UNIVERSITY OF WISCONSIN SEA GRANT INSTITUTE

CONTACT
Jane Harrison,
janeharrison@aqua.wisc.edu
414-227-3291

The Economic Impacts of Restoring Wisconsin's Sheboygan River

Quick Read

- The average Sheboygan River angler spends $167 per fishing day.
- Out-of-state anglers spend $394 per fishing day while at the Sheboygan River.
- The estimated annual economic impact of the Lake Michigan tributary sport fishery is $24,774,424.

Overview

An economic impact study was developed to assess activity related to restoration and remediation of the Sheboygan River. This study, initiated by the University of Wisconsin Sea Grant Institute and Wisconsin Department of Natural Resources, was intended to develop baseline data for 2013 with similar studies planned in 2015 and 2017. The first part of the study estimated the economic impacts of sport fishing on the Sheboygan River and angler perceptions of the cleanup.

In September and October 2013, during peak salmon and trout runs, 100 anglers were surveyed while fishing within the bounds of the Sheboygan River cleanup. The angler survey reveals that the average Sheboygan angler spends $167/fishing day at the Sheboygan River. The median expenditure was $66/fishing day. These values indicate the economic importance of the Sheboygan fishery. The survey revealed that of respondents who were aware of clean-up efforts, about 40% felt the changes (e.g., deeper sections of the river, new vegetation, easier access to fishing sites) improved their sport-fishing experience.

Background

The Sheboygan River Area of Concern (AOC) is one of 43 Great Lakes AOCs identified by the Environmental Protection Agency in 1984 for their environmentally degraded conditions. In 2010, remediation and mitigation efforts began on the Sheboygan AOC, totaling $80 million. Completed in June 2013, clean-up efforts included the dredging of 400,000 cubic yards of contaminated sediment, habitat and shoreline restoration, and bank stabilization and in-stream habitat projects.

The Survey Method

The survey estimated the economic use values associated with sport fishing on the Sheboygan River. Anglers were asked about their travel expenses, perceptions of how the cleanup affected their fishing experience and demographic information. The average angler surveyed visits the Sheboygan River 10 times/year, fishes five hours/visit and catches two fish/visit. Almost half (47%) of the respondents live within the area of the Sheboygan ZIPcode while 40% live in Wisconsin but outside of Sheboygan. Fewer (12%) respondents reported living out of state.

Distribution of Angler Expenses *Table 1*

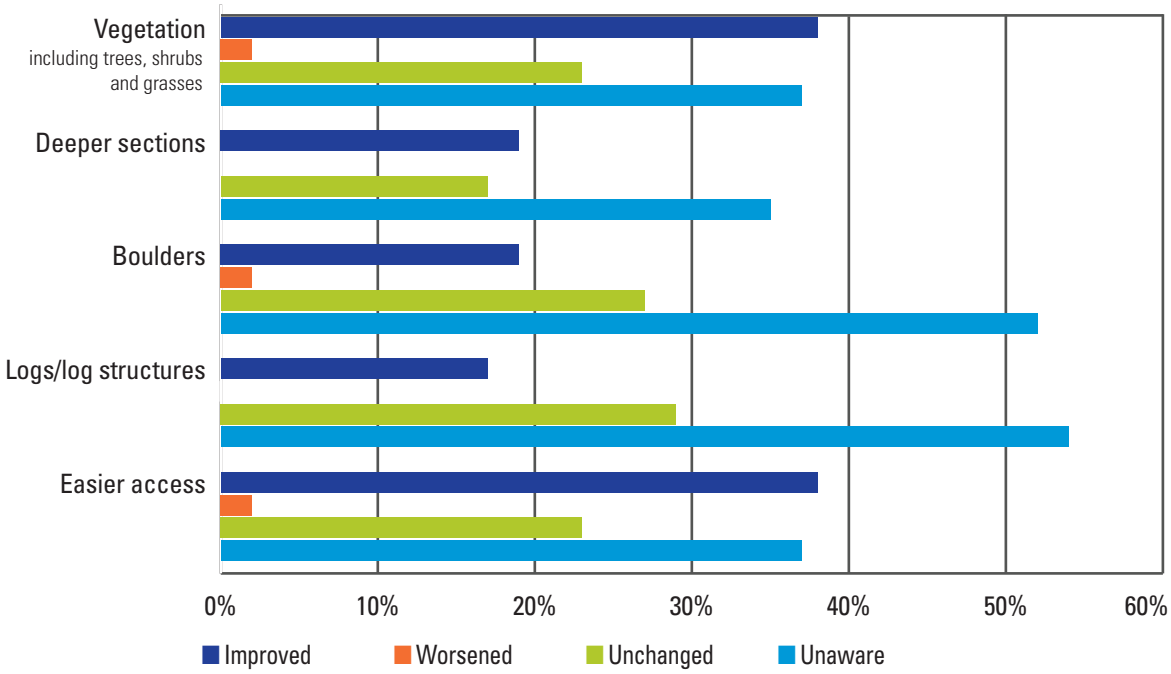
Expenditures on Sport Fishing at Sheboygan River	Dollar Amount
Minimum Expenditure	$2
25 percentile	$27
50 percentile	$66
75 percentile	$229
Maximum Expenditure	$3,067
Average Expenditure	$167

Economic Impacts

The average angler surveyed spent $167/fishing day at the Sheboygan River with a median expenditure of $66/fishing day. With an average of $394, the total expenses of out-of-state anglers were much higher than that of Wisconsin anglers who spent an average of $102. Table 1 displays the distribution of expenses across anglers. The median value of expenditures, $66 per angler, per day, presents a

Continued

Changes in Angler Fishing Experience *Figure 1*
in Response to New River Features



more conservative estimate compared to the average value. The median value is comparable to past estimates of recreational fishing in the U.S.

The Numbers in Perspective

To put these angler expenditure values into perspective, consider that there are approximately 376,511 angler day visits to Lake Michigan tributary waters in Wisconsin annually. Multiplying the median expenditure value of $65.80 of the Sheboygan sport fishery by the total number of angler visitor days at Lake Michigan results in an annual economic impact of $24,774,424 for the Lake Michigan sport fishery. This value does not include anglers using charter services because they were not included in the initial survey; economic data on charter boat fishing will be collected in summer 2014.

Angler Perceptions of the Cleanup

Of anglers who were aware of the clean-up efforts, about 40% felt the changes (i.e., deeper sections of the river, new vegetation, easier access to fishing sites) improved their sport fishing experience. However, many were unaware of the new river features. Additional outreach may be needed to make anglers aware of the cleanup. How the anglers described a given change, or new river feature, is reported in *Figure 1*.

Jane Harrison, PhD, University of Wisconsin Sea Grant
Catherine Simons, University of Wisconsin-Milwaukee

March 2014 WISCU-G-14-006