

The Economic Contributions of Recreational Visitation at Sherburne National Wildlife Refuge

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This paper establishes the economic contribution baseline for recreational visitation at Sherburne National Wildlife Refuge (Refuge). The paper addresses the levels of Refuge recreational activities and the economic effects of Refuge 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, Sherburne National Wildlife Refuge 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.

Refuge Description

Sherburne National Wildlife Refuge is located in central Minnesota and was established in 1965 at the urging of local conservationists and sportsmen interested in restoring the wildlife values of the St. Francis River Basin, which had been altered by a series of drainage ditches and agricultural production. The land was purchased under the authority of the Migratory Bird Conservation Act of 1929 and is managed to promote the health and well-being of migratory birds and their habitat. At 30,700 acres predominately composed of oak savanna, Sherburne supports a wide variety of wildlife, including state threatened Blanding’s turtles, and is a fall staging area for greater sandhill cranes, with a record number of over 11,000 cranes estimated to be roosting on the refuge in recent years. The oak savanna habitat was traditionally found in Minnesota and the Midwest, but has largely disappeared from the landscape due to plowing and development. Only about 0.02 percent of this habitat remains and the Refuge strives to maintain, enhance and restore this landscape for the benefit of a wide variety of species, including the red-headed woodpecker.

The Refuge is an asset to the local community, providing recreational opportunities for residents and for those traveling through these communities. Many visitors enjoy the scenery and wildlife that can be spotted on the refuge’s three hiking trails, the Prairie’s Edge Wildlife Drive, or from a canoe or kayak on the designated canoe route along the St. Francis River. From a consumptive standpoint, we are known for deer, small game and migratory bird hunting and anglers are commonly spotted at the various fishing access points spread across the Refuge.

The Refuge hosts environmental education programs throughout the year for local elementary and intermediate schools, both on and off site. The Refuge has a partnership with two schools who receive volunteer or staff-led programming and offer self-led opportunities for other neighboring school districts. It also provides a variety of interpretive programs and events throughout the calendar year, with the two featured events being the World Migratory Bird Day Spring Celebration in May and the Wildlife Festival in September. The Refuge is fortunate to have an active volunteer program, with over 200 passionate and dedicated individuals donating their time and expertise, many for over a decade. In addition, the Friends of Sherburne National Wildlife Refuge support the refuge immensely through volunteerism, advocacy, and fundraising, and celebrated their 25th anniversary in July 2018.

Activity Levels

Table 1 shows the recreation visits for the Refuge. The Refuge had about 78,000 recreational visits in 2017 which contributed to the economic effect of the Refuge. Non-consumptive recreation accounted for about 66,000 visits with residents comprising 62 percent of Refuge visitation.

Table 1. Sherburne NWR: 2017 Recreation Visits

Activity	Residents	Non-Residents	Total
Non-Consumptive:			
Pedestrian	16,346	7,006	23,352
Auto Tour	15,196	6,512	21,708
Boat Trail/Launch	266	114	380
Bicycle	284	122	405
Photography	4,199	1,799	5,998
Interpretation	85	36	121
Other Recreation	6,032	6,032	12,063
Visitor Center	1,129	1,129	2,257
Hunting:			
Big Game	2,236	3,355	5,591
Small Game	996	1,493	2,489
Migratory Birds	683	1,025	1,708
Fishing:	1,396	930	2,326
Total Visitation	48,846	29,552	78,398

Source: Refuge Annual Performance Plan 2017 and Refuge Staff

Regional Economic Analysis

The economic area for the Refuge is Sherburne County, Minnesota. It is assumed that visitor expenditures occur primarily within this county. Visitor recreation expenditures for 2017 are shown in Table 2. Total expenditures were \$1.2 million with non-residents accounting for \$771,000 or 62 percent of total expenditures. Expenditures on non-consumptive activities accounted for 65 percent of all expenditures.

Spending in the local area generates and supports economic activity within Sherburne County (Table 3). The contribution of recreational spending in local communities was associated with about 19 jobs, \$396,000 in employment income, \$153,000 in total tax revenue, and \$1.6 million in economic output.

Table 2. Sherburne NWR: Visitor Recreation Expenditures (2017 \$,000)

Activity	Residents	Non-Residents	Total
Non-Consumptive	\$370.0	\$433.8	\$803.8
Hunting	\$78.9	\$313.2	\$392.1
Fishing	\$14.3	\$23.9	\$38.1
Total Expenditures	\$463.2	\$770.8	\$1,234.0

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

	Residents	Non-Residents	Total
Economic Output	\$624.6	\$994.1	\$1,618.7
Jobs	8	11	19
Job Income	\$156.5	\$239.8	\$396.3
State and Local Tax Revenue	\$57.3	\$95.3	\$152.5

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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