

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

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

Strategically located within the Mississippi River migration corridor, the Refuge is an important resting and feeding area for waterfowl. In addition, a variety of other birds including nesting black tern pairs and migrating warblers benefit from marsh habitats. Though relatively small in comparison to other refuges within the system, Trempealeau NWR is vital in supporting an immense variety of diverse plants and animals and their habitats. Trempealeau NWR lies between La Crosse, Wisconsin, a city of about 50,000 people and Winona, Minnesota, a population of about 25,000. Visits to the Refuge have steadily increased as have the wide variety of public use activities. Some of the unique public use activities include: hiking, biking (including a stretch of the Great River State Bike Trail which runs through the refuge), snowshoeing and cross-country skiing, disabled person’s waterfowl hunting, deer hunting, trapping, canoeing, and bird watching.

Schools, universities, and other groups are welcome and encouraged to visit and study nature. Diverse refuge habitats provide a wonderful outdoor classroom for many exciting discovery activities. A recently constructed classroom, along with teacher workshops, provides teachers resources to teach their own classes at the Refuge. The Refuge celebrates World Migratory Bird Day in May and National Wildlife Refuge Week in October. The 4.5-mile, self-guided, Wildlife Drive acquaints visitors with the diverse habitats and wildlife of the Refuge, including sand prairie, marsh, and hardwood forest communities. Two interpretive nature trails highlight the refuge's unique features - Prairie View Trail and the Woods Trail. Refuge wildlife and scenery provide excellent opportunities for observation and photography. The Refuge is open year-round during daylight hours with miles of roads and dikes available for walking and bicycling. An accessible observation deck with spotting scopes overlooks the marsh.

## 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 nearly all visits with residents comprising 72 percent of Refuge visitation.

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

| Activity                | Residents     | Non-Residents | Total         |
|-------------------------|---------------|---------------|---------------|
| <b>Non-Consumptive:</b> |               |               |               |
| Pedestrian              | 2,100         | 900           | 3,000         |
| Auto Tour               | 21,000        | 9,000         | 30,000        |
| Boat Trail/Launch       | 131           | 44            | 175           |
| Bicycle                 | 5,625         | 1,875         | 7,500         |
| Photography             | 16,875        | 5,625         | 22,500        |
| Interpretation          | 9,590         | 4,110         | 13,700        |
| Other Recreation        | 270           | 30            | 300           |
| Visitor Center          | 960           | 640           | 1,600         |
| <b>Hunting:</b>         |               |               |               |
| Big Game                | 51            | 17            | 68            |
| Small Game              | -             | -             | -             |
| Migratory Birds         | 20            | 60            | 80            |
| <b>Fishing:</b>         | 203           | 23            | 225           |
| <b>Total Visitation</b> | <b>56,825</b> | <b>22,323</b> | <b>79,148</b> |

Source: Refuge Annual Performance Plan 2017 and Refuge Staff

## Regional Economic Analysis

The economic area for the Refuge is the two-county area of Buffalo and Trempealeau Counties in Wisconsin. It is assumed that visitor expenditures occur primarily within these counties. Visitor recreation expenditures for 2017 are shown in Table 2. Total expenditures were \$1.4 million with non-residents accounting for \$664,000 or 48 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 the two county area (Table 3). The contribution of recreational spending in local communities was associated with about 22 jobs, \$443,000 in employment income, \$111,000 in total tax revenue, and \$1.6 million in economic output.

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

| <b>Activity</b>           | <b>Residents</b> | <b>Non-Residents</b> | <b>Total</b>     |
|---------------------------|------------------|----------------------|------------------|
| Non-Consumptive           | \$707.0          | \$656.6              | \$1,363.6        |
| Hunting                   | \$2.0            | \$6.5                | \$8.5            |
| Fishing                   | \$2.8            | \$0.8                | \$3.5            |
| <b>Total Expenditures</b> | <b>\$711.7</b>   | <b>\$663.9</b>       | <b>\$1,375.6</b> |

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

|                             | <b>Residents</b> | <b>Non-Residents</b> | <b>Total</b> |
|-----------------------------|------------------|----------------------|--------------|
| Economic Output             | \$861.9          | \$767.4              | \$1,629.3    |
| Jobs                        | 12               | 10                   | 22           |
| Job Income                  | \$236.8          | \$206.5              | \$443.3      |
| State and Local Tax Revenue | \$57.8           | \$53.7               | \$111.4      |

## 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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