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Title: Estimates of Select Economic Values of New Hampshire Lakes, Rivers, Streams and Ponds: Phase 2

Authors: Dr. Lisa Shapiro and Heidi Kroll

Journal: prepared for the [New Hampshire Lakes Association](#)

Date: June 2003

Pages: 1-43 (11/5 KB)

Abstract:

This paper is phase 2 of a study of economic values of surface water in New Hampshire. The purpose of this phase is to provide an economic value for New Hampshire freshwaters based on three recreational uses – fishing, swimming, and boating – and two non-recreational uses – waterfront property ownership and public drinking water supplies. Using these five economic values was determined, in Phase 1 of this study, to be the most significant values and have the most available data for study. Not included in this phase are the economic value of commercial and industrial uses and the intrinsic, or non-use, values discussed in Phase 1. This will help researchers determine the value of these activities in terms of generating economic wealth.

The economic impacts are measured in terms of the following terms:

- Direct Sales – all the money spent by a group of consumers when they spend money in a certain region on various goods and services. In this study, it is the money spent by various recreators and public water consumers in New Hampshire on trips to surface water locations, necessary recreation equipment, and public water access.
- Total Sales – includes the Direct Sales plus the additional sales that are made near New Hampshire freshwater locations when those that profit from the Direct Sales re-spend the money they earned. In other words, this measures the second-generation economic activity generated from the first-generation economic activity of Direct Sales.
- Visitor Days – the total number of days per year people spend participating in a given freshwater recreational activity. This measure represents the product of the number of participants (visitors) and frequency of visits per year.
- Household Income – employee compensation (wages, salaries, and benefits) and property-type income (rents, royalties and dividends)
- Jobs – full-time and part-time workers, including wage and salaried as well as self-employed.

The study finds that the Total Sales generated by the three recreational uses of boating, fishing, and swimming range from \$850 million to as much as \$1.2 billion annually, derived from Direct Sales totaling \$645 million. These result in \$320 million to \$340 million in annual Household Income generated from 9,000 to 15,000 full- and part-time jobs. Annually, approximately 14.7 million visitor days are spent in New Hampshire either boating, fishing, or swimming.

As for non-recreational uses, nearly 200,000 households and businesses rely on public drinking water from New Hampshire surface waters. This results in approximately \$276 million to \$301 million in annual Total Sales, derived from \$151 million in Direct Sales. This results in \$75 million to \$150 million in annual Household Income from 1,900 to 2,600 full- and part-time jobs. A preliminary estimate suggests that waterfront property owners contribute about \$247 million per year in property taxes based on developed land.

