

The Economic Contributions of Recreational Visitation at Lee Metcalf 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 Lee Metcalf 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, Lee Metcalf 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

Lee Metcalf National Wildlife Refuge is approximately 2 miles north of Stevensville and 25 miles south of Missoula in Ravalli County, Montana. The Refuge lies in the heart of the Bitterroot Valley, cradled between two mountain ranges: the Bitterroot Mountains to the west and the Sapphire Mountains to the east. Today, the refuge boundary encompasses 2,800 acres. Elevation ranges from about 3,225 feet on the north end of the Refuge to about 3,314 feet on the south.

The Refuge contains upland habitat composed of floodplain and terrace grasslands, shrublands, or a combination of both. The Refuge also has riparian habitat consisting of woodlands, wetlands, and wetland impoundments that have open water and persistent emergent vegetation. Other habitats include the river channel and areas of either bare or very sparse vegetation.

The Refuge serves as a staging and nesting area for migrating waterfowl, shorebirds, sandhill cranes, and other migratory birds. A variety of refuge habitats are home for native resident wildlife such as bats, white-tailed deer, porcupines, and beaver. The Refuge is located in the Bitterroot River floodplain.

Activity Levels

Table 1 shows the recreation visits for the Refuge. The Refuge had about 178,000 recreational visits in 2017 which contributed to the economic effect of the Refuge. Non-consumptive recreation accounted for about 176,000 visits with residents comprising 57 percent of Refuge visitation.

Table 1. Lee Metcalf NWR: 2017 Recreation Visits

Activity	Residents	Non-Residents	Total
Non-Consumptive:			
Pedestrian	50,400	21,600	72,000
Auto Tour	36,000	44,000	80,000
Boat Trail/Launch	-	-	-
Bicycle	66	594	660
Photography	10,920	7,280	18,200
Interpretation	295	295	590
Other Recreation	-	-	-
Visitor Center	1,944	2,376	4,320
Hunting:			
Big Game	726	484	1,210
Small Game	-	-	-
Migratory Birds	552	237	789
Fishing:	-	-	-
Total Visitation	100,903	76,866	177,769

Source: Refuge Annual Performance Plan 2017 and Refuge Staff

Regional Economic Analysis

The economic area for the Refuge is Ravalli County, Montana. It is assumed that visitor expenditures occur primarily within this county. Visitor recreation expenditures for 2017 are shown in Table 2. Total expenditures were \$3.2 million with non-residents accounting for \$2.4 million or 75 percent of total expenditures. Expenditures on non-consumptive activities accounted for 96 percent of all expenditures.

Spending in the local area generates and supports economic activity within Ravalli County (Table 3). The contribution of recreational spending in local communities was associated with about 45 jobs, \$4.5 million in employment income, \$302,000 in total tax revenue, and \$4.5 million in economic output.

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

Activity	Residents	Non-Residents	Total
Non-Consumptive	\$780.5	\$2,324.2	\$3,104.8
Hunting	\$30.5	\$92.3	\$122.8
Fishing	\$0.0	\$0.0	\$0.0
Total Expenditures	\$811.1	\$2,416.5	\$3,227.6

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

	Residents	Non-Residents	Total
Economic Output	\$1,125.0	\$3,352.6	\$4,477.6
Jobs	12	33	45
Job Income	\$307.6	\$873.6	\$1,181.3
State and Local Tax Revenue	\$77.6	\$224.2	\$301.8

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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