## Study Documents Utahns' Perceptions of Water Situation

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A recent survey of households by a consortium of Utah universities provides extensive scientific data on current residential water management and public support for a range of water policies.

With experts predicting rapid population growth and changes in weather patterns, the perceptions and behaviors of Utah residents will be a critical driver of water resource conditions and quality of life in the state. A survey of households by a consortium of Utah universities provides extensive scientific data on current residential water management and public support for a range of water policies.

Researchers from Utah State University and the University of Utah came together as a team under the iUTAH program, a \$20 million interdisciplinary research effort funded by the National Science Foundation to study and protect the state's water sustainability.

More than 2,300 households were surveyed in Cache, Salt Lake and Wasatch counties in the summer of 2014. The survey collected detailed information about how local residents in distinctive neighborhoods use and think about water in their daily lives.

"This is the largest and most thorough academic assessment of attitudes and behaviors concerning water that has ever been done in the state," said project coordinator, Douglas Jackson-Smith, professor of sociology at Utah State University.

The study found that Utahns are concerned about a number of water issues, though water ranks behind other pressing concerns about growth-related issues such as air pollution, traffic congestion and loss of open space. More than half of all respondents expressed concern over high costs of water, water shortages, deteriorating water infrastructure, climate change, and poor water quality.

Meanwhile, a large percentage of survey participants felt that current water supplies in their city were adequate to meet current needs, though nearly half were worried future water supplies might fall short of their local needs.

While most Utahns follow basic indoor conservation practices (like turning off water while brushing teeth and fixing leaky faucets), only a minority report engaging in practices which reduce outdoor water use (such as landscaping with low water use plants and testing and calibrating sprinklers to avoid overwatering lawns).

"As long as people feel that their local water supplies are adequate, it is not surprising they are not more proactive about water conservation in their yards," said Jackson-Smith.

Interestingly, survey respondents were much more likely to feel that they could do more to reduce indoor than outdoor water use. By contrast, roughly two-thirds of water used by a typical Utah household goes to outdoor irrigation. Scientists studying residential water use in Utah note that outdoor use is the area where the greatest future gains in water use efficiency can be made.

"The gap between public perceptions and expert views points to an opportunity to target public education and incentive programs toward raising awareness of strategies to help people eliminate unnecessary outdoor water use," said Joanna Endter-Wada, a professor of water policy at USU and co-author of the study.

While access to a reliable supply of clean water for household use is important to nearly all respondents, many also value water for other purposes. A majority of respondents report that they frequently engage in gardening and outdoor water-based recreation activities.

"Our analysis shows that people who are more active in water-related recreation are more concerned about water supply and quality," said Courtney Flint, professor of sociology at USU and survey research co-leader.

As a whole, respondents expressed strong support for a wide range of local and state-level policies and programs to address many of the water challenges Utahns will face in coming years. Respondents support providing incentives to reduce consumption, improving or sustaining water quality, augmenting water supply, and protecting water-based amenities and recreational activities that are important to the quality of life for many Utah residents.

"The public's willingness to support and engage in collective policy-related changes to help meet Utah's future water sustainability challenges should be encouraging to state officials and local water managers," Endter-Wada said.

The survey found that most urban Utahns do not support efforts to take water away from farms to meet the state's growing urban needs. They do not think agriculture currently uses too much water and are willing to conserve in their households if they think that will provide more water for farmers. However, they do think residential lawns, parks and golf courses, and industry use too much water, indicating support for conserving water in all sectors of the economy.

One aspect of the survey project is to ensure that local and state water decision makers are aware of the experiences and priorities of their citizens. To accomplish this, Jackson-Smith and Melissa Haeffner, a USU post-doctoral researcher working on the project, have been presenting results to city councils and public utility staff in each of the cities where data were collected. "The survey results give city councils detailed neighborhood-level information of how residents perceive and manage their water resources," said Haeffner.

The Utah's Water Future household survey is part of IUTAH, a multi-institution project aimed at exploring how population growth, a changing climate, and land use are affecting the state's water resources.

Efforts by IUTAH collaborators have placed a sensor network, along three rivers as they flow from the mountains into the more densely populated valleys. These monitors track how changes in climate and different patterns of urban development affect water supply and water quality in the state's urbanizing watersheds.

For more information about the iUTAH Utah's Water Future survey visit <u>www.iutahepscor.org/hhsurvey</u> or contact Dr. Douglas Jackson-Smith at 435-797-0582, <u>doug.jackson-smith@usu.edu</u>.

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