

The Economic Contributions of Recreational Visitation at Malheur National Wildlife Refuge

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

The Malheur National Wildlife Refuge is located in southeastern Oregon's high desert, at the northern end of the Great Basin. It is adjacent to the Steens Mountain, from which the wild and scenic Donner und Blitzen River flows into the Refuge's southern boundary. The Refuge is famous for its spectacular concentrations of wildlife, which are attracted to the Refuge's habitats and abundant water resources in an otherwise arid landscape. With more than 320 bird species and 60 mammal species, Malheur is a mecca for bird watchers and wildlife enthusiasts.

People have been drawn to Malheur’s abundant wildlife and natural resources for thousands of years. When unregulated market and plume hunting began to decimate populations of migratory birds, President Theodore Roosevelt stepped into stop the slaughter. In 1908, he designated Malheur as a preserve and breeding ground for native birds.

The Refuge now encompasses over 187,000 acres that are a small part of the northern Great Basin. The Refuge is disproportionately important as a stop along the Pacific Flyway, and as a resting, breeding and nesting area for hundreds of thousands of migratory birds and other wildlife. Many of the species migrating through or breeding here are highlighted as priority species in national bird conservation plans.

The Refuge is well-loved by its visitors; many return year after year, compelled by the excellent birding, opportunities for solitude, intriguing historic remnants and geologic sites, and a variety of recreational opportunities. The Refuge has strong historic ties to local residents and far-flung birding communities. Both local and distant communities will continue to play a large role in the Refuge's future.

Activity Levels

Table 1 shows the recreation visits for the Refuge. The Refuge had about 210,000 recreational visits in 2017 which contributed to the economic effect of the Refuge. Non-consumptive recreation accounted for about 208,000 visits with non-residents comprising 96 percent of Refuge visitation. The Refuge provides a variety of interpretive opportunities to connect visitors and the local community with historic and natural resources through interpretive panels, docent-led tours, special events, and group presentations.

Table 1. Malheur NWR: 2017 Recreation Visits

| Activity | Residents | Non-Residents | Total |
|-------------------------|--------------|----------------|----------------|
| Non-Consumptive: | | | |
| Pedestrian | 1,040 | 24,960 | 26,000 |
| Auto Tour | 2,400 | 57,600 | 60,000 |
| Boat Trail/Launch | 150 | 150 | 300 |
| Bicycle | 108 | 2,592 | 2,700 |
| Photography | 2,060 | 49,440 | 51,500 |
| Interpretation | 2,080 | 49,920 | 52,000 |
| Other Recreation | 40 | 960 | 1,000 |
| Visitor Center | 576 | 13,824 | 14,400 |
| Hunting: | | | |
| Big Game | 4 | 36 | 40 |
| Small Game | 225 | 675 | 900 |
| Migratory Birds | 75 | 25 | 100 |
| Fishing: | 700 | 700 | 1,400 |
| Total Visitation | 9,458 | 200,882 | 210,340 |

Source: Refuge Annual Performance Plan 2017 and Refuge Staff

Regional Economic Analysis

The economic area for the Refuge is Harney County, Oregon. It is assumed that visitor expenditures occur primarily within this county. Visitor recreation expenditures for 2017 are shown in Table 2. Total expenditures were \$30.6 million with non-residents accounting for \$30.4 million or 99 percent of total expenditures. Expenditures on non-consumptive activities accounted for 99 percent of all expenditures.

Spending in the local area generates and supports economic activity within Harney County (Table 3). The contribution of recreational spending in local communities was associated with about 387 jobs, \$8.3 million in employment income, \$1.5 million in total tax revenue, and \$30.7 million in economic output.

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

| Activity | Residents | Non-Residents | Total |
|---------------------------|------------------|----------------------|-------------------|
| Non-Consumptive | \$211.0 | \$30,217.9 | \$30,428.9 |
| Hunting | \$7.5 | \$71.4 | \$78.9 |
| Fishing | \$33.4 | \$79.5 | \$112.9 |
| Total Expenditures | \$251.9 | \$30,368.8 | \$30,620.6 |

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

| | Residents | Non-Residents | Total |
|-----------------------------|------------------|----------------------|--------------|
| Economic Output | \$310.4 | \$30,368.9 | \$30,679.3 |
| Jobs | 4 | 382 | 387 |
| Job Income | \$83.2 | \$8,178.6 | \$8,261.8 |
| State and Local Tax Revenue | \$15.1 | \$1,506.1 | \$1,521.2 |

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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