

The Economic Contributions of Recreational Visitation at Charles M. Russell National Wildlife Refuge

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This paper establishes the economic contribution baseline for recreational visitation at Charles M. Russell 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, Charles M. Russell 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

Charles M. Russell National Wildlife Refuge encompasses an area of 1.1 million acres that spans 125 air miles along the Missouri River, from the Fort Peck Dam west to the boundary with the Upper Missouri River Breaks National Monument.

Given the size and remoteness of the Refuge, the area has changed very little from the historic voyage of the Lewis and Clark expedition, through the era of outlaws and homesteaders, to the present time. Elk, mule deer, pronghorn, bighorn sheep, sage and sharp-tailed grouse, and bald eagles make the Refuge home. Visitors find spectacular examples of native prairie, forested coulees, river bottoms, and "breaks" badlands so often portrayed in the paintings of the colorful artist for whom this Refuge is named.

Hunting and fishing opportunities abound on Charles M. Russell NWR. Boating is popular on the Missouri River and Fort Peck Reservoir. Several state parks and recreational areas have been developed within the Refuge and excellent wildlife viewing and photography opportunities are found throughout the Refuge. Each fall, hundreds of elk congregate in the Slippery Ann Wildlife Viewing Area, creating a spectacle not to be missed. Camping, hiking and horseback riding are permitted.

Activity Levels

Table 1 shows the recreation visits for the Refuge. The Refuge had about 439,000 recreational visits in 2017 which contributed to the economic effect of the Refuge. Non-consumptive recreation accounted for about 190,000 visits with residents comprising 38 percent of Refuge visitation.

Table 1. Charles M. Russell NWR: 2017 Recreation Visits

Activity	Residents	Non-Residents	Total
Non-Consumptive:			
Pedestrian	80	320	400
Auto Tour	16,000	64,000	80,000
Boat Trail/Launch	25,000	25,000	50,000
Bicycle	100	400	500
Photography	9,000	21,000	30,000
Interpretation	600	2,400	3,000
Other Recreation	3,200	800	4,000
Visitor Center	4,400	17,600	22,000
Hunting:			
Big Game	21,000	49,000	70,000
Small Game	1,800	4,200	6,000
Migratory Birds	2,080	520	2,600
Fishing:	85,000	85,000	170,000
Total Visitation	168,260	270,240	438,500

Source: Refuge Annual Performance Plan 2017 and Refuge Staff

Regional Economic Analysis

The economic area for the Refuge is the six-county area of Fergus, Garfield, McCone, Petroleum, Phillips, and Valley Counties in Montana. It is assumed that visitor expenditures occur primarily within these counties. Visitor recreation expenditures for 2017 are shown in Table 2. Total expenditures were \$26.3 million with non-residents accounting for \$22.9 million or 87 percent of total expenditures. Expenditures on hunting, fishing, and non-consumptive activities accounted for 42 percent, 32 percent, and 26 percent of expenditures, respectively.

Spending in the local area generates and supports economic activity within the six county area (Table 3). The contribution of recreational spending in local communities was associated with about 320 jobs, \$9.1 million in employment income, \$2.0 million in total tax revenue, and \$33.2 million in economic output.

Table 2. Charles M. Russell NWR: Visitor Recreation Expenditures (2017 \$,000)

Activity	Residents	Non-Residents	Total
Non-Consumptive	\$725.8	\$6,110.6	\$6,836.4
Hunting	\$843.4	\$10,306.5	\$11,149.9
Fishing	\$1,906.1	\$6,433.2	\$8,339.3
Total Expenditures	\$3,475.4	\$22,850.2	\$26,325.6

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

	Residents	Non-Residents	Total
Economic Output	\$4,508.7	\$28,736.5	\$33,245.2
Jobs	47	273	320
Job Income	\$1,282.9	\$7,822.9	\$9,105.8
State and Local Tax Revenue	\$252.2	\$1,752.9	\$2,005.1

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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