

# New Hampshire's Citizens Value and Use Water in Many Ways

A Preliminary Report of the New Hampshire  
Water and Watershed Survey—statewide perspectives with an  
oversample in the Piscataqua Region Watershed

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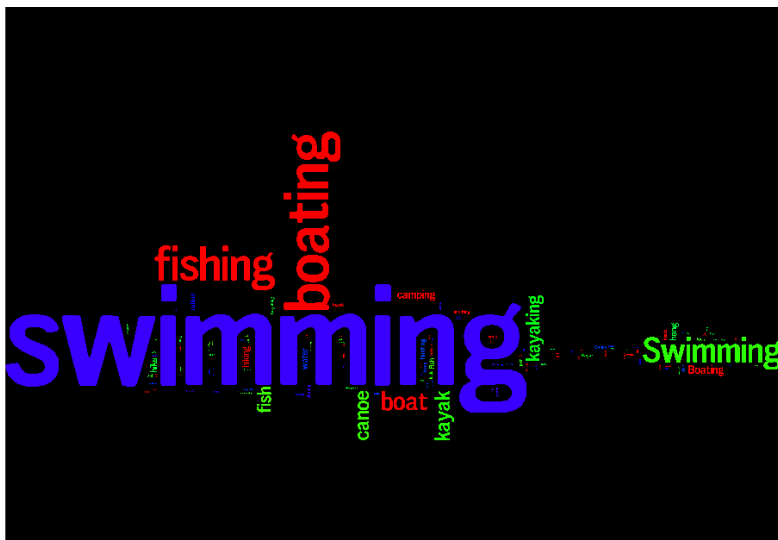
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## Executive Summary

How New Hampshire residents use and value water resources is a question that many researchers, managers, and citizens are interested in understanding more completely. Additionally, identifying residents' behaviors and habits in relation to non-point source pollution sources (lawn fertilizer, stormwater management) and overall water quality and quantity are important. Understanding residents' behavior guides a more cost-effective targeting of outreach and education efforts and helps evaluate whether efforts to improve these behaviors are making a difference. The NH & Piscataqua Region Water and Watersheds Survey was a telephone survey of randomly selected adults in the state of New Hampshire with an oversample of towns in New Hampshire and Maine that fall within the Great Bay Watershed and sought to answer some of those questions. It was conducted in September 2013 but the planning for this survey has been underway for some time. The partnership between the Center for the Environment at PSU and the

Piscataqua Region Estuaries Partnership (PREP) with assistance from the UNH Survey Center was responsible for the development and deployment of the survey, essentially a partnership between research and outreach interests. The data are being used for many purposes including context and background information on Watershed Ecosystem Services for the National Science Foundation supported statewide project "Ecosystems & Society." Additionally, it is being used as a much needed baseline understanding from which social indicators will be developed to be monitored alongside PREP's environmental indicators going forward. The following report will describe the survey and detail summary findings from the report as well as some of the interesting analyses. Extensive appendices include the survey instrument and data tables that we hope will be of use to other researchers and policy makers. The raw data are also available for further review and we hope that this will spur further analysis and discussion.



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### *New Hampshire Statewide<sup>1</sup> Results*

- Forty two percent of respondents (42%) are connected to city water and sewer and 57% have their own septic systems and water.
- Seventy six (76%) take care of their own lawn while 22% hire a lawn care service and 2% do not have a lawn
- Thirty three percent (33%) spread a chemical weed killer or fertilizer
- A majority of residents (58%) indicate that they know actions on their property can have an impact on overall water in the community.
- Seventy percent (70%) agree that they would be willing to pay higher water and sewer fees to improve the cleanliness of the lakes, rivers, streams, and bays in their community.
- Eighty three percent (83%) agree that they would be willing to take action to reduce storm water pollution, especially if it would help keep water and sewer bills down.
- Eighty percent (80%) understand the connection between clean water resources and economic stability of their community.

### *A majority of New Hampshire Residents are concerned with several water resource issues, including flooding, providing safe drinking water, and levels of pollution in our water bodies.*

- Seventy two percent (72%) are concerned with the cost of providing safe drinking water.
- Sixty one percent (61%) are concerned with the cost of their sewer bills or maintaining septic systems.
- Eighty seven percent (87%) are concerned with the cleanliness of drinking water.
- Ninety percent (90%) are concerned with the level of pollution in local streams, rivers, lakes, and bays.
- Ninety two percent (92%) are concerned with the cleanliness of water for fish and wildlife.
- Ninety one percent (91%) are concerned with the availability of clean drinking water in the future.
- Seventy five percent (75%) are concerned with public access for recreation in streams, rivers, lakes, and bays.
- Eighty two percent (82%) are concerned with contaminants, such as mercury, in locally caught seafood.
- Sixty four percent (64%) are concerned with protection from flooding.

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<sup>1</sup> The Statewide results include a representative sample from respondents throughout the State of New Hampshire and is separate from the Piscataqua Region oversample

## **CULTURAL WATER RESOURCE SERVICES USED AND ENJOYED BY NEW HAMPSHIRE'S RESPONDENTS**

Our waterways provide many benefits to users—from life sustaining drinking water to aesthetic and spiritual values. We asked New Hampshire residents about what cultural benefits (which include recreational, aesthetic, spiritual, and other, sometimes, intangible benefits) they appreciate. Specifically, we asked respondents to indicate what they and/or their family like to do in and around the state's water bodies. The responses were extensive and included approximately 30 unique activities, with the most popular being swimming, boating, fishing, and kayaking, as represented by the word cloud (courtesy of wordle.net).

## **CONCLUSIONS, RECOMMENDATIONS AND NEXT STEPS**

Overall, results indicate that there is a general awareness among New Hampshire and Piscataqua Region respondents of a connection between individual and community level actions and quality of water resources. A majority of respondents believe that high quality water resources support the economic wellbeing of their community. The data in the report is vast and varied and can and should be utilized by a wide array of partners, including but not limited to researchers, resource managers, municipal decision makers, educators and outreach professionals and local, state and federal regulators. This survey is just the start of a much-needed investment in building a body of knowledge regarding the uses, values and behaviors of New Hampshire and Piscataqua Region residents in regards to water resources. We will be working on several initiatives, including outreach/education, indicators, and geographic

visualization of select results. It is our hope that this survey will serve as a stepping-stone to further investigation and implementation of actions. To further the discussion we offer the following recommendations:

### *Researchers*

- Further investigation into the identification of ecosystem services trade-offs (will be explored through the Ecosystems & Society Project)
- Exploration and more specific research conducted using willingness to pay techniques to better address preferable actions and solutions.

### *Resource Managers*

- Use as baseline to develop measurable social indicators that can be reported upon and tracked for regulatory permits and monitoring

### *Educators and Outreach Professionals*

- Use as guidance to developing outreach messages in order to better target gaps in knowledge
- Employ as support for fundraising efforts for campaigns and efforts
- Fold into current and future evaluation strategies in regards to ongoing outreach and education efforts
- Apply data in advocacy and lobbying efforts at local, state and federal levels

### *Municipal Leaders*

- Incorporate into local planning efforts, utilize data as support for increased efforts to protect water resources
- Use survey instrument as a model to designing a localized survey to better pinpoint specific community concerns