

# Communicating with Extension Clients about Water<sup>1</sup>

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## Introduction

The conservation and preservation of natural resources is one of the most pressing issues facing the nation today (Gregory and Di Leo, 2003), with water quality and quantity being of particularly high concern. Water is one of the most important resources in the United States, especially Florida. Not only is Florida a specialty crop state, but its economy also depends highly on tourism and recreation, both of which thrive on water. Water impacts Florida's tourism, agriculture, retail, and real estate development industries, all of which significantly contribute to Florida's economy (Odera, Lamm, Dukes, Irani, and Carter, 2013).

As populations in the US and Florida continue to increase and the demand for fresh, clean water rises, water quality and quantity issues will become increasingly important. Extension faculty should understand public opinion surrounding water issues and identify the information that needs to be communicated to the public about water resource management, as well as the best mode for this communication. In doing so, Extension faculty will be able to communicate more effectively with clients about water.

Enhancing and protecting water quantity, quality, and supply is of ever-increasing importance to UF/IFAS Extension and is considered a high-priority initiative in the 2013–2023 Florida Extension Roadmap. This EDIS publication will provide an overview of how to communicate

with Florida residents about water, including information about their preferred communication method and what water-related topics are of interest to Florida residents. This publication will better equip Extension faculty to discuss water quantity and quality issues with Florida residents.

## Background

The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources conducted an online survey of Florida residents in November and December of 2016. A total of 547 completed responses were collected from Florida residents 18 and older. To ensure that respondents were representative of the 2010 US Census, the data were weighted to balance their geographic location in the state, age, gender, and race (Kalton and Flores-Cervantes, 2003; Odera and Lamm, 2014). The survey included questions about Floridians' water conservation behaviors, the importance of water, and perceptions of water quality and quantity.

## Results

### The Importance of Water in Florida

Respondents were provided with a list of different issues currently facing Florida: the economy, health care, water, taxes, public education, food production, climate change, environmental conservation, housing and foreclosures, and immigration. Respondents were asked whether they

1. This document is AEC501, one of a series of the Department of Agricultural Education and Communication, UF/IFAS Extension. Original publication date June 2014. Revised September 2017. Reviewed February 2019. Visit the EDIS website at <https://edis.ifas.ufl.edu> for the currently supported version of this publication.
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U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.

considered an issue to be *not at all important, slightly important, fairly important, highly important, extremely important, or unsure*. Eighty-three percent of respondents rated water as a highly or extremely important issue in the state of Florida. Water was the third-most important issue behind health care and the economy.

## Engagement in Water Conservation

In addition to being asked about issues facing the state, respondents were asked to indicate what water conservation behaviors they currently engage in, as well as the frequency of their engagement, by selecting *never, almost never, sometimes, almost every time, or every time*.

Respondents showed moderate to high levels of engagement in indoor water conservation behaviors (Figure 1). Although 70% of respondents indicated they turn off the water while brushing their teeth *almost every time* or *every time*, 47% indicated they leave the water running in the kitchen when washing and/or rinsing dishes *sometimes* or *almost every time*.

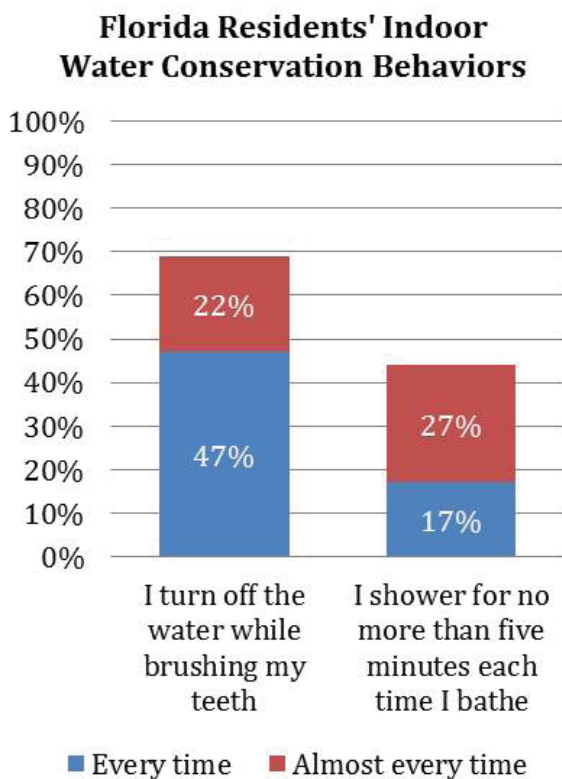


Figure 1. Florida residents' indoor water conservation behaviors.

Respondents showed higher levels of engagement in outdoor water conservation behaviors (Figure 2). Respondents indicated they *never* or *almost never* hose down their driveways (58%), let their sprinklers run when it is raining (70%), or let their sprinklers run when rain is predicted in the forecast (65%).

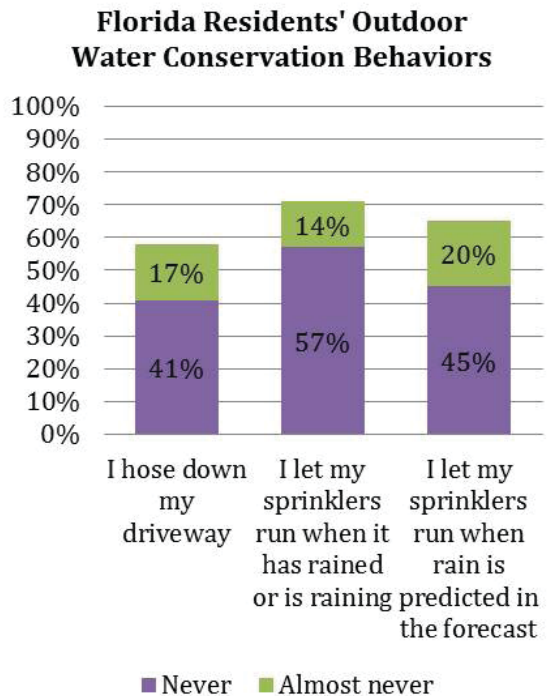


Figure 2. Florida residents' outdoor water conservation behaviors.

Respondents were also asked to indicate the types of water-efficient products and infrastructure they currently own. A majority of respondents indicated having low-flow shower heads installed in their homes (57%), or having water-efficient toilets installed in their homes (59%). Approximately one-half (49%) have low-water-consuming plant materials in their yard.

## Florida Residents' Interest in Water Topics

A portion of the survey asked respondents about their interest in learning about a variety of topics related to water quality and quantity issues. Respondents indicated moderate levels of interest in water-related topics, having the most interest in topics related to home water use (Figure 3): home and garden landscaping ideas for Florida (37%), fish and wildlife water needs (35%), watershed restoration (33%), fertilizer and pesticide management (32%), community actions concerning water issues (31%), and shoreline cleanup (30%).

## Learning Opportunities about Water Issues

Respondents were asked to indicate which types of learning opportunities they would most likely use to learn about water issues (Figure 4). Respondents had a strong preference for digital communication, with 61% indicating interest in a website and 32% indicating interest in watching a video. Respondents were also interested in more traditional communication, which could include fact sheets or

brochures (41%), a newspaper article or series (34%), and television coverage (47%).

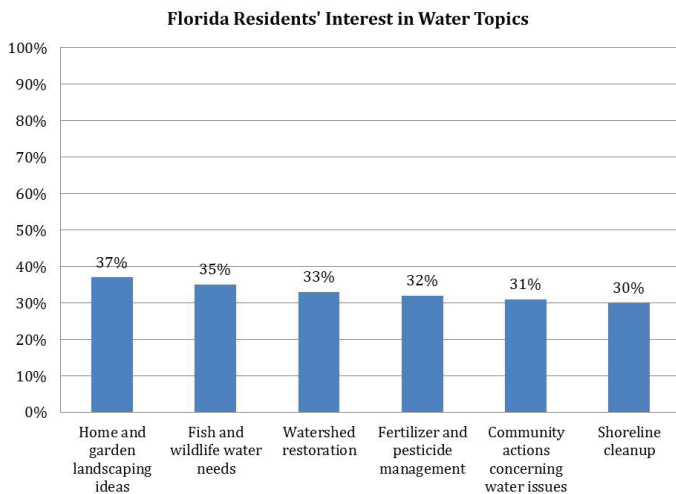


Figure 3. Florida residents' interest in water topics.

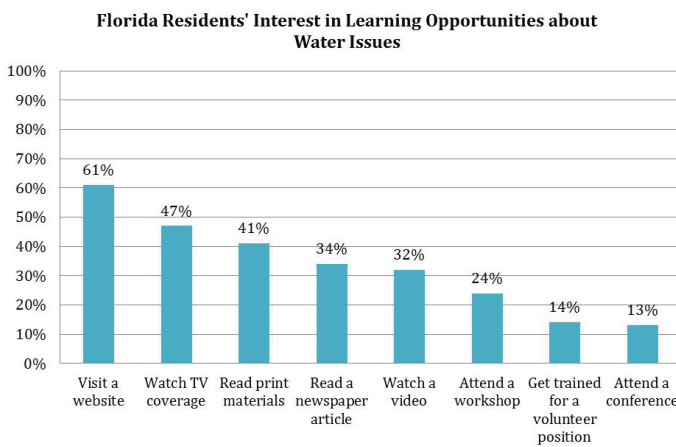


Figure 4. Florida residents' interest in learning opportunities about water issues.

Respondents showed a lower level of interest in learning opportunities that would require their attendance, with only 13% indicating interest in attending a seminar or conference, 14% indicating interest in getting trained for a regular volunteer position, and 24% indicating interest in attending a short course or workshop.

## Recommendations

As water quality and quantity issues become increasingly important in Florida, Extension's role in delivering water-related programming will grow in significance. Extension faculty can use data from this study as a form of needs assessment to inform their program planning.

Extension faculty should consider what the public is interested in learning about, and then target their educational programs accordingly. When communicating with the public about water, it is important to make the topics

relatable and reflective of their interests. Respondents expressed the most interest in learning about home and garden landscaping ideas, fish and wildlife water needs, and watershed restoration. Respondents also expressed interest in learning about fertilizer and pesticide management practices. By tailoring existing programming to better reflect these topics, Extension faculty can better communicate with the public about water.

Additionally, water issues are significant to all Extension programmatic areas, either directly or indirectly. By emphasizing the importance of water quality and quantity in programming that does not directly deal with water issues, Extension faculty can continue to educate the public without creating new training opportunities.

The information presented about learning opportunities can be used to inform the ways in which Extension faculty communicate with their clientele and design educational programming. Although traditional programming is encouraged, digital communication was the most preferred form of communication by respondents. Simple modifications to traditional programming, such as making handouts available online or posting recorded videos of classes, are ways to incorporate both traditional programming elements and digital communication. Using multiple communication channels will also assist faculty in reaching a larger and more diverse audience. By putting information online, members of the general public who are interested in topics but are unable to attend programming will have access to the information. In addition, a large online database of water conservation programming can be created over time and become the leading source for information on water issues in Florida.

## References

- Gregory, G. D., and Di Leo, M. (2003). Repeated behavior and environmental psychology: The role of personal involvement and habit formation in explaining water consumption. *Journal of Applied Social Psychology*, 33(6), 1261-1296. doi: 10.1111/j.1559-1816.2003.tb01949.x
- Kalton, G. and Flores-Cervantes, I. (2003). Weighting methods. *Journal of Official Statistics*, 19(2), 81-97.
- Odera, E., and Lamm, A. (2014). Public opinion of water in Florida. PIE2012/13-06. Gainesville, FL: UF/IFAS Center for Public Issues Education.

Odera, E., Lamm, A., Dukes, M., Irani, T., and Carter, H. (2013). *Water issues in Florida: How Extension can facilitate stakeholder engagement and involvement*. WC151. Gainesville: University of Florida Institute of Food and Agricultural Sciences. <http://edis.ifas.ufl.edu/wc151>.