

Economic Value of Outdoor Recreation Activities in Iowa

Daniel Otto, Kristin Tylka, and
Susan Erickson

Department of Economics
Iowa State University Extension and Outreach
Center for Agricultural and Rural Development
College of Agriculture and Life Sciences
Iowa State University

Commissioned by the Nature Conservancy with
support from the Doris Duke Charitable Foundation



D O R I S D U K E
C H A R I T A B L E F O U N D A T I O N

<http://www.ddcf.org/>



Acknowledgements

Daniel Otto is a professor in the Department of Economics at Iowa State University, Kristin Tylka is an undergraduate research assistant in the Department of Economics at Iowa State University and Susan Erickson is a program coordinator at Iowa State University. Numerous individuals assisted in the preparation of this report. The authors particularly appreciate the assistance received from Dennis Parker, Tom Hazelton and Mark Langgin, who in turn leveraged the support of many others for acquiring information in a timely manner. The authors also appreciate the professional editorial and production assistance from Sandra Oberbroeckling who helped make this document presentable.

If you have questions or comments regarding this report, please contact:

Daniel Otto
E-mail: [dmotto@iastate.edu](mailto:dmonto@iastate.edu)
Telephone: 515-294-6147

Table of Contents

Executive Summary	1
Introduction.....	3
How Iowa Compares with the US on Natural Resources and Outdoor Amenities	3
Economic Impacts of Natural Resources and Outdoor Amenities in Iowa	4
State Parks	6
County Parks	8
City Parks	9
Trails	10
Lakes	12
Rivers and Streams	13
Soil Erosion Control Improvement Investments	15
Health Benefits of Parks and other Green Spaces	16
Potential Sales Tax Revenues to Support Natural Resources and Outdoor Recreation Trust Fund	19
Conclusion.....	20
Appendix Tables	21

Executive Summary

While Iowa's natural resource base is closely identified with its highly productive agricultural base, outdoor recreation opportunities are also becoming a major part of the rural economy. With nearly 90% of Iowa's land base in privately owned farmland, much of Iowa's outdoor recreation takes place alongside agricultural activities. Similar to agriculture production, utilizing the natural resource base for recreational purposes generates jobs and income benefits for the Iowa economy.

As Iowa's demographics become more urbanized, the market for recreation opportunities in rural areas will grow. To meet this demand, there is a significant need for additional public funding and support to improve and expand outdoor recreational resources and facilities. Although these enhancements will require additional capital, they will also lead to more highly valued recreation activities, increased economic activity, and improved quality of life for residents.

Accessing outdoor recreation opportunities and improving the quality of the natural areas that support recreation are important to Iowans. This report documents continued increases in the utilization of Iowa's outdoor recreational resources since a benchmark study in 2007. Along with the increased use of recreation venues is a greater economic impact as Iowans spend on equipment, travel, and supplies to enjoy Iowa's parks, lakes, rivers, and trails. The growth in outdoor recreation participation occurs alongside production agriculture in many parts of Iowa. The co-existence of these two major resource-based industries presents a challenge for successfully encouraging the growth of both industries in Iowa, while maintaining environmental integrity.

The goal of this study is to develop a comprehensive profile of Iowa's outdoor recreational resources, the current levels of participation, and the economic impact associated with those outdoor recreation activities. In examining the magnitude and growth of outdoor recreation activities in Iowa, this report underscores several major points:

- Outdoor recreation opportunities are increasingly important to Iowans. Visitation rates at Iowa outdoor recreation facilities and parks have

increased and applications for funds from the Iowa DNR's Resource Enhancement and Protection (REAP) program to assist local recreation projects continue to exceed funds available. Another example is the recently completed 25-mile High Trestle Trail from Ankeny to Woodward is attracting more than 91,000 users annually and is stimulating new business formation.

- Outdoor recreation spending is a big business in Iowa. Spending estimates were made for recreation in state parks, county parks, lakes, rivers and streams, and multi-use trails. Expenditures on travel to recreation sites and participation in recreation activities has resulted in more than \$3 billion of spending, which in turn helps support approximately 31,000 jobs and \$717 million of income in the state.
- Considerable attention is being paid and substantial effort has gone into improving water quality in the state. Iowans demonstrated their support for protecting Iowa waterways by a 63% vote in favor of the Water and Land Legacy Amendment. However, long-term monitoring at Iowa Water Quality Index sites has not shown significant improvement. In FY 2011 Iowa Land Improvement Contractors Association spent \$8 million on projects, but more capital is needed for wider gains. A 3/8-cent sales tax would generate an estimated \$123.4 million in revenue for the constitutionally protected Natural Resources and Outdoor Recreation Trust Fund dedicated to supporting a range of natural resource enhancing projects including additional water quality improvement measures.
- Studies have shown that recreational amenities and quality of life opportunities are important to attracting businesses and entrepreneurs. Expanding and improving outdoor recreation opportunities is a win-win proposition for Iowa as increased access to recreation opportunities enhances residents' quality of life and health, as well as furthers Iowa's economic development goals.
- Increased access to outdoor parks and recreation amenities can contribute to lower health care costs for Iowans by increasing participation in outdoor



Prairie Bridges Park Camping Area, Ackley, Iowa

physical activities. The cost of physical inactivity can be substantial. An East Carolina University study suggests that in Iowa, physical inactivity is costing the state about \$4.6 billion annually in lost worker productivity, \$866.3 million in higher health care costs and \$10.6 million in higher workers compensation costs. Research has shown that expanding and improving parks, which will encourage increased outdoor recreational park-based physical activity, can reduce these health care costs.

Introduction

While Iowa's natural resource base is closely identified with its highly productive agricultural base, outdoor recreation opportunities are also becoming a major part of the rural economy. With nearly 90% of Iowa's land base in privately owned farmland, much of Iowa's outdoor recreation takes place alongside agricultural activities. Similar to agriculture production, utilizing the natural resource base for recreational purposes generates jobs and income benefits for the Iowa economy. A 2007 study of outdoor recreation in Iowa estimated \$2.63 billion of spending supporting 27,400 jobs and \$580 million of personal income.¹

As Iowa's demographics become more urbanized, the market for recreation opportunities in rural areas will grow. To meet this demand, the state will need to improve and expand outdoor recreational resources and facilities. Although these enhancements will require additional capital, they will also lead to more highly valued recreation activities, increased economic activity, and improved quality of life for residents.

Iowans have already demonstrated their willingness to support measures to enhance Iowa's natural environment and outdoor recreation. In 2010 the voters approved an initiative to allow a vote on a 3/8-cent sales tax increase to generate a dedicated fund to support natural resource-related projects in Iowa. In the lead up to that vote, it is important for voters to better understand the range of resources available for outdoor recreation, how they are currently being used, and how additional investments will improve opportunities for outdoor recreation in Iowa.

The goal of this study is to develop a comprehensive profile of Iowa's outdoor recreational resources, the current levels of participation, and the economic impact associated with those outdoor recreation activities. Specifically, this report will:

- Update estimates of visitation rates and spending patterns at major outdoor recreation venues (parks, lakes, rivers, and multi-use trails),

- Estimate the economic impacts in terms of jobs and income associated with spending on outdoor recreation in Iowa,
- Estimate economic impacts associated with expenditures in Iowa on soil erosion control and water quality improvement measures,
- Estimate the potential health benefits of increasing physical activity through increased access to outdoor recreation in Iowa, and
- Estimate the potential sales tax revenues for a dedicated fund for natural resource improvements per county that would be generated by a 3/8-cent sales tax.

How Iowa Compares with the US on Natural Resources and Outdoor Amenities

In 2011, 91.1 million Americans—38% of the US population ages 16 and older—enjoyed some form of fishing, hunting or wildlife-associated recreation.² Outdoor recreation is a huge contributor to the nation's economy. Expenditures by hunters, anglers, and wildlife-recreationists were \$145.0 billion. Almost 37.4 million Americans fished, hunted, or both in 2011. These sportsmen and women spent \$43.2 billion on equipment; \$32.2 billion on trips; and \$14.6 billion on licenses and fees, membership dues and contributions, land leasing and ownership, and plantings for hunting. On average, each sportsperson spent \$2,407 in 2011.

Even though Iowa is not endowed with a stretch of the Rocky Mountains or a sandy ocean beach, the average percentage of Iowans engaging in wildlife-related activities is significantly higher than that of the country as a whole.

Iowa offers considerable natural resources and venues for outdoor recreation. Among these opportunities are a large number of state parks, state forests, rivers, streams, lakes, and trails that accommodate a variety of recreational and wildlife-related pursuits.

¹Otto, Daniel, et al. *The Economic Value of Iowa's Natural Resources*. Iowa State University: Ames, IA. 2007.

²*National Survey - 2011*. US Fish and Wildlife Service, accessed August 2012, www.wsfrprograms.fws.gov/Subpages/NationalSurvey/2011_Survey.htm.



Prairie Bridges Park, Ackley, Iowa

There are 3.054 million acres of forest in Iowa with approximately 279,660 acres publicly owned.³ Of the public forestland, the state forest system in Iowa comprises 43,500 acres and offers venues for hiking, picnicking, hunting, fishing, and camping, as well as snowmobiling and horseback riding in designated areas. The Iowa DNR manages wildlife areas totaling more than 356,000 acres throughout the state.⁴

In 2011 the participation rate of wildlife viewers in Iowa was among the highest in the nation at 44%. It also appears that wildlife viewing as an activity remains popular among Iowans. In 2011, the number of individuals age 16 and older in Iowa engaging in wildlife watching exceeded 1 million.^{5,6}

Preliminary results from the 2011 National Survey of Fishing, Hunting and Wildlife-Associated Recreation indicate these participation rates remain at relatively high levels (see table 1). Comparable data from other states are not yet available.

³Iowa Forests Today: An Assessment of the Issues and Strategies for Conserving and Maintaining Iowa's Forests. Iowa Department of Natural Resources, <http://www.iowadnr.gov/Environment/Forestry/ForestryLinksPublications/IowaForestActionPlan.aspx> (accessed August 2012).

⁴Iowa Department of Natural Resources website: <http://www.iowadnr.gov/Hunting/PlacestoHuntShoot/WildlifeManagementAreas.aspx> (accessed August 2012).

⁵Aiken, Richard. *Wildlife Watching Trends: 1991–2006. A Reference Report.* Addendum to the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, Report 2006-3. June 2009. Division of Policy and Programs: Arlington, VA. accessed September 2012, http://library.fws.gov/Pubs/wildlifewatching_natsurvey06.pdf.

⁶2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. US Fish and Wildlife Service, accessed September 2012, <http://www.census.gov/prod/2008pubs/thw06-ia.pdf>.

The next most popular wildlife activity is fishing, which is enjoyed by more than 800,000 people fishing from shore, 534,000 people fishing in boats, and 750,000 people fishing from lakes and ponds. Iowa boasts numerous locations for angling, as well as a variety of fish species. The Iowa DNR lists more than 240 angling locations and 16 fish species statewide, ranging from catfish and largemouth bass to northern pike and walleye. Hunting is the third most practiced activity, with more than 386,000 Iowans engaging in big game hunting and 350,000 in small game and waterfowl hunting.⁷

Economic Impacts of Natural Resources and Outdoor Amenities in Iowa

Participating in outdoor recreation typically involves expenditures such as travel, food, supplies, and specialized equipment (e.g., bikes, fishing tackle, hunting equipment, licenses, and special clothing). Identifying and measuring these expenses is one way to estimate the value people place on a particular recreational activity. Natural resources have value even when no expenditures are made while participating. Beyond what consumers actually spend to engage in a recreation pursuits, there is a surplus value of what they would actually be willing to pay for that recreation opportunity. This surplus is an important part of the valuation of the outdoor recreation experience and is critical in assessing the value of the nearby recreation facilities that residents are able to use without incurring significant user fees.



South Ponds, Clarksville, Iowa

⁷2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. US Fish and Wildlife Service (released August 2011).

Table 1. Outdoor recreation participants in Iowa, 2011

Activity	Estimated no. of participants in Iowa	Current participation rate	Percent very interested	Latent demand	Mean no. of days participated in past 12 mos. (among participants)	Mean no. of days participated in past 12 months (among all Iowans)
Fishing		46%	60%	14%		
Fishing from a boat	534,292	23%	42%	19%	17.4	3.84
Fishing from the shore	817,146	36%	53%	17%	19.68	6.75
Lake fishing, not including ponds	754,172	33%	55%	22%	5.64	0.27
Pond fishing	550,818	24%	44%	20%	17.64	4.19
Stream or river fishing other than trout streams	577,635	25%	43%	18%	22.16	5.44
Trout stream fishing	113,617	5%	19%	14%	10.7	0.52
Hunting		21%	29%	8%		
Hunting big game	386,113	17%	22%	5%	17.36	2.87
Hunting small game	306,875	13%	22%	9%	19.1	2.52
Hunting waterfowl	56,736	3%	9%	6%	11.1	0.27
Birding	302,226	13%	21%	8%	86.62	10.19
Observing, feeding, or photographing wildlife within 1 mile of home	1,006,592	44%	51%	7%	140.77	58.99
Outdoor wildlife photography	478,800	21%	33%	12%	29.11	5.75
Taking a trip or outing of at least 1 mile from home for observing, feeding, or photographing wildlife	531,180	23%	41%	18%	16.43	3.72

Source: 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. US Fish and Wildlife Service (released August 2011).

This section focuses on identifying the expenditure impacts that are generated from residents and visitors spending money on outdoor recreational activities in Iowa. The economic impact will be identified by type of recreational resource and measured in terms of dollars spent, jobs supported, and payroll generated. These measures provide an indication of the magnitude of the outdoor recreation industry in Iowa.

A series of consumer surveys on recreation use patterns and agency data collected over the years on park visitation rates facilitates the process of updating the estimated impacts of expenditures on recreational activities in Iowa. The surveys target groups interested in special types of recreation and visitors to specific recreational sites. The US Fish and Wildlife Service conducts surveys every five years to collect state-specific information on recreational spending by individuals engaged in fishing, hunting, and wildlife viewing. Occasional surveys at trails, parks, and lakes in Iowa provide information on

recreation and spending patterns at these sites. This study also includes information on spending patterns in county parks by surveying visitors at Easter Lake and Jester Park in Polk County and Kennedy Park in Webster County. Most of the state parks obtain traffic counts of visitors entering parks. Overall, the most comprehensive information on recreation in Iowa appears to be the data captured at the sites where recreation occurs, rather than data obtained from participant groups of a particular outdoor recreation activity. Hence, this section is organized according to major sites in Iowa where people engage in outdoor recreation

State Parks

The Iowa state park system consists of 71 parks across the state (see figure 1). Of these, local county conservation boards manage 17, with the Iowa DNR managing the balance. Recreation at state parks covers an array of outdoor activities from hiking, biking, and camping; to picnicking; nature studies; and fishing, boating, and swimming where lakes are available.

In recent years, Iowa devoted considerable attention to many of the state and county parks that were in need of building, road, and facility upgrades (see appendix table A.1). In addition to maintenance of existing parks, one new state park was opened recently. Located on Rathbun Lake in south central Iowa, Honey Creek Resort State Park opened in 2008. This state park provides numerous recreation opportunities for hiking, cycling, and boating enthusiasts, as well as picnic facilities and playgrounds.

Along with the state park additions, there have been many county park improvements. Jester Park in Polk County introduced a Natural Playscape and a Bison/Elk Exhibit. Another county park improvement has been at Preparation Canyon—the Loess Hills Archeological Interpretive Center. This interpretive center is located on Iowa's largest archaeological preserve, which is 907 acres. Improvements have been made to educate visitors about the Loess Hill's history and to encourage them to appreciate and explore Iowa's historic treasure.⁸

A fair amount of data is available on the number of visitors to Iowa's state parks (see appendix table A.2). Estimates of spending by park visitors are also available from a number of sources. The state park system collects data on the number of visitors to 55 of the larger state parks. In appendix table A.3, the four-year pattern of visitation and camping for the 55 larger state parks is summarized across all uses and seasons, and totals include local visitors as well as visitors traveling longer distances. Between 2007 and 2010, these parks saw a yearly average of nearly 14 million visitors and more than 690,000 camping parties.

The majority of visitors are expected to be local (within 30 miles of the park), which is consistent with a

comprehensive study of state park visits conducted by Michigan State University's Department of Tourism Studies in 1997. The information in this study on visitor spending at parks can still be considered reliable because it is based on a very extensive data collection effort in Michigan and the rest of the United States at a wide range of campgrounds, parks, and tourism events. These data were used as part of the Michigan Tourism Economic Impact Model (MITEIM).⁹ This Michigan resource provides information on expenditure patterns broken down into spending categories, by local and nonlocal visitors, and by type of visit. Per-party spending in Michigan state parks was estimated at \$78 for camping and \$67 for day trips. This information has been adapted to estimate the impacts associated with visits to Iowa's state parks.

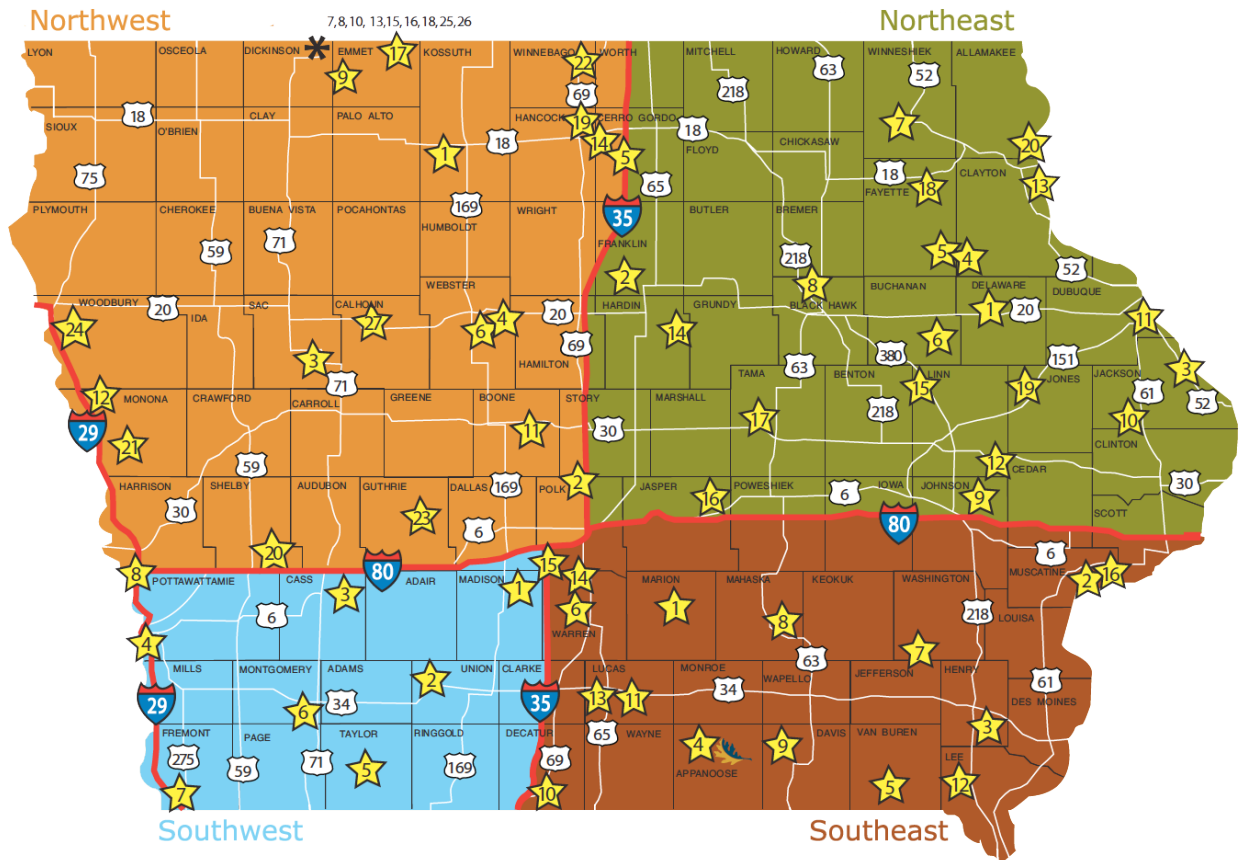
The spending profile from Michigan state parks is similar to the survey results from a 1999–2000 study of visitors to Saylorville Lake in central Iowa. Spending values in this study were estimated as \$45.53 per party for camping and \$41.77 per party for day trips. Similarly, the surveys of users of Iowa lakes conducted in 2002 and again in 2010–2011 have generated comparable estimates of \$43 per party for day visitors and \$97 per day for overnight visiting parties, which are consistent with similar studies across the United States. The overnight spending by visitors to the five intercept survey sites in Iowa (Storm Lake, Clear Lake, Lake Manawa, Rock Creek Lake and Pleasant Creek Lake, included motel and camping.

To estimate economic impact of visitors to Iowa state parks, the visitor expenditures have been updated to 2011 price levels. The estimates of total visitors and camping parties to Iowa state parks, based on counts provided by the Iowa DNR, are presented in the fourth and fifth columns of appendix table A.3. The estimated total expenditures for day visitors and overnight campers are shown in sixth and seventh columns of table A.3. These estimates are based on the assumptions of per party expenditures. Combined spending for day and overnight visitors totals about \$786 million a year

⁸ Iowa's State Parks, Iowa Department of Natural Resources website, access September 10, 2012, <http://www.iowadnr.gov/Destinations/StateParksRecAreas/IowasStateParks.aspx>.

⁹ "Michigan Tourism Economic Impact Model," Michigan State University, accessed September 11, 2012, <https://www.msu.edu/course/prr/840/econimpact/michigan/MITEIM.htm>.

Figure 1. Map of state parks
 Source: *A Guide to Iowa's Parks*, Iowa Department of Natural Resources



Northwest		19	Pilot Knob	10	Maquoketa Caves	8	Wilson Island
1	Ambrose A. Call	20	Prairie Rose	11	Mines of Spain & E.B. Lyons Interpretive Center	Southeast	
2	Big Creek	21	Preparation Canyon	12	Palisades-Kepler	1	Elk Rock (Red Rock)
3	Black Hawk	22	Rice Lake	13	Pikes Peak	2	Fairport
4	Brushy Creek	23	Springbrook	14	Pine Lake	3	Geode
5	Clear Lake	24	Stone	15	Pleasant Creek	4	Honey Creek (Rathbun)
6	Dolliver Memorial	25	Templar Park	16	Rock Creek	5	Lacey-Keosauqua
7	Elinor Bedell	26	Trappers Bay	17	Union Grove	6	Lake Ahquabi
8	Emerson Bay & Lighthouse	27	Twin Lakes	18	Volga River	7	Lake Darling
9	Fort Defiance	Northeast		19	Wapsipinicon	8	Lake Keomah
10	Gull Point	1	Backbone	20	Yellow River Forest Camp	9	Lake Wapello
11	Ledges	2	Beeds Lake	Southwest		10	Nine Eagles
12	Lewis and Clark	3	Bellevue	1	Badger Creek	11	Red Haw
13	Lower Gar Access	4	Bixby Preserve	2	Green Valley	12	Shimek Forest Camp
14	McIntosh Woods	5	Brush Creek Canyon Preserve	3	Lake Anita	13	Stephens Forest Camp
15	Marble Beach	6	Cedar Rock	4	lake Manawa	14	Summerset
16	Mini-Wakan	7	Fort Atkinson Preserve	5	Lake of Three Fires	15	Walnut Woods
17	Okamanpedan	8	George Wyth Memorial	6	Viking Lake	16	Wildcat Den
18	Pikes Point	9	Lake Macbride	7	Waubonsie		

with overnight visitors accounting for about \$41 million and day visitors the other \$745 million.

When compared to the 2001–2006 averages, the total number of yearly visitors fell by about 2.5% and inflation-adjusted yearly expenditures also fell slightly by about 2.8%. But when viewed in light of the recent recession, which saw per capita consumption fall by more than 4% between 2007 and 2009, this highlights the resilience of Iowa’s recreational service sector.¹⁰

Furthermore, viewing day and overnight visitors separately reveals that expenditures by day visitors fell by about 3.1% while expenditures by overnight camping parties rose by nearly 3%.

Direct expenditures by visitors to state parks have secondary impacts on the local economy as the money is circulated and used to purchase additional goods and services. The magnitude of these secondary or multiplier impacts can be estimated using an input-output (I-O) model for the region with the park.¹¹

These I-O models can also be used to translate expenditures into jobs and income estimates. Since tourism spending involves mostly retail and service sectors, expenditure totals must be appropriately adjusted to include only margins generated in the local economy. The production costs of retail goods manufactured elsewhere but sold locally are adjusted in the IMPLAN® model to reflect only the local value-added margins provided by local businesses. The results of the I-O analysis of state park spending are presented in table 2. The results indicate that the impacts are distributed across all sectors of the local economy and

Table 2. Summary of spending impact, Iowa state parks, 2011

Impact type	Jobs	Labor income	Total value added	Output
Service	3,940.30	\$118,392,706	\$217,883,813	\$395,679,886
Trade	3,330.60	\$86,238,978	\$140,267,162	\$542,749,945
Trans. and public utilities	93.1	\$5,147,757	\$10,824,979	\$17,380,623
Government	45.6	\$3,476,711	\$3,472,061	\$8,916,378
Construction	32	\$1,399,449	\$1,664,284	\$3,472,353
Manufacturing	27.1	\$1,395,156	\$2,019,997	\$7,722,161
Agriculture	3.7	\$166,281	\$273,136	\$717,184
Mining	0.2	\$8,847	\$17,703	\$51,634
Total:	7,472.5	\$216,225,883	\$376,423,134	\$976,690,163

an estimated 7,473 jobs, \$376.4 million of value added, and \$216 million of personal income are directly or indirectly linked to recreational spending at Iowa’s state parks.

County Parks

The system of county parks maintained and operated by the County Conservation Boards (CCB) is another major natural resource for Iowans. The size of these holdings in each county typically range from a few acres of habitat preservation to more sizeable holdings with features that are comparable to state parks (see appendix table A.4). The CCB listing of county park holdings totals 193,624 in new table acres of land and facilities in 1,832 different parks.¹²

Unlike state parks, the county parks do not track visitor numbers, although Polk County officials offered a rough estimate of 1.5 million total visitors to their system of county parks. Because many of the features of county parks are comparable to the state parks, the attributes of county population and total park acreage are used as a weighting scheme to estimate the number of visitors to county parks. The Polk County estimate of 1.5 million visitors relative to its population base serves as an estimate for urban areas. The relationship to the population base observed for visitation patterns to state parks in urban counties is then compared to that of state parks in rural counties. Using these assumptions, the

¹⁰Petev, Ivaylo, Luigi Pestaferri, and Itay Saporta-Eksten. “An Analysis of Trends, Perceptions, and Distributional Effects in Consumption,” in *The Great Recession*, ed. David B. Grutsky, Bruce Western, and Christopher Wimer, 161–195. New York: Russell Sage Foundation Publications, 2011.

¹¹An I-O model is essentially a generalized accounting system of a regional economy that tracks purchases and sales of commodities between industries, businesses and final consumers. Successive rounds of transactions stemming from the initial economic stimulus (such as a new plant or community business) are summed to provide an estimate of direct, indirect, induced (or consumer-related) and total effects of the event. The impacts are calculated using the IMPLAN® Input-output modeling system, originally developed by the US Forest Service and currently maintained by the Minnesota IMPLAN® Group. This modeling system is widely used by regional scientists to estimate economic impacts.

¹²2012 *Guide to Outdoor Adventure Iowa County Conservation System*. accessed September 11, 2012, <http://www.mycountyparks.com/GuideBook/Iowa/index.html>.

Table 3. Summary of spending impact, Iowa county parks, 2011

Impact type	Jobs	Labor income	Total value added	Output
Service	3,052.6	\$91,720,963	\$2,689,868	\$306,540,338
Trade	2,580.3	\$66,810,890	\$108,667,498	\$420,478,180
Trans. and public utilities	72.1	\$3,988,060	\$8,386,306	\$13,465,082
Government	35.3	\$2,693,470	\$2,689,868	\$6,907,678
Construction	24.8	\$1,080,852	\$1,289,350	\$2,690,094
Manufacturing	21.0	\$1,084,179	\$1,564,928	\$5,982,497
Agriculture	2.8	\$128,820	\$211,603	\$555,616
Mining	0.2	\$6,854	\$13,715	\$40,002
Total:	5,789.1	\$167,514,088	\$291,621,786	\$756,659,487



Great Western Park near Manning, Iowa

total annual visits to county parks can be estimated at 24 million visitor parties in 2011.

Information on visitor expenditures at county parks is sparse. In the 2007 report, the assumption was made that county parks would be more frequently visited by nearby residents with spending at one half the rate estimated for state parks. For this report, the assumption was tested by conducting intercept surveys of visitors to three county parks (Easter Lake, Jester Park, and Kennedy Park). Visitors to one rural and two urban parks were surveyed on a weekend and weekdays. Overall, 110 surveys were completed. Average per-visitor spending ranged from \$9.75 at Easter Park to \$36 at Kennedy Park for an overall average of \$25.37 per visitor. Many of the park users in the urban county were local residents using the park for a walk or hosting a picnic. Although the sample was fairly small and summer 2012 was atypical in being hotter than usual,

these survey results are consistent with the original assumption of using a spending rate of one half the state park average. Using the \$25.37 per person average spending from the survey applied to the estimated 24 million visitors implies annual expenditures of about \$608.9 million.

The secondary impact of visitor spending at Iowa's county parks can be estimated using the same I-O methods. The results of this analysis are presented in table 3 and estimate that \$756.7 million of spending, \$291.6 million of value added, and \$167.5 of income, and about 5,800 jobs are supported by spending associated with using county parks in Iowa.

City Parks

City parks are another significant outdoor venue in Iowa. Often these parks receive state dollars for maintenance and improvements. However, there is no centrally available source of information on size and amenities of city parks in Iowa, making this resource beyond the scope of this project to inventory and value. As a local facility, these parks can be heavily used by residents. Local parks have an economic value even though per-capita spending per visit may be lower than at state and county parks. Many local government projects are supported with the assistance of the DNR's Resource Enhancement and Protection (REAP) program (see appendix table A.5).¹³ REAP-funded projects in the city of Ames can be used to illustrate the impact of these local projects. Metered visitor counts conducted at several locations in Ames estimated user traffic along a segment of trails around Ada Hayden Lake. During a 30-day period in June and July 2007, an estimated 7,000 people used the trails. Picnickers and anglers were not included. Adjusting for seasonality, approximately 40,000 visitors use the trails around Ada Hayden Lake in Ames each year.

¹³Resource Enhancement and Protection, Iowa Department of Natural Resources, accessed September 2012, <http://www.iowadnr.gov/Environment/REAP.aspx>.

Trails

This trail section reports on a special class of multi-use trails. The Iowa Natural Heritage Foundation and the Iowa Department of Transportation (DOT) maintain the listing of multi-use trails (see figure 2). The list changes frequently as trail sections are expanded and upgraded.

The impact of a trail depends on the type of activity taking place on that trail. Multi-use trails can accommodate biking, hiking, and cross-country skiing. A limited number of trails can also accommodate horses. 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. In 2011 the entire set of multiuse trails in the system consisted of 1,150 miles of paved and packed cinder or gravel trails, up from 890 miles reported in 2006.

Trail usage is not closely monitored, but information is available from several sources to provide an estimate of overall trail use and expenditures. Trail volunteers and park boards in Polk and Black Hawk Counties did visitor counts that were used to estimate annual visits to several trails. The newly opened High Trestle Trail from Ankeny to Woodward had trail monitors tracking usage during most of the 2011 season. Usage was highest on holiday weekends and near the bridge. When related to the area population, these counts and observations provide a basis for estimating trail usage in other areas. Statistical techniques were used to relate the population of the county with the trail and the length of the trail to arrive at a population-weighted estimate of trail users per mile. Table A.6 in the appendix contains the results of this estimation method for 58 trails in Iowa. In total, these Iowa trails saw an estimated 1.8 million visits in 2011, indicating about a 28% increase in usage since 2007.

The volunteer teams in Black Hawk County also did a short survey of the spending patterns of trail visitors for 2003. Information on durable goods and equipment was incomplete, but small purchases such as food and beverages and other miscellaneous items totaled about \$8.80 per person in 2011 dollars. This finding

Table 4. Summary of spending impact, Iowa trails, 2011

Impact Type	Jobs	Labor income	Total value added	Output
Agriculture	0.1	3,767	6,188	16,249
Mining	0	200	401	1,170
Construction	0.8	31,610	37,708	78,673
Manufacturing	0.7	31,707	45,767	174,961
Trans. and public utilities	2.1	116,633	245,262	393,794
Trade	75.4	1,953,921	3,178,040	12,297,111
Service	89.3	2,682,429	4,936,604	8,964,938
Government	1.0	78,772	78,667	202,019
Total:	169.3	4,899,040	8,528,637	22,128,915

is similar to the spending patterns found in trail users of the Heritage Trail in Pennsylvania in another 2003 study. Because of the similarities in these findings, the Black Hawk County results were used to estimate the impact of spending by users of the Iowa trail system. The estimated total expenditures on trail usage in Iowa in 2011 is more than \$16 million (see appendix table A.6); this is about a 33% increase in expenditures when compared to inflation-adjusted 2007 numbers.

These findings indicate that Iowa's investments in its trail system appear a well-guided choice. Between 2006 and 2011 the trail system mileage increased by 29% and ridership growth projected at about 36%.

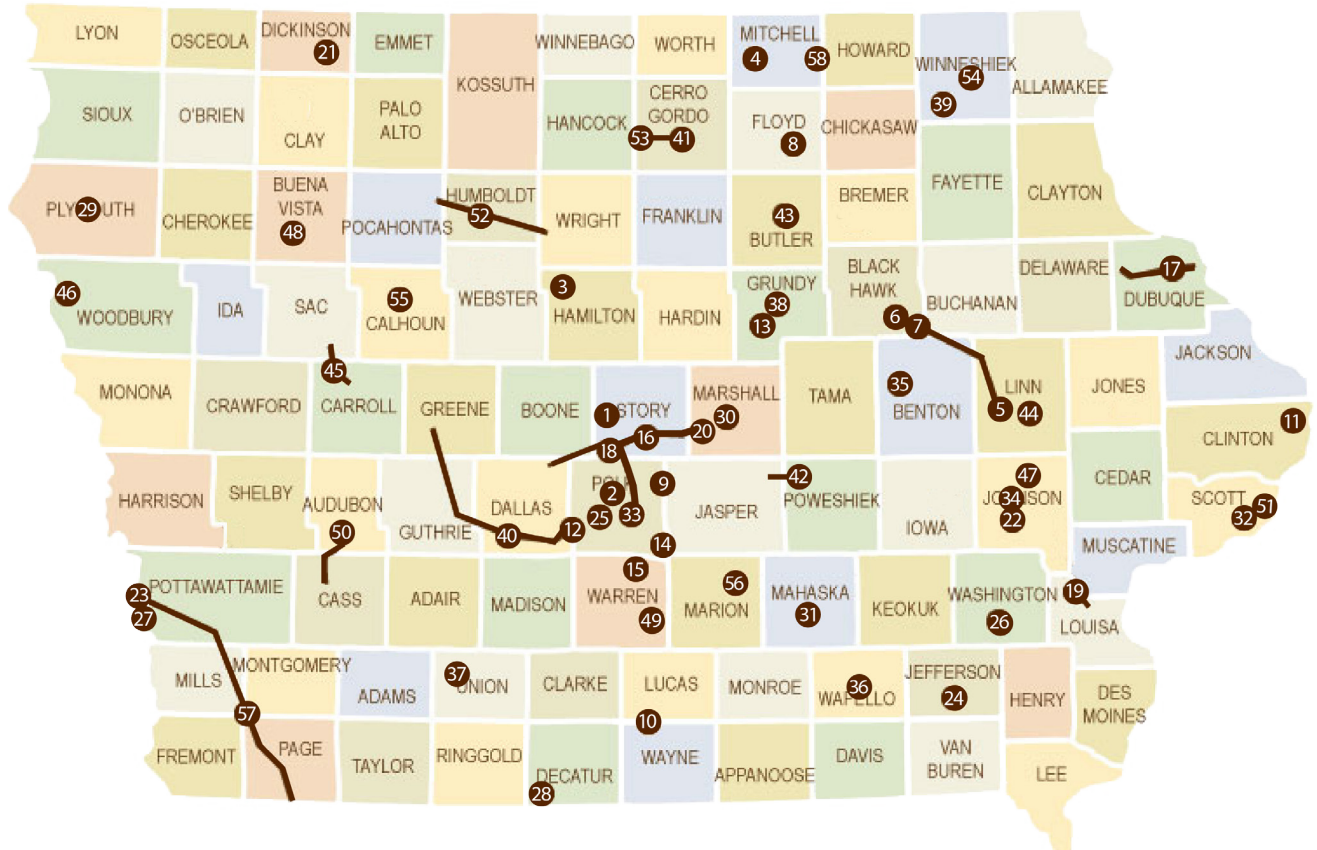
Again, I-O methods can be used to estimate the total direct and indirect impacts associated with trail users in Iowa. The results of this analysis, presented in table 4, indicate \$22 million of spending, \$8.5 million of value added, \$4.8 million of income and 169 jobs are directly and indirectly supported from spending by trail users.

Spending by bike riders on multi-use trails represents a subset of bike riders. A recent study by the University of Northern Iowa Sustainable Tourism and Environment Program (STEP) estimates that recreational bike riding generates \$364.8 million of direct and secondary economic impacts.¹⁴

¹⁴*Economic and Health Benefits of Bicycling in Iowa*. Sustainable Tourism and Environmental Program, University of Northern Iowa, accessed September 11, 2012, <http://www.uni.edu/step/projects.html>.

Figure 2. Map of Iowa multi-use trails

Sources: Iowa Department of Transportation and Iowa Natural Heritage Foundation

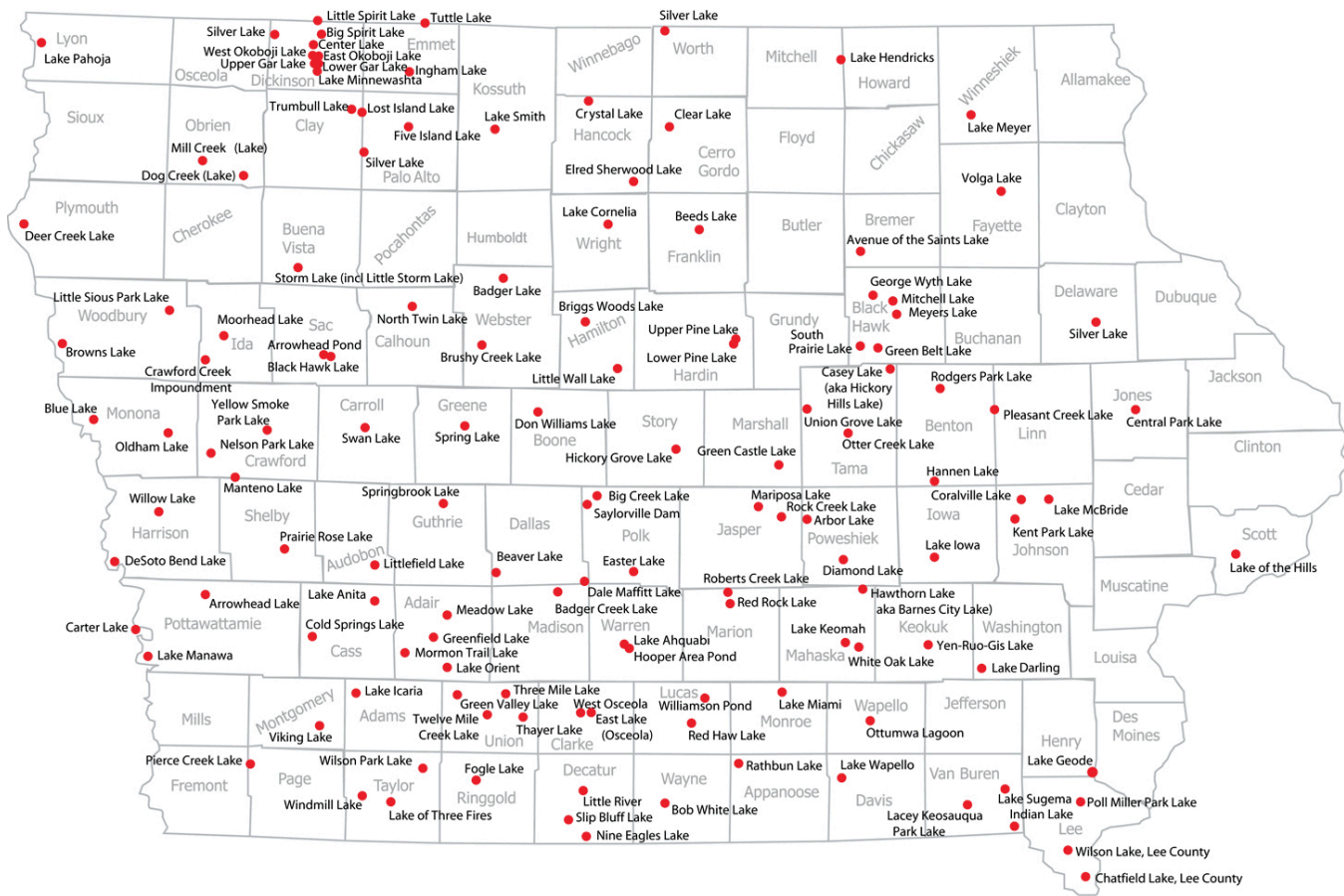


1	Ames Trail System
2	Ankeny Trail System
3	Boone River Recreation Trail
4	Cedar River Greenbelt/Harry Cook
5	Cedar River Trails
6	Cedar Valley Lakes Trails Network
7	Cedar Valley Nature Trail
8	Charley Western Recreationa Trailway
9	Chichaqua Valley Trail
10	Cinder Path
11	Clinton Discovery Trail
12	Clive Greenbelt Trail
13	Comet Trail
14	Gay Lea Wilson Trail
15	Great Western/Bill Riley Trails
16	Heart of Iowa Nature Trail
17	Heritage Trail
18	High Trestel Trail
19	Hoover Nature Trail

20	Iowa 330 Trail
21	Iowa Great Lakes Trail
22	Iowa River Corridor
23	Iowa Riverfront Trail
24	Jefferson County Trail System
25	Jordan Creek Trail
26	Kewash Nature Trail
27	Lake Manawa
28	Lamoni Recreational Trail
29	Le Mars Recreational Trail
30	Linn Creek Greenbelt Parkway
31	Mahaska Community Recreation Trail
32	Mississippi Riverfront Trail
33	Neal Smith Trail/John Pat Dorrian
34	North Ridge-Noth Liberty Trail
35	Old Creamery Trail
36	Ottumwa Trails Systems
37	Park to Park Trail
38	Pioneer Trail
39	Prairie Farmer Recreational Trail

40	Raccoon River Valley Trail
41	River City Greenbelt
42	Rock Creek Recreational Trail
43	Rolling Prarie Trail
44	Sac and Fox Trail
45	Sauk Rail Trail
46	Sioux City River Trails
47	Solon Trail
48	Storm Lake Trail
49	Summerset Trail
50	T-Bone Trail
51	Trail and Duck Creek Parkway
52	Three Rivers Trail
53	Trolley Trail
54	Trout Run Trail
55	Twin Lakes Trails
56	Volksweg Trail
57	Wabash Trace Nature Trail
58	Wapsi-Great Western Line

Figure 3. Locations of selected Iowa lakes



Lakes

Iowa lakes are a valuable natural resource, in part because there are so few. The DNR inventories a list of 132 natural and man-made lakes covering 324,000 acres of surface area in Iowa. Figure 3 illustrates where the lakes are located. A great deal of information is available on the recreational usage of Iowa's lakes because of the Iowa Lakes Project.¹⁵

The Iowa Lakes Project has been studying lakes in Iowa to better understand the overall usage patterns and to estimate the value that households in Iowa would place on improvements to water quality. In the first phase of the project a sample survey of households in Iowa was conducted for four consecutive years from 2002 to 2005. Recently, another series of intercept survey was conducted at three Iowa lakes in 2009–2010 to allow comparisons with the first phase.

In conjunction with the household surveys in the Iowa Lakes Project, a separate intercept survey was conducted at three Iowa lakes (Clear Lake, Pleasant Lake, and Lake Manawa) during the summers of 2009 and 2010 to estimate spending patterns associated with their visits. Similar intercept surveys were conducted at Storm Lake and Rock Creek Lake in 2002. When combined and adjusted to a common dollar basis, these surveys find overall weighted averages of spending per visitor party at each lake to be \$163.37 at Clear Lake, \$110.31 at Lake Manawa, \$109.27 at Pleasant Creek Lake, \$101.82 at Storm Lake, and \$67.95 at Rock Creek Lake.

The per-party spending estimates for these five lakes are then used to estimate recreation spending associated with each of Iowa's 132 lakes. The 132 Iowa lakes in this study were classified into one of three different categories according to their proximity to population centers and levels of amenities. Ten lakes were classified as similar to Clear Lake and Storm Lake, 22 lakes similar to Lake Manawa and Pleasant Creek, and 100 lakes similar

¹⁵Nonmarket Valuation: Iowa Lakes Project, Center for Agricultural and Rural Development, Iowa State University, accessed September 2012, http://www.card.iastate.edu/environment/nonmarket_valuation/iowa_lakes/.

Table 5. Summary of Visits and Economic Impacts of Outdoor Recreation Activities in Iowa, 2011

	Visits	Spending	Value Added	Income	Jobs
State Parks	3,704,306	\$785,937,571	\$376,423,134	\$216,225,883	7,472
County Parks	24,000,000	\$608,880,000	\$291,621,786	\$167,514,088	5,789
Trails	1,851,011	\$22,128,915	\$8,528,637	\$4,899,040	169
Lakes	11,977,633	\$1,210,009,269	\$394,848,660	\$302,178,423	14,766
Rivers	18,780,745	\$823,847,666	\$268,836,890	\$129,969,384	6,351
Total:	60,313,695	\$3,444,963,405	\$1,339,532,004	\$820,369,154	34,533
Duplicates from lakes located in parks	3,759,848	\$376,900,331	\$180,515,615	\$103,692,214	3,583
Net Total:	56,553,847	\$3,073,903,063,074	\$1,159,743,492	\$717,094,604	30,964

to Rock Creek Lake in terms of characteristics and expected similarities of spending patterns by visitors. The total annual spending at each lake can be estimated by multiplying the weighted average spending per party by the estimated number of visitors to each lake.

The estimated annual expenditures associated with Iowa's 132 lakes in 2009 are \$1.2 billion. This represents a 26% increase from the 2002–2005 four-year average, due chiefly to the higher level of use (see appendix table A.7).

The value of expenditures reported here for lake use overlaps somewhat with park estimates in cases where the lakes are part of a state or county park. In an effort to identify the amount of double counting in the lakes table, we identify lakes that are part of a state park with a single asterisk and those that are part of county parks with a double asterisk. When the spending at these lakes is identified, a total of \$376.9 million of the \$3.4 billion in estimated spending is potentially double counted,



Okoboji Lake, West Okoboji, Iowa

having already been captured through visit and spending estimates at state and county parks (see table 5).

Rivers and Streams

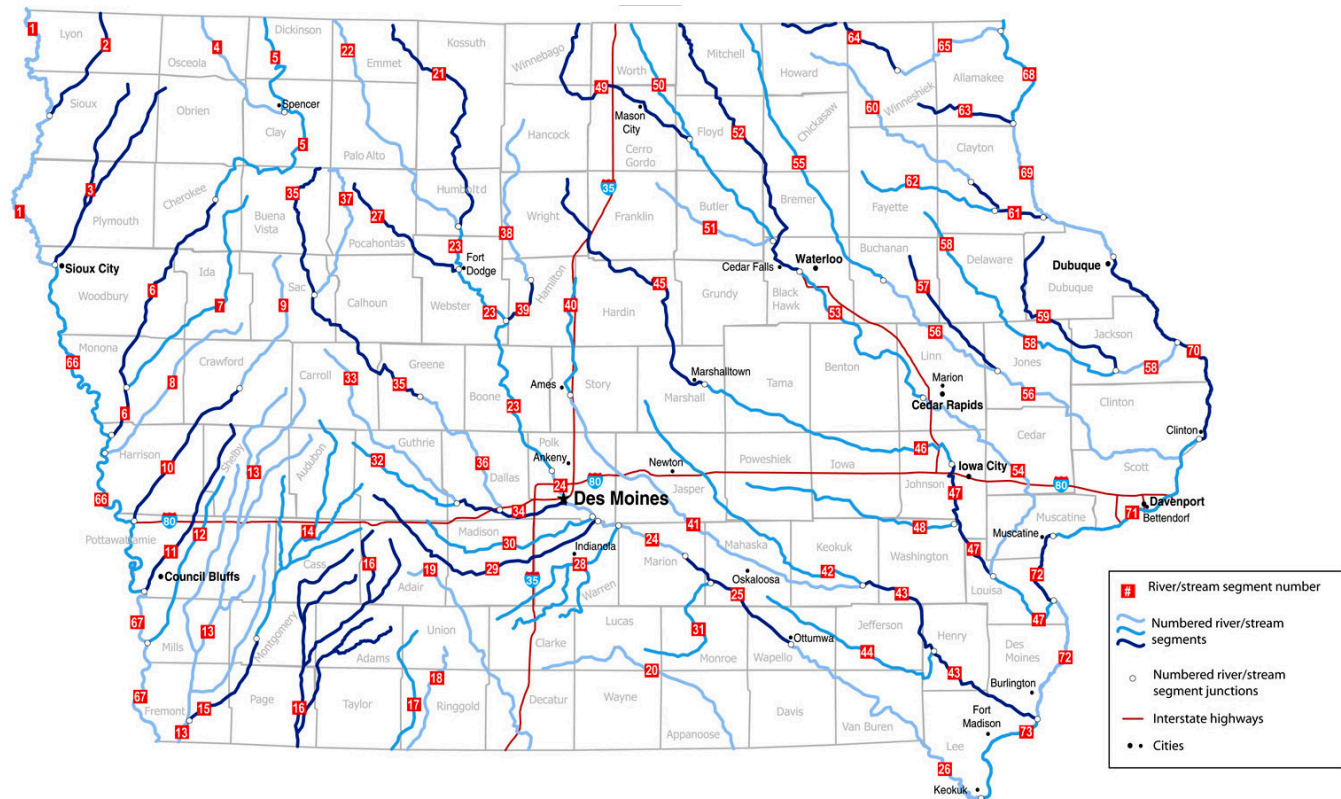
Water recreation also occurs on Iowa's rivers and streams. The recreational opportunities provided by these resources generate impact to local economies through spending on materials and supplies by users and visitors. The 2010 river visitor survey conducted by researchers at the Center for Agricultural and Rural Development (CARD) with DNR support provides information on the number of trips to popular recreation segments of major rivers in Iowa¹⁶ Figure 4 is a map detailing 73 popular river trail segments where visitors were surveyed in 2010. These river-usage estimates can be combined with river- and water-based recreation spending profiles to estimate the economic impacts associated with this form of recreation.

Although the 2010 survey did not collect data on spending patterns of river visitors, a number of sources are available to provide estimates of spending levels by recreational users of Iowa's rivers and streams. A symposium on measuring the economic impacts of long-distance recreation trails provides an overview of recent studies of spending associated with water trails in different parts of the United States.¹⁷ Pollock's study of the Northern Forest Canoe Trail from northern

¹⁶ Nonmarket Valuation: Iowa Rivers & River Corridors Valuation Project, Center for Agricultural and Rural Development, Iowa State University, accessed September 2012, http://www.card.iastate.edu/environment/nonmarket_valuation/iowa_rivers/.

¹⁷ Pollack, Noah, Lisa Chase, Clare Ginger, and Jane Kolodinsky, "Methodological Innovations for Measuring Economic Impacts of Long-Distance Recreation Trails", Proceedings of the 2007 Northeastern Recreation Research Symposium GTR-NRS-P-23. http://nrs.fs.fed.us/pubs/gtr/gtr_nrs-p-23papers/36pollack-p23.pdf

Figure 4. Locations of selected Iowa river trail segments



Maine to northern New York estimated that each visitor spent \$46 per day on their recreation.¹⁸ A 1992 study of the Upper Mississippi River water system estimated the average general spending per visitor day at \$15.84, or \$25.99 in 2009 dollars.¹⁹ In addition, visitors engaged in fishing and boating recreation spent an additional \$12.54 per person, for a combined total of \$28.38, or \$46.56 in 2009 dollars.

A 1989 National Park Service study of river trails in the northeast United States estimated that canoeists spent \$15–\$20—or \$24.95–\$34.60 in 2009 dollars—per visitor on river recreation.²⁰ In a 2002 case study closer to Iowa, water trails on the Kickapoo River in Wisconsin and the Superior Trail in northern

Minnesota estimated that visitors spent \$34.50–\$87.94 per visitor per day.²¹

A study of spending by visitors to five Iowa lakes—Storm Lake and Rock Creek Lake in 2002, and Clear Lake, Lake Manawa, and Pleasant Creek Lake in 2009—were used to generate estimates of daily per party spending, which ranged from \$67.95 at Rock Creek Lake to \$163.37 at Clear Lake.²² The amenities at these five lakes varied considerably, with highest spending occurring at the lake with of the most amenities. The lowest level of spending occurred at Rock Creek Lake, which had only tent camping and no motorboats. The activities and amenities of Rock Creek Lake seem very similar to river recreation. In addition, the per-person spending of \$26.23 is comparable to values found in other river recreation studies when

¹⁸Pollock, N. 2007. The Northern Forest Canoe Trail: Economic impacts and implications for sustainable community development. Unpublished master's thesis, University of Vermont, Burlington, Vermont.

¹⁹B.D. Carlson, Propst, D.B., Stynes, D.J., and Jackson, R. S. 1995. "Economic impact of recreation on the Upper Mississippi River System," Technical Report EL-95-16. Vicksburg, MS: US Army Engineer Waterways Experiment Station. <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA294201>

²⁰National Park Service, Water Trails/Blueways: National Park Service Partnerships and Resources, 2011. accessed September 10, 2012, <http://www.nps.gov/nrcr/portals/rivers/projgw/watertrails.htm>

²¹Johnson, Lindsay, Case Studies of Water Trail Impacts on Rural Communities, report for MS in Community and Regional Planning, University of Oregon 2002. <http://www.nps.gov/nrcr/programs/rtca/helpfultools/wtimpacts.pdf>

²²Herriges, Joseph A., Catherine L. Kling, Daniel M. Otto, Subhra Bhattacharjee, Keith S. Evans, and Yongjie Ji. 2011. *Iowa Lakes Survey 2009*. Ames, Iowa: Iowa State University.

adjusted to \$34.75 in 2009 dollars. Therefore, the estimate of spending by visitors to interior Iowa rivers is based on the \$34.75 per-person spending observed at Rock Creek Lake in Iowa. An expenditure of \$46.56 per person for Mississippi River visitors is used along Mississippi and Missouri River segments (#66–73 in figure 4) adjusted for the share of parties engaged in fishing activities.

The total annual spending for each water trail segment can be estimated by multiplying the weighted average spending per visitor by the estimated number of visitors to each lake (see appendix table A.8). The number of visits to each river section is reported by individual persons and by household in columns three and four. The “direct spending” column is simply the product of the per-visitor spending and number of visits (column five). Total direct recreational spending for this set of river segments is \$520.4 million.

The Input-Output model estimates indicate a substantial overall economic impact from recreation on these 73 river segments in the 2010. Almost 5,000 jobs are supported with \$143 million of personal income earned from spending associated with river recreation.

Soil Erosion Control Improvement Investments

Improving water quality in Iowa’s rivers and lakes is a high-priority state goal. A major strategy for advancing this goal is to reduce non-point pollution with soil erosion control measures. These investments lead to improved water quality and fishing habitat, but also generate different types of economic development benefits. Improving the water can lead to more participation in recreation activities, along with higher quality and increased value of outdoor recreation activities. The information on the growth of lake usage and value of benefits following lake restoration projects illustrates these economic impacts (see appendix table A.9).

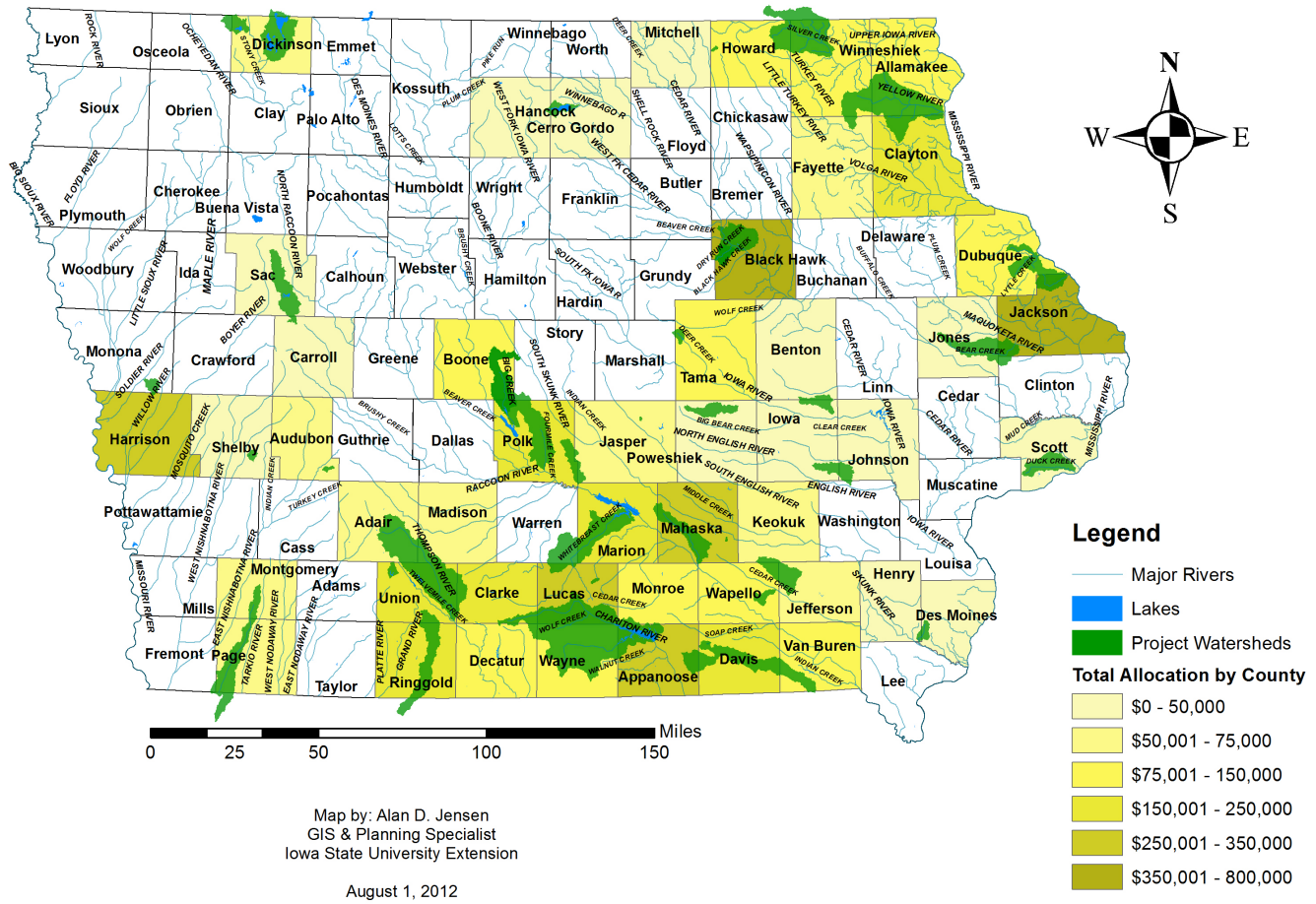
Table 6. Summary of Soil Conservation Spending Impacts, 2011

ImpactType	Jobs	Labor Income	Total Value Added	Output
Agriculture	0.1	3,309	5,093	13,680
Mining	50.5	2,894,066	4,265,629	7,635,349
Construction	0.3	14,169	17,067	35,740
Manufacturing	0.5	27,392	45,347	178,723
Trans. and public utilities	2.6	161,947	343,906	620,983
Trade	6.4	212,603	351,136	430,835
Service	22.7	877,708	1,546,070	2,698,260
Government	0.5	37,526	40,368	135,215
Total:	83.5	4,228,720	6,614,616	11,748,784



Beaver Creek, Prairie Bridges Park, Ackley, Iowa

Figure 5. Soil erosion project funding allocations by county



Soil conservation efforts also generate economic benefits through the spending on materials and restoration efforts during the implementation phase. The direct expenditures during the restoration process also generate secondary economic impacts. The data from the Iowa Land Improvement Association of expenditures on soil conservation projects since 2011 are summarized in figure 5 and itemized in table A.9 in the appendix. Expenditures for FY2011 total \$6.04 million. In addition to SCS expenditures, landowners are required to put up at least a 25% match. Including match dollars as part of the total, there was \$7.55 million of spending on soil erosion control measures in Iowa during FY 2011. The I-O model is used to estimate secondary impacts with results presented in table 6. The statewide direct and indirect impact of this spending totals \$11.7 million, which supports 83 jobs and \$4.3 million of income.

Health Benefits of Parks and other Green Spaces

Access to outdoor recreation facilities can improve health and well-being of residents and help counter alarming obesity trends. Obesity rates have escalated in Iowa over time, in concert with nationwide trends. Data on Iowa adult physical health patterns can be accessed from the Behavioral Risk Factor Surveillance System (BRFSS). According to the 2010 Iowa BRFSS report, 37.1% of adult Iowans are overweight and 29.1% are obese; the combined percentage of individuals who are overweight or obese is 66.2%. Another problem for Iowans and their health is a lack of physical activity. According to the 2010 Iowa BRFSS report, 75.2% of respondents reported they had engaged in some sort of physical activity for exercise during the past month outside of their regular job. This means that 24.8% of respondents did not engage in any leisure activity. The

Iowa Department of Public Health (IDPH) is actively working to increase the physical activity levels of Iowans. They are cognizant of the fact that being overweight, obese, and physically inactive are linked to serious health problems, including heart disease, cancer, and stroke, which are the first, second, and third leading causes of death nationwide.²³

A solid relationship has been shown to exist between excess weight, poor health, and high medical costs. Thorpe, et al. (2004) report that 27% of the rise in inflation-adjusted medical expenditures between 1987 and 2001 was due to the rising prevalence and costs of obesity.²⁴ Finkelstein, et al. (2009) estimate that costs of obesity may be as high as \$147 billion per year (in 2008 dollars), or roughly 9% of annual medical expenditures.²⁵ Obesity-related costs to Medicare are likely to grow significantly in the future due to the large number of people in this population and its high rate of obesity. A research team led by Finkelstein predicts a nationwide obesity prevalence of 42% by the year 2030. This increase in obesity prevalence is expected to hinder health-care cost containment. If obesity were to remain at 2010 levels, the combined savings in medical expenditures over two decades (2010–2030) would be \$549.5 billion in the United States.²⁶

East Carolina University noted many positive health outcomes relating to engaging in regular physical activity, such as reducing the risk of developing diabetes, high blood pressure, and some cancers. They have published an online calculator to quantify the cost of physical inactivity to a business, city, or state. This calculator provides an estimate of the financial cost of physically inactive people to a particular community, city, state, or business. The calculator, along with background and supportive data, can be found at <http://www.ecu.edu/picostcalc/>. This calculator applied to average demographic values observed in Iowa suggests that physical inactivity is costing the state of Iowa about



American Discovery Trail near Slater, Iowa

\$5.3 billion through lost worker productivity, increased medical costs, and increased workers compensation. These totals break out to \$4.257 billion of lost worker productivity (\$1,822 per worker), \$866.29 million in increased medical costs (\$370 per worker), and \$10.6 million in increased workers compensation costs (\$4.54 per worker).

Clearly, the costs of being overweight and obese, together with the costs of physical inactivity, present a huge burden to Iowa's economy. Direct costs such as medical care costs, workers compensation costs, and lost productivity costs are only one facet of this complex problem, however. One reason people have become more sedentary is that they spend a great deal of time in front of a television or computer screen. Again, the 2010 BRFSS revealed that on the weekend, 43.8% of adult Iowans spent five hours or more in front of a TV or computer screen. During the week, most people (52.4%) spend one to three hours in this activity. One way to decrease time spent in front of a TV or computer screen and increase physical activity levels is to increase access to parks and other green spaces. Active Living Research, a national program of the Robert Wood Johnson Foundation, reports that people who live near trails are 50% more likely to meet physical activity guidelines than people who do not live near trails.²⁷ IDPH supports interventions to increase physical activity, including creating policies and cultures that support physical activities and developing recreational trails. They also

²³U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*. Rockville, MD: Public Health Service, Office of the Surgeon General, 2001.

²⁴Thorpe, Kenneth E., et al. "The Impact Of Obesity On Rising Medical Spending." *Health Affairs*. October 20, 2004.

²⁵Finkelstein, E.A., et al. "Annual Medical Spending Attributable to Obesity: Payer-and Service-Specific Estimates." *Health Affairs* 28 (2009): w822–w831.

²⁶Finkelstein, E.A., et al. "Obesity and Severe Obesity Forecasts Through 2030." *American Journal of Preventive Medicine* 42, no 6 (2012): 563–570.

²⁷Carmen Cutter. "The Role of Communities in Promoting Physical Activity," Move! (blog), Active Living Research, June 27, 2012, <http://www.activelivingresearch.org/blog/2012/06/node/12666>.

support several strategies to combat obesity, including improving access to safe and healthy places to live, work, learn, and play.²⁸

Access to parks, recreation areas, and trails is certainly an important component of the movement to increase Iowans' physical activity levels and reduce the incidence of overweight and obesity. The Iowa DNR and local governments can play an important part in addressing these public health concerns through providing access to well designed and maintained parks for Iowans.

Numerous studies have shown that people with access to parks and open spaces are more likely to exercise, which in turn can lead to healthier people and lower health care costs.^{29, 30, 31} These studies show that the creation of enhanced access to places for physical activity combined with informational outreach can result in more frequent exercising.³²

Well-designed parks have been shown to provide health-related benefits. Researchers in Australia performed a study that examined whether improvements to a park increased its use and park-based physical activity of its users. They observed physical activity levels at two similar parks, one before and after improvements were performed at the parks. Researchers assessed physical activity levels of park use at selected times over a one-year period. Research results indicated that improving an existing park resulted in an overall increase in park use, as well as an increase in park users walking and being vigorously active. In addition, the increases continued over the time of the study. They indicated that their results were consistent with US



High Trestle Trail near Madrid, Iowa

studies that observed increases in physical activity with improvements to greenways/trails.³³

The Trust for Public Land (TPL) launched a Parks for People initiative with a goal of putting a park within easy reach of every family. They noted that the opportunity for exercise in close-to-home parks, greenways, and other open space must be part of any comprehensive solution to the current health crisis. Supporting physical exercise is only one of many ways the TPL believes that parks and open spaces help build the health of communities and their residents.³⁴ The TPL created a health benefits calculator by identifying the common types of medical problems that are inversely related to physical activity, such as heart disease and diabetes. Using this calculator they determined the health care cost benefits of Denver's parks and found a total annual value of health benefits to be \$64,955,500. Other factors in benefits of parks in the TPL model include property value, tourism value, direct use value, community cohesion value, storm water retention value, and air pollution value.

²⁸Shepherd, Donald H. 2010. *Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System*. Iowa Department of Public Health: Des Moines, IA.

²⁹Willis, Ken, and Bob Crabtree, "Measuring Health Benefits of Green Space in Economic Terms," in *Forests, Trees, and Human Health*, ed. Kjell Nilsson, et al. 375–402. New York: Springer.

³⁰Lee, A.C.K., and R. Maheswaran. "The Health Benefits of Urban Green Spaces: A Review of the Evidence." *Journal of Public Health* 33, no. 2 (June 2011): 212–222.

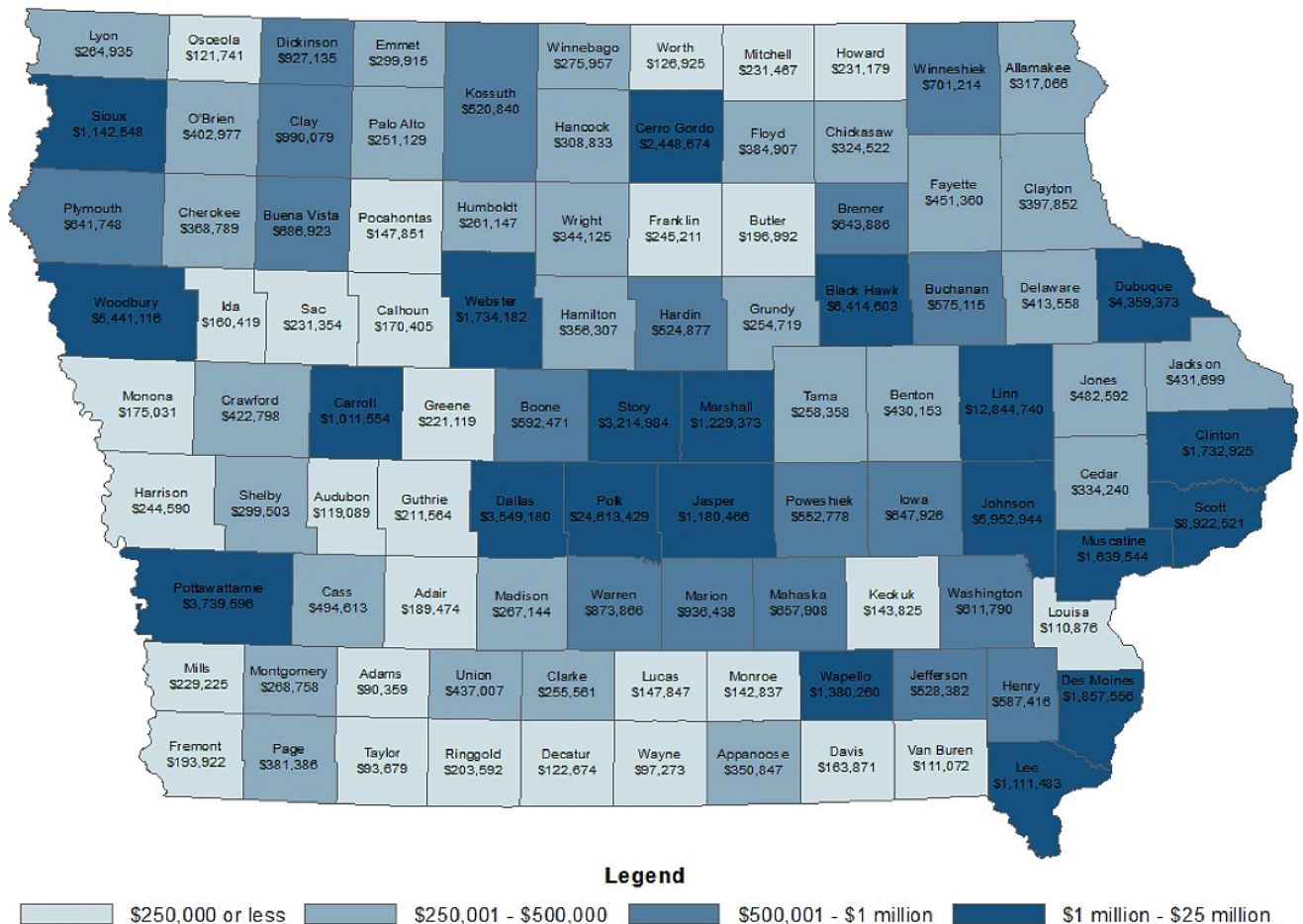
³¹Thompson, Catherine Ward, and Peter A. Aspinall. "Natural Environments and Their Impact on Activity, Health, and Quality of Life." *Applied Psychology: Health and Well-being* 3, no. 3 (2001): 230–260

³²Kaplan, Rachel, and Stephen Kaplan. "Well-being, Reasonableness, and the Natural Environment." *Applied Psychology: Health and Well-being* 3, no. 3 (2011): 304–321.

³³Veitch, Jenny, et al. "Park Improvements and Park Activity: A Natural Experiment." *American Journal of Preventative Medicine*, 42, no. 6 (2012): 616–619.

³⁴Parks for People, Trust for Public Land, <http://www.tpl.org/what-we-do/initiatives/parks-for-people/>.

Figure 6. Potential revenues from 3/8-cent sales tax by county



Potential Sales Tax Revenues to Support Natural Resources and Outdoor Recreation Trust Fund

In fall 2010, voters in Iowa passed a measure to allow a referendum on raising the sales tax in Iowa by 3/8-cent in order to provide a dedicated funding source for environmental improvements. Although many of the investments in preserving and enhancing the environment such as in erosion control and water quality improvements are likely to occur in rural places,

the benefits of water quality improvement and fish and wildlife enhancements affect all Iowa. As a broad-based funding source, the sales tax generates revenue in all counties of the state. Based on 2011 Iowa retail sales, the new tax would generate \$123.4 million of revenues. Figure 6 depicts the estimated revenues by county that would be generated for the fund based on 2011 retail sales patterns, assuming no change in the cross-county distribution (Appendix table A.3). The major trade centers in Iowa's larger metropolitan counties would generate the greatest revenues.

Conclusion

Accessing outdoor recreation opportunities and improving the quality of the natural resource environment that support recreation are important to Iowans. Our current report documents continued increase in the utilization of Iowa's outdoor recreational resources since a benchmark study in 2007. Along with the increased utilization is an increased economic impact as Iowans spend on equipment, travel, and supplies to enjoy Iowa's parks, lakes, rivers, and trails. The growth in outdoor recreation participation occurs alongside production agriculture in many parts of Iowa. The co-existence of these two major resource-based industries presents a challenge for successfully encouraging the growth of both industries in Iowa. In examining the magnitude and growth of outdoor recreation activities in Iowa, our report underscores several major points;

- Outdoor recreation opportunities are increasingly important to Iowans. Visitation rates at Iowa outdoor recreation facilities and parks have increased and applications of REAP funds to assist local recreation projects continue to exceed funds available. The recently completed 26 mile high trestle trail from Ankeny to Woodward is attracting over 90,000 users annually and is stimulating new business formation.
- Outdoor recreation spending is a big business in Iowa. Spending estimates were made for recreation in state parks, county parks, lakes, rivers and streams and multi-use trails. Spending on traveling to and participating in recreation resulting more than \$3.1 billion of spending which in turn helps support almost 31,000 jobs and \$1.16 billion of income in the state.
- Considerable attention is being given to water quality conditions in the state and considerable effort has gone into improving water quality. Iowans demonstrated their support for protecting Iowa waterways with a 63 percent favorable vote approving the Water and Land Legacy amendment. However long-term monitoring at Iowa Water Quality Index sites has not shown significant improvement. In FY 2011, the Iowa Land Improvement Contractors Association spent \$8 million on projects, but more resources are needed for wider gains. A 3/8 cent sales tax would generate an estimated \$123.4 million of revenues dedicated to supporting a range of natural resource enhancing projects including additional water quality improvement measures.
- Studies have shown that recreational amenities and quality of life opportunities are important to attracting businesses and entrepreneurs. Expanding and improving outdoor recreation opportunities is a no-lose proposition for Iowa as increased access to recreation opportunities enhances quality of life and health of Iowans as well as furthers Iowa's economic development goals.
- Increased access to outdoor parks and recreation amenities can contribute to lower health care costs for Iowans by increasing participation in outdoor physical activities. The cost of physical inactivity can be substantial. An East Carolina University study suggests that physical inactivity is costing the state of Iowa about \$4.26 billion annually in lost worker productivity, \$866.3 million in higher health care and \$10.6 million of higher workers compensation costs. Research has shown that expanded and improved parks have resulted in increased participation and park-based physical activity which can reduce these health costs.

Appendix Tables



Table A.1. State park improvement costs 2007–2012

Location	Project	Cost	Date
Viking Lake	jetty and habitat	\$132,340	1/8/07
Ventura Access Harbor Inn	Development	\$73,400	1/17/07
Ventura Access	shelter/restroom	\$73,399	1/18/07
AA Call	Well house	\$16,477	1/30/07
Big Creek	Trail bldg	\$281,355	2/21/07
Lake Icaria	paving	\$384,741	2/21/07
Prairie Rose	paving cabin road	\$154,865	2/21/07
Wildcat Den	Bulk Fuel tanks	\$9,850	2/21/07
Lake Manawa	River Boat Docks	\$18,834	2/28/07
Waubonsie/WaShawtee	Asbestos removal	\$3,850	2/28/07
Waubonsie/WaShawtee	move buildings	\$17,900	2/28/07
Casino Bay	utilities	\$153,630	3/1/07
Lake of Three Fires	Pressure reducing valves	\$6,075	3/1/07
Dolliver	wing dam	\$92,850	3/6/07
Prairie Rose	Campground electrical and water upgrade	\$394,059	3/6/07
Backbone	Hatchery wall Phase I	\$64,034	3/21/07
Casino Bay	Phase I roads	\$304,125	3/28/07
Casino Bay	Phase I utilities	\$317,990	3/28/07
Bob White	roadways	\$673,719	4/18/07
Green Valley	roads	\$229,827	4/18/07
Stone Park	reroof attendant's roof	\$3,519	4/30/07
Bellevue - Nelsen Unit	Septic Sysytem upgrade	\$3,990	5/1/07
Casino Bay	Tree removal	\$7,000	5/5/07
Casino Bay	docks	\$351,045	5/5/07
Clear Lake	Residence renovation	\$32,083	5/8/07
Viking Lake	concession replacement	\$479,212	5/8/07
Fort Atkinson	Replace steps and rail	\$44,263	5/14/07
Casino Bay	boat repair bldg	\$479,100	5/30/07
Lake Macbride	shower bldg and water bldgs	\$235,635	5/30/07
Stone Park	shower	\$235,750	5/30/07
Lewis and Clark	finish exterior on visitor center	\$21,258	6/5/07
Lake Darling	lodge	\$614,885	6/26/07
Lake Macbride	camp electric	\$309,067	6/26/07
Lake of Three Fires	wetland above lake	\$94,876	6/26/07
Swan Lake	paving	\$488,469	6/26/07
Maquoketa Caves	paving	\$97,036	6/28/07
Geode	paving	\$1,643,166	7/18/07
Pilot Knob	paving	\$117,422	7/18/07
Lewis and Clark	camp electric 78 SITES	\$287,522	8/27/07
Lake Darling	9 sediment control structures	\$73,743	9/20/07
Springbrook	water distribution	\$149,500	9/20/07
Village Creek	channel deepening	\$106,425	9/20/07

Table A.1. State park improvement costs 2007–2012

Location	Project	Cost	Date
Lake Macbride	P&I	\$329,059	9/25/07
Backbone	Hatchery wall Phase II	\$142,240	10/18/07
Brushy Creek	rip rap shoreline	\$69,452	10/18/07
Dolliver	camp electric	\$103,000	10/18/07
Elk Rock	boat ramp and parking	\$584,675	10/18/07
Geode	water and waste water	\$313,224	10/18/07
George Kunch	entrance portal	\$9,250	10/18/07
waubonsie	shower bldg	\$234,903	10/18/07
Brushy	boat ramp potty	\$17,300	11/8/07
Walnut Woods	camp electric	\$149,899	11/21/07
Green Valley	tile for trail	\$3,910	12/16/07
Maquoketa Caves	lagoon pump	\$11,833	1/3/08
Brushy Creek	seed harvest road	\$81,398	1/17/08
Brushy Creek	cabin utilites	\$154,648	1/17/08
Honey Creek Resort	road and trail paving	\$4,296,211	2/7/08
Lake darling	Youth camp structures - 2 earthen basins	\$34,964	2/21/08
Palisades Kepler	septic system	\$16,832	2/21/08
Backbone	roadwork	\$253,439	3/20/08
Geode	shelter/kitchenette	\$273,015	3/20/08
Geode	combo shelter	\$273,015	3/20/08
Lake Darling	beach complex	\$60,551	3/20/08
Storm Lake	paving phase 2	\$549,770	3/20/08
Village Creek	boat ramp & parking	\$30,385	3/20/08
Waubonsie/WaShawtee	roadwork	\$1,577,559	5/1/08
Rock Creek	shelter install	\$64,565	5/22/08
WaShawtee	cabins	704,00	5/22/08
Yellow River	low water grade crossings	\$44,500	7/17/08
Backbone	flood repair	\$404,116	8/7/08
Lake Wapello	lake control structures & pond	\$141,160	8/21/08
George Wyth	camp flood repair	\$28,860	9/9/08
Ledges	Guard rail and rip rap	\$77,711	9/18/08
Nine Eagles	cabin utility	\$46,268	9/18/08
Green Valley	Fish habitat & shoreline riprap	\$389,550	10/16/08
Rock Creek	residence basement walls	\$17,800	10/20/08
Dolliver	FEMA rerock	\$13,688	10/30/08
Fort Defiance	railing repair	\$5,522	10/30/08
Maquoketa Caves	cave lighting	\$17,679	12/1/08
Green Valley	Spillway repair	\$510,435	12/4/08
Lake Wapello	lake restoration	\$379,415	12/4/08
Geroge Wyth	FEMA repair beach facility	\$6,560	12/5/08
Pine Lake	trail repair emergency	\$5,980	12/10/08
Dolliver	replace 3 bridges & 1 dam	\$162,305	1/15/09

Table A.1. State park improvement costs 2007–2012

Location	Project	Cost	Date
Green Valley	Spillway repair	\$510,435	1/26/09
Ledges	Flood damage	\$28,838	2/2/09
Lake Darling	6 sediment structures	\$81,411	2/26/09
Lake Darling	9 culvert risers	\$50,699	2/26/09
Lake Manawa	riprap	\$7,000	3/2/09
Beeds Lake	sewer line replacement	\$19,900	3/4/09
Volga	test well drilling	\$20,552	3/4/09
Pine Lake	toilet demolition	\$8,480	3/11/09
Palisades Kepler	FEMA	\$52,129	3/26/09
Green Valley	trail construction	\$171,390	4/16/09
Honey Creek	resurface all roads & trail	\$3,708,550	4/16/09
Walnut Woods	FEMA campground repair	\$107,950	4/16/09
Volga	campground development	\$990,081	4/23/09
Lake Wapello	lake drain replacement	\$23,899	5/1/09
Backbone	lodge door replacement	\$9,026	5/7/09
George Wyth	FEMA repair dock and shoreline	\$15,820	5/7/09
Pilot Knob	tower roof replacement	\$5,010	5/7/09
Blackhawk	boat ramp repair	\$52,821	5/14/09
Green Valley	campground electric upgrade	\$316,530	5/21/09
Stephens State Forest	Pond road	\$36,609	5/21/09
Bobwhite	fence	\$13,750	5/27/09
Brushy Creek	east boat ramp terrace	\$6,597	5/27/09
Springbrook	FEMA	\$69,591	5/27/09
Backbone	barn septic	\$5,300	6/4/09
Storm Lake	marina security gates	\$15,897	6/4/09
Summerset	parking addition	\$5,681	6/4/09
Bellevue both units	water system upgrade	\$167,236	6/18/09
Templer	concrete step repair	\$4,940	6/19/09
Geode	sewer fix	\$8,440	7/16/09
Harpers Ferry	restroom reroof	\$4,195	7/16/09
Lacey Keoauqua	bridge repair	\$6,250	7/16/09
MOS	sewer connection to city	\$101,361	7/16/09
Backbone	residence roof	\$7,122	7/21/09
George Wyth	FEMA? Wyth restroom repairs	\$32,793	7/23/09
Green Valley	shower floor	\$2,875	8/3/09
Brushy Creek	flood damage	\$39,001	8/14/09
Brushy Creek	manhole repair	\$12,180	8/14/09
Ledges	additional bridge repair	\$16,062	8/14/09
Ledges	additional repair	\$4,010	8/14/09
Big Creek	riprap & jetties	\$96,240	8/19/09
Ledges	stone bridge repair	\$46,000	8/24/09
Margo Frankel	FEMA trail work	\$22,035	8/24/09

Table A.1. State park improvement costs 2007–2012

Location	Project	Cost	Date
WaShawtee	cabin water	\$40,940	8/28/09
Wildcat Den	mill siding	\$44,645	9/30/09
Fairport	FEMA septic field (90-10)	\$38,747	10/14/09
Lake Wapello	grouted rip rap chute	\$53,219	12/31/09
Springbrook	Serburne emergency lighting	\$7,400	1/7/10
Lake of Three Fires	Sewer line replace 100'	\$11,250	1/29/10
Lake of Three Fires	campground equine utilities	\$39,475	1/29/10
Lewis and Clark	visitor center	\$945,152	2/1/10
Green Valley	sidewalk	\$12,215	2/15/10
Lynn Lorenzen	boat ramp parking and restroom	\$202,925	2/18/10
Walnut Woods	jetty & boat ramp repair	\$292,311	2/18/10
MOS	flooring for center	\$20,250	2/23/10
Fairport	rip rap shoreline FEMA	\$9,315	3/1/10
Lake Wapello	removal of 3 pit vaults	\$4,495	3/12/10
MOS	EB Lyons well	\$19,354	3/18/10
MOS	parking lot expansion	\$18,870	3/28/10
Springbrook	Sherburne water treatment & fire ext	\$3,000	4/26/10
Big Creek	sewer hauling	\$15,125	5/10/10
Blackhawk	shower bldg shower roof	\$9,634	5/10/10
MOS	change order - change elevation of sewer service	\$19,210	5/10/10
Gull Point	Hwy 9 restroom utilities	\$32,314	5/11/10
MOS	well pump & water treatment	\$35,465	5/27/10
MOS	sewer connection	\$102,595	6/1/10
MOS	EB Lyons fire lane	\$66,187	6/4/10
Geode	playground sidewalk	\$24,587	6/16/10
Lewis & Clark	parking lot	\$349,000	6/17/10
Wildcat Den	CXT foundations 10,877	\$10,877	6/24/10
Dolliver	Flood damage repair	\$10,520	7/1/10
Vining Lake Aldersgate	waterline replacement	\$5,345	7/1/10
Dolliver	flood damage (executive council)	\$10,520	7/7/10
Lake Wapello	lodge reroof	\$7,175	7/7/10
Lake Wapello	Lodge roof repair	\$7,175	7/10/10
Brushy Creek	shower bldg utilities	\$30,932	7/15/10
Lake Macbride	wastewater for new potty	\$52,414	7/15/10
Springbrook	replace septic tanks	\$19,900	7/22/10
Honey Creek resort	day-use restroom utilities	\$53,858	7/29/10
Stone	pit toilet improvements	\$5,490	7/29/10
Union Grove	cabin	\$104,100	7/29/10
Honey Creek resort	activity center foundation	\$59,005	8/5/10
Lake Darling	culvert repair	\$28,026	8/5/10
Lewis and Clark	pit vault demo	\$4,690	8/5/10
Big Creek	flood damage	\$95,826	8/6/10

Table A.1. State park improvement costs 2007–2012

Location	Project	Cost	Date
Backbone	pit vault removal	\$2,000	8/19/10
Clear Lake	pit vault removal	\$4,500	8/19/10
George Wyth	cxt pad & plumbing	\$13,496	8/19/10
Lake Darling	8 sediment ponds	\$98,044	8/20/10
Lake Darling	5 sediment ponds	\$55,897	8/20/10
Brushy Creek	Sanitary utilities for Shower CXT	\$51,867	9/2/10
Brushy Creek	electrical primary cost for shower	\$7,223	9/3/10
Elk Rock	ramp median & wedge dock	\$29,387	9/16/10
Lake Anita	trail construction	\$280,264	9/16/10
Clear Lake Ritz	sidewalk undercut	\$4,481	10/14/10
Lynn Lorenzen	concrete fishing access	\$9,576	10/14/10
Lake Darling	Spillway evaluation	\$1,700,800	10/21/10
Wilson Island	Shower pad & utilities	\$98,737	10/21/10
AA Call	rock pad/utilities	\$2,600	11/4/10
Backbone	cabin sewer sleeve	\$198,935	11/4/10
Brushy Creek	sediment control structures	\$64,618	11/18/10
Lake Wapello	culver removal and replacement	\$65,219	11/18/10
Pine Lake	FEMA repairs	\$36,141	11/18/10
Springbrook	septic tank replacement	\$20,395	11/23/10
Walnut Woods	pit removal	\$8,800	12/10/10
Pine Lake	roof replacement 13 - hail	\$116,000	12/16/10
Rock Creek	FEMA repairs	\$9,759	12/16/10
Clear Lake	shoreline stabilization	\$60,591	12/23/10
Honey Creek Resort	beach	\$24,967	12/30/10
Gull Point	dump station relocation	\$53,269	1/20/11
Ledges	FEMA road repair	\$54,000	1/20/11
Volga	angling access repair	\$6,400	2/3/11
Rock Creek	water control structures	\$89,119	2/17/11
Volga	road - beach & camp	\$1,002,300	2/24/11
Wapsinicon	picnic shelter	\$22,823	3/1/11
Honey Creek resort	solar house	\$195,000	3/9/11
Beeds Lake	sewer televising	\$12,100	3/10/11
Black Hawk Lake	well bldg removal	\$3,680	3/10/11
Clear Lake	cxt pad & plumbing	\$24,913	3/10/11
Clear Lake	sewer televising	\$4,977	3/10/11
Clear Lake	restroom demo	\$4,400	3/10/11
Red Haw	sewer lift station	\$192,914	3/17/11
Palisades Kepler	lodge roof	\$52,435	3/22/11
Palisades Kepler	lodge roof	\$47,650	3/24/11
Blackhawk	wellabandonment	\$3,680	3/26/11
Clear Lake	shower bldg pad and utility stubs	\$45,395	3/26/11
Wapsipinicon	shelter FEMA	\$22,823	3/26/11

Table A.1. State park improvement costs 2007–2012

Location	Project	Cost	Date
Clear Lake	televise sewer	\$4,977	3/27/11
Lake Ahquabi	CCC entrance portal restoration	\$66,975	4/21/11
Big Creek	sewer lines	\$132,160	5/19/11
Nine Eagles	cabin	\$149,280	5/19/11
MiniWakan	lodge restoration	\$649,675	6/2/11
Backbone	CCC museum foundation	\$5,760	6/16/11
Lacey-Keosauqua	CCC beach house conversion	\$145,530	6/16/11
Palisades Kepler	CCC gazebo & restroom	\$69,530	6/16/11
WaShawtee	Nature Center remodel	\$392,026	6/16/11
George Wyth	beach flush foundation	\$15,996	6/29/11
Lake Anita	trail surfacing	\$317,002	7/21/11
Walnut Woods	lodge interior renovation	\$72,308	7/21/11
McIntosh Woods	portal replacement	\$70,079	8/1/11
Rock Creek	shower electrical upgrade	\$7,600	8/14/11
Lake Macbride	concession bldg replacement	\$459,000	9/1/11
Lake Darling	shower demo & utility stubs	\$46,487	9/14/11
Springbrook	Sherborne Rd	\$252,800	9/15/11
Volga	equine camp electricity & pads	\$91,424	9/15/11
Backbone	FEMA road repair	\$38,355	9/19/11
Lacey-Keosauqua	gatehouse restoration	\$62,600	10/1/11
AA Call	historic cabin & portal restoration	\$43,935	11/17/11
Big Creek	trail repair emergency	\$19,696	11/17/11
Wildcat Den	mill parking & utilities	\$173,309	11/28/11
Lake Ahquabi	shower demo & utility	\$50,609	12/16/11
Ledges	Henning shelter renovation	\$46,117	12/16/11
East Okobojii-	Road P&I	\$165,352	1/1/12
Honey Creek resort	wedge dock	\$12,500	1/5/12
Honey Creek resort	indoor kiosk	\$1,200	1/5/12
Honey Creek resort	kiosk, concrete & stone veneer	\$52,175	1/5/12
Lacey-Keosauqua	sewer rehab	\$108,160	1/6/12
Lake Keomah	sewer rehab	\$222,544	1/6/12
Cedar Rock	replace boat house roof	\$21,018	1/9/12
George Wyth	FEMA repairs beach & dike	\$115,437	1/9/12
Clear Lake	shoreline stabilization	\$53,750	1/19/12
Waubonsie	kiosk	\$20,480	1/26/12
Lake Ahquabi	shower install	\$238,500	2/1/12
Bixby	road repair	\$29,351	2/2/12
Big Creek	trail bldg demo	\$16,700	2/22/12
Lake Macbride	concession sea wall	\$42,500	2/22/12
Stone	septic tank replacement	\$45,490	2/22/12
Lake Darling	Campground road and pad construction	\$535,169	3/1/12
George Wyth	lift station replacement	\$19,100	3/21/12

Table A.1. State park improvement costs 2007–2012

Location	Project	Cost	Date
Maquoketa Caes	well for VC	\$86,328	3/22/12
Springbrook	Sherburne road	\$260,776	3/22/12
AA Call	waterline replacement	\$73,605	4/9/12
Beeds Lake	sewer rehabilitation	\$181,572	4/9/12
Springbrook	sewer repair	\$151,333	5/1/12
Rock Creek	dump station	\$135,797	5/17/12
	Total:	\$41,767,393	

Table A.2. Visitors and spending at state parks, 2011

Park	County	Acres	Visitors (avg)	Camping (avg)	Visitor expenditures (\$)	Camping expenditures (\$)	Total (\$)
A.A. Call	Kossuth	130	60,800	389	3,319,072	23,176	3,342,248
Backbone	Delaware	2,000	315,100	22,898	17,201,309	1,364,962	18,566,271
Badger Creek	Madison	319	61,190	–	3,340,362	–	3,340,362
Beed's Lake	Franklin	1,162	204,800	15,909	11,180,032	948,324	12,128,356
Bellevue	Jackson	770	83,300	5,674	4,547,347	338,203	4,885,550
Big Creek	Polk	3,550	720,692	–	39,342,598	–	39,342,598
Black Hawk	Sac	86	220,800	17,622	12,053,472	1,050,424	13,103,896
Brushy Creek	Webster	6,500	542,000	24,910	29,587,780	1,484,885	31,072,665
Cedar Rock	Buchanan	423	7,268	–	396,771	–	396,771
Clear Lake	Cerro Gordo	55	130,768	31,746	7,138,636	1,892,355	9,030,991
Dolliver	Webster	600	236,480	2,111	12,909,443	125,861	13,035,304
Elk Rock	Marion	850	151,134	9,905	8,250,405	590,425	8,840,830
Fort Defiance	Emmet	221	64,200	448	3,504,678	26,705	3,531,383
Geode	Henry	1,641	375,650	18,566	20,506,734	1,106,707	21,613,441
George Wyth	Black Hawk	1,200	437,316	14,161	23,873,080	844,113	24,717,194
Green Valley	Union	1,058	134,701	14,300	7,353,317	852,411	8,205,728
Gull Point Complex	Dickinson	195	1,219,400	65,167	66,567,046	3,884,617	70,451,663
Honey Creek	Appanoose	828	122,126	9,501	6,666,837	566,378	7,233,215
Lacey-Keosauqua	Van Buren	1,653	143,020	8,812	7,807,462	525,259	8,332,721
Lake Ahquabi	Warren	770	921,830	34,406	50,322,700	2,050,942	52,373,641
Lake Anita	Cass	1,062	307,700	25,846	16,797,343	1,540,704	18,338,047
Lake Darling	Washington	1,387	142,741	6,813	7,792,231	406,123	8,198,354
Lake Keomah	Mahaska	366	109,198	4,384	5,961,141	261,306	6,222,447
Lake Macbride	Johnson	2,180	478,320	13,231	26,111,489	788,724	26,900,213
Lake Manawa	Pottawattamie	1,529	1,329,124	18,982	72,556,857	1,131,505	73,688,362
Lake of Three Fires	Taylor	1,155	72,106	11,631	3,936,245	693,300	4,629,545
Lake Wapello	Davis	1,150	132,200	6,771	7,216,798	403,631	7,620,429
Ledges	Boone	1,200	405,600	23,280	22,141,704	1,387,733	23,529,437
Lewis and Clark	Monona	176	253,500	21,473	13,838,565	1,279,982	15,118,547
Maquoketa Caves	Jackson	323	137,905	6,290	7,528,234	374,971	7,903,205
McIntosh Woods	Cerro Gordo	62	173,100	7,675	9,449,529	457,507	9,907,036
Mines of Spain/E.B. Lyons	Dubuque	1,387	312,150	–	17,040,269	–	17,040,269
Nine Eagles	Decatur	1,119	54,014	5,074	2,948,635	302,449	3,251,084
Palisades-Kepler	Linn	840	248,000	9,352	13,538,320	557,473	14,095,793
Pikes Peak	Clayton	970	298,380	14,609	16,288,564	870,831	17,159,395
Pilot Knob	Hancock	528	115,200	3,445	6,288,768	205,380	6,494,148
Pine Lake	Hardin	654	327,134	17,474	17,858,256	1,041,601	18,899,857
Pleasant Creek	Linn	1,927	430,600	19,607	23,506,454	1,168,761	24,675,215
Prairie Rose	Shelby	661	102,280	17,821	5,583,465	1,062,286	6,645,751
Preparation Canyon	Monona	344	10,295	83	562,004	4,924	566,928
Red Haw	Lucas	649	153,012	9,027	8,352,925	538,088	8,891,013
Rock Creek	Jasper	1,697	258,985	34,272	14,138,002	2,042,942	16,180,944
Shimek Forest Camping	Lee and Van Buren	1,948	9,810	1,306	535,528	77,851	613,379
Springbrook	Guthrie	920	119,131	17,231	6,503,350	1,027,164	7,530,514

Table A.2. Visitors and spending at state parks, 2011

Park	County	Acres	Visitors (avg)	Camping (avg)	Visitor expenditures (\$)	Camping expenditures (\$)	Total (\$)
Stephens Forest Camping	Lucas	14,112	73,001	4,690	3,985,103	279,559	4,264,662
Stone Park	Plymouth	1,543	118,308	2,383	6,458,434	142,039	6,600,472
Union Grove	Tama	282	114,718	904	6,262,456	53,864	6,316,319
Viking Lake	Montgomery	1,000	251,460	27,059	13,727,201	1,612,987	15,340,188
Volga River	Fayette	5,500	100,060	4,466	5,462,275	266,194	5,728,470
Walnut Woods	Polk	250	78,420	3,662	4,280,948	218,316	4,499,263
Wapsipinicon	Jones	390	324,170	2,865	17,696,418	170,759	17,867,177
Waubonsie	Fremont	1,990	91,696	7,366	5,005,706	439,087	5,444,794
Wildcat Den & Fairport	Muscatine	423	292,040	11,160	15,942,464	665,248	16,607,711
Wilson Island	Pottawattamie	547	62,793	17,040	3,427,870	1,015,731	4,443,600
Yellow River Camping	Allamakee	8,500	64,580	16,725	3,525,422	997,001	4,522,423
TOTAL:		82,782	3,704,306	690,518	744,798,982	41,138,590	785,937,571

Table A.3. Average visitors and camping at Iowa's state parks, 2007–2010

	Park	County	Acres	Visitors (avg)	Camping (avg)	Visitor expenditure	Camping expenditure
1	A.A. Call	Kossuth	130	60,800	389	\$3,319,072	\$23,176
2	Backbone	Delaware	2,000	315,100	22,898	\$17,201,309	\$1,364,962
3	Badger Creek	Madison	319	61,190	0	\$3,340,362	\$-
4	Beed's Lake	Franklin	1,162	204,800	15,909	\$11,180,032	\$948,324
5	Bellevue	Jackson	770	83,300	5,674	\$4,547,347	\$338,203
6	Big Creek	Polk	3,550	720,692	0	\$39,342,598	\$-
7	Black Hawk	Sac	86	220,800	17,622	\$12,053,472	\$1,050,424
8	Brushy Creek	Webster	6,500	542,000	24,910	\$29,587,780	\$1,484,885
9	Cedar Rock	Buchanan	423	7,268	0	\$396,771	\$-
10	Clear Lake	Cerro Gordo	55	130,768	31,746	\$7,138,636	\$1,892,355
11	Dolliver	Webster	600	236,480	2,111	\$12,909,443	\$125,861
12	Elk Rock	Marion	850	151,134	9,905	\$8,250,405	\$590,425
13	Fort Defiance	Emmet	221	64,200	448	\$3,504,678	\$26,705
14	Geode	Henry	1,641	375,650	18,566	\$20,506,734	\$1,106,707
15	George Wyth	Black Hawk	1,200	437,316	14,161	\$23,873,080	\$844,113
16	Green Valley	Union	1,058	134,701	14,300	\$7,353,317	\$852,411
17	Gull Point Complex	Dickinson	195	1,219,400	65,167	\$66,567,046	\$3,884,617
18	Honey Creek	Appanoose	828	122,126	9,501	\$6,666,837	\$566,378
19	Lacey-Keosauqua	Van Buren	1,653	143,020	8,812	\$7,807,462	\$525,259
20	Lake Ahquabi	Warren	770	921,830	34,406	\$50,322,700	\$2,050,942
21	Lake Anita	Cass	1,062	307,700	25,846	\$16,797,343	\$1,540,704
22	Lake Darling	Washington	1,387	142,741	6,813	\$7,792,231	\$406,123
23	Lake Keomah	Mahaska	366	109,198	4,384	\$5,961,141	\$261,306
24	Lake Macbride	Johnson	2,180	478,320	13,231	\$26,111,489	\$788,724
25	Lake Manawa	Pottawattamie	1,529	1,329,124	18,982	\$72,556,857	\$1,131,505
26	Lake of Three Fires	Taylor	1,155	72,106	11,631	\$3,936,245	\$693,300
27	Lake Wapello	Davis	1,150	132,200	6,771	\$7,216,798	\$403,631
28	Ledges	Boone	1,200	405,600	23,280	\$22,141,704	\$1,387,733
29	Lewis and Clark	Monona	176	253,500	21,473	\$13,838,565	\$1,279,982
30	Maquoketa Caves	Jackson	323	137,905	6,290	\$7,528,234	\$374,971
31	McIntosh Woods	Cerro Gordo	62	173,100	7,675	\$9,449,529	\$457,507
32	Mines of Spain/E.B. Lyons	Dubuque	1,387	312,150	0	\$17,040,269	\$-
33	Nine Eagles	Decatur	1,119	54,014	5,074	\$2,948,635	\$302,449
34	Palisades-Kepler	Linn	840	248,000	9,352	\$13,538,320	\$557,473
35	Pikes Peak	Clayton	970	298,380	14,609	\$16,288,564	\$870,831
36	Pilot Knob	Hancock	528	115,200	3,445	\$6,288,768	\$205,380
37	Pine Lake	Hardin	654	327,134	17,474	\$17,858,256	\$1,041,601
38	Pleasant Creek	Linn	1,927	430,600	19,607	\$23,506,454	\$1,168,761
39	Prairie Rose	Shelby	661	102,280	17,821	\$5,583,465	\$1,062,286
40	Preparation Canyon	Monona	344	10,295	83	\$562,004	\$4,924
41	Red Haw	Lucas	649	153,012	9,027	\$8,352,925	\$538,088
42	Rock Creek	Jasper	1,697	258,985	34,272	\$14,138,002	\$2,042,942
43	Shimek Forest Camping	Lee and Van Buren	1,948	9,810	1,306	\$535,528	\$77,851

Table A.3. Average visitors and camping at Iowa's state parks, 2007–2010

	Park	County	Acres	Visitors (avg)	Camping (avg)	Visitor expenditure	Camping expenditure
44	Springbrook	Guthrie	920	119,131	17,231	\$6,503,350	\$1,027,164
45	Stephens Forest Camping	Lucas	14,112	73,001	4,690	\$3,985,103	\$279,559
46	Stone Park	Plymouth	1,543	118,308	2,383	\$6,458,434	\$142,039
47	Union Grove	Tama	282	114,718	904	\$6,262,456	\$53,864
48	Viking Lake	Montgomery	1,000	251,460	27,059	\$13,727,201	\$1,612,987
49	Volga River	Fayette	5,500	100,060	4,466	\$5,462,275	\$266,194
50	Walnut Woods	Polk	250	78,420	3,662	\$4,280,948	\$218,316
51	Wapsipinicon	Jones	390	324,170	2,865	\$17,696,418	\$170,759
52	Waubonsie	Fremont	1,990	91,696	7,366	\$5,005,706	\$439,087
53	Wildcat Den & Fairport	Muscatine	423	292,040	11,160	\$15,942,464	\$665,248
54	Wilson Island	Pottawattamie	547	62,793	17,040	\$3,427,870	\$1,015,731
55	Yellow River Camping	Allamakee	8,500	64,580	16,725	\$3,525,422	\$997,001
		TOTAL:	82,782	13,704,306	690,518	\$744,798,982	\$41,138,590

Table A.4. Estimated visits and spending at Iowa county parks, 2011

County	Acres	Estimated visits	Estimated expenditures
Adair	853	145,841	\$3,699,998
Adams	2,151	35,212	\$893,322
Allamakee	1,73	125,102	\$3,173,825
Appanoose	1,088	115,413	\$2,928,031
Audubon	651	52,867	\$1,341,224
Benton	1,363	408,716	\$10,369,124
Black Hawk	8,240	571,164	\$14,490,431
Boone	1,226	406,261	\$10,306,842
Bremer	3,856	179,569	\$4,555,658
Buchanan	2,844	203,418	\$5,160,718
Buena Vista	1,144	194,816	\$4,942,480
Butler	1,596	82,700	\$2,098,099
Calhoun	624	169,852	\$4,309,152
Carroll	2,741	201,988	\$5,124,426
Cass	588	120,923	\$3,067,809
Cedar	920	261,943	\$6,645,486
Cerro Gordo	3,024	433,899	\$11,008,006
Cherokee	1,205	200,365	\$5,083,258
Chickasaw	1,760	107,072	\$2,716,428
Clarke	797	169,578	\$4,302,204
Clay	1,624	92,566	\$2,348,406
Clayton	905	262,459	\$6,658,591
Clinton	2,151	480,566	\$12,191,949
Crawford	1,327	92,874	\$2,356,202
Dallas	4,399	477,858	\$12,123,254
Davis	396	160,017	\$4,059,642
Decatur	2,793	156,984	\$3,982,676
Delaware	2,154	259,245	\$6,577,047
Des Moines	1,,501	393,697	\$9,988,098
Dickinson	566	91,485	\$2,320,981
Dubuque	2,392	806,841	\$20,469,550
Emmet	302	170,382	\$4,322,604
Fayette	1,149	204,617	\$5,191,124
Floyd	1,756	90,733	\$2,301,909
Franklin	2,179	172,423	\$4,374,374
Fremont	198	142,201	\$3,607,638
Grenne	1,685	161,465	\$4,096,364
Grundy	844	198,919	\$5,046,571
Guthrie	1,192	186,161	\$4,722,905
Hamilton	1,769	89,312	\$2,265,852

Table A.4. Estimated visits and spending at Iowa county parks, 2011

County	Acres	Estimated visits	Estimated expenditures
Hancock	1,212	189,616	\$4,810,548
Hardin	3,324	260,436	\$6,607,262
Harrison	1,746	86,816	\$2,202,510
Henry	822	195,802	\$4,967,491
Howard	2,206	180,813	\$4,587,214
Humboldt	407	161,385	\$4,094,326
Ida	574	60,618	\$1,537,878
Iowa	1,577	87,962	\$2,231,605
Jackson	1,987	195,860	\$4,968,962
Jasper	2,365	363,450	\$9,220,723
Jefferson	1,398	87,918	\$2,230,492
Johnson	1,645	525,948	\$13,343,292
Jones	3,334	199,552	\$5,062,633
Keokuk	2,258	181,180	\$4,596,537
Kossuth	1,799	89,872	\$2,280,052
Lee	2,771	353,891	\$8,978,214
Linn	6,908	703,358	\$17,844,198
Louisa	2,329	194,934	\$4,945,476
Lucas	1,945	178,698	\$4,533,570
Lyon	2,125	188,828	\$4,790,573
Madison	2,086	126,780	\$3,216,404
Mahaska	1,421	214,562	\$5,443,446
Marion	3,412	315,733	\$8,010,134
Marshall	2,047	380,650	\$9,657,093
Mills	1,738	82,524	\$2,093,644
Mitchell	2,389	176,263	\$4,471,800
Monona	866	178,900	\$4,538,702
Monroe	94	144,536	\$3,666,879
Montgomery	844	183,140	\$4,646,269
Muscatine	1,306	410,078	\$10,403,689
O'Brien	621	122,296	\$3,102,646
Osceola	1,802	55,353	\$1,404,294
Page	898	89,164	\$2,262,093
Palo Alto	2,334	179,783	\$4,561,092
Plymouth	2,353	190,823	\$4,841,176
Pocahontas	2,440	149,151	\$3,783,962
Polk	11,354	1,500,000	\$38,055,000
Pottawattame	1,932	791,200	\$20,072,756
Poweshiek	2,231	273,149	\$6,929,798
Ringgold	796	43,069	\$1,092,665

Table A.4. Estimated visits and spending at Iowa county parks, 2011

County	Acres	Estimated visits	Estimated expenditures
Sac	907	173,982	\$4,413,915
Scott	2,509	570,999	\$14,486,255
Shelby	712	108,191	\$2,744,814
Sioux	2,599	310,086	\$7,866,877
Story	2,916	712,893	\$18,086,085
Tama	956	257,538	\$6,533,726
Taylor	539	54,521	\$1,383,201
Union	3,790	192,701	\$4,888,814
Van Buren	557	141,760	\$3,596,443
Wapello	1,781	344,949	\$8,751,351
Warren	2,274	410,107	\$10,404,422
Washington	2,244	205,873	\$5,223,001
Wayne	1,654	53,747	\$1,363,557
Webster	1,182	378,578	\$9,604,533
Winnebago	3,313	183,028	\$4,643,416
Winneshiek	720	204,791	\$5,195,538
Woodbury	5,526	467,127	\$11,851,011
Worth	2,609	141,852	\$3,598,775
Wright	2,083	115,684	\$2,934,912
TOTAL:	192,693	24,000,000	\$608,880,000

Table A.5. Projects funded by the Resource Enhancement and Protection (REAP) program, 2011

County	Park/Trail	Acres (parks)/mi	Estimated visits		Estimated expenditures		Funding (\$)	
			Park	Trail	Park	Trail	Grant	Match
Butler	Trail	1.25		24,780		\$99,120	\$75,000	\$4,136
Bremer	Trail	0.5					\$50,000	\$625
Chickasaw	Campground	18	90,000				\$75,000	\$112,791
Pottawattamie	Building/Trail	0.65					\$50,000	\$442,425
Audubon	Trail	0.21		60,000			\$50,000	\$22,188
Chickasaw	Trail	0.55		11,250			\$50,000	\$23,482
Carroll	Park Restroom						\$21,400	\$-
Crawford	Park						\$15,250	\$-
Winneshiek	Trail	0.75					\$50,000	\$-
Dallas	Park	7					\$75,000	\$10,000
Shelby	Trail	0.57					\$50,000	\$141,127
Woodbury	Building						\$75,000	\$22,643
Crawford	Campground						\$50,000	\$10,200
Sac	Park						\$11,410	\$-
Dubuque	Trail	0.57		3,000			\$75,000	\$242,600
Clayton	Park		750				\$9,976	\$-
Hamilton	Trail	7		2,000		\$94,500	\$50,000	\$1,780,000
Clayton	Park	9	1,200		\$98,140		\$75,000	\$547,000
Hamilton	Trail	0.2		2,000			\$75,000	\$6,305
Washington	Trail	3.4		2,363			\$50,000	\$10,000
Winnebago	Park	35	4,200				\$75,000	\$8,990
Palo Alto	Trail	0.9	5,000				\$75,000	\$47,495
Black Hawk	Campground		21,200				\$75,000	\$14,886
Linn	Campground		210,967		\$840,000		\$144,000	\$-
Polk	Trail	0.66		67,000		1,500,000	\$250,000	\$560,000
Des Moines	Trail	0.8		14,000			\$150,000	\$15,000
Scott	Trail	1.1		32,000			\$150,000	\$274,469
Pottawattamie	Park	5	62,230				\$125,000	\$450,000
Scott	Park	227	99,700				\$300,000	\$-
Dubuque	Trail	0.5					\$200,000	\$306,000
Floyd	Park	67.25	85,000				\$43,270	\$35,330
Kossuth	Display		8,000				\$40,000	\$40,000
Dallas	Park	11					\$152,800	\$-
Palo Alto	Park	14.54	30,000		\$2,000,000		\$213,000	\$43,000
Taylor	Park	235					\$550,000	\$32,000
Des Moines	Trail	4					\$150,000	\$728,000
Dubuque	Park	419.44					\$600,000	\$809,000
Howard	Park	66	3,000				\$100,000	\$100,000
Des Moines	Park	235	15,000		10,094,653		\$400,000	\$309,000
Chickasaw	Park/Bridge	3					\$224,445	\$45,000
Black Hawk	Park	87.5	70,000				\$20,000	\$163,750
	TOTAL:	1,463.34	706,247	218,393	\$13,032,793	\$1,693,620	\$5,070,550	\$7,357,442

Table A.6. Estimated usage and spending associated with Iowa multi-use trails, 2011

	Trail	Miles 2011	Estimated trail usage 2011	Estimated expenditures 2011
1	Ames Trail System	55	97,810	\$860,726
2	Ankeny Trail System	33	66,330	\$583,704
3	Boone River Recreation Trail	6	10,668	\$93,878
4	Cedar River Greenbelt/Harry Cook	7	11,916	\$104,857
5	Cedar River Trails	13	22,663	\$199,436
6	Cedar Valley Lakes Trails Network	100	177,837	\$1,564,963
7	Cedar Valley Nature Trail	54	95,989	\$844,705
8	Charley Western Recreationa Trailway	5	8,890	\$78,232
9	Chichaqua Valley Trail	20	35,567	\$312,987
10	Cinder Path	14	24,897	\$219,094
11	Clinton Discovery Trail	12	14,634	\$128,778
12	Clive Greenbelt Trail	9	15,116	\$133,020
13	Comet Trail	10	17,783	\$156,489
14	Gay Lea Wilson Trail	16	32,160	\$283,008
15	Great Western/Bill Riley Trails	18	33,077	\$291,081
16	Heart of Iowa Nature Trail	27	49,639	\$436,826
17	Heritage Trail	26	46,238	\$406,891
18	High Trestel Trail	25	91,774	\$807,611
19	Hoover Nature Trail	24	42,681	\$375,593
20	Iowa 330 Trail	6	10,668	\$93,878
21	Iowa Great Lakes Trail	28	49,793	\$438,182
22	Iowa River Corridor	14	24,540	\$215,954
23	Iowa Riverfront Trail	7	12,446	\$109,525
24	Jefferson County Trail System	16	10,670	\$93,893
25	Jordan Creek Trail	12	21,341	\$187,797
26	Kewash Nature Trail	14	24,541	\$215,960
27	Lake Manawa	6	8,891	\$78,244
28	Lamoni Recreational Trail	6	10,668	\$93,878
29	Le Mars Recreational Trail	9	16,002	\$140,818
30	Linn Creek Greenbelt Parkway	11	17,535	\$154,304
31	Mahaska Community Recreation Trail	12	21,607	\$190,144
32	Mississippi Riverfront Trail	11	19,561	\$172,138
33	Neal Smith Trail/John Pat Dorrian	28	50,151	\$441,323
34	North Ridge-Noth Liberty Trail	10	17,783	\$156,489
35	Old Creamery Trail	15	26,675	\$234,743
36	Ottumwa Trails Systems	16	28,448	\$250,342
37	Park to Park Trail	15	26,670	\$234,696
38	Pioneer Trail	12	21,341	\$187,797
39	Prairie Farmer Recreational Trail	20	35,567	\$312,987
40	Raccoon River Valley Trail	73	12,821	\$1,142,420
41	River City Greenbelt	13	31,122	\$273,870

Table A.6. Estimated usage and spending associated with Iowa multi-use trails, 2011

	Trail	Miles 2011	Estimated trail usage 2011	Estimated expenditures 2011
42	Rock Creek Recreational Trail	6	10,670	\$93,893
43	Rolling Prairie Trail	26	24,108	\$212,151
44	Sac and Fox Trail	8	12,804	\$112,676
45	Sauk Rail Trail	33	58,686	\$516,433
46	Sioux City River Trails	25	45,385	\$399,388
47	Solon Trail	5	8,891	\$78,244
48	Storm Lake Trail	5	10,622	\$93,475
49	Summerset Trail	11	19,562	\$172,148
50	T-Bone Trail	21	37,168	\$327,081
51	Trail and Duck Creek Parkway	13	23,118	\$203,435
52	Three Rivers Trail	33	58,686	\$516,433
53	Trolley Trail	23	40,904	\$35,993
54	Trout Run Trail	12	21,336	\$187,757
55	Twin Lakes Trails	11	20,451	\$179,967
56	Volksweg Trail	14	23,119	\$203,445
57	Wabash Trace Nature Trail	64	112,036	\$985,919
58	Wapsi-Great Western Line	12	21,341	\$187,797
	TOTAL:	1,150	1,851,011	\$17,807,500

Table A.7. Estimated annual expenditures at Iowa lakes for 2009

DNR#	Lake	2002-05 4yr average	Visits 2009	2009 \$direct spending	Total expend impacts	Total income effects	Total job effects
1	Arbor Lake	30,337	37,885	\$2,574,298	\$4,075,114	\$642,886	31.4
2	Arrowhead Pond (Pottawattamie County)	39,435	41,501	\$2,819,987	\$4,464,040	\$704,243	34.4
3	Arrowhead Lake (Sac County)	11,283	18,657	\$1,267,722	\$2,006,804	\$316,591	15.5
4	Avenue of the Saints Lake	18,199	29,587	\$2,010,467	\$3,182,570	\$502,079	24.5
5	Badger Creek Lake	67,456	78,978	\$5,366,524	\$8,495,207	\$1,340,195	65.5
6	Badger Lake	76,902	72,648	\$4,936,406	\$7,814,331	\$1,232,781	60.2
7	Beaver Lake	24,625	28,840	\$1,959,688	\$3,102,186	\$489,398	23.9
8	Beeds Lake	85,641	78,158	\$5,310,820	\$8,407,028	\$1,326,284	64.8
9	Big Creek Lake	402,164	467,169	\$51,290,491	\$81,192,847	\$12,808,902	625.9
10	Big Spirit Lake	257,596	327,117	\$43,372,486	\$68,658,646	\$10,831,519	529.3
11	Black Hawk Lake	110,831	145,411	\$15,964,686	\$25,272,098	\$3,986,901	194.8
12	Blue Lake	51,906	59,866	\$4,067,897	\$6,439,480	\$1,015,886	49.6
13	Bob White Lake	11,353	11,604	\$788,522	\$1,248,231	\$196,920	9.6
14	Briggs Woods Lake	59,015	75,131	\$5,105,176	\$8,081,493	\$1,274,928	62.3
15	Browns Lake	57,842	90,021	\$6,116,928	\$9,683,097	\$1,527,596	74.6
16	Brushy Creek Lake	149,056	176,201	\$19,345,077	\$30,623,256	\$4,831,094	236.1
17	Carter Lake	57,905	78,472	\$8,615,462	\$13,638,276	\$2,151,561	105.1
18	Casey Lake (aka Hickory HillsLake)	47,189	51,677	\$3,511,423	\$5,558,582	\$876,916	42.9
19	Center Lake	30,791	42,873	\$2,913,214	\$4,611,618	\$727,524	35.6
20	Central Park Lake	47,763	60,064	\$4,081,325	\$6,460,738	\$1,019,240	49.8
21	Clear Lake	383,743	501,916	\$66,548,989	\$105,347,049	\$16,619,445	812.1
22	Cold Springs Lake	28,242	33,097	\$2,248,916	\$3,560,035	\$561,628	27.4
23	Coralville Lake	446,032	529,593	\$70,218,746	\$111,156,274	\$17,535,903	856.9
24	Crawford Creek Impoundment	13,957	29,109	\$1,977,982	\$3,131,145	\$493,966	24.1
25	Crystal Lake	43,088	54,926	\$3,732,239	\$5,908,135	\$932,061	45.5
26	Dale Maffitt Lake	56,612	69,747	\$4,739,292	\$7,502,300	\$1,183,555	57.8
28	DeSoto Bend Lake	56,280	68,086	\$4,626,437	\$7,323,650	\$1,155,372	56.5
29	Diamond Lake	42,828	60,255	\$4,094,297	\$6,481,273	\$1,022,479	50
30	Dog Creek Lake	19,105	24,389	\$1,657,208	\$2,623,360	\$413,859	20.2
31	Don Williams Lake	79,198	94,433	\$6,416,737	\$10,157,694	\$1,602,468	78.3
32	East Lake (Osceola)	43,664	62,105	\$4,220,059	\$6,680,353	\$1,053,886	51.5
33	East Okoboji Lake	310,723	368,567	\$48,868,288	\$77,358,501	\$12,204,000	596.3
34	Easter Lake	130,134	158,991	\$17,455,585	\$27,632,191	\$4,359,227	213
35	Eldred Sherwood Lake	15,739	18,647	\$1,267,050	\$2,005,741	\$316,424	15.5
36	Five Island Lake	73,547	97,340	\$10,686,941	\$16,917,428	\$2,668,876	130.4
37	Fogle Lake	11,245	11,058	\$751,358	\$1,189,399	\$187,638	9.2
38	George Wyth Lake	169,641	234,907	\$25,790,406	\$40,826,213	\$6,440,703	314.7
39	Green Belt Lake	28,645	44,953	\$3,054,581	\$4,835,402	\$762,828	37.3
40	Green Castle Lake	16,491	24,142	\$1,640,458	\$2,596,845	\$409,676	20
41	Green Valley Lake	66,671	69,962	\$4,753,949	\$7,525,501	\$1,187,216	58
42	Greenfield Lake	24,387	32,670	\$2,219,903	\$3,514,107	\$554,382	27.1

Table A.7. Estimated annual expenditures at Iowa lakes for 2009

43	Hannen Lake	56,248	67,322	\$4,574,527	\$7,241,476	\$1,142,408	55.8
44	Hawthorn Lake (aka Barnes City Lake)	53,519	41,748	\$2,836,800	\$4,490,654	\$708,441	34.6
45	Hickory Grove Lake	63,388	74,573	\$5,067,233	\$8,021,430	\$1,265,453	61.8
46	Hooper Area Pond	14,636	25,330	\$1,721,167	\$2,724,607	\$429,831	21
47	Indian Lake	19,782	28,069	\$1,907,293	\$3,019,245	\$476,313	23.3
48	Ingham Lake	29,294	31,491	\$2,139,788	\$3,387,285	\$534,375	26.1
49	Kent Park Lake	90,068	127,109	\$13,955,332	\$22,091,290	\$3,485,100	170.3
50	Lacey Keosauqua Park Lake	56,593	69,248	\$4,705,368	\$7,448,597	\$1,175,083	57.4
51	Lake Ahquabi	119,519	165,246	\$18,142,334	\$28,719,314	\$4,530,730	221.4
52	Lake Anita	54,410	71,262	\$4,842,238	\$7,665,263	\$1,209,264	59.1
53	Lake Cornelia	70,228	78,643	\$5,343,822	\$8,459,270	\$1,334,526	65.2
54	Lake Darling	72,305	79,059	\$5,372,088	\$8,504,016	\$1,341,585	65.6
55	Lake Geode	101,646	147,400	\$16,183,014	\$25,617,712	\$4,041,425	197.5
56	Lake Hendricks	25,520	28,902	\$1,963,878	\$3,108,819	\$490,444	24
57	Lake Icaria	63,245	71,108	\$4,831,785	\$7,648,715	\$1,206,654	59
58	Lake Iowa	46,319	61,888	\$4,205,319	\$6,657,021	\$1,050,205	51.3
59	Lake Keomah	49,278	58,214	\$3,955,609	\$6,261,729	\$987,844	48.3
60	Lake Manawa	146,528	198,703	\$21,815,553	\$34,534,021	\$5,448,053	266.2
61	Lake MacBride	260,956	360,449	\$39,573,646	\$62,645,082	\$9,882,826	482.9
63	Lake Miami	38,182	45,878	\$3,117,379	\$4,934,811	\$778,511	38
64	Lake Minnewashta	52,138	84,072	\$9,230,220	\$14,611,439	\$2,305,086	112.6
65	Lake of the Hills	74,665	94,770	\$6,439,637	\$10,193,946	\$1,608,187	78.6
66	Lake of Three Fires	22,897	35,546	\$2,415,346	\$3,823,492	\$603,190	29.5
67	Lake Orient	18,791	31,016	\$2,107,527	\$3,336,216	\$526,318	25.7
68	Lake Pahoja	17,130	29,611	\$2,012,041	\$3,185,061	\$502,472	24.6
69	Lake Smith	35,188	46,065	\$3,130,107	\$4,954,959	\$781,689	38.2
70	Lake Sugema	50,793	68,619	\$4,662,649	\$7,380,974	\$1,164,415	56.9
71	Lake Wapello	74,229	85,573	\$5,814,699	\$9,204,668	\$1,452,119	71
72	Little River	31,125	43,127	\$2,930,493	\$4,638,971	\$731,839	35.8
73	Little Sioux Park Lake	26,336	33,748	\$2,293,179	\$3,630,103	\$572,681	28
74	Little Spirit Lake	72,859	99,594	\$10,934,426	\$17,309,196	\$2,730,681	133.4
75	Little Wall Lake	55,017	71,603	\$4,865,426	\$7,701,970	\$1,215,055	59.4
76	Littlefield Lake	27,875	34,420	\$2,338,806	\$3,702,330	\$584,076	28.5
77	Lost Island Lake	76,984	81,855	\$8,986,809	\$14,226,119	\$2,244,298	109.7
78	Lower Gar Lake	72,489	107,966	\$11,853,621	\$18,764,282	\$2,960,234	144.7
79	Lower Pine Lake	63,649	66,537	\$4,521,162	\$7,157,000	\$1,129,081	55.2
80	Manteno Lake	4,542	6,866	\$466,544	\$738,539	\$116,511	5.7
81	Mariposa Lake	21,279	23,683	\$1,609,236	\$2,547,421	\$401,879	19.6
82	Meadow Lake	5,160	8,519	\$578,882	\$916,370	\$144,566	7.1
83	Meyers Lake	38,460	58,248	\$3,957,920	\$6,265,387	\$988,421	48.3
84	Mill Creek (Lake)	26,251	28,766	\$1,954,668	\$3,094,240	\$488,144	23.9
85	Mitchell Lake	14,382	29,296	\$1,990,667	\$3,151,226	\$497,134	24.3

Table A.7. Estimated annual expenditures at Iowa lakes for 2009

86	Moorehead Lake	9,342	18,285	\$1,242,473	\$1,966,834	\$310,286	15.2
87	Mormon Trail Lake	13,832	23,303	\$1,583,421	\$2,506,555	\$395,432	19.3
88	Nelson Park Lake	9,688	15,457	\$1,050,295	\$1,662,617	\$262,293	12.8
89	Nine Eagles Lake	14,631	16,566	\$1,125,671	\$1,781,937	\$281,117	13.7
90	North Twin Lake	91,707	109,641	\$12,037,433	\$19,055,257	\$3,006,138	146.9
91	Oldham Lake	5,403	8,646	\$587,477	\$929,976	\$146,712	7.2
92	Otter Creek Lake	29,537	44,821	\$3,045,596	\$4,821,179	\$760,584	37.2
93	Ottumwa Lagoon	93,762	132,498	\$9,003,269	\$14,252,175	\$2,248,409	109.9
94	Pierce Creek Lake	8,415	7,863	\$534,281	\$845,766	\$133,427	6.5
95	Pleasant Creek Lake	183,950	202,631	\$22,246,818	\$35,216,712	\$5,555,753	271.5
96	Pollmiller Park Lake	31,528	40,490	\$2,751,275	\$4,355,269	\$687,083	33.6
97	Prairie Rose Lake	42,036	61,474	\$4,177,182	\$6,612,479	\$1,043,178	51
98	Rathbun Lake	238,298	305,917	\$40,561,491	\$64,208,840	\$10,129,522	495
99	Red Haw Lake	38,673	45,269	\$3,076,015	\$4,869,332	\$768,181	37.5
100	Red Rock Lake	319,856	392,157	\$51,996,131	\$82,309,875	\$12,985,124	634.5
101	Roberts Creek Lake	45,612	73,200	\$4,973,925	\$7,873,723	\$1,242,151	60.7
102	Rock Creek Lake	76,478	90,988	\$6,182,606	\$9,787,066	\$1,543,998	75.4
103	Rodgers Park Lake	23,868	36,478	\$2,478,674	\$3,923,741	\$619,005	30.2
104	Saylorville Lake	613,919	760,563	\$100,843,039	\$159,634,530	\$25,183,784	1,230.60
105	Silver Lake (Dickinson County)	47,615	78,659	\$5,344,872	\$8,460,932	\$1,334,788	65.2
106	Silver Lake (Worth County)	11,434	17,303	\$1,175,731	\$1,861,182	\$293,618	14.3
107	Silver Lake (Delaware County)	14,122	35,539	\$2,414,851	\$3,822,709	\$603,067	29.5
108	Silver Lake (Palo Alto County)	35,553	41,405	\$2,813,443	\$4,453,681	\$702,608	34.3
109	Slip Bluff Lake	3,514	5,290	\$359,442	\$568,997	\$89,764	4.4
110	South Prairie Lake	50,865	58,472	\$3,973,140	\$6,289,480	\$992,222	48.5
111	Spring Lake	36,319	51,001	\$3,465,505	\$5,485,894	\$865,449	42.3
112	Springbrook Lake	51,836	60,329	\$4,099,329	\$6,489,238	\$1,023,736	50
113	Storm Lake (incl Little Storm Lake)	174,624	271,983	\$36,062,189	\$57,086,445	\$9,005,900	440.1
114	Swan Lake	95,858	128,717	\$14,131,826	\$22,370,680	\$3,529,176	172.5
115	Thayer Lake	7,548	19,037	\$1,293,597	\$2,047,765	\$323,053	15.8
116	Three Mile Lake	99,792	93,333	\$10,246,995	\$16,220,994	\$2,559,008	125
117	Trumbull Lake	24,851	25,461	\$1,730,043	\$2,738,658	\$432,048	21.1
118	Tuttle Lake	21,085	20,534	\$1,395,253	\$2,208,686	\$348,440	17
119	Twelve Mile Creek Lake	62,789	75,686	\$5,142,863	\$8,141,152	\$1,284,340	62.8
120	Union Grove Lake	44,474	48,650	\$3,305,790	\$5,233,065	\$825,563	40.3
121	Upper Gar Lake	75,157	110,104	\$12,088,347	\$19,135,853	\$3,018,853	147.5
122	Upper Pine Lake	68,352	68,629	\$4,663,367	\$7,382,110	\$1,164,594	56.9
123	Viking Lake	52,287	81,893	\$5,564,645	\$8,808,834	\$1,389,673	67.9
124	Volga Lake	73,112	84,363	\$5,732,463	\$9,074,490	\$1,431,582	70
125	West Okoboji Lake	405,671	485,660	\$64,393,646	\$101,935,141	\$16,081,186	785.8
126	West Osceola	55,486	61,558	\$4,182,881	\$6,621,501	\$1,044,601	51
127	White Oak Lake	7,501	10,202	\$693,256	\$1,097,424	\$173,128	8.5
128	Williamson Pond	6,665	9,428	\$640,633	\$1,014,121	\$159,987	7.8

Table A.7. Estimated annual expenditures at Iowa lakes for 2009

129	Willow Lake	10,888	14,891	\$1,011,843	\$1,601,747	\$252,690	12.3
130	Wilson Park Lake	6,989	10,387	\$705,776	\$1,117,244	\$176,255	8.6
131	Windmill Lake	7,205	9,648	\$655,576	\$1,037,776	\$163,719	8
132	Yellow Smoke Park Lake	43,491	51,329	\$3,487,780	\$5,521,156	\$871,012	42.6
TOTAL:		9,496,785	11,977,633	\$1,210,008,412	\$1,915,443,322	\$302,178,423	14,766.00

Table A.8. Economic effects of visits to Iowa rivers

River segment	Trips	Statewide trips (person)	Statewide trips (household)	Total spending (\$)	Multiplier spending (\$)	Income effects (\$)	Job effects
1	369	268,286	108,459	7,369,757	11,666,325	1,840,468	90
2	253	183,947	74,363	5,052,977	7,998,863	1,261,893	62
3	193	140,323	56,728	3,854,643	6,101,899	962,630	47
4	76	55,257	22,338	1,517,890	2,402,820	379,067	19
5	290	210,848	85,238	5,791,950	9,168,657	1,446,438	71
6	143	103,970	42,031	2,856,030	4,521,096	713,244	35
7	52	37,807	15,284	1,038,557	1,644,035	259,361	13
8	23	16,722	6,760	459,362	727,169	114,718	6
9	59	42,897	17,342	1,178,362	1,865,347	294,275	14
10	61	44,351	17,929	1,218,307	1,928,580	304,251	15
11	105	76,342	30,862	2,097,085	3,319,686	523,710	26
12	37	26,901	10,875	738,973	1,169,794	184,546	9
13	183	133,052	53,788	3,654,920	5,785,739	912,752	45
14	80	58,165	23,514	1,597,779	2,529,285	399,017	19
15	113	82,158	33,214	2,256,863	3,572,615	563,612	28
16	154	111,968	45,265	3,075,725	4,868,873	768,109	38
17	25	18,177	7,348	499,306	790,401	124,693	6
18	60	43,624	17,636	1,198,334	1,896,963	299,263	15
19	59	42,897	17,342	1,178,362	1,865,347	294,275	14
20	171	124,328	50,261	3,415,253	5,406,346	852,900	42
21	314	228,298	92,293	6,271,284	9,927,442	1,566,143	77
22	194	141,050	57,022	3,874,615	6,133,515	967,617	47
23	979	711,794	287,753	19,552,824	30,952,120	4,882,976	239
24	1513	1,100,045	444,709	30,218,001	47,835,095	7,546,417	369
25	675	490,767	198,400	13,481,263	21,340,839	3,366,709	165
26	399	290,098	117,276	7,968,924	12,614,807	1,990,099	97
27	84	61,073	24,690	1,677,668	2,655,749	418,968	20
28	123	89,429	36,153	2,456,586	3,888,775	613,489	30
29	175	127,236	51,437	3,495,142	5,532,810	872,851	43
30	104	75,614	30,568	2,077,113	3,288,070	518,723	25
31	58	42,170	17,048	1,158,390	1,833,731	289,288	14
32	82	59,619	24,102	1,637,724	2,592,517	408,993	20
33	193	140,323	56,728	3,854,643	6,101,899	962,630	47
34	468	340,265	137,557	9,347,009	14,796,315	2,334,252	114
35	234	170,133	68,779	4,673,504	7,398,157	1,167,126	57
36	272	197,761	79,948	5,432,450	8,599,568	1,356,659	66
37	20	14,541	5,879	399,445	632,321	99,754	5
38	116	84,339	34,095	2,316,780	3,667,463	578,575	28
39	68	49,440	19,987	1,358,112	2,149,892	339,165	17
40	293	213,029	86,120	5,851,867	9,263,505	1,461,401	71
41	232	168,678	68,191	4,633,560	7,334,925	1,157,150	57

Table A.8. Economic effects of visits to Iowa rivers

River segment	Trips	Statewide trips (person)	Statewide trips (household)	Total spending (\$)	Multiplier spending (\$)	Income effects (\$)	Job effects
42	113	82,158	33,214	2,256,863	3,572,615	563,612	28
43	303	220,300	89,059	6,051,589	9,579,665	1,511,278	74
44	31	22,539	9,112	619,139	980,098	154,619	8
45	533	387,524	156,662	10,645,205	16,851,359	2,658,454	130
46	800	581,650	235,140	15,977,793	25,292,846	3,990,174	195
47	737	535,845	216,623	14,719,542	23,301,035	3,675,948	180
48	76	55,257	22,338	1,517,890	2,402,820	379,067	19
49	462	335,903	135,794	9,227,175	14,606,619	2,304,326	113
50	381	277,011	111,986	7,609,424	12,045,718	1,900,320	93
51	116	84,339	34,095	2,316,780	3,667,463	578,575	28
52	1071	778,684	314,794	21,390,270	33,860,798	5,341,846	261
53	877	637,633	257,773	17,515,655	27,727,283	4,374,228	214
54	653	474,772	191,933	13,041,873	20,645,286	3,256,980	159
55	308	223,935	90,529	6,151,450	9,737,746	1,536,217	75
56	742	539,480	218,093	14,819,403	23,459,115	3,700,886	181
57	85	61,800	24,984	1,697,640	2,687,365	423,956	21
58	659	479,134	193,697	13,161,707	20,834,982	3,286,906	161
59	84	61,073	24,690	1,677,668	2,655,749	418,968	20
60	248	180,311	72,894	4,953,116	7,840,782	1,236,954	60
61	142	103,243	41,737	2,836,058	4,489,480	708,256	35
62	232	168,678	68,191	4,633,560	7,334,925	1,157,150	57
63	111	80,704	32,626	2,216,919	3,509,382	553,637	27
64	314	228,298	92,293	6,271,284	9,927,442	1,566,143	77
65	208	151,229	61,137	4,154,226	6,576,140	1,037,445	51
66	884	642,723	259,830	19,810,487	31,360,001	4,947,322	242
67	245	178,130	72,012	5,245,901	8,304,261	1,310,072	64
68	676	491,494	198,694	15,897,434	25,165,638	3,970,106	194
69	1246	905,919	366,231	29,107,472	46,077,127	7,269,082	355
70	1578	1,147,304	463,815	35,641,667	56,420,758	8,900,882	435
71	1591	1,156,756	467,636	35,946,096	56,902,670	8,976,908	439
72	483	351,171	141,966	11,535,781	18,261,142	2,880,859	141
73	740	538,026	217,505	17,523,117	27,739,094	4,376,092	214
			Total:	520,434,407	823,847,666	129,969,384	6,351
Meantrip-1:definedastripnumbers/wholesample Meantrip-2:definedastripnumbers/subsampleoftriptakers Meantrip-3:definedastripnumbers/vistorstoeachsite							

Table A.9. Iowa SCS expenditures on soil conservation projects

Project name	SWCD(s) location	Project objective	FY	Cost description	Fund	Allocation*
Big Bear Creek Watershed Project (Jones)	Jones	WWSP	2012	Grassed Waterway	WSPF	\$26,478
Big Bear Creek Watershed Project (Jones)	Jones	WWSP	2012	Terraces	WSPF	\$6,029
Big Bear Creek Watershed Project (Jones)	Jones	WWSP	2012	Streambank/Shoreline Protection	WSPF	\$3,000
Big Creek Lake Watershed Project	Polk & Boone	LP	2012	Streambank/Shoreline Protection	Lake	\$25,000
Big Creek Lake Watershed Project	Polk & Boone	LP	2012	Water and Sediment Control Basin	319	\$16,000
Big Creek Lake Watershed Project	Polk & Boone	LP	2012	Water and Sediment Control Basin	WSPF	\$12,500
Big Creek Lake Watershed Project	Polk & Boone	LP	2012	Grade Stabilization Structure	319	\$8,200
Big Creek Lake Watershed Project	Polk & Boone	LP	2012	Terraces	319	\$7,000
Big Creek Lake Watershed Project	Polk & Boone	LP	2012	Grassed Waterway	319	\$4,200
Big Creek Lake Watershed Project	Polk & Boone	LP	2012	Cover Crop	319	\$4,000
Big Creek Lake Watershed Project	Polk & Boone	LP	2012	Pasture and Hayland Management	WSPF	\$2,500
Big Creek Lake Watershed Project	Polk & Boone	LP	2012	Grassed Waterway	WSPF	\$1,500
Black Hawk Lake Watershed Project	Sac & Carroll	LP	2012	Terraces	WSPF	\$50,000
Black Hawk Lake Watershed Project	Sac & Carroll	LP	2012	Streambank/Shoreline Protection	319	\$17,500
Black Hawk Lake Watershed Project	Sac & Carroll	LP	2012	Rain Garden	319	\$6,800
Black Hawk Lake Watershed Project	Sac & Carroll	LP	2012	Streambank/Shoreline Protection	Lake	\$5,000
Black Hawk Lake Watershed Project	Sac & Carroll	LP	2012	CRP Incentive	Lake	\$4,200
Black Hawk Lake Watershed Project	Sac & Carroll	LP	2012	Nutrient Management	319	\$1,200
Buckeye Creek Water Quality Improvement and Flood Reduction Project	Wapello	WWSP & FLD	2012	Terraces	WSPF	\$13,697
Burr Oak/Turtle Creek Water Quality Project	Mitchell	WWSP	2012	Streambank/Shoreline Protection	WSPF	\$18,000
Camp Creek Watershed Project	Polk	WWSP	2012	Grade Stabilization Structure	WSPF	\$14,229
Camp Creek Watershed Project	Polk	WWSP	2012	Riffle/Pool	WSPF	\$7,238
Camp Creek Watershed Project	Polk	WWSP	2012	Pasture and Hayland Management	WSPF	\$1,120
Clear Lake Enhancement and Restoration Project	Cerro Gordo & Hancock	LP	2012	Pervious Concrete	319	\$30,000
Clear Lake Enhancement and Restoration Project	Cerro Gordo & Hancock	LP	2012	Pervious Concrete	WSPF	\$30,000
Clear Lake Enhancement and Restoration Project	Cerro Gordo & Hancock	LP	2012	Rain Garden	WSPF	\$14,963
Clear Lake Enhancement and Restoration Project	Cerro Gordo & Hancock	LP	2012	Streambank/Shoreline Protection	319	\$10,000
Clear Lake Enhancement and Restoration Project	Cerro Gordo & Hancock	LP	2012	Rain Garden	319	\$7,500

Table A.9. Iowa SCS expenditures on soil conservation projects

Project name	SWCD(s) location	Project objective	FY	Cost description	Fund	Allocation*
Coldwater/Pine Watershed Protection Project	Winneshiek	CWSP	2012	Use Exclusion	WSPF	\$8,805
Coldwater/Pine Watershed Protection Project	Winneshiek	CWSP	2012	Grassed Waterway	WSPF	\$7,086
Coldwater/Pine Watershed Protection Project	Winneshiek	CWSP	2012	Heavy Use Area Protection	WSPF	\$3,195
Coldwater/Pine Watershed Protection Project	Winneshiek	CWSP	2012	Cover Crop	WSPF	\$1,250
Coldwater/Pine Watershed Protection Project	Winneshiek	CWSP	2012	Sinkhole Protection	WSPF	\$675
Competine Creek Partnership Project	Wapello, Jefferson, Keokuk	WWSP	2012	Terraces	WSPF	\$144,847
Competine Creek Partnership Project	Wapello, Jefferson, Keokuk	WWSP	2012	Grade Stabilization Structure	WSPF	\$37,909
Competine Creek Partnership Project	Wapello, Jefferson, Keokuk	WWSP	2012	Water and Sediment Control Basin	WSPF	\$12,245
Competine Creek Watershed Project	Marion	WWSP	2012	Water and Sediment Control Basin	WSPF	\$42,694
Competine Creek Watershed Project	Marion	WWSP	2012	Grade Stabilization Structure	WSPF	\$37,500
Competine Creek Watershed Project	Marion	WWSP	2012	Terraces	WSPF	\$29,974
Competine Creek Watershed Project	Marion	WWSP	2012	Streambank/Shoreline Protection	WSPF	\$22,500
Competine Creek Watershed Project	Marion	WWSP	2012	Grassed Waterway	WSPF	\$9,009
Competine Creek Watershed Project	Marion	WWSP	2012	Rain Garden	WSPF	\$9,000
Competine Creek Watershed Project	Marion	WWSP	2012	Fence	WSPF	\$3,000
Competine Creek Watershed Project	Marion	WWSP	2012	Watering Facility	WSPF	\$1,050
Competine Creek Watershed Project	Marion	WWSP	2012	Pasture and Hayland Planting	WSPF	\$675
Deer Creek and North Branch Sub-sheds of Clear Creek Project	Johnson & Iowa	WWSP	2012	Grassed Waterway	WSPF	\$17,072
Deer Creek and North Branch Sub-sheds of Clear Creek Project	Johnson & Iowa	WWSP	2012	Water and Sediment Control Basin	WSPF	\$7,859
Deer Creek and North Branch Sub-sheds of Clear Creek Project	Johnson & Iowa	WWSP	2012	Water and Sediment Control Basin	319	\$5,096
Deer Creek and North Branch Sub-sheds of Clear Creek Project	Johnson & Iowa	WWSP	2012	Grade Stabilization Structure	319	\$1,325
Dry Run Creek Water Protection Project	Black Hawk	URB & WWSP	2012	Bio-Retention Cell	319	\$289,095
Dry Run Creek Water Protection Project	Black Hawk	URB & WWSP	2012	Storm Water Retrofit	319	\$280,000
Dry Run Creek Water Protection Project	Black Hawk	URB & WWSP	2012	Streambank/Shoreline Protection	WSPF	\$107,425
Dry Run Creek Water Protection Project	Black Hawk	URB & WWSP	2012	Bio-Retention Cell	WSPF	\$51,242

Table A.9. Iowa SCS expenditures on soil conservation projects

Project name	SWCD(s) location	Project objective	FY	Cost description	Fund	Allocation*
Dry Run Creek Water Protection Project	Black Hawk	URB & WWSP	2012	Grassed Waterway	WSPF	\$20,419
Dry Run Creek Water Protection Project	Black Hawk	URB & WWSP	2012	Infiltration Tree Grate	WSPF	\$5,555
Dry Run Creek Water Protection Project	Black Hawk	URB & WWSP	2012	Grassed Waterway	319	\$3,982
Dry Run Creek Water Protection Project	Black Hawk	URB & WWSP	2012	Pervious Concrete	WSPF	\$780
Dry Run Creek Water Protection Project	Black Hawk	URB & WWSP	2012	Rain Garden	WSPF	\$667
Duck Creek Watershed Project	Scott	URB & WWSP	2012	Infiltration Practices	319	\$13,000
East Fork of Grand River Watershed Project	Ringgold	WWSP	2012	Grade Stabilization Structure	WSPF	\$90,992
East Fork of Grand River Watershed Project	Ringgold	WWSP	2012	Terraces	WSPF	\$80,547
East Fork of Grand Watershed Project	Union	WWSP	2012	Terraces	WSPF	\$25,550
Elk Creek Watershed Project (Harrison)	Harrison	WWSP	2012	Grade Stabilization Structure	WSPF	\$293,856
Elk Creek Watershed Project (Harrison)	Harrison	WWSP	2012	Water and Sediment Control Basin	WSPF	\$10,150
Elk Creek Watershed Project (Harrison)	Harrison	WWSP	2012	Summer Construction Incentive	WSPF	\$1,700
Four Mile Creek NPS Watershed Project	Polk	URB & WWSP	2012	Storm Water Retrofit	WSPF	\$50,000
Four Mile Creek NPS Watershed Project	Polk	URB & WWSP	2012	Storm Water Improvement	WSPF	\$41,837
Four Mile Creek NPS Watershed Project	Polk	URB & WWSP	2012	Streambank/Shoreline Protection	WSPF	\$35,000
Four Mile Creek NPS Watershed Project	Polk	URB & WWSP	2012	Filter Strip	WSPF	\$15,000
Fox River Impaired Waters Treatment Project	Davis & Appanoose	WWPS	2012	Grade Stabilization Structure	319	\$53,200
Fox River Impaired Waters Treatment Project	Davis & Appanoose	WWPS	2012	Water and Sediment Control Basin	319	\$43,673
Fox River Impaired Waters Treatment Project	Davis & Appanoose	WWPS	2012	Pasture and Hayland Planting	319	\$5,916
Fox River Impaired Waters Treatment Project	Davis & Appanoose	WWPS	2012	Fence	319	\$2,980
Fox River Impaired Waters Treatment Project	Davis & Appanoose	WWPS	2012	Watering Facility	319	\$1,160
Fox River Water Quality Project	Van Buren, Davis & Appanoose	WWSP	2012	Grade Stabilization Structure	WSPF	\$180,500
Fox River Water Quality Project	Van Buren, Davis & Appanoose	WWSP	2012	Water and Sediment Control Basin	WSPF	\$88,060
Green Valley Watershed Erosion, Flood, and WQ Project	Union	LP	2012	Terraces	WSPF	\$42,918

Table A.9. Iowa SCS expenditures on soil conservation projects

Project name	SWCD(s) location	Project objective	FY	Cost description	Fund	Allocation*
Green Valley Watershed Erosion, Flood, and WQ Project	Union	LP	2012	Grassed Waterway	WSPF	\$28,854
Green Valley Watershed Erosion, Flood, and WQ Project	Union	LP	2012	Grade Stabilization Structure	Lake	\$23,399
Green Valley Watershed Erosion, Flood, and WQ Project	Union	LP	2012	Grade Stabilization Structure	WSPF	\$19,499
Green Valley Watershed Erosion, Flood, and WQ Project	Union	LP	2012	Water and Sediment Control Basin	WSPF	\$10,022
Iowa Great Lakes Targeted Watershed Project	Dickinson	LP	2012	LID Practices	WSPF	\$37,500
Iowa Great Lakes Targeted Watershed Project	Dickinson	LP	2012	CRP Incentive	319	\$5,000
Iowa Great Lakes Targeted Watershed Project	Dickinson	LP	2012	Grassed Waterway	319	\$3,750
Iowa Great Lakes Targeted Watershed Project	Dickinson	LP	2012	Sediment Basin	319	\$3,375
Iowa Great Lakes Targeted Watershed Project	Dickinson	LP	2012	No-Till	319	\$1,500
Iowa Great Lakes Targeted Watershed Project	Dickinson	LP	2012	Streambank/Shoreline Protection	319	\$1,500
Kettle Creek Watershed Project	Wapello	WWSP	2012	Grade Stabilization Structure	WSPF	\$22,501
Kettle Creek Watershed Project	Wapello	WWSP	2012	Water and Sediment Control Basin	WSPF	\$9,435
Lake Geode Watershed NPS Project	Des Moines & Henry	LP	2012	Grade Stabilization Structure	WSPF	\$40,500
Lake Hendricks Watershed Project	Howard	LP	2012	Wetland Creation	319	\$90,000
Lake Hendricks Watershed Project	Howard	LP	2012	Water and Sediment Control Basin	319	\$21,750
Lake Wapello Nonpoint Source Watershed Project	Davis	LP	2012	Pond	WSPF	\$10,819
Lake Wapello Nonpoint Source Watershed Project	Davis	LP	2012	Grade Stabilization Structure	WSPF	\$2,930
Lake Wapello Nonpoint Source Watershed Project	Davis	LP	2012	Water and Sediment Control Basin	WSPF	\$2,593
Littlefield Lake NPS Watershed Project	Audubon	LP	2012	Terraces	WSPF	\$25,773
Littlefield Lake NPS Watershed Project	Audubon	LP	2012	Grassed Waterway	319	\$22,963
Littlefield Lake NPS Watershed Project	Audubon	LP	2012	Grassed Waterway	WSPF	\$10,500
Littlefield Lake NPS Watershed Project	Audubon	LP	2012	Prescribed Grazing	WSPF	\$5,850
Mariposa Lake Watershed Project	Jasper	LP	2012	Wetland Creation	319	\$52,500
Muchakinock Creek Watershed Project	Mahaska	WWSP	2012	Terraces	319	\$104,235
Muchakinock Creek Watershed Project	Mahaska	WWSP	2012	Terraces	WSPF	\$42,922
Muchakinock Creek Watershed Project	Mahaska	WWSP	2012	Grade Stabilization Structure	WSPF	\$25,104
Muchakinock Creek Watershed Project	Mahaska	WWSP	2012	Water and Sediment Control Basin	WSPF	\$11,666

Table A.9. Iowa SCS expenditures on soil conservation projects

Project name	SWCD(s) location	Project objective	FY	Cost description	Fund	Allocation*
North Thompson River Water Quality Project	Adair, Madison & Union	WWSP	2012	Terraces	WSPF	\$92,781
North Thompson River Water Quality Project	Adair, Madison & Union	WWSP	2012	Grade Stabilization Structure	WSPF	\$67,936
North Thompson River Water Quality Project	Adair, Madison & Union	WWSP	2012	Grassed Waterway	WSPF	\$26,681
North Thompson River Water Quality Project	Adair, Madison & Union	WWSP	2012	Water and Sediment Control Basin	WSPF	\$1,901
Nutting Creek Watershed Project	Fayette	WWSP	2012	Waste Storage Facility	WSPF	\$30,000
Nutting Creek Watershed Project	Fayette	WWSP	2012	Terraces	WSPF	\$18,000
Nutting Creek Watershed Project	Fayette	WWSP	2012	Grade Stabilization Structure	319	\$10,481
Nutting Creek Watershed Project	Fayette	WWSP	2012	Terraces	319	\$8,325
Nutting Creek Watershed Project	Fayette	WWSP	2012	Grassed Waterway	319	\$3,668
Onion Creek Watershed Protection and Stream Restoration Project	Boone	WWSP	2012	Sediment Basin	WSPF	\$13,500
Onion Creek Watershed Protection and Stream Restoration Project	Boone	WWSP	2012	Streambank/Shoreline Protection	WSPF	\$8,000
Onion Creek Watershed Protection and Stream Restoration Project	Boone	WWSP	2012	Stream Habitat Improvement and Management	WSPF	\$7,920
Onion Creek Watershed Protection and Stream Restoration Project	Boone	WWSP	2012	Fence	WSPF	\$3,500
Onion Creek Watershed Protection and Stream Restoration Project	Boone	WWSP	2012	Riffle/Pool	WSPF	\$3,000
Onion Creek Watershed Protection and Stream Restoration Project	Boone	WWSP	2012	No-Till/Strip-Till	WSPF	\$2,000
Prairie Rose Lake Water Quality Project	Shelby	LP	2012	Grade Stabilization Structure	WSPF	\$41,250
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Grade Stabilization Structure	WSPF	\$22,847
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Grade Stabilization Structure	319	\$12,847
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Grassed Waterway	WSPF	\$4,648
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Fence	319	\$4,500
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Pond	319	\$4,000
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Use Exclusion	319	\$4,000
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Stream Crossing	319	\$1,500
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Water and Sediment Control Basin	WSPF	\$850
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Filter Strip	WSPF	\$700
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Pasture and Hayland Planting	WSPF	\$452
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Terraces	WSPF	\$275
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Heavy Use Area Protection	WSPF	\$258

Table A.9. Iowa SCS expenditures on soil conservation projects

Project name	SWCD(s) location	Project objective	FY	Cost description	Fund	Allocation*
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Pipeline	319	\$250
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Watering Facility	319	\$200
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Critical Area Planting	319	\$77
Price Creek Water Quality Project	Iowa & Benton	WWSP	2012	Critical Area Planting	WSPF	\$74
Rathbun Lake Special Project	Wayne, Appanoose, Clarke, Decatur, Lucas & Monroe	LP	2012	Terraces	319	\$296,002
Rathbun Lake Special Project	Wayne, Appanoose, Clarke, Decatur, Lucas & Monroe	LP	2012	Terraces	WSPF	\$222,703
Rathbun Lake Special Project	Wayne, Appanoose, Clarke, Decatur, Lucas & Monroe	LP	2012	Grade Stabilization Structure	319	\$178,974
Rathbun Lake Special Project	Wayne, Appanoose, Clarke, Decatur, Lucas & Monroe	LP	2012	Water and Sediment Control Basin	WSPF	\$55,789
Rathbun Lake Special Project	Wayne, Appanoose, Clarke, Decatur, Lucas & Monroe	LP	2012	Water and Sediment Control Basin	319	\$54,368
Rathbun Lake Special Project	Wayne, Appanoose, Clarke, Decatur, Lucas & Monroe	LP	2012	Summer Construction Incentive	319	\$48,500
Rathbun Lake Special Project	Wayne, Appanoose, Clarke, Decatur, Lucas & Monroe	LP	2012	Grade Stabilization Structure	WSPF	\$8,200
Rathbun Lake Special Project	Wayne, Appanoose, Clarke, Decatur, Lucas & Monroe	LP	2012	Grassed Waterway	319	\$932
Rathbun Lake Special Project	Wayne, Appanoose, Clarke, Decatur, Lucas & Monroe	LP	2012	Grassed Waterway	WSPF	\$490
Silver Creek Watershed Project	Clayton	WWSP	2012	Terraces	319	\$75,518
Silver Creek Watershed Project	Clayton	WWSP	2012	Terraces	WSPF	\$59,649
Silver Creek Watershed Project	Clayton	WWSP	2012	Streambank/Shoreline Protection	WSPF	\$17,416
Silver Creek Watershed Project	Clayton	WWSP	2012	Grassed Waterway	319	\$16,500
Silver Creek Watershed Project	Clayton	WWSP	2012	Water and Sediment Control Basin	WSPF	\$7,500
Silver Creek Watershed Project	Clayton	WWSP	2012	Grassed Waterway	WSPF	\$4,059

Table A.9. Iowa SCS expenditures on soil conservation projects

Project name	SWCD(s) location	Project objective	FY	Cost description	Fund	Allocation*
Silver Lake Watershed Protection Project (Dickinson)	Dickinson	LP	2012	Sediment Basin	WSPF	\$4,500
Silver Lake Watershed Protection Project (Dickinson)	Dickinson	LP	2012	CRP Incentive	WSPF	\$1,250
Silver Lake Watershed Protection Project (Dickinson)	Dickinson	LP	2012	Grassed Waterway	WSPF	\$875
Silver Lake Watershed Protection Project (Dickinson)	Dickinson	LP	2012	No-Till	WSPF	\$600
Tete Des Morts Creek Watershed Project	Jackson	WWSP	2012	Waste Storage Facility	319	\$271,428
Tete Des Morts Creek Watershed Project	Jackson	WWSP	2012	Streambank/Shoreline Protection	319	\$77,052
Tete Des Morts Creek Watershed Project	Jackson	WWSP	2012	Grade Stabilization Structure	WSPF	\$65,576
Tete Des Morts Creek Watershed Project	Jackson	WWSP	2012	Water and Sediment Control Basin	WSPF	\$42,725
Tete Des Morts Creek Watershed Project	Jackson	WWSP	2012	Grassed Waterway	WSPF	\$22,636
Tete Des Morts Creek Watershed Project	Jackson	WWSP	2012	Streambank/Shoreline Protection	WSPF	\$7,250
Tete Des Morts Creek Watershed Project	Jackson	WWSP	2012	Terraces	WSPF	\$6,115
Tete Des Morts Creek Watershed Project	Jackson	WWSP	2012	Nutrient Management	319	\$4,860
Tete Des Morts Creek Watershed Project	Jackson	WWSP	2012	Nutrient Management	WSPF	\$4,860
Union Grove Lake NPS Watershed Project	Tama	LP	2012	Grassed Waterway	WSPF	\$37,748
Union Grove Lake NPS Watershed Project	Tama	LP	2012	Grassed Waterway	319	\$20,457
Union Grove Lake NPS Watershed Project	Tama	LP	2012	Water and Sediment Control Basin	319	\$11,250
Union Grove Lake NPS Watershed Project	Tama	LP	2012	Cover Crop	WSPF	\$5,400
Union Grove Lake NPS Watershed Project	Tama	LP	2012	Wetland Creation	319	\$3,543
Union Grove Lake NPS Watershed Project	Tama	LP	2012	Fence	319	\$1,602
Upper Catfish Creek Watershed Protection Project	Dubuque	CWSP & URB	2012	Grade Stabilization Structure	WSPF	\$40,967
Upper Catfish Creek Watershed Protection Project	Dubuque	CWSP & URB	2012	Rain Garden	WSPF	\$22,208
Upper Catfish Creek Watershed Protection Project	Dubuque	CWSP & URB	2012	Water and Sediment Control Basin	WSPF	\$16,023
Upper Catfish Creek Watershed Protection Project	Dubuque	CWSP & URB	2012	Soil Quality Improvement	WSPF	\$4,602
Upper Catfish Creek Watershed Protection Project	Dubuque	CWSP & URB	2012	Water and Sediment Control Basin	319	\$3,043
Upper Catfish Creek Watershed Protection Project	Dubuque	CWSP & URB	2012	Timber Stand Improvement	WSPF	\$2,400
Upper Catfish Creek Watershed Protection Project	Dubuque	CWSP & URB	2012	Native Landscaping	WSPF	\$422
Upper Whitebreast Creek Water Quality Project	Clarke, Lucas	WWSP	2012	Grade Stabilization Structure	WSPF	\$45,665
Upper Whitebreast Creek Water Quality Project	Clarke, Lucas	WWSP	2012	Terraces	WSPF	\$29,496

Table A.9. Iowa SCS expenditures on soil conservation projects

Project name	SWCD(s) location	Project objective	FY	Cost description	Fund	Allocation*
Upper Whitebreast Creek Water Quality Project	Clarke, Lucas	WWSP	2012	Grade Stabilization Structure	319	\$22,137
Upper Whitebreast Creek Water Quality Project	Clarke, Lucas	WWSP	2012	Grassed Waterway	319	\$17,785
Upper Whitebreast Creek Water Quality Project	Clarke, Lucas	WWSP	2012	Fence	WSPF	\$12,125
Upper Whitebreast Creek Water Quality Project	Clarke, Lucas	WWSP	2012	Water and Sediment Control Basin	WSPF	\$2,835
Upper Whitebreast Creek Water Quality Project	Clarke, Lucas	WWSP	2012	Watering Facility	WSPF	\$1,503
Walnut Creek Watershed Quality Improvement Project	Poweshiek	WWSP	2012	Summer Construction Incentive	WSPF	\$7,500
Walnut Creek Watershed Quality Improvement Project	Poweshiek	WWSP	2012	Water and Sediment Control Basin	WSPF	\$7,067
Walnut Creek Watershed Quality Improvement Project	Poweshiek	WWSP	2012	Grassed Waterway	WSPF	\$6,048
Walnut Creek Watershed Quality Improvement Project	Poweshiek	WWSP	2012	Prescribed Grazing	WSPF	\$3,747
Walnut Creek Watershed Quality Improvement Project	Poweshiek	WWSP	2012	Grade Stabilization Structure	WSPF	\$3,726
Walnut Creek Watershed Quality Improvement Project	Poweshiek	WWSP	2012	Prescribed Grazing	319	\$275
West Tarkio Watershed Project	Page & Montgomery	WWSP	2012	Terraces	WSPF	\$126,300
West Tarkio Watershed Project	Page & Montgomery	WWSP	2012	Water and Sediment Control Basin	WSPF	\$3,700
White Oak Lake Nonpoint Source Watershed Project	Mahaska	LP	2012	Wetland Creation	319	\$100,000
Williamson Pond Watershed Project	Lucas	LP	2012	Water and Sediment Control Basin	319	\$63,360
Williamson Pond Watershed Project	Lucas	LP	2012	Grade Stabilization Structure	319	\$47,100
Yellow River Headwaters Watershed Project	Winneshiek & Allamakee	CWSP	2012	Grade Stabilization Structure	WSPF	\$127,845
Yellow River Headwaters Watershed Project	Winneshiek & Allamakee	CWSP	2012	Terraces	WSPF	\$29,873
Yellow River Headwaters Watershed Project	Winneshiek & Allamakee	CWSP	2012	Grassed Waterway	WSPF	\$17,030
Yellow River Headwaters Watershed Project	Winneshiek & Allamakee	CWSP	2012	Use Exclusion	WSPF	\$7,635
Yellow River Headwaters Watershed Project	Winneshiek & Allamakee	CWSP	2012	Heavy Use Area Protection	WSPF	\$4,737
Yellow River Headwaters Watershed Project	Winneshiek & Allamakee	CWSP	2012	Sediment Basin	WSPF	\$3,750
Yellow River Headwaters Watershed Project	Winneshiek & Allamakee	CWSP	2012	Summer Construction Incentive	WSPF	\$3,000

Table A.9. Iowa SCS expenditures on soil conservation projects

Project name	SWCD(s) location	Project objective	FY	Cost description	Fund	Allocation*
Yellow River Headwaters Watershed Project	Winneshiek & Allamakee	CWSP	2012	Fence	WSPF	\$1,500
Yellow River Headwaters Watershed Project	Winneshiek & Allamakee	CWSP	2012	Diversion	WSPF	\$750
Yellow River Headwaters Watershed Project	Winneshiek & Allamakee	CWSP	2012	Nutrient Management	WSPF	\$500
Yellow River Headwaters Watershed Project	Winneshiek & Allamakee	CWSP	2012	Cover Crop	WSPF	\$275
TOTAL:						\$6,041,938

Project Objectives: WWSP - Warm Water Stream Project; LP - Lake Project; URB - Urban Conservation; CWSP - Cold Water Stream Project; FLD - Flooding

Fund: WSPF - Watershed Protection Fund; 319 - Section 319 Grant Fund; Lake - Lakes Restoration Fund

* These amounts represent the allocations that were provided for state fiscal year 2012. These funds may be used to provide a cost share payment of up to 75% of the practice construction cost with the landowner/producer providing the remaining 25%. Funds may also be used in combination with other state and/or federal program funds to provide the 75% cost share amount.

Table A.10. Taxable sales, sales tax and revenues from 3/8 cent tax

County	Taxable Sales	Computed Tax	NewTax
Adair	50,526,369.00	3,008,384.21	189,473.88
Adams	24,095,850.00	1,443,064.34	90,359.44
Allamakee	84,550,879.00	5,065,264.11	317,065.80
Appanoose	93,559,330.00	5,570,122.15	350,847.49
Audubon	31,757,004.00	1,904,813.68	119,088.77
Benton	114,707,440.00	6,876,867.05	430,152.90
Black Hawk	1,710,560,724.00	102,322,483.90	6,414,602.72
Boone	157,992,144.00	9,461,754.78	592,470.54
Bremer	171,702,918.00	10,279,204.85	643,885.94
Buchanan	153,364,056.00	9,191,220.77	575,115.21
Buena Vista	183,179,400.00	10,951,970.89	686,922.75
Butler	52,531,091.00	3,151,496.02	196,991.59
Calhoun	45,441,263.00	2,725,963.59	170,404.74
Carroll	269,747,733.00	16,154,617.54	1,011,554.00
Cass	131,896,830.00	7,898,180.86	494,613.11
Cedar	89,130,779.00	5,344,808.21	334,240.42
Cerro Gordo	652,979,615.00	39,050,325.93	2,448,673.56
Cherokee	98,343,641.00	5,889,048.03	368,788.65
Chickasaw	86,539,219.00	5,183,646.69	324,522.07
Clarke	68,149,703.00	4,056,131.15	255,561.39
Clay	264,021,074.00	15,813,338.00	990,079.03
Clayton	106,093,881.00	6,339,660.25	397,852.05
Clinton	462,113,436.00	27,677,229.63	1,732,925.39
Crawford	112,746,064.00	6,748,489.01	422,797.74
Dallas	946,448,054.00	56,473,640.42	3,549,180.20
Davis	43,699,039.00	2,617,358.02	163,871.40
Decatur	32,713,008.00	1,955,921.94	122,673.78
Delaware	110,282,250.00	6,608,757.28	413,558.44
Des Moines	495,348,228.00	29,617,497.16	1,857,555.86
Dickinson	247,236,129.00	14,699,659.68	927,135.48
Dubuque	1,162,499,417.17	69,477,234.50	4,359,372.81
Emmet	79,977,279.00	4,788,691.02	299,914.80
Fayette	120,362,787.00	7,206,200.37	451,360.45
Floyd	102,641,848.00	6,141,894.80	384,906.93
Franklin	65,389,556.00	3,915,185.54	245,210.84
Fremont	51,712,557.00	3,086,427.60	193,922.09
Greene	58,964,988.00	3,533,726.98	221,118.71
Grundy	67,925,030.00	4,071,049.90	254,718.86
Guthrie	56,417,183.00	3,378,943.02	211,564.44
Hamilton	95,015,229.00	5,684,552.77	356,307.11
Hancock	82,355,525.00	4,933,558.79	308,833.22

Table A.10. Taxable sales, sales tax and revenues from 3/8 cent tax

County	Taxable Sales	Computed Tax	NewTax
Hardin	139,967,183.00	8,383,636.03	524,876.94
Harrison	65,224,079.00	3,896,426.75	244,590.30
Henry	156,644,288.00	9,376,895.38	587,416.08
Howard	61,647,860.00	3,694,063.34	231,179.48
Humboldt	69,639,104.00	4,172,779.93	261,146.64
Ida	42,778,490.00	2,530,780.31	160,419.34
Iowa	172,780,361.00	10,321,988.52	647,926.35
Jackson	115,119,613.00	6,896,147.94	431,698.55
Jasper	314,790,819.00	18,841,928.77	1,180,465.57
Jefferson	140,901,862.00	8,434,509.09	528,381.98
Johnson	1,587,451,852.00	94,827,327.41	5,952,944.45
Jones	128,691,282.00	7,707,759.74	482,592.31
Keokuk	38,353,427.00	2,298,397.22	143,825.35
Kossuth	138,890,566.00	8,321,097.76	520,839.62
Lee	296,395,404.00	17,728,772.70	1,111,482.77
Linn	3,425,263,882.00	204,859,538.99	12,844,739.56
Louisa	29,566,907.00	1,772,275.79	110,875.90
Lucas	39,425,890.00	2,361,138.13	147,847.09
Lyon	70,649,216.00	4,235,388.18	264,934.56
Madison	71,238,315.00	4,270,550.32	267,143.68
Mahaska	175,442,228.00	10,507,912.67	657,908.36
Marion	249,716,915.00	14,936,309.11	936,438.43
Marshall	327,832,928.00	19,617,025.50	1,229,373.48
Mills	61,126,702.00	3,666,232.55	229,225.13
Mitchell	61,724,493.00	3,698,251.20	231,466.85
Monona	46,674,833.00	2,791,098.88	175,030.62
Monroe	38,089,888.00	2,280,160.50	142,837.08
Montgomery	71,668,816.00	4,287,060.71	268,758.06
Muscatine	437,211,619.00	26,179,355.05	1,639,543.57
Obrien	107,460,665.00	6,432,607.20	402,977.49
Osceola	32,464,233.00	1,945,637.59	121,740.87
Page	101,702,913.00	6,089,457.64	381,385.92
Palo Alto	66,967,716.00	4,000,252.78	251,128.94
Plymouth	171,132,773.00	10,245,901.89	641,747.90
Pocahontas	39,426,951.00	2,361,767.32	147,851.07
Polk	6,563,580,934.00	392,240,075.94	24,613,428.50
Pottawattamie	997,225,688.00	59,434,848.07	3,739,596.33
Poweshiek	147,407,447.00	8,799,481.54	552,777.93
Ringgold	54,291,132.00	3,254,154.42	203,591.75
Sac	61,694,330.00	3,695,724.05	231,353.74
Scott	2,379,338,801.00	142,291,314.66	8,922,520.50
Shelby	79,867,455.00	4,782,106.83	299,502.96

Table A.10. Taxable sales, sales tax and revenues from 3/8 cent tax

County	Taxable Sales	Computed Tax	NewTax
Sioux	304,679,588.00	18,250,265.48	1,142,548.46
Story	857,329,183.00	51,196,521.90	3,214,984.44
Tama	68,895,588.00	4,124,315.91	258,358.46
Taylor	24,981,085.00	1,498,477.27	93,679.07
Union	116,535,197.00	6,972,760.72	437,006.99
Van Buren	29,619,067.00	1,771,263.11	111,071.50
Wapello	368,069,247.50	22,035,175.02	1,380,259.68
Warren	233,030,815.00	13,973,388.15	873,865.56
Washington	163,144,022.00	9,747,202.14	611,790.08
Wayne	25,939,404.00	1,554,064.11	97,272.77
Webster	462,448,513.00	27,635,137.37	1,734,181.92
Winnebago	73,588,615.00	4,413,945.69	275,957.31
Winneshiek	186,990,391.00	11,182,180.76	701,213.97
Woodbury	1,450,964,146.00	86,851,099.87	5,441,115.55
Worth	33,846,674.00	2,006,268.11	126,925.03
Wright	91,766,737.00	5,502,215.35	344,125.26
		Total:	123,390,062.56

IOWA STATE UNIVERSITY

Extension and Outreach

... and justice for all

The US Department of Agriculture (USDA) prohibits discrimination in all its programs and activities based on race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice or TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue SW, Washington, DC 20250-9410 or call 800-795-3272 (voice) or 202-720-6382 (TDD).

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the US Department of Agriculture. Cathann Kress, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.