

# **The Economic Contributions of Recreational Visitation at Kootenai National Wildlife Refuge**

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This paper establishes the economic contribution baseline for recreational visitation at Kootenai 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, Kootenai 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**

Nestled in a glacial valley, flanked on the west by the Selkirk Mountains and on the east by the Purcell Range, lies the Kootenai River. For thousands of years, spring floods of the Kootenai River inundated the valley floor, creating a mixture of floodplain forests, river meanders, old oxbows, and wet meadows—the largest wetland complex in what would eventually become the State of Idaho. The river also laid down rich soils that would later attract farmers to the region.

The Kootenai River and its tributaries teemed with white sturgeon, burbot, kokanee, redband trout, cutthroat trout, and bull trout. In spring and fall, multitudes of ducks, geese, and swans passed through the valley as they migrated between nesting areas in Canada and wintering grounds to the south. In winter, the valley provided food and shelter for deer, elk, and moose. This was the ancestral home of the Kootenai (Ktunaxa) people. They were a “river people” who gained much of the livelihood from the valley’s abundant fish and waterfowl. Their material culture, from their fish traps and weirs to their unique sturgeon-nosed bark canoes, reflected their focus on wetland and river resources.

David Thompson’s 1808 expedition marked the first Euro-American incursion into the region, but the valley changed little until the discovery of gold in Canada increased traffic through the area on the Wildhorse Trail. As the mines played out, northern Idaho became known for its vast timber resources, attracting large timber interests from the East. As the easily accessible timber was cut over, farms and ranches appeared in the fertile river valley and its surrounding benchlands.

Beginning in 1921, 47 miles of the Kootenai River, and many of its tributaries, were diked in order to drain the bottomland for agriculture. In 1925, the area that would one day become a national wildlife

refuge was established as Drainage District # 7. By 1947, farming dominated the fertile river valley and 95 percent of the original wetlands had been lost. The huge flocks of waterfowl that once darkened the skies became a distant memory.

In the early 1960s, the Migratory Bird Conservation Commission (MBCC) realized that there was “a pressing need for the restoration of waterfowl habitat in this part of the Pacific Flyway.” The MBCC noted that waterfowl “generally pass over the Kootenai Valley for lack of resting or feeding areas.” So, on June 24, 1964, the MBCC authorized the acquisition of land to create Kootenai National Wildlife Refuge.

### Activity Levels

Table 1 shows the recreation visits for the Refuge. The Refuge had about 79,000 recreational visits in 2017 which contributed to the economic effect of the Refuge. Non-consumptive recreation accounted for about 78,000 visits with residents comprising 62 percent of Refuge visitation. "Other Recreation" includes cross country skiing and snowshoeing.

**Table 1. Kootenai NWR: 2017 Recreation Visits**

Activity	Residents	Non-Residents	Total
<b>Non-Consumptive:</b>			
Pedestrian	9,104	6,070	15,174
Auto Tour	12,749	8,499	21,248
Boat Trail/Launch	-	-	-
Bicycle	2,805	495	3,300
Photography	13,374	7,202	20,576
Interpretation	98	25	123
Other Recreation	6,273	3,378	9,650
Visitor Center	3,529	4,313	7,842
<b>Hunting:</b>			
Big Game	133	57	190
Small Game	15	4	19
Migratory Birds	375	250	625
<b>Fishing:</b>	6	14	20
<b>Total Visitation</b>	<b>48,462</b>	<b>30,305</b>	<b>78,767</b>

Source: Refuge Annual Performance Plan 2017 and Refuge Staff

### Regional Economic Analysis

The economic area for the Refuge is Boundary County, Idaho 20 miles south of the Canadian border and 35 miles north of Sandpoint. It is assumed that visitor expenditures occur primarily within this county. The nearest community, Bonners Ferry, is five miles west of the Refuge. The designation of the International Selkirk Loop (a 280-mile drive that travels through northern Idaho, eastern Washington and southeastern British Columbia) in 1999 as the only North American Scenic Byway and subsequent promotion has brought many new visitors to the area. Visitor recreation expenditures for 2017 are shown in Table 2. Total expenditures were \$2.3 million with non-residents accounting for \$1.8 million or 78

percent of total expenditures. Expenditures on non-consumptive activities accounted for 98 percent of all expenditures.

Spending in the local area generates and supports economic activity within Boundary County (Table 3). The contribution of recreational spending in local communities was associated with about 26 jobs, \$550,000 in employment income, \$166,000 in total tax revenue, and \$2.3 million in economic output.

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

Activity	Residents	Non-Residents	Total
Non-Consumptive	\$502.1	\$1,794.3	\$2,296.4
Hunting	\$18.7	\$32.0	\$50.7
Fishing	\$0.1	\$0.5	\$0.5
<b>Total Expenditures</b>	<b>\$520.9</b>	<b>\$1,826.8</b>	<b>\$2,347.6</b>

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

	Residents	Non-Residents	Total
Economic Output	\$520.9	\$1,826.8	\$2,347.6
Jobs	7	20	26
Job Income	\$140.3	\$410.2	\$550.6
State and Local Tax Revenue	\$42.3	\$123.6	\$166.0

## 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 8 activity visits to the refuge; yet, they are only four visitors.

## References

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