

Article #: 42

Title: The Economic Impact of Potential Decline in New Hampshire Water Quality: The Link Between Visitor Perceptions, Usage and Spending

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

Date: May 2007

Pages: 92 p. (KB 11/12/08)E

Abstract:

This paper is phase 4 of a study of economic values of surface water in New Hampshire. The purpose of this phase is to combine previous elements by trying to answer the following question: "How would the New Hampshire economy be affected if resident and non-resident recreationalists who fish, boat and swim perceive any negative changes to the water quality in the areas where they recreate?"

Survey data was again collected for this phase, but this time surveys were administered on-site at 75 randomly selected freshwater access points. This paper confirms findings in previous phases that freshwater fishing, boating, and swimming are considerable contributors to New Hampshire's economy, accounting for \$379 million in Total Sales, \$134 million in Household Income, and nearly 6,000 jobs from May to August. Using the same areas of water quality as Phase 3 (crowding, natural beauty, water clarity and purity, and water level and flows), this paper confirms that while recreators are generally satisfied with the water quality, any perceived degradation would lead to decreased visits to the location.

The paper proceeds to estimate losses of Total Sales, Household Income, and Jobs if degradation occurred in each one of these areas. In addition, losses are divided into seven separate tourism regions to measure the severity of impact on different types of freshwater bodies and their popularity. Of the four variables, water clarity and purity has the most detrimental effect on the economy if it were to decline as the highest percentage of people said they would decrease or cease visits in that case. Perceived declines in this variable alone would account for about \$51 million in lost Total Sales, \$18 million in lost Household Income, and more than 800 lost Jobs. The other variables have less impact, but are nonetheless significant, particularly if deterioration occurs in multiple variables simultaneously.