

The Economic Contributions of Recreational Visitation at Iowa Wetland Management District

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This paper establishes the economic contribution baseline for recreational visitation at Iowa Wetland Management District (District). The paper addresses the levels of recreational activities and the economic effects of recreational activities. The analysis is followed by a glossary of terms. For more information regarding the methodology, please refer to “Banking on Nature – The Economic Contributions to Local Communities of National Wildlife Refuge Visitation” at <https://www.fws.gov/economics/divisionpublications/divisionpublications.asp>.

From an economic perspective, Iowa WMD provides a variety of environmental and natural resource goods and services used by people either directly or indirectly. The use of these goods and services may result in economic effects to both local and state economies. The various services the Refuge provides can be grouped into five broad categories: (1) maintenance and conservation of environmental resources, services and ecological processes; (2) protection of natural resources such as fish, wildlife, and plants; (3) protection of cultural and historical sites and objects; (4) provision of educational and research opportunities; and (5) outdoor and wildlife-related recreation. A comprehensive economic profile of the Refuge would address all applicable economic effects associated with the use of refuge-produced goods and services. However, some of the major contributions of the Refuge to the natural environment, such as watershed protection, maintenance and stabilization of ecological processes, and the enhancement of biodiversity are beyond the scope of this paper. Therefore, this paper focuses on economic effects associated with recreational visitation. As a result, benefits represent conservative estimates and do not represent the Refuge’s total social impacts.

District Description

The Iowa WMD is situated in the southern part of the Prairie Pothole Region of North America. The Prairie Pothole Region makes up just 10 percent of North America’s waterfowl breeding habitat, but produces 50 percent of the continent’s ducks in an average year. Approximately 90 percent of the wetlands in Iowa have been drained since the state was settled. We have restored thousands of acres of these previously drained wetlands within the district to reestablish habitat for nesting waterfowl. These wetlands also provide vitally important habitat to a vast array of waterfowl and other migratory birds for feeding and resting during migration. Tallgrass prairie is a fire-dependent ecosystem characterized by tall grasses, wildflowers, and deep, rich soils. Tallgrass prairie once covered parts of 14 states in the Midwest, including about 80 percent of Iowa. Less than 0.1 percent of the original tallgrass prairie in Iowa remains today. We have replanted tallgrass prairie on thousands of acres of former cropland in the Iowa WMD. Our reconstructed prairie provides critical habitat for many grassland-dependent wildlife species.

Although the District boundary encompasses 35 counties, at this time there are 75 waterfowl production areas in only 18 of those counties. Most land purchases are intended to increase habitat at existing wetland complexes, so it is unlikely that land will be purchased in the entire 35-county area. The waterfowl production areas range in size from 35 acres to over 2000 acres, and provide over 25,000 total acres of habitat. In addition, some waterfowl production areas within the district have been recognized as part of twelve Important Bird Areas established by the Audubon Society and five Iowa Bird Conservation Areas, as defined under the North American Bird Conservation Initiative.

Activity Levels

Table 1 shows the recreation visits for the District. The District had about 145,000 recreational visits in 2017 which contributed to the economic effect of the District. Non-consumptive recreation accounted for about 18,000 visits with residents comprising 87 percent of District visitation.

Table 1. Iowa WMD: 2017 Recreation Visits

Activity	Residents	Non-Residents	Total
Non-Consumptive:			
Pedestrian	1,081	120	1,201
Auto Tour	10,200	1,133	11,333
Boat Trail/Launch	-	-	-
Bicycle	1,401	600	2,001
Photography	734	82	816
Interpretation	73	8	81
Other Recreation	-	-	-
Visitor Center	2,049	362	2,410
Hunting:			
Big Game	4,846	255	5,101
Small Game	37,508	12,503	50,010
Migratory Birds	67,469	3,551	71,020
Fishing:	1,189	12	1,201
Total Visitation	126,549	18,625	145,174

Source: Refuge Annual Performance Plan 2017 and Refuge Staff

Regional Economic Analysis

With the District covering about one-third of Iowa, the economic area for the District is the 13-county area of Dickinson, Emmet, Kossuth, Winnebago, Worth, Cerro Gordo, Hancock, Palo Alto, Clay, Buena Vista, Pocahontas, Wright, Sac, Greene, Boone, Guthrie, and Polk Counties. It is assumed that visitor expenditures occur primarily within these counties. Visitor recreation expenditures for 2017 are shown in Table 2. Total expenditures were \$2.6 million with non-residents accounting for \$749,000 or 29 percent of total expenditures. Expenditures on hunting activities accounted for 97 percent of all expenditures.

Spending in the local area generates and supports economic activity within the 13 county area (Table 3). The contribution of recreational spending in local communities was associated with about 35 jobs, \$1.7 million in employment income, \$228,000 in total tax revenue, and \$4.3 million in economic output.

Table 2. Iowa WMD: Visitor Recreation Expenditures (2017 \$,000)

Activity	Residents	Non-Residents	Total
Non-Consumptive	\$58.4	\$21.4	\$79.9
Hunting	\$1,769.3	\$727.0	\$2,496.3
Fishing	\$8.1	\$0.2	\$8.3
Total Expenditures	\$1,835.8	\$748.7	\$2,584.5

Table 3. Iowa WMD: Local Economic Contributions Associated with Recreation Visits (2017 \$,000)

	Residents	Non-Residents	Total
Economic Output	\$3,053.9	\$1,238.6	\$4,292.5
Jobs	25	10	35
Job Income	\$1,198.6	\$454.4	\$1,653.0
State and Local Tax Revenue	\$157.0	\$70.8	\$227.7

Glossary

Economic Contribution: The economic activity generated in a region by residents and non-resident recreation spending.

Expenditures: The spending by recreational visitors when visiting refuges. Expenditure categories include food, lodging, transportation, and other. Expenditure information is based on the 2011 National Survey of Fishing, Hunting and Wildlife Associated Recreation (NSFHWR).

Economic Output: The total spending by final consumers on all goods. The amount reported in this study is the change in spending by final consumers in the region attributable to refuge visitation. Economic output includes spending by people who earn income from refuge visitors' activities as well as spending by refuge visitors themselves.

Impact: The new economic activity generated in a region as a refuge attracts non-residents to the area. This figure represents economic activity that would be lost if the refuge were not there.

IMPLAN: An economic modeling software package that applies input-output analysis techniques to regional economies.

Jobs: Full and part time jobs.

Job Income: Income to households from labor including wages and salaries.

Resident/Non-Resident: People living more than 50 miles from the refuges are considered non-residents for this study.

Tax Revenue: Local, county and state taxes: sales tax, property tax, and income tax

Visitors: A visitor is someone who comes to the refuge and participates in one or more of the activities available at the refuge.

Visits (visitation): A visit is not the same as a visitor. One visitor could be responsible for several visits on a refuge. For example, if a family of four went fishing in the morning and hiked a short nature trail in the afternoon, they would have contributed eight activity visits to the refuge; yet, they are only four visitors.

References

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