

The Economic Contributions of Recreational Visitation at Des Lacs National Wildlife Refuge

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Division of Economics
U.S. Fish & Wildlife Service

This paper establishes the economic contribution baseline for recreational visitation at Des Lacs 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, Des Lacs 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

Des Lacs National Wildlife Refuge encompasses more than 19,500 acres along the Des Lacs River from the Canadian Border to a point 8 miles south of Kenmare, North Dakota. A mix of natural lakes and managed wetlands in the valley provide a haven for migrating and nesting waterfowl and marsh birds.

Refuge marshes, lakes, prairies, and wooded coulees provide wildlife and variety of habitats. Because of this mix, more than 250 bird species have been recorded making the Refuge a bird watchers paradise.

Des Lacs NWR offers high quality opportunities for you to enjoy wildlife-dependent recreation. Nature trails on the refuge offer chances to see wildlife in natural settings. A scenic auto tour points out historic and natural wonders in the valley. Deer and late season upland game bird hunting opportunities are available in the fall, or take a ride on a kayak to enjoy the wildlife and scenery of middle Des Lacs Lake.

Activity Levels

Table 1 shows the recreation visits for the Refuge. The Refuge had about 6,000 recreational visits in 2017 which contributed to the economic effect of the Refuge. Non-consumptive recreation accounted for most visits with residents comprising 70 percent of Refuge visitation.

Table 1. Des Lacs NWR: 2017 Recreation Visits

Activity	Residents	Non-Residents	Total
Non-Consumptive:			
Pedestrian	736	315	1,051
Auto Tour	3,087	1,323	4,410
Boat Trail/Launch	23	3	26
Bicycle	-	-	-
Photography	6	1	7
Interpretation	-	-	-
Other Recreation	-	-	-
Visitor Center	40	160	200
Hunting:			
Big Game	225	25	250
Small Game	119	6	125
Migratory Birds	-	-	-
Fishing:	-	-	-
Total Visitation	4,236	1,833	6,069

Source: Refuge Annual Performance Plan 2017 and Refuge Staff

Regional Economic Analysis

The economic area for the Refuge is the two-county area of Burke and Ward Counties in North Dakota. It is assumed that visitor expenditures occur primarily within these counties. Visitor recreation expenditures for 2017 are shown in Table 2. Total expenditures were \$180,000 with non-residents accounting for \$114,000 or 63 percent of total expenditures. Expenditures on non-consumptive activities accounted for 93 percent of all expenditures.

Spending in the local area generates and supports economic activity within the two county area (Table 3). The contribution of recreational spending in local communities was associated with about 2 jobs, \$79,000 in employment income, \$4,000 in total tax revenue, and \$252,000 in economic output.

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

Activity	Residents	Non-Residents	Total
Non-Consumptive	\$57.7	\$108.9	\$166.5
Hunting	\$8.7	\$4.7	\$13.4
Fishing	-	-	-
Total Expenditures	\$66.3	\$113.6	\$179.9

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

	Residents	Non-Residents	Total
Economic Output	\$96.0	\$156.3	\$252.3
Jobs	1	1	2
Job Income	\$30.9	\$47.6	\$78.5
State and Local Tax Revenue	-	\$4.1	\$4.1

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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