state or a county park. Using the list of lakes from the Iowa Lakes project, we manually identified a lake as being in a county park if it was listed as being as part of a county's park on the Iowa county parks website,[5] and part of a state park if it was clearly identified as being a part of a state park by the name (E.g., Lake of The Three Fires State Park), and/or it was designated within a state park boundary using data from the Lake Link Iowa website.[6]

After identifying the lakes in both state and county parks, we estimate that about $740 million of the spending identified as being part of lakes outlined in the Iowa Lakes project has been accounted for in spending at state and county parks.

State Parks

Iowa's state park system has a history dating back to the early 20th century, when the first state parks were established to preserve unique natural areas and provide public recreation spaces.[7] The system has grown significantly since then, evolving from a handful of scenic locations to a comprehensive network of parks that spans the state. This expansion reflects both increasing public demand for outdoor recreation and a growing recognition of the importance of preserving Iowa's natural heritage for future generations.

State parks serve multiple functions in Iowa's recreational ecosystem. They provide opportunities for activities ranging from hiking and camping to fishing and wildlife viewing. Many parks include access to lakes or rivers. State parks also serve as important conservation areas, protecting natural habitats and providing opportunities for environmental education and nature study.

Local visitors living within 50 miles tend to make day trips for activities like hiking or picnicking, while visitors from greater distances often stay longer and engage in camping or multi-day recreation activities.[8] This mix of day use and overnight stays creates varying economic impacts through spending on supplies, food, fuel, and lodging.

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[5] Iowa County Parks, "Home Page", Accessed February 11, 2025. https://www.mycountyparks.com/
[6] Lake Link, "Lake-Link: Iowa," Accessed February 11, 2025. https://www.lake-link.com/iowa/
[7] Conard, Rebecca, "Iowa's State Parks: A Various Language," Journal of the Iowa Academy of Science: JIAS, 104(2), 32-38. 1997. Available at: https://scholarworks.uni.edu/jias/vol104/iss2/4
[8] Nyaupane et al., "Does Distance Matter? Differences in Characteristics, Behaviors, and Attitudes of Visitors Based on Travel Distance," Northeastern Recreation Research Symposium, 2003. Accessed February 12, 2025. https://www.fs.usda.gov/ne/newtown_square/publications/technical_reports/pdfs/2004/317papers/nyaupane317.pdf

While no new state parks have opened recently in Iowa, investment in park infrastructure and maintenance offers new amenities to visitors and prevents park quality from deteriorating. Recent renovations such as electrification and pull-through driveways have provided new conveniences for visitors, and future plans include road improvements for certain state parks.[9,10] These improvements enhance the visitor experience, manage increased visitor numbers, and help protect natural resources.

Spending on state park recreation supports employment for operational needs and maintenance, creates opportunities for businesses offering recreation-related goods and services, and contributes to the quality of life factors that help Iowa communities attract and retain businesses. Parks also provide ecosystem services through habitat protection, water quality improvement, and carbon sequestration that have additional economic value beyond recreational benefits.[11]

Iowa's Department of Natural Resources provided us spending data and visitation estimates for 65 of its state parks. These parks range from historical sites to large multi-use recreation areas. Total estimated visitation across all state parks was 13,714,545 visitors, with 792,809 camper guest days during FY2024. Note that two major Iowa state parks were closed during the year. This suggests total economic impact could be even higher if all parks were open in a given year. A 2021 study of state parks managed in the Pat Harrison Waterway District in Mississippi estimated the average spending for an individual visit at a state park to be $126.28[12] Adjusting for inflation since 2015 based on the Bureau of Labor Statistics' consumer price index calculator and adjusting for regional prices using Bureau of Economic Analysis data on regional price parities, our final estimate for the average spending per state park visitor was $147.68[13] This estimate aligns somewhat closely with estimates from the previous 2012 Iowa State University study, which assumed that state park spending was about double that of county park spending.

Based on this spending estimate, we estimate total FY2024 spending associated with state park visits to be around $2 billion.

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[9] Kealey, Kate, "Peak camping season started. What's new at Iowa's state parks?" May 9, 2024. https://www.desmoinesregister.com/story/entertainment/2024/05/09/iowa-state-parks-dnr-camping-2024-fishing-license/73542234007/

[10] Iowa Department of Transportation, "2025-2029 STATE PARK & INSTITUTIONAL ROADS PROGRAM" January 1, 2025. https://iowadot.gov/program_management/ParksandInstitutionalRoads.pdf

[11] Iowa Department of Natural Resources, "Iowa State Preserves," 2025, Accessed February 12, 2025. https://www.iowadnr.gov/Places-to-Go/State-Preserves

[12]Juwon Choi, Hyeongjin Jeon, "Economic Impacts of Local Park Visitor Spending on Local Communities: A Case of Mississippi Parks," International Journal of Hospitality & Tourism Management. Vol. 5, No. 2, 2021, pp. 37-44. doi: 10.11648/j.ijhtm.20210502.12. https://headwaterseconomics.org/wp-content/uploads/trails-library/Trail_Study_169-MS-Economic_Impacts_Park_Visitor_Spending.pdf

[13] Bureau of Labor Statistics. "CPI Inflation Calculator." Accessed January 28, 2025. https://data.bls.gov/cgi-bin/cpicalc.pl?cost1=1.2&year1=200912&year2=202412

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$1,179,380,051	$2,081,306,220	18,208	$551,288,800
Professional and Administrative Services	$370,943,777	$592,906,882	3,387	$160,440,723
Trade	$154,811,224	$264,586,455	1,617	$72,580,327
Education and Social Services	$86,654,075	$138,726,941	1,193	$59,913,954
Manufacturing	$57,702,365	$168,080,757	443	$28,348,549
Energy, Utilities, and Construction	$49,258,117	$80,421,415	178	$15,481,122
Other Services	$25,734,853	$46,242,314	502	$19,502,193
Agriculture, forestry, fishing, and hunting	$16,486,390	$44,834,939	146	$8,243,195
Household Spending	$1,005,268	$0	74	$1,005,268
Total	**$1,941,976,119**	**$3,417,105,923**	**25,746**	**$916,804,131**

Table 5: Summary of spending impact, state parks, 2024

The sector that benefits the most from spending at state parks, similarly to lakes, is the hospitality and leisure sector, which amounts to almost $1.2 billion in value added. In addition, all together, state park spending supported over 25,000 jobs in 2024.

County Parks

Each of Iowa's 99 counties have county parks, which visitors utilize for camping, recreation, and other outdoor activities. The number of parks in each county vary greatly, with the largest overall park acreage belonging to Polk County, which boasts over 15,000 acres of parkland.[14]

While data on county park spending and visitation in Iowa is scarce, we were able to find a few sources to estimate spending and visitation. We made estimates based on economic analyses of Hickory Grove Park and Dakins Lake, two parks in Story County, IA.[15,16] These studies made visitation estimates for campers, since they are the predominant spenders among park users. After adjusting for inflation, we calculated that the average spending per visitor was about

[14] MyCountyParks, "Polk County," Accessed February 10, 2025, https://www.mycountyparks.com/county/polk
[15] Story County Conservation, "Hickory Grove Lake Economic Impact Analysis," October 2018, Accessed February 10, 2025
[16] Story County Conservation, "Dakins Lake Economic Impact Analysis," October 2018, Accessed February 10, 2025

$82.72, with the biggest categories of camping spending being food/groceries, gas, lodging reservations, and restaurants.

Taking visitation data from the two studies, we estimated the annual visitation and the annual spend for each park using the acreage of each county's parks and the county's population. Park acreage was weighed more heavily as a factor than population, as people are generally willing to travel for camping trips, which makes local population not as significant in determining visitation as park size.

Our estimates show that total spending at county parks is about $374 million. Below are our economic impact results drawn from that estimate.

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$219,587,579	$387,516,300	3,390	$102,643,904
Professional and Administrative Services	$69,065,647	$110,392,733	631	$29,872,296
Trade	$28,824,145	$49,263,085	301	$13,513,658
Education and Social Services	$16,134,035	$25,829,429	222	$11,155,319
Manufacturing	$10,743,545	$31,294,786	82	$5,278,188
Energy, Utilities, and Construction	$9,171,319	$14,973,582	33	$2,882,415
Other Services	$4,791,546	$8,609,810	93	$3,631,094
Agriculture, forestry, fishing, and hunting	$3,069,584	$8,347,772	27	$1,534,792
Household Spending	$187,170	$0	14	$187,170
Total	**$361,574,569**	**$636,227,496**	**4,794**	**$170,698,834**

Table 6: Summary of spending impact, County Parks, 2024

Hospitality and leisure dominate the value added from parks spending, with county parks specifically generating $220 million in value. Overall, county parks contribute about a fifth of the value that state parks do in terms of value added, output, employment, and earnings.

The totals here are lower than our estimate in the legislative white paper we prepared in December. Part of this is due to the spending source we used here, which only focused on campers. It also may be a function of our visitation numbers, which here extrapolated from differences in visitation from specific county parks rather than assuming visitation at county parks mirrored visitation changes at state parks. If the true value of outdoor recreation at county

parks is closer to the numbers from the earlier white paper, they would be about 13% higher than the numbers presented here.

City Parks

Iowa's over 900 cities manage thousands of local parks within their city jurisdictions. These parks, unlike state and county parks, are almost entirely visited by local visitors participating in recreation for a portion of the day.

Revenue and visitation data for city parks in Iowa was not readily available. Our estimates for the visitation of city parks comes from a 2018 study by the National Recreation and Parks Association on city park engagement.[17] This study estimates that 87% of Americans have visited a local park in the past year. Applying that to Iowa's population, we then broke that number down by the percentage of respondents and their reported number of visits in the previous year, as shown in Figure 2. We used the midpoint of each of the visitation ranges (e.g., 3 visits for the 1-5 visit category). For frequent visitors (50+), we assumed that some proportion of those visitors were visiting far more than 50 times. As a conservative estimate, we made the assumption that about 2/3 of the 9% who visited more than 50+ or more times visited about 50 times, 2/9 visited about 75 times, and 1/9 visited about 100 times. These frequent visitors would be people like daily dog-walkers, runners, or bikers.

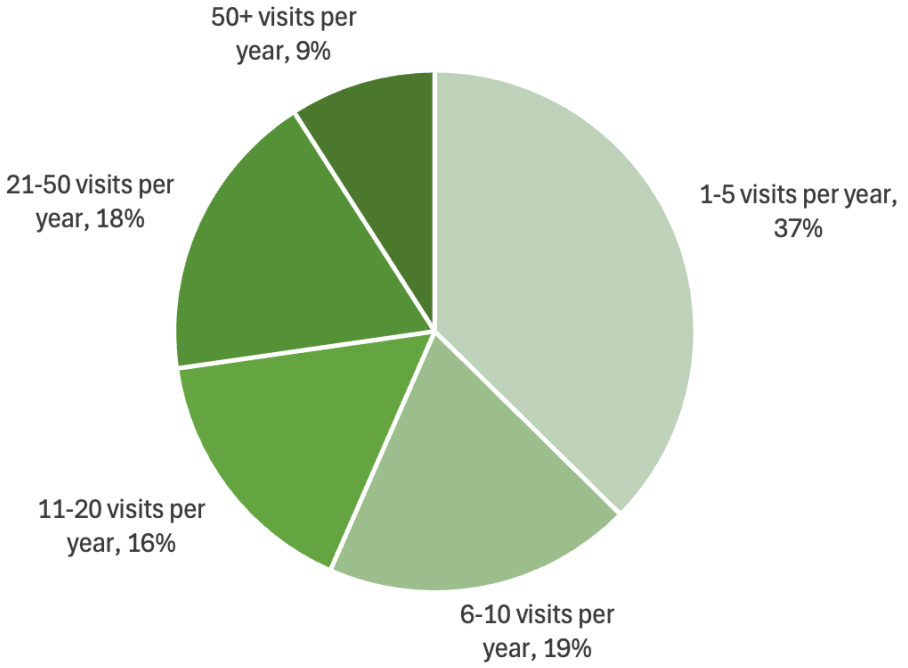

Figure 2: Survey data of visitation from the National Recreation and Park Association[18]

[17] National Recreation and Parks Association, "2018 AMERICANS' ENGAGEMENT WITH PARKS REPORT," 2018, Accessed February 10, 2018. https://www.nrpa.org/globalassets/engagement-survey-report-2018.pdf
[18] National Recreation and Parks Association, "2018 AMERICANS' ENGAGEMENT WITH PARKS

We estimate that Iowa's city parks receive **about 2.75 million visits each year**. Due to the lack of data on spending associated with visiting local parks, we made a conservative estimate that the average spending on a trip to a city park is about one dollar in the form of travel costs, equipment used at parks, and spending at local amenities in proximity to city parks. This is a conservative estimate that likely underestimates the economic impact of city parks in Iowa.

Based on this estimate, we estimated economic output associated with spending due to city park visits. Due to our conservative spending assumption, these are conservative estimates of the overall economic impact of city parks in Iowa.

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$1,620,300	$2,859,418	25	$757,392
Professional and Administrative Services	$509,624	$814,570	5	$220,423
Trade	$212,689	$363,504	2	$99,715
Education and Social Services	$119,050	$190,591	2	$82,313
Manufacturing	$79,275	$230,919	1	$38,947
Energy, Utilities, and Construction	$67,674	$110,488	0	$21,269
Other Services	$35,356	$63,530	1	$26,793
Agriculture, forestry, fishing, and hunting	$22,650	$61,597	0	$11,325
Household Spending	$1,381	$0	0	$1,381
Total	**$2,667,998**	**$4,694,617**	**35**	**$1,259,558**

Table 7: Summary of spending impact, City Parks, 2024

Hospitality and leisure, the leading category for value added, contributes around $1.6 million of the $2.7 million total value added. In addition, city park spending accounts for an additional 35 jobs created in Iowa's economy.

REPORT," 2018, Accessed February 10, 2018.
https://www.nrpa.org/globalassets/engagement-survey-report-2018.pdf

Soil and Water Conservation

Improving water quality and soil conservation efforts in Iowa is a high-priority state ecological goal. Soil and water conservation efforts in Iowa generate substantial economic benefits that extend throughout the state's economy. These investments protect Iowa's valuable topsoil, improve water quality, and create long-term economic value through multiple pathways. Implementation of these conservation practices not only preserves the productivity of agricultural land, but also stimulates economic activity through demand for conservation materials, labor, and technical services. These projects can support local contractors, create jobs in conservation-related industries, and generate economic benefits in Iowan communities. Additionally, improved water quality and natural resources are beneficial to recreational opportunities that impact local Iowa economies.

The state of Iowa has a cost-share program in which the state, farmers, and other partners invest in projects for soil and water conservation efforts. Iowa Department of Agriculture's annual cost-share report for FY2024 reported a record year for the program, with the state contributing $27.1 million and farmers and other partners contributing about $41.2 million, for a total of $68.3 million pledged towards soil and water conservation efforts.[19] These projects include conservation projects like terraces, cover-cropping, water/sediment control basins, and many others.

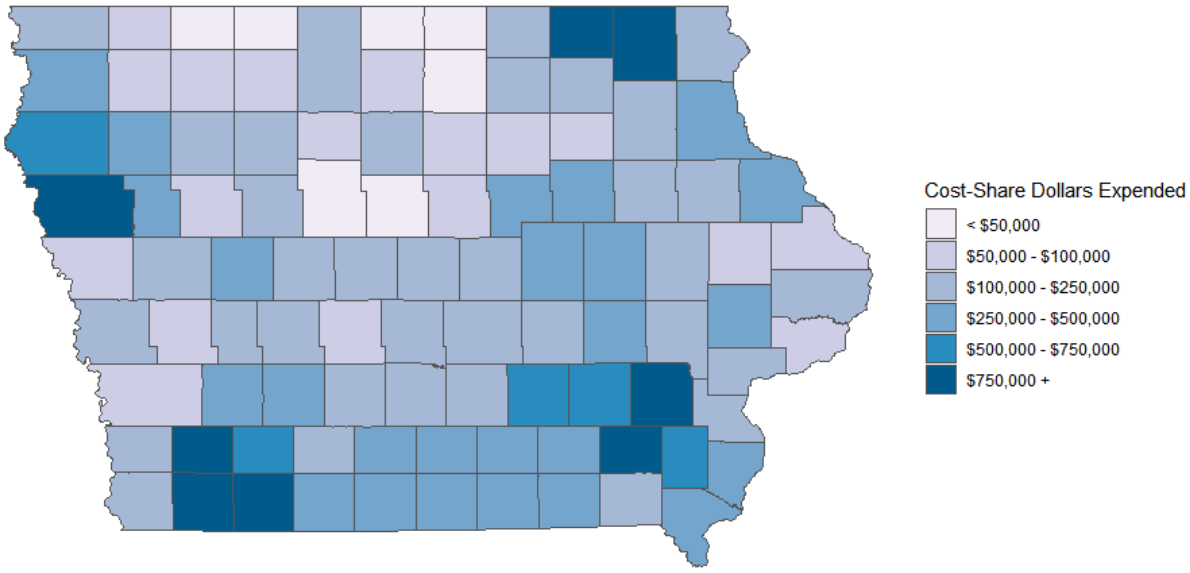

Figure 3: Cost-share dollars are more prevalent in Southern Iowa

[19] Iowa Department of Agriculture and Land Stewardship, "2024 Annual Report," February, 2024, Accessed February 10, 2024. https://www.legis.iowa.gov/docs/publications/SD/1521176.pdf

Analyzing the effects of the $68.3 million in annual spending, we developed the estimates in Table 8.

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$1,277,210	$2,240,240	25	$648,850
Professional and Administrative Services	$10,033,270	$16,146,120	90	$4,439,500
Trade	$10,169,870	$17,334,540	109	$4,685,380
Education and Social Services	$3,838,460	$6,174,320	52	$2,663,700
Manufacturing	$6,208,470	$16,392,000	47	$3,053,010
Energy, Utilities, and Construction	$37,981,630	$71,045,660	422	$25,380,280
Other Services	$969,860	$1,748,480	19	$737,640
Agriculture, forestry, fishing, and hunting	$341,500	$922,050	3	$170,750
Household Spending	$40,980	$0	3	$40,980
Total	**$70,861,250**	**$132,003,410**	**771**	**$41,820,090**

Table 8: Summary of spending impact, Soil and Water Conservation, 2024

Because of the associated construction for these conservation projects, the energy, utilities, and construction category is a large contributor to the overall value added, followed by trade and professional and administrative services. Soil and water conservation projects also support 771 jobs, 422 of which come from the construction, energy and utilities industries.

Rivers and Streams

Recreational opportunities provided by Iowa's rivers and streams generate significant economic impact through spending on materials, supplies, and associated visitor expenses. Other studies have demonstrated the scale of this economic impact. A 2019 study of rivers and streams in the State of Arizona by The National Audubon Society estimated that Arizona's rivers and streams received 1.5 million visitors a year, generating $13.5 billion in economic output and supporting 114,000 jobs.[20]

[20] The Audubon Society, "The Economic Impact of Arizona's Rivers, Lakes, and Streams," 2019, Accessed February 12, 2025.
https://www.audubon.org/economic-impact-arizonas-rivers-lakes-and-streams

Another 2010 study from the National Parks Service on the Delaware Water Gap National Recreation Area found that 74% of these visitor trips were made by local residents or non-locals on day trips. The average visitor group size was 4.3 people and spent an average of $35 in the park and an average of $107 outside the park within 20 miles.[21] Both of these instances demonstrate the substantial economic impact rivers and streams can have on local economies.

Iowa itself is home to thousands of rivers and streams. Data from the 2012 Iowa State University study on the economic impact of outdoor recreation in Iowa quantified rivers and streams to have an estimated annual visitation of 18,780,745, with visitors spending a total of $823,847,666, which comes out to be about $44 dollars per visitor.[22]

To update these numbers to 2024 dollars, we calculated the estimated change in visitation using annual visitation statistics from the National Parks Service.[23] We found that as of 2023, there was about a 30% increase in the number of visitors to rivers nationally since 2012. After adjusting the Iowa data for this increase in visitation and the spending data for inflation, we calculated the estimated total spending associated with rivers and streams in Iowa to be about $1.49 billion. Below are the economic impact estimates we made using this spending estimate.

[21] Cook, P. S. “Impacts of river visitor spending on the local economy: Delaware Water Gap National Recreation Area,” 2010. Natural Resource Report NPS/NRSS/EQD/NRR—2012/609. National Park Service, Fort Collins, Colorado. Accessed February 12, 2025. https://s3.wp.wsu.edu/uploads/sites/3019/docs/239_DEWA-MGM2.pdf

[22] Otto, Daniel, Kristin Tylka, and Susan Erickson. "Economic Value of Outdoor Recreation Activities in Iowa." Saatavilla: https://web.archive.org/web/20150804034108/http://www.card.iastate.edu/environment/items/DNR-AmenityRevised_9-25-12.pdf. Viitattu 24 (2012): 2018.

[23] National Park Service, “Annual Visitation Statistics Release,” 2024, Accessed February 11, 2025. https://www.nps.gov/subjects/socialscience/visitor-use-statistics-dashboard.htm

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$872,904,678	$1,540,455,034	13,476	$408,030,110
Professional and Administrative Services	$274,549,801	$438,833,259	2,507	$118,748,369
Trade	$114,581,760	$195,830,644	1,197	$53,719,500
Education and Social Services	$64,136,024	$102,677,161	883	$44,344,629
Manufacturing	$42,707,747	$124,403,053	328	$20,981,855
Energy, Utilities, and Construction	$36,457,833	$59,522,992	131	$11,458,176
Other Services	$19,047,357	$34,225,720	371	$14,434,326
Agriculture, forestry, fishing, and hunting	$12,202,213	$33,184,068	108	$6,101,107
Household Spending	$744,037	$0	54	$744,037
Total	**$1,437,331,450**	**$2,529,131,932**	**19,055**	**$678,562,109**

Table 8: Summary of spending impact, Rivers and Streams, 2024

Rivers and streams spending contribute an estimated $1.4 billion in value added to the Iowa economy, as well as over 19,000 jobs, the second largest category investigated in this study behind state parks.

Trails

The Iowa Natural Heritage Foundation and the Iowa Department of Transportation maintain a list of multi-use trails across the state. In 2025, they report the state multiuse trail system consisted of over 2,000 miles of paved and packed cinder or gravel trails, up from 1,150 miles reported in 2011.[24] The list of multi-purpose trails indicates that these trails are fairly widely dispersed throughout Iowa and are frequently part of a rails-to-trails right-of-way. The list changes as trail sections are expanded and upgraded.

The Iowa Department of Transportation provides state funding for the construction and maintenance of recreational trails via the State Recreational Trail program.[25] While year-to-year spending can vary, looking at the three year rolling average of funds allocated by the State Recreational Trail program, we can see that spending has increased over the last 6 years.

[24] Iowa Natural Heritage Foundation, “Iowa Trails FAQ,” Accessed January 8, 2025, https://www.inhf.org/what-we-do/trails/iowa-trails-faq/
[25] Iowa Department of Transportation, “Federal and State Recreational Trails,” accessed February 21, 2025. Available online: https://iowadot.gov/local_systems/Grant-Programs/Federal-and-State-Recreational-Trails#

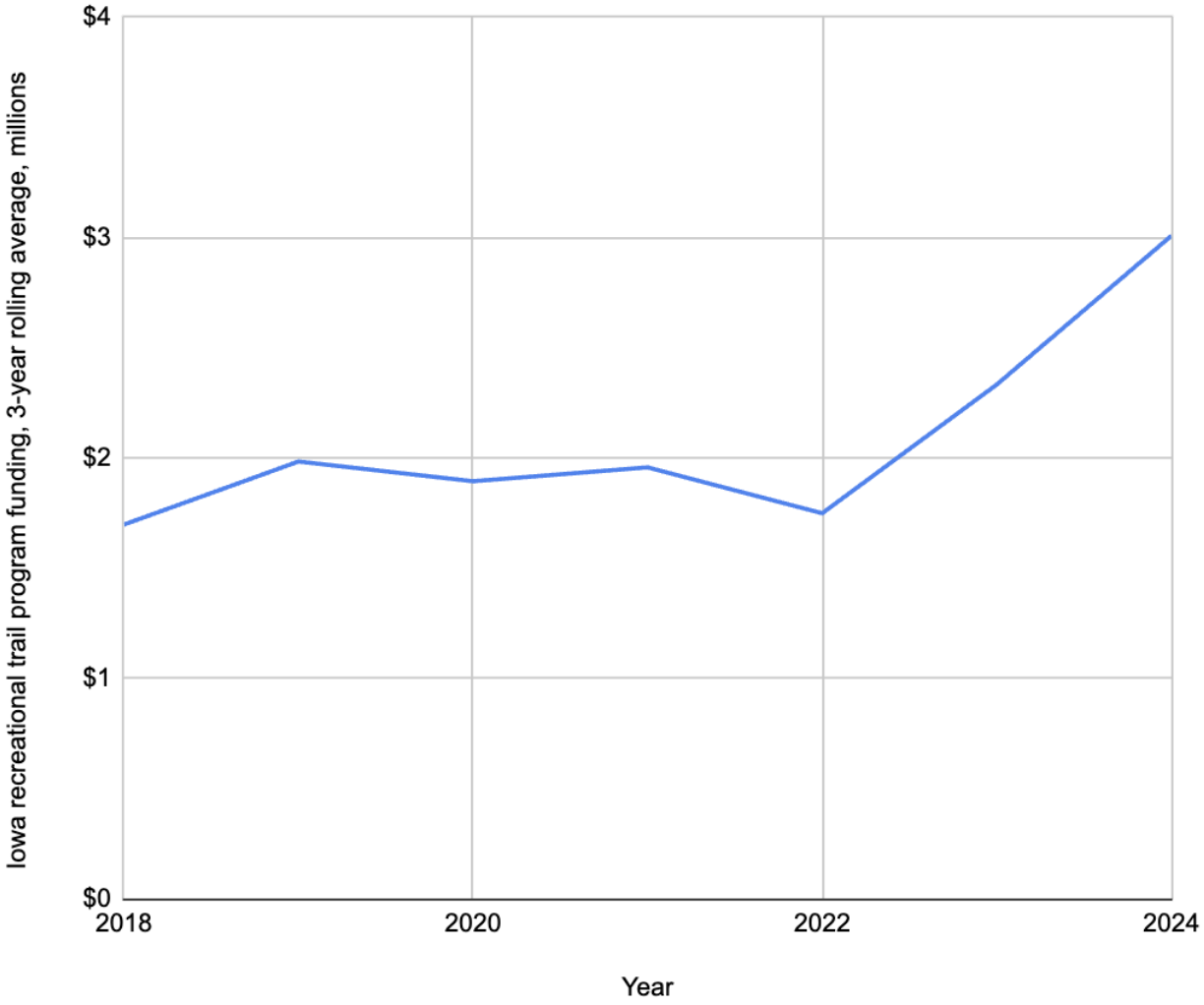

Figure 4: Spending on trails in Iowa has been increasing in recent years

The impact of a trail depends on the type of activity people use it for. People can cycle, hike, and ski on multi-use trails. Some trails can accommodate horses. Trail usage increases during the summer months. According to data from the Linn County Trails Association, most trails experience their highest weekly visitor numbers during June and July.[26]

Trail usage is not always closely monitored, but information is available from several sources to provide an estimate of overall trail use and expenditures. All available trail counter data was collected by the Iowa Bicycle Coalition which we then used to develop a regression model to estimate the number of visitors on the trails that did not have reliable counter data. Among the trails we do have counter data for, we've seen a dramatic rise in the number of visitors since

[26] Linn County Trail Association "Trail and Usage Data," 2022, Accessed February 18, 2025. Available Online: https://linncountytrails.org/trails/trail-usage/2022-2/

2011. The most prominent example of this is the Raccoon River Valley trail which went from under 13,000 visits to over 350,000 visits in 2024.[27,28]

Our spending model is based on the work done by the Rails-to-Trails Conservancy in their 2022 economic impact analysis.[29] Data on spending also comes from the Rails-to-Trails conservancy. They find that how much an average visitor spends depends on whether that visitor uses the trail for an overnight visit or for a day visit.

We use the RIMS-II model to estimate the total direct and indirect impacts associated with trail users in Iowa. The results of this analysis, presented in table 10, indicate $349 million of value added, $374 million of output, $165 million of income, and 4,620 jobs are directly and indirectly supported from spending by trail users.

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$211,652,336	$373,512,612	3,268	$98,934,658
Professional and Administrative Services	$66,569,819	$106,403,467	608	$28,792,800
Trade	$27,782,526	$47,482,863	290	$13,025,314
Education and Social Services	$15,550,998	$24,896,030	214	$10,752,198
Manufacturing	$10,355,305	$30,163,886	79	$5,087,450
Energy, Utilities, and Construction	$8,839,895	$14,432,481	32	$2,778,253
Other Services	$4,618,394	$8,298,677	90	$3,499,877
Agriculture, forestry, fishing, and hunting	$2,958,659	$8,046,108	26	$1,479,329
Household Spending	$180,406	$0	13	$180,406
Total	**$348,508,339**	**$613,236,124**	**4,620**	**$164,530,285**

Table 10: Summary of spending impact, Trails, 2024

[27] Otto, Daniel, Kristin Tylka, and Susan Erickson. "Economic Value of Outdoor Recreation Activities in Iowa." Saatavilla: https://web.archive.org/web/20150804034108/https://www.card.iastate.edu/environment/items/DNR-AmenityRevised_9-25-12.pdf. Viitattu 24 (2012): 2018.
[28] Raccoon River Valley Trail, “About the Loop,” Accessed February 18, 2025. Available Online: https://www.raccoonrivervalleytrail.org/about
[29] Headwater Economics, “Economic Impact of the Great American Rail Trail,” Rails-to-Trails Conservancy, Available Online: https://headwaterseconomics.org/wp-content/uploads/HE-GRT-Economic-Potential-Methods.pdf

Many of the activities people perform on multiuse trails are often performed without dedicated infrastructure. Many people still contribute to the economy by biking and walking on city streets and sidewalks. For instance, our recent study on cycling in Iowa found that overall, cycling is responsible for over $1.4 billion in economic activity for Iowa.[30]

Regional Analysis

Understanding how outdoor recreation contributes to regional economies in parts of the state can help policymakers and the public understand how outdoor recreation impacts local economies. We conducted a regional analysis of counties in Iowa and their respective economic outputs from outdoor recreation. Our study divided Iowa into three regions based on Iowa's county conservation systems districts. The "East Iowa" region consists of the 32 counties in districts 3 and 4, the "Central Iowa" region consists of the 33 counties in districts 1 and 2, and the "West Iowa" region consists of the 34 counties in districts 5 and 6.

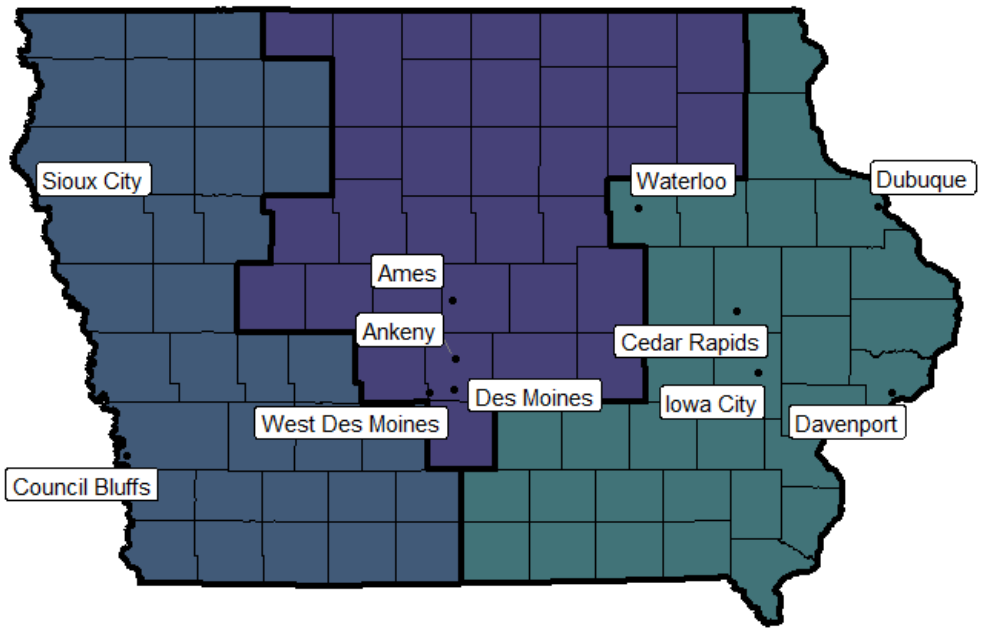

Figure 5: Regional Analysis Areas

This regional analysis is done to specifically analyze the economic outputs of the different geographical areas, which have different economic makeups of the goods and services that are more commonly produced and sold in each one.

The analysis includes the economic contribution of state parks, county parks, and lakes of each region, which makes up about 60% of the total economic value contributed by Iowa's outdoor

[30] Scioto Analysis, "Economic and Health Impacts of Cycling and Trails in Iowa," accessed February 21, 2025. Available Online: https://iowabicyclecoalition.org/economic-impact-study-of-cycling-and-trails/

recreation. Using the RIMS II multipliers specific to each Iowa region, we developed the estimates of economic output by region presented in Table 11.

Region	Value Added	Output	Employment	Earnings
West Iowa	$766,771,193	$1,362,505,504	8,571	$293,500,465
Central Iowa	$901,727,860	$1,570,335,561	13,166	$461,379,964
East Iowa	$819,155,018	$1,441,824,440	10,764	$375,689,819

Table 11: Summary of total spending impacts in Iowa's 3 regions

Overall, we estimate Central Iowa generates the most economic output of the three regions through its outdoor recreation, generating just over $900 million for Iowa's economy. Its outdoor recreation also supports the most jobs out of any region with 13,166, almost 2,500 more than East Iowa, and just over 4,500 more than Western Iowa.

We find that state parks, county parks, and lakes in Eastern Iowa generate about $820 million in economic output each year for the state of Iowa, second of the three regions. Its outdoor recreation supports over 10,000 jobs across its state parks, county parks, and lakes.

Western Iowa, despite having the smallest output of the three regions, still represents a formidable contributor to economic output, generating about $760 million in value added to Iowa's economy, and supporting jobs for 8,571 Iowans.

Ecosystem Services

An alternate approach to estimating the economic impact of outdoor recreation assets is by estimating the total value of services provided by public lands on a per-acre basis. This approach is known in the economic literature as the estimation of "ecosystem service" values.

Ecosystem services are defined as contributions to human welfare from the environment or ecosystems.[31] These services are both market and nonmarket goods that humans can obtain from the environment that make them better or worse off. We can divide ecosystem services into four main categories: **provisioning**, **regulating**, **cultural**, and **supporting**.[32]

Provisioning ecosystem services directly provide goods like food, raw materials, or energy to people. For these services, we can estimate the per-acre value of public land by calculating the

[31] Office of Information and Regulatory Affairs. "Guidance for Assessing Changes in Environmental and Ecosystem Benefits in Benefit-Cost Analysis." February 28, 2024. Accessed February 24, 2025. https://perma.cc/C5XY-VFVN
[32] United States Department of Agriculture. "Ecosystem Services." Accessed February 24, 2025. https://www.climatehubs.usda.gov/ecosystem-services

amount of production or materials provided in a particular acre of land and multiplying that amount by the market value of those goods.

Regulating ecosystem services are benefits obtained through the moderation of ecosystem processes, including carbon sequestration, erosion prevention, and disease control. These types of ecosystem services create value primarily through preventative measures. To monetize these ecosystem services, we can estimate costs avoided from preventing natural disasters, environmental damage, or disease, or estimate the amount of money that would otherwise be spent to prevent these kinds of issues.

Cultural ecosystem services are non-material benefits that contribute to the cultural development of people, including aesthetic value, recreation, and creative inspiration. These services can be harder to monetize than provisioning and regulating services. Some strategies that are used to monetize cultural ecosystem services are contingent valuation, surveying people to determine how much they would pay for a non-market good or service, or measuring the amount people pay to travel to and engage with different forms of environmental recreation.

Lastly, **supporting** ecosystem services are the processes that allow ecosystems to sustain life, such as the water cycle, nutrient cycling, or photosynthesis. These services can be more challenging to monetize, but their values often have overlap with regulating services. We can monetize supporting services by estimating the amounts that would otherwise be spent to maintain these sorts of processes to sustain habitats, animal life, and human life.

Quality of life benefits could fall under the regulating, cultural, or supporting categories. Benefits to workforce retention and recruitment would largely be considered provisioning benefits.

The value of ecosystem services in different areas is dynamic— it can change based on individual or social preferences for goods and services, both those provided by the environment, or provided as substitutes for the environment. The value of ecosystem services is also dynamic because of the vastly different value that different environments and biomes can provide to humans. Different biomes have different strengths in providing ecosystem services, and even urban areas or intensive land uses can provide high value in ecosystem services. However, the wide range of value created by different biomes highlights the importance of sustaining untouched ecosystems, even through a lens of economic value for humans.

Appendix A presents the results of a global meta-analysis that calculates the monetary value of ecosystem services across different biomes.[33] Because the topic of monetizing ecosystem services is still fairly niche, not every ecosystem service is monetized for each biome. Table 20 shows the estimated monetary values of ecosystem services per acre in different biomes, with monetary values adjusted for inflation to December 2024.

[33] Brander, L. M., R. De Groot, J. P. Schägner, V. Guisado-Goñi, V. Van't Hoff, S. Solomonides, A. McVittie et al. "Economic values for ecosystem services: A global synthesis and way forward." *Ecosystem Services* 66 (2024): 101606.

Health Benefits of Parks and other Green Spaces

According to the Centers for Disease Control and Prevention, approximately 25% of Iowans report they have not engaged in physical activities or exercise outside of work in the past month.[34] Additionally, more than one-third of Iowa's population is classified as obese, placing the state in a tie with Indiana for the 7th highest obesity rate in the United States.[35] The combination of low physical activity levels and high obesity rates means that Iowans face an increased risk of chronic diseases, which could both adversely affect their physical health and drive up healthcare costs as the prevalence of non-communicable diseases continues to rise across the nation.[36]

Obesity is linked to an elevated risk of several health conditions, including diabetes, hypertension, cerebrovascular disease, cardiovascular disease, kidney disease, biliary disease, respiratory disease, osteoarthritis, and neoplasms.[37] In Iowa, obesity results in an estimated $4.5 billion in healthcare costs, loss of life, absenteeism from work, and disability. By increasing participation in physical activity, the prevalence of non-communicable diseases and their associated costs can be reduced. The United States Department of Health and Human Services recommends that adults engage in 150 minutes of moderate to vigorous physical activity each week.[38]

Having access to outdoor recreation activities has been found to lead to an increased possibility that individuals reach the recommended amount of physical activity.[39] To calculate the health impacts of outdoor recreation in Iowa, we rely on data from the Behavioral Risk Factor Surveillance System, the best available source of individual level health data in the United States.[40] We combine this with satellite data of the amount of greenspace in each of Iowa's counties from the National Land Cover Database to help estimate how much access Iowans have to outdoor recreation opportunities.[41]

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[34] Centers for Disease Control and Prevention, "Adult Physical Inactivity Outside of Work," January 2022, Accessed December 20, 2024, https://www.cdc.gov/physical-activity/php/data/inactivity-maps.html.
[35] Centers for Disease Control and Prevention, "Adult Obesity Prevalence Maps," Accessed December 20, 2024, https://www.cdc.gov/obesity/data-and-statistics/adult-obesity-prevalence-maps.html
[36] Hambleton, Ian R., Roberta Caixeta, Selvi M. Jeyaseelan, Silvana Luciani, and Anselm JM Hennis. "The rising burden of non-communicable diseases in the Americas and the impact of population aging: a secondary analysis of available data." The Lancet Regional Health–Americas 21 (2023).
[37] Woods, Thomas, and Tatjana Miljkovic. "Modeling the economic cost of obesity risk and its relation to the health insurance premium in the United States: a state level analysis." Risks 10, no. 10 (2022): 197.
[38] United States Department of Health and Human Services, "Physical Activity Guidelines for Americans: 2nd Edition," Accessed December 20, 2024, https://odphp.health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf
[39] Mytton, Oliver T., Nick Townsend, Harry Rutter, and Charlie Foster. "Green space and physical activity: an observational study using Health Survey for England data." *Health & place* 18, no. 5 (2012): 1034-1041.
[40] Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2023.
[41] Dewitz, J., 2023, National Land Cover Database (NLCD) 2021 Products: U.S. Geological Survey data release, https://doi.org/10.5066/P9JZ7AO3.

Additionally, studies have found that the quality of outdoor recreation opportunities can have impacts on health outcomes.[42] Researchers in Australia used a natural experiment to test whether improvements to a park increased the physical activity of its users. They found that improving an existing park in overall park use, as well as an increase in the amount of vigorous physical activity users participated in. They also noted that use increased over the time of the study, suggesting that these gains were sustainable. This is reflected in the Behavioral Risk Factor Surveillance System data, with Iowans who get the recommended amount of aerobic exercise reporting that their self-assessed health was either excellent or very good nearly 50% more often than those who don't.

To estimate the impact of increasing exposure to outdoor recreation, we perform a scenario analysis comparing how rates of physical activity would increase if access to greenspace increases by 5%, 10%, and 15% across the state. We then assume that people who would now achieve the recommended level of aerobic exercise would be exposed to the lower morbidity rates associated with that group from the Behavioral Risk Factor Surveillance System. Finally, we use estimates of the cost of treating disease to translate these reductions in morbidity to healthcare cost savings for the state.

Additionally, we make an estimate for the amount of this healthcare spending that would come from Medicaid, which would result in direct cost savings for the state. Using data from KFF about state Medicaid spending, we assume that 24.1% of healthcare spending savings come from Medicaid.

Scenario	Monetized Values	Medicaid Savings
5% Increase	$28 million	$7 million
10% Increase	$80 million	$19 million
15% Increase	$107 million	$26 million

Table 12: Increasing greenspace could save Iowa between $6.7 and $25.8 million in Medicaid spending

Diabetes

Consistent physical activity is critical for reducing the risk of diabetes.[43] According to survey data from the Behavioral Risk Factor Surveillance System, Iowans who achieve the recommended

[42] Veitch, Jenny, et al. "Park Improvements and Park Activity: A Natural Experiment." American Journal of Preventative Medicine, 42, no. 6 (2012): 616–619.
[43] Colberg, Sheri R., Ronald J. Sigal, Jane E. Yardley, Michael C. Riddell, David W. Dunstan, Paddy C. Dempsey, Edward S. Horton, Kristin Castorino, and Deborah F. Tate. "Physical activity/exercise and diabetes: a position statement of the American Diabetes Association." *Diabetes care* 39, no. 11 (2016): 2065.

amount of aerobic exercise are 40% less likely to have diabetes compared to other Iowans. If access to greenspace in Iowa was increased, we would expect to see a **reduction in the number of cases of diabetes between 450 and 1,700** depending on the scenario.

According to data from the American Diabetes Association, the average person with diabetes spends $12,022 more than a similar individual without diabetes each year.[44] This means that if Iowa residents did not participate in regular aerobic activity, there would be **additional spending of over $5 to $20 million on diabetes treatment annually.**

Scenario	Reduced Cases	Monetized Values	Medicaid Savings
5% Increase	450	$5 million	$1.2 million
10% Increase	1,300	$15 million	$3.6 million
15% Increase	1,700	$20 million	$4.8 million

Table 13: Outdoor recreation access could reduce state diabetes costs by $5 million to $20 million.

Breast Cancer

Studies have shown that physical exercise can reduce the risk of breast cancer in adults.[45,46] Survey respondents who reported getting enough aerobic exercise reported having breast cancer 4% less often compared to those that did not. Under our increased greenspace scenarios, this would translate to **between 2 and 9 fewer cases of breast cancer for Iowans**.

One study on the treatment costs of breast cancer found that the average cost was over $128,000.[47] This translates to between **$300,000 and $1 million in annual avoided medical costs for breast cancer per year** in the greenspace access scenarios we modeled.

[44] Parker, Emily D., Janice Lin, Troy Mahoney, Nwanneamaka Ume, Grace Yang, Robert A. Gabbay, Nuha A. ElSayed, and Raveendhara R. Bannuru. "Economic costs of diabetes in the US in 2022." *Diabetes Care* 47, no. 1 (2024): 26-43.
[45] Friedenreich, Christine M., and Anne E. Cust. "Physical activity and breast cancer risk: impact of timing, type and dose of activity and population subgroup effects." *British journal of sports medicine* 42, no. 8 (2008): 636-647.
[46] Patel, Alpa V., Christine M. Friedenreich, Steven C. Moore, Sandra C. Hayes, Julie K. Silver, Kristin L. Campbell, Kerri Winters-Stone et al. "American College of Sports Medicine roundtable report on physical activity, sedentary behavior, and cancer prevention and control." *Medicine and science in sports and exercise* 51, no. 11 (2019): 2391.
[47] Blumen, Helen, Kathryn Fitch, and Vincent Polkus. "Comparison of treatment costs for breast cancer, by tumor stage and type of service." *American health & drug benefits* 9, no. 1 (2016): 23.

Scenario	Reduced Cases	Monetized Values	Medicaid Savings
5% Increase	2	$300,000	$72,000
10% Increase	7	$900,000	$217,000
15% Increase	9	$1 million	$240,000

Table 14: Outdoor recreation access could reduce state breast cancer prevalence

Overweight

It is well documented that regular exercise is one of the most important contributors to maintaining a healthy body weight.[48] According to Behavioral Risk Factor Surveillance System survey data, active Iowans are 5% less likely to be overweight or obese compared to the rest of the population. If Iowans had better access to greenspace, this could lead to between **300 and 1,300 fewer people being overweight each year**.

The Centers for Disease Control found that adults with obesity experienced annual medical costs that were $1,861 higher than other adults.[49] Increasing access to outdoor recreation opportunities in Iowa could lead to **between $560,000 and $2.5 million in avoided medical costs per year.**

Scenario	Reduced Cases	Monetized Values	Medicaid Savings
5% Increase	200	$400,000	$97,000
10% Increase	700	$1 million	$240,000
15% Increase	900	$2 million	$480,000

Table 15: Outdoor recreation access could reduce state obesity prevalence

High Blood Pressure

Exercise has been shown to improve outcomes for individuals with high blood pressure.[50] Active people in Iowa were 19% less likely to have high blood pressure compared to the rest of the population according to Behavioral Risk Factor Surveillance System survey data. Our model

[48] Petridou, Anatoli, Aikaterina Siopi, and Vassilis Mougios. "Exercise in the management of obesity." *Metabolism* 92 (2019): 163-169.
[49] Centers for Disease Control, “Adult Obesity Facts,” May 14, 2024. Available Online: https://www.cdc.gov/obesity/adult-obesity-facts/index.html
[50] Pagonas, Nikolaos, Fernando Dimeo, F. Bauer, F. Seibert, F. Kiziler, W. Zidek, and T. H. Westhoff. "The impact of aerobic exercise on blood pressure variability." *Journal of human hypertension* 28, no. 6 (2014): 367-371.

estimates that increasing the amount of greenspace in Iowa could lead to **between 600 and 2,100 fewer people having high blood pressure**.

A study found that the median cost for a person with high blood pressure spent to achieve blood pressure control was $3,316.[51] This means that by increasing access to greenspace, **Iowans could avoid between $2 and $7 million in medical costs associated with high blood pressure per year.**

Scenario	Reduced Cases	Monetized Values	Medicaid Savings
5% Increase	600	$2 million	$480,000
10% Increase	1,600	$5 million	$1.2 million
15% Increase	2,100	$7 million	$1.7 million

Table 16: Outdoor recreation access could reduce high blood pressure costs by $2 million to $7 million.

Stroke

Although risk of stroke may increase during and shortly after intense exercise, a lifelong commitment to exercise decreases the risk in the long run.[52] According to Behavioral Risk Factor Surveillance System data, Iowans who get enough aerobic exercise are 44% less likely to have a stroke compared to the rest of the population. Under our increased greenspace scenarios, we expect that **between 120 and 470 fewer Iowans would experience strokes every year.**

According to a 2021 study, the average healthcare cost of a stroke per person is over $140,000.[53] By increasing people's access to greenspace, **the state of Iowa could avoid between $17 and $65 million in medical costs associated with strokes per year.**

[51] Jacob, Verughese, Sajal K. Chattopadhyay, Anilkrishna B. Thota, Krista K. Proia, Gibril Njie, David P. Hopkins, Ramona KC Finnie, Nicolaas P. Pronk, Thomas E. Kottke, and Community Preventive Services Task Force. "Economics of team-based care in controlling blood pressure: a community guide systematic review." *American journal of preventive medicine* 49, no. 5 (2015): 772-783.
[52] Edward, Justin A., and William K. Cornwell III. "Impact of exercise on cerebrovascular physiology and risk of stroke." *Stroke* 53, no. 7 (2022): 2404-2410.
[53] Rochmah, Thinni Nurul, Indana Tri Rahmawati, Maznah Dahlui, Wasis Budiarto, and Nabilah Bilqis. "Economic burden of stroke disease: a systematic review." *International journal of environmental research and public health* 18, no. 14 (2021): 7552.

Scenario	Reduced Cases	Monetized Values	Medicaid Savings
5% Increase	120	$17 million	$4 million
10% Increase	350	$49 million	$12 million
15% Increase	470	$65 million	$16 million

Table 17: Outdoor recreation access could reduce stroke costs by $17 million to $65 million.

Arthritis

While moderate exercise has long been used as a way to manage arthritis, its ability to help prevent the onset of arthritis has not been studied as much. In 2023, researchers from the University of Chihuahua in Mexico found that arthritis developed slower in mice who were exposed to light treadmill exercises, suggesting that moderate exercise could be used to help prevent the onset of arthritis.[54] Behavioral Risk Factor Surveillance System respondents who reported getting the recommended amount of aerobic exercise reported experiencing arthritis 11% less frequently than those who did not. This means that under our greenspace increase scenarios, we expect to see **between 250 and 930 fewer cases of arthritis among Iowans.**

According to a meta-analysis of the costs of arthritis treatment, direct medical costs associated with treatment averaged almost $13,000 per person. By increasing access to greenspace, Iowa could save **between $3 and $12 million in reduced arthritis costs.**

Scenario	Reduced Cases	Monetized Values	Medicaid Savings
5% Increase	250	$3 million	$724,000
10% Increase	700	$9 million	$2.2 million
15% Increase	930	$12 million	$2.9 million

Table 18: Outdoor recreation access improvements could reduce arthritis cases in the state by 250 to 930

Mental Health

The Behavioral Risk Factor Surveillance System asks respondents how many days of the past thirty they experienced poor mental health. They categorize respondents into those that had

[54] González-Chávez, Susana Aideé, Salma Marcela López-Loeza, Samara Acosta-Jiménez, Rubén Cuevas-Martínez, César Pacheco-Silva, Eduardo Chaparro-Barrera, and César Pacheco-Tena. "Low-intensity physical exercise decreases inflammation and joint damage in the preclinical phase of a rheumatoid arthritis murine model." *Biomolecules* 13, no. 3 (2023): 488.

zero days of poor mental health, those with one to fifteen days of poor mental health, and those with more than 15 days of poor mental health.[55]

Studies have found that regular exercise can positively impact an individual's mental health.[56] According to the Behavioral Risk Factor Surveillance Survey, active Iowans are 37% less likely than non-active Iowans to have experienced over 15 days of poor mental health at the time of response. If increasing greenspace leads to more people getting the recommended amount of exercise, we expect that there would be between **550 and 2,100 fewer Iowans experiencing poor mental health per year.**

Scenario	Reduced Cases
5% Increase	550
10% Increase	1,600
15% Increase	2,100

Table 19: Outdoor recreation access could reduce poor mental health by 700 to 3,100 cases per year.

Potential Sources of Revenues to Support Natural Resources and Outdoor Recreation Trust Fund

Iowa's Natural Resources and Outdoor Recreation Trust Fund was created by a statewide vote in 2010. The role of this fund is to protect and enhance water quality and natural areas in the state including parks, trails, and fish and wildlife habitat, and to conserve agricultural soils in this state.

Another fund is the Resource Enhancement & Protection Fund, which funds open space, county conservation, soil and water conservation, city parks and open space, state land management, historical resource development, roadside vegetation, and conservation education.[57] It is funded through gaming receipts and from the sale of the natural resource license plate. This program is required by statute to receive $20 million per year through 2026.[58] For Fiscal Year 2020-2023, it has only been allocated $12 million of those $20 million, and no records back to 2010 show it

[55] Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2023.
[56] Mikkelsen, Kathleen, Lily Stojanovska, Momir Polenakovic, Marijan Bosevski, and Vasso Apostolopoulos. "Exercise and mental health." *Maturitas* 106 (2017): 48-56.
[57] Iowa Department of Natural Resources. "Resource Enhancement and Protection (REAP)." Accessed March 25, 2025. https://www.iowadnr.gov/programs-services/resource-enhancement-protection-reap
[58] Legislative Services Agency. "Resource Enhancement and Protection Fund." November 2013. Accessed March 25, 2025. https://www.legis.iowa.gov/docs/publications/FTNO/17033.pdf

being fully funded.[59] If this program were fully funded and allocations kept up with inflation, this fund would total $52 million in 2025.[60]

A ⅜-cent sales tax would deliver a substantial amount to the trust fund, and extending, fully funding, and fixing the Resource Enhancement & Protection fund would provide substantial resources to Iowa's public lands. In this section, we present policy options for policymakers interested in finding creative ways to finance these and other funds.

General Public Funds

When lawmakers need to fund a project, they can either raise new revenue or reallocate existing funds. General public funds are broad-based revenue sources that support a wide range of government services and can be either reallocated or increased to fund outdoor recreation investments. The following options highlight general public fund revenue options for financing outdoor recreation investments.

General Revenue Fund: Lawmakers have the discretion to spend money from the state's General Revenue Fund as they see fit. Iowa's general revenue is funded about 95% from state taxes, meaning everyone helps contribute to it.[61] The implications of spending from the General Revenue Fund are determined by what type of tax is raised in order to support the additional spending.

Sales Tax: Sales taxes are often regressive, as people with lower income regularly spend a larger portion of their income on consumption.[62] Initially, a ⅜-cent sales tax was approved by voters to fund the Natural Resources and Outdoor Recreation Trust Fund, but this has never been implemented by the legislature.

Federal Funds: Through programs like the National Park Service's Outdoor Recreation Legacy Partnership Grants Program, Iowa can improve its outdoor recreation assets with federal dollars.[63] This offers Iowa an opportunity to improve their outdoor infrastructure at a relatively low cost to the state.

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[59] Iowa Open Data. "State of Iowa Budget Appropriations." December 12, 2023. Accessed March 25, 2025. https://data.iowa.gov/State-Government-Finance/State-of-Iowa-Budget-Appropriations/ai8x-sahe/about_data

[60] Bureau of Labor Statistics. "CPI Inflation Calculator." Accessed March 25, 2025. https://data.bls.gov/cgi-bin/cpicalc.pl?cost1=20&year1=198902&year2=202502

[61] Legislative Services Agency, "General Revenue Fund Sources - 1994 to 2023," November 18, 2024. Available Online: https://www.legis.iowa.gov/docs/publications/FTNO/1452382.pdf

[62] O'Brien, Rourke L. "Redistribution and the new fiscal sociology: Race and the progressivity of state and local taxes." *American Journal of Sociology* 122, no. 4 (2017): 1015-1049.

[63] National Park Service, "Outdoor Recreation Legacy Partnership Grants Program," Accessed March 11, 2025. Available Online: https://www.nps.gov/subjects/lwcf/outdoor-recreation-legacy-partnership-grants-program.htm

Bonds: Government entities have the authority to sell municipal bonds to help fund capital infrastructure projects.[64] Either the state or local governments could sell municipal bonds to improve their outdoor recreation infrastructure.

Lottery: From a public finance perspective, the lottery acts as a de facto tax on entertainment. The majority of Iowa's lottery revenue is fed into its General Revenue Fund, with about 2% being allocated to specific funds.[65] Iowa lawmakers could either use these resources via the General Revenue Fund, or they could earmark part of the revenue to be used in a dedicated outdoor recreation fund.

Direct User Fees

Direct user fees generate revenue by charging individuals who actively use recreational facilities and participate in paid activities within parks and natural areas. These fees operate on a "user pays" principle, ensuring those who are directly benefiting from these resources are also contributing to their maintenance and enhancement.

Premium Campsite Fees: Implementing tiered pricing for campsites with premium amenities or locations can generate additional revenue while maintaining affordable options. Sites with features like electricity, water hookups, or scenic views could command higher rates, creating a self-sustaining model for campground operations. While this already exists in some capacity within Iowa's state parks, these fees could be increased to bring in more revenue.

Recreational Use and Special Event Permits: Establishing or expanding permit requirements for activities such as hiking, mountain biking, or kayaking provides a consistent revenue stream, and can help manage visitor impact on parks. Charging fees for organized events can generate revenue from commercial and group use of public lands. These permits not only help finance upkeep and maintenance but also ensure proper oversight of activities that may impact sustainability of Iowa's natural resources. This permit approach can be tailored seasonally and by location to balance accessibility with conservation funding needs.

Expand Park User Fees To Include Digital Payment: Modernizing fee collection through digital passes and mobile applications can increase compliance and reduce administrative costs. This approach may include virtual permits, online reservations, and QR code verification systems that improve user experience while increasing revenue.

Park Concession Expansions: Expanding concession opportunities for food services, equipment rentals, and guided experiences creates revenue without direct taxation. These

[64] Securities and Exchange Commission, "What are Municipal Bonds," Accessed March 11, 2025. Available Online: https://www.sec.gov/munied
[65] Legislative Services Agency, "Iowa Lottery Fund," October 25, 2023. Available online: https://www.legis.iowa.gov/docs/publications/FTNO/1386426.pdf

partnerships can enhance visitor experiences while providing a percentage of sales to fund conservation efforts.

Indirect User Fees

Indirect user fees capture revenue from activities and purchases related to outdoor recreation, spreading the financial responsibility to include those who benefit from or impact recreation and natural resources indirectly.

Outdoor Equipment Dedicated Sales Tax: Levying a small percentage tax on outdoor recreation equipment purchases creates a connection between purchasing outdoor recreation goods and conservation funding.

Lodging Tax for Park-Adjacent Hotels: Implementing a small surcharge or tax on accommodations near popular natural tourist areas captures spending that directly relates to the attraction value of these resources.

Out-of-State Hunting/Fishing License Premium: Charging non-residents higher rates for recreational licenses recognizes that these out-of-state visitors don't contribute to conservation through state taxes. This pricing maintains affordability for locals while capturing additional revenue from tourism.

Recreational Vehicle/Equipment Registration Fee: Adding a conservation fee to recreational vehicle and equipment registrations generates revenue from park users whose activities impact natural areas. This mechanism connects the ownership of ATVs and motorized bikes, as well as other vehicles like non-motorized boats and kayaks with their environmental footprint.

Recreation Impact Fees for Commercial Developments: Requiring developers to pay fees based on a project's impact on recreational opportunities and resources ensures that growth helps fund the amenities that make an area attractive.

Energy Infrastructure Fees Through Natural Corridors: Charging fees for energy transmission lines, pipelines, and other similar infrastructure that crosses public land ensures these commercial uses contribute to conservation. This helps compensate for environmental impacts while providing sustainable funding for natural lands.

Property Taxes for Local Trails: Implementing modest property tax assessments for trail development and maintenance ties the increased property values associated with nearby recreational amenities to funding to sustain these amenities.

Natural Assets

Another category of revenue comes from leveraging the use and value of natural resources. These funding mechanisms allow parks and public lands to generate revenue while

simultaneously encouraging conservation, recreation, and public engagement. This approach sustains natural spaces while fostering a direct connection between people and the environments they cherish.

Volunteer Membership Programs: The Iowa Department of Natural Resources currently provides volunteers with opportunities to educate, support conservation, and support recreation activities in parks.[66] A tiered membership program that can either be purchased with a donation or obtained through logged volunteer hours could bring revenue or in-kind support to outdoor recreation assets in Iowa.

Iowa State Park Passport: The Iowa Department of Natural Resources sponsors an "Iowa State Park Passport" to encourage residents to visit state parks.[67] This "passport" is not required for entry, it is a tool for park enthusiasts to track parks they visit. Introducing paid "VIP" or "Supporter" tiers, optional donations when people sign up, and selling collectible physical passports and stamps could provide new revenue streams. Partnerships with outdoor businesses or the state lottery could also raise funds through tie-ins.

Natural Resources License Plates: County Treasurer offices throughout Iowa currently make license plates available for supporting natural resources in Iowa.[68] Funds from these plates support wildlife diversity programs and resource enhancement and protection. This program could be enhanced with more plate design options, fee increases or higher tiers, and new marketing initiatives.

Selling Carbon Offsets: In 2021, the nonprofit Trees Forever ran a reforesting program in Des Moines that generated 4,398 carbon credits.[69] Parks that engage in conservation efforts that abate carbon can register efforts with accreditation programs and then sell credits to private market purchasers interested in offsetting their carbon footprint. An established state or county-focused program could help with forestation efforts and simultaneously generate revenue for maintenance of natural lands.

Eco-Tourism Leasing: Iowa has a number of eco-tourism programs such as Clinton County's Mississippi River Eco Tourism Center, Buchanan County's Fontana Park Sustainable Living Cabins, Polk County's Jester Park, and the Hitchcock Nature Center in Pottawattamie

[66] Iowa Department of Natural Resources. "Volunteer Opportunities." Accessed March 11, 2025. https://www.iowadnr.gov/programs-services/volunteer-opportunities
[67] Iowa Department of Natural Resources. "Parks Passport." Accessed March 11, 2025. https://www.iowadnr.gov/places-go/state-parks/parks-passport
[68] Iowa Department of Natural Resources. "Natural Resources License Plates." Accessed March 11, 2025. https://www.iowadnr.gov/programs-services/natural-resources-license-plates
[69] City Forest Credits. "Reforesting Des Moines - 2021." Accessed March 11, 2025. https://www.cityforestcredits.org/carbon-credits/carbon-registry/des-moines-forest-carbon-offsets-2/

County.[70,71,72,73] A formal eco-tourism leasing program in Iowa's state and county parks would allow private businesses, nonprofits, or entrepreneurs to lease park land or facilities to operate sustainable tourism ventures. A strong program would generate revenue, improve visitor experience, and promote conservation while ensuring that private operations do not degrade natural resources.

Trust Fund Interest: The Natural Resources Trust Fund has not currently been funded with a sales tax increase as was authorized by voters upon its creation. A strong trust fund will generate interest which can then also be used to fund natural resource conservation and promote outdoor recreation within the state.

Outdoor Recreation Checkoff on Tax Returns or Utility Bills: Voluntary donation programs associated with regular payments provide an option for revenue for natural resources in the state. Iowa's "Chickadee Checkoff" was one of the first state income tax checkoff programs in the nation dedicated to wildlife conservation.[74] Electric providers such as the Iowa Lakes Electric Cooperative and the North West Rural Electric Cooperative sponsor "round-up programs" that allow people paying electric bills to give small donations to charities in the state.[75,76] Having a statewide program focused on providing funds to natural resources for outdoor recreation through tax returns or utility payments could provide new resources for conservation. The Chickadee Checkoff Program could also be enhanced through improved marketing, increased incentives, or expanded contribution options.

Public-Private Partnerships

Strategic partnerships between public and private organizations are another strategy for generating revenue for the preservation and restoration of Iowa's natural assets. Public-private partnerships combine the focus on social benefits of the public sector with the benefits of efficiency, innovation, and scalability of the private sector to promote sustainable conservation practices.

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[70] My County Parks, "Mississippi River Eco Tourism Center." Accessed March 11, 2025. https://www.mycountyparks.com/county/clinton/content/Mississippi-River-Eco-Tourism-Center
[71] Buchanan County. "Reserve a Sustainable Living Cabin." Accessed March 11, 2025. https://www.buchanancounty.iowa.gov/services/conservation/sustainable_living_cabins_reservations.php
[72] Polk County. "Jester Park." Accessed March 11, 2025. https://www.polkcountyiowa.gov/conservation/parks-trails/jester-park/
[73] Pottawattamie County. "Hitchcock Nature Center." Accessed March 11, 2025. https://www.pottconservation.com/parks/hitchcock_nature_center/
[74] Cohen, Olivia, "Donations to Iowa's 'Chickadee Checkoff' decline, but DNR hopeful about its future." *The Gazette*. February 10, 2025. Accessed March 11, 2025. https://www.thegazette.com/environment-nature/donations-to-iowas-chickadee-checkoff-decline-but-dnr-hopeful-about-its-future/
[75] Iowa Lakes Electric Cooperative. "Operation Round Up." Accessed March 11, 2025. https://www.ilec.coop/operation-round-up
[76] North West Rural Electric Cooperative. "Operation Round-Up." Accessed March 11, 2025. https://www.nwrec.coop/operation-round-up

Sponsorships and Naming Rights: By allowing local businesses to purchase naming rights to parks and the infrastructure within them, corporate sponsors can support sustainability of public lands while promoting Iowa-based businesses. This can apply to recreational areas or areas that are more devoted to conservation.

Natural Development Donation Match: Donation matching is a philanthropic strategy by which businesses agree to match their employees' donations to nonprofits. By encouraging companies to work with their employees to raise funds for Iowa's parks and outdoor recreation assets, the state can create a private stream of funding for its natural lands.

Corporate Stewardship Tax Credit: The state of Iowa can provide tax credits to companies that participate in land conservation and preservation initiatives, sustainable land management practices, pollution reduction and habitat restoration, carbon and biodiversity market participation, and ecological research and education.

Pigouvian Taxes

A core principle of markets in economic theory is that they maximize the total benefit for suppliers and purchasers. However, when a market creates externalities (e.g. pollution from a factory, secondhand smoke from cigarettes) there is a cost borne by people not participating in the market. Pigouvian taxes are taxes on goods that are designed to capture the cost of any externalities those goods create and add them to the market cost of the goods. This brings the private benefit in line with the social benefit created by this market and generates revenue that the government can use to help finance the provision of public goods.

Cigarette Tax: Smoking is one of the leading preventable causes of death in the United States.[77] Taxing cigarettes can disincentivize people from smoking and it can generate revenue that could be used to improve Iowa's outdoor assets.

Tobacco Settlement: The Tobacco Master Settlement Agreement of 1998 was a landmark legal settlement that required tobacco companies to pay states billions of dollars annually to compensate for healthcare costs related to smoking.[78] In practice, this operates the same as the tobacco industry paying back taxes to correct the market failures of the past.

[77] Danaei, Goodarz, Eric L. Ding, Dariush Mozaffarian, Ben Taylor, Jürgen Rehm, Christopher JL Murray, and Majid Ezzati. "The preventable causes of death in the United States: comparative risk assessment of dietary, lifestyle, and metabolic risk factors." *PLoS medicine* 6, no. 4 (2009): e1000058.
[78] National Association of Attorneys General, "The Master Settlement Agreement," Accessed January 13, 2025. Available Online: https://www.naag.org/our-work/naag-center-for-tobacco-and-public-health/the-master-settlement-agreement/

Carbon Tax: Taxing carbon emissions internalizes pollution costs into markets. In addition to improving environmental outcomes, the additional revenue could go towards improving outdoor recreation opportunities in Iowa.

Fertilizer Tax: Nitrogen fertilizer is an essential component of modern farming practices, but its overuse can lead to negative environmental impacts such as worsened water quality.[79] Taxing nitrogen fertilizer can reduce over application, and the funds raised could be used to improve Iowa's lakes and streams that may have been damaged by nitrogen runoff.

Motor Fuels Tax: Motor fuels taxes are important to ensure that people who benefit from the provision of public roads help bear the maintenance costs. Additionally, this helps capture some of the environmental externalities associated with fossil fuel consumption.

[79] Gazzani, Flavio. "Economic and environmental evaluation of nitrogen fertilizer taxation: A review." *International Journal of Environment, Agriculture and Biotechnology* 2, no. 4 (2017): 238859.

Appendix A: Ecosystem Service Values

Ecosystem Service	Marine	Coral reefs	Coastal systems	Mangroves	Inland wetlands	Rivers and lakes	Tropical forests	Temperate forests	Boreal forests	Shrublands	Grasslands	Polar alpines	Intensive land uses	Urban areas
Food	$34	$363	$1,176	$3,330	$300	$178	$37	$48	$174	$16	$232	$335	$691	$511
Water	$12		$3,601	$796	$428	$4,226	$49	$173	$39	$65	$87	$9	$171	$714
Raw materials	$0.17	$9,078	$157	$2,809	$9	$43	$212	$437	$135	$6	$94	$49	$4,290	$252
Genetic resources	-	-	$5	-	$112	-	$249	-	-	-	-	-	-	-
Medicinal resources	-	-	-	-	-	-	$3	-	$15	$3	$0.54		$5	-
Ornamental resources	-	$17	-	-	-	-	$0.14	-	$331	-	-	-	-	-
Air quality regulation	-	-	$96	$649	$1,218		$7	$551	$846	-	$2	$0.64	$248	$5,092
Climate regulation	$90	$0.98	$54	$674	$91	$116	$367	$233	$699	$26	$203	$329	$253	$427
Moderation of extreme events	-	$7,046	$3,664	$7,055	$2,437	$3,960	$38	$19	$349	$21	-	-	$298	$4,409
Regulation of water flows	-	-	$40	$0.78	$644	$812	$1	$461	-	$56	$18	-	$318	$304
Waste treatment	$54	$2,000	$971	$1,564	$1,276	$1,073	$5	$5	-	-	-	-	$473	$48
Erosion prevention	-	$1,676	-	$3,447	-	-	$23	$68	$323	$10	$13	$16	$19	-
Maintenance of soil fertility	-	$761	$3,029	$504	$398	$11	$0.69	$24	$102	-	$701	$0.26	$201	-
Pollination	-	-	-	-	-	-	$127	$4,410	-	$0.49	$28	-	$103	-
Biological control	-	-	-	-	-	$154	$7	-	-	$0.14	-	-	$452	-
Maintenance of life cycles	-	$679	$38	$2,000	$2,334	$309	$9	-	-	-	-	$0.05	$0.74	-
Maintenance of genetic diversity	-	$4,625	$20	$2,933	$727	-	$3	$158	-	-	$57	-	-	-
Aesthetic information	-	$2,736	$355	$164	$291	$595	-	$17	-	$16	$1,037	-	$42	$8,583
Opportunities for recreation and tourism	$991	$3,075	$2,728	$3,000	$6,325	$1,151	$18	$111	$3	$27	$117	$2	$106	$9,793
Existence, bequest values	$11	$9,215	$1,001	$7,011	$31	$1,677	$2,842	$822	-	$2	$110	$126	$834	$236
Inspiration for culture, art and design	-	$450	$0.04	$1,907	$50	$1,310	$1	-	-	$33	$139	-	$7	-
Spiritual experience	-	-	-	-	-	$39	-	-	-	-	-	-	-	-
Information for cognitive development	$0.06	$1,042	$730	$367	$59	$744	$3	$98	-	$75	$72	$0.30	$0.93	$1,095
Total	**$1,193**	**$42,763**	**$17,665**	**$38,211**	**$16,729**	**$16,400**	**$4,004**	**$7,635**	**$2,726**	**$357**	**$2,910**	**$867**	**$8,512**	**$31,463**

Table 20: Ecosystem service value estimates[80]

[80] Brander, L. M., R. De Groot, J. P. Schägner, V. Guisado-Goñi, V. Van't Hoff, S. Solomonides, A. McVittie et al. "Economic values for ecosystem services: A global synthesis and way forward." *Ecosystem Services* 66 (2024): 101606.

Appendix B: Regional Economic Impacts

Eastern Iowa Regional Economic Impacts

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$726,660,173	$1,282,531,037	10,897	$329,804,319
Professional and Administrative Services	$186,529,688	$297,827,801	1,708	$79,321,595
Trade	$83,535,555	$142,530,991	864	$37,305,938
Education and Social Services	$50,443,577	$80,932,815	664	$33,463,798
Manufacturing	$31,604,698	$91,591,654	230	$14,748,859
Energy, Utilities, and Construction	$27,762,558	$45,238,097	93	$8,180,039
Other Services	$13,385,519	$24,044,358	262	$10,287,019
Agriculture, forestry, fishing, and hunting	$7,560,340	$20,697,979	64	$3,718,200
Household Spending	$495,760	$0	40	$495,760
Total	**$1,127,977,867**	**$1,985,394,732**	**14,822**	**$517,325,527**
Lakes in Eastern Iowa	$308,822,850	$543,570,292	4,058	$141,635,708
Total w/o Double Counted Lakes	**$819,155,018**	**$1,441,824,440**	**10,764**	**$375,689,819**

Table 21: Eastern Iowa county park, state park, and lake impacts

Central Iowa Regional Economic Impacts

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$707,795,732	$1,249,334,764	12,636	$382,390,409
Professional and Administrative Services	$281,070,203	$443,110,247	2,637	$116,982,069
Trade	$101,440,682	$172,882,872	1,050	$46,985,589
Education and Social Services	$57,346,514	$91,320,709	795	$40,118,464
Manufacturing	$29,637,064	$86,260,722	236	$14,939,008
Energy, Utilities, and Construction	$23,492,794	$39,034,182	109	$8,674,263
Other Services	$18,432,808	$33,130,864	350	$13,613,773
Agriculture, forestry, fishing, and hunting	$9,517,594	$25,781,836	84	$4,698,559
Household Spending	$602,379	$0	51	$602,379
Total	**$1,229,335,769**	**$2,140,856,196**	**17,949**	**$629,004,513**
Lakes in Central Iowa	$327,607,910	$570,520,635	4,783	$167,624,549
Total w/o Double Counted Lakes	**$901,727,860**	**$1,570,335,561**	**13,166**	**$461,379,964**

Table 22: Central Iowa county park, state park, and lake impacts

Western Iowa Regional Economic Impacts

Industry	Value Added	Output	Employment	Earnings
Hospitality and Leisure	$679,641,668	$1,199,236,797	8,093	$245,513,967
Professional and Administrative Services	$85,818,664	$138,269,907	749	$35,357,758
Trade	$60,412,593	$103,614,621	574	$26,225,622
Education and Social Services	$26,576,858	$43,084,950	334	$16,859,328
Manufacturing	$21,308,318	$64,159,110	157	$9,834,608
Energy, Utilities, and Construction	$22,947,419	$37,348,095	63	$5,736,855
Other Services	$9,366,293	$16,976,407	160	$6,205,169
Agriculture, forestry, fishing, and hunting	$8,429,664	$22,947,419	70	$4,097,753
Household Spending	$351,236	$0	27	$351,236
Total	**$914,852,713**	**$1,625,637,307**	**10,226**	**$350,182,296**
Lakes in Western Iowa	$148,081,520	$263,131,802	1,655	$56,681,831
Total w/o Double Counted Lakes	**$766,771,193**	**$1,362,505,504**	**8,571**	**$293,500,465**

Table 23: Western Iowa county park, state park, and lake impacts