

Economic Impacts of Natural Resource-Related Organizations Operating in Sauk County

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Introduction

Sauk County, WI is widely recognized for its diverse natural resource gems and a long history of conservation efforts. In late 2016, a number of natural resource-related nonprofit (and similar type) organizations and economic development entities from the Baraboo area gathered to discuss how they can collaborate and better support each other. This assembly, known informally as “Fostering Collaborations,” formed a workgroup to assess the economic impact of all the natural resource-related organizations operating in Sauk County. This effort was designed to be an initial step in better understanding these nonprofit (and similar type) organizations in Sauk County. This report focuses on economic impacts (jobs, incomes, etc.) and does not consider the value of these organizations to their communities or the environment. For example, the economic impact of efforts to clean waterways were explored but not the value of those improved waterways.

Sauk County’s Natural Resource Vision for 2030

“Sauk County’s land and water resources are the key to our continued health and prosperity and essential elements of the community in which we live. From the Upper Narrows to the Lower Wisconsin, from Fairfield Marsh to Baaken’s Pond, forested bluffs, grasslands, rivers, lakes and wetlands are protected and managed for long-term quality and for the benefit of future generations. We recognize their value in serving ecological and social purposes that we may not yet fully understand. We seek to restore rather than to diminish native biological diversity and productivity.”

Methodology

In partnership with the Fostering Collaborations workgroup, University of Wisconsin-Extension (UWEX) developed and distributed an online survey to the natural resource-related organizations operating within Sauk County. The list of survey recipients was developed using nonprofit status data and augmented with local knowledge. Most, but not all, of the organizations had 501(c) 3 nonprofit status. The survey was conducted throughout the spring of 2017. The following 26 organizations completed the survey:

- Aldo Leopold Foundation, Inc.
- Baraboo Range Preservation Association, Inc.
- Bird City (Baraboo)
- Driftless Area Land Conservancy, Inc.
- Durward’s Glen Retreat Center
- Ferry Bluff Eagle Council, Inc.
- Flyways Waterfowl Museum, Inc.
- Friends of Devils Lake State Park
- Friends of the Great Sauk State Trail, Inc.
- Friends of the Mirror Lake State Park
- Ice Age Trail Alliance
- International Crane Foundation, Inc.
- Lake Wisconsin Alliance
- Mirror Lake Association, Inc.
- Natural Resources Foundation of Wisconsin, Inc.
- Reedsburg Area Ducks Unlimited
- Riverland Conservancy, Inc.
- Sauk Area Climate Awareness and Action
- Sauk County Sportsman’s Alliance
- Sauk Prairie Conservation Alliance, Inc.
- Sauk Prairie River Projects Association, Limited
- The Nature Conservancy, Inc.- Baraboo Hills
- The Prairie Enthusiasts, Inc. - Empire Sauk Chapter
- The Wisconsin Council of Trout Unlimited 9WI
- Wisconsin Climber’s Association
- Wisconsin Society of Ornithology, Inc.

Results

The responses can be summarized as:

- Eight survey respondents owned property in Sauk County totaling 13,072 acres or 2.5% of Sauk County's total land area (531,840 acres). These are deeded properties and do not include trails or property under easement.
- Twelve survey respondents reported that they received 35,741 visits from tourists, event attendees, hunters, etc. from outside of Sauk County. A visit is defined as each occasion a person visited a property. The 2013 *Economic Impact of the Wisconsin State Park System: Connections to Gateway Communities*¹ includes an estimate for the average trip-related expenditure for birders/naturalists/sightseers that visit Wisconsin state parks at \$28.75 per visit. Utilizing the same trip expenditure estimate, visitors to the natural resource-related organizations contributed at least \$1,027,554 to the Sauk County economy.
- Survey respondents estimated that 23,978 volunteer hours were donated to their organizations. According to the Independent Sector,² the estimated value of volunteer time in Wisconsin was \$23.06 per hour in 2016. At that rate, Sauk County's natural resource-related organizations contributed \$552,933 worth of volunteer hours throughout Sauk County.

Economic Impact Analysis

The survey collected basic information on total expenditures, number of employees and wages from the organizations' most recent complete fiscal year (2016). Using an input-output modeling method, detailed models of local (county) economies can be constructed and analyzed. An input-output model is a representation of economic activity between sectors (i.e. agriculture, manufacturing, hospitality) in a region. This analysis utilizes IMPLAN® (Impact analysis for PLANning) software developed by MIG, Inc. IMPLAN® is a regional economic modeling and impact assessment system.³ It measures positive and negative changes in a local economy based on different inputs or scenarios. IMPLAN uses four metrics of economic activity: employment, labor income, total income and industry sales. They are defined below:

- Employment is the total number of jobs
- Labor income includes wages, salaries and proprietor income
- Total income is labor income plus other sources of income such as dividends, interest and rental income, plus transfer payments such as social security
- Industry sales are the same as total business revenues

This model assumes that if the 26 natural resource-related organizations that completed the survey ceased to exist there would be measurable impacts to the local economy. As part of this analysis, three scenarios were examined: (1) loss of wages/salaries, (2) loss of expenditures, and (3) loss of jobs from the 26 organizations to the local economy. This data provided through the survey were entered into the model as a way to "shock the system" and then the economic "reverberations" were measured throughout the county. The organizations also

¹ Prey, J. Marcouiller, D. and Kim, D. November 2013. "[Economic Impacts of the Wisconsin State Park System; Connections to Gateway Communities](#)". Wisconsin Department of Natural Resources Report # PR-487-2013.

² "The Value of Volunteer Time", Independent Sector, last modified May 31, 2016, <https://independentsector.org/resource/the-value-of-volunteer-time/>.

³ IMPLAN® analysis conducted by Dr. Steve Deller, University of Wisconsin-Extension and University of Wisconsin-Madison.

shared data on total revenues, but because of the volatile nature of revenue generation during events like major fund-raising campaigns or large one-time grants, this information was not considered.

The analysis also includes multiplier effects specific to Sauk County. Multiplier effects are based on the concept that employment of one person causes ripple effects resulting from this person’s consumption of retail, real estate and other goods in the economy. The multiplier is composed of three effects/parts: direct, indirect and induced. The three add up to the total effect or economic impact. The direct effect is the number of jobs, wages, etc. that were collected from the survey. The indirect effect is the business-to-business transactions, and the induced effect is related to household spending (increased sales) in the local economy. The effects from all three scenarios are included in Table 1.

Table 1. Economic Impact of Natural-Resource Related Organizations Operating in Sauk County Utilizing Three Scenarios.

	Employment	Labor Income	Total Income	Industry Revenues
<u>Scenario 1: Wage Only Impact</u>				
<i>Direct Effect</i>	128	\$3,300,000	\$3,300,000	\$6,000,000
<i>Indirect Effect</i>	0	0	0	0
<i>Induced Effect</i>	17	\$600,000	\$1,200,000	\$2,000,000
Total Effect	145	\$4,000,000	\$4,500,000	\$8,000,000
<i>Multiplier</i>	1.131	1.187	1.354	1.331
<u>Scenario 2: Expenditure-Based Impact</u>				
<i>Direct Effect</i>	128	\$3,300,000	\$3,300,000	\$6,000,000
<i>Indirect Effect</i>	9	\$300,000	\$500,000	\$1,000,000
<i>Induced Effect</i>	23	\$800,000	\$1,600,000	\$2,700,000
Total Effect	160	\$4,500,000	\$5,400,000	\$9,700,000
<i>Multiplier</i>	1.247	1.349	1.626	1.626
<u>Scenario 3: Job-Based Impact</u>				
<i>Direct Effect</i>	128	\$3,300,000	\$3,300,000	\$6,000,000
<i>Indirect Effect</i>	15	\$500,000	\$800,000	\$1,700,000
<i>Induced Effect</i>	37	\$1,400,000	\$2,600,000	\$4,400,000
Total Effect	180	\$5,200,000	\$6,800,000	\$12,000,000
<i>Multiplier</i>	1.408	1.575	2.030	2.029
ECONOMIC IMPACT <i>Average Total Effect of Scenario 2 & 3</i>	170	\$4,900,000	\$6,100,000	\$10,900,000

Ideally, each of the three scenarios would result in similar total effects (or economic impact) for employment, labor income, total income and industry revenues. There is, however, considerable variability, which means that it is more difficult to accurately determine the economic impact of the organizations in Sauk County. It was anticipated that the total effect from the wage only impact (Scenario 1) would be the smallest because it considered only the workers’ spending in the local economy, non-labor related expenses were ignored. In addition, there is a discrepancy in the total effect between the expenditure-based impact (Scenario 2) and the

job-based impact (Scenario 3). This could indicate that the wages in Sauk County in this sector are lower than the national average.

Because the results of the analysis for the three scenarios varied, one could consider the true impact to lay between the high and low estimated impacts. Alternatively, an average total effect from the expenditure-based impact (Scenario 2) and the job-based impact (Scenario 3) provides a reasonable interpretation of the actual economic impact. Based on that calculation this economic impact analysis estimates that the survey respondents support 170 jobs (0.4% of Sauk County jobs), and inject \$4.9 million in labor income (wages, salaries, proprietor income), \$6.1 million in total income, and \$10.9 million in business sales activity in Sauk County.

Conclusions

Nonprofit (and similar type) organizations affect the local community in several ways. They provide services that may not be offered by government or private businesses. Without these organizations, certain goods and services that enhance the well-being of local residents may not be provided. Second, these organizations create opportunities for local residents to volunteer and give back to the community. They are an important means to foster social capital within the community. Third, many of these organizations provide services that support the tourism and recreational elements of the regional economy. Without them, the number of tourists to the area, along with their expenditures, may be significantly reduced. Fourth, many of these organizations employ people, and those employees make purchases in the local economy such as housing, services, supplies and equipment. In other words, despite their nonprofit status they have similar impacts on the local economy as a for-profit private business.

This study provides a broad overview of natural resource-related nonprofit (and similar type) organizations operating in Sauk County with a focus on the impact they have on the local economy. Using data derived from a survey of these organizations this analysis found that they:

- contributed \$552,933 worth of volunteer hours throughout Sauk County;
- support 170 jobs, \$4.9 million in labor income, \$6.1 million in total income, and \$10.9 million in business sales activity in Sauk County; and
- own and manage 13,072 acres or 2.5% of Sauk County's total land area.

This initial analysis did not evaluate the value that these natural resource-related organizations provide. For example, what is the value of a waterway that has been cleaned by the efforts of one of these organizations or the value of a group of volunteers working together to achieve a common goal? This study should be viewed as a first step in helping the wider community better understand these organizations.