## MID-ATLANTIC FARMERS' OPINIONS OF NONTRADITIONAL WATER



The University of Maryland (UMD) College of Agriculture and Natural Resources conducted a needs assessment in the Mid-Atlantic region of the United States. These survey results will help researchers and educators understand the agricultural educational needs and create relevant training and resources.

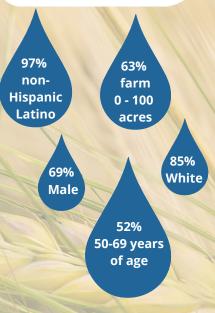
## **Nontraditional water:**

Any water source other than groundwater including agricultural runoff, treated wastewater, recycled water, produced water (water resulting from oil and gas processes in subsurface hydraulic aquifers), untreated surface water\*, and brackish surface and groundwater (U.S. Bureau of Reclamation, 2017; USDA, 2017)

**52%** 

of farmers would supplement with nontraditional water

## Respondents



**OPINIONS** 

Farmers were most concerned with the safety of using nontraditional water sources

**36%** concerned about water availability

**65%** are somewhat to a little knowledgeable about nontraditional water sources

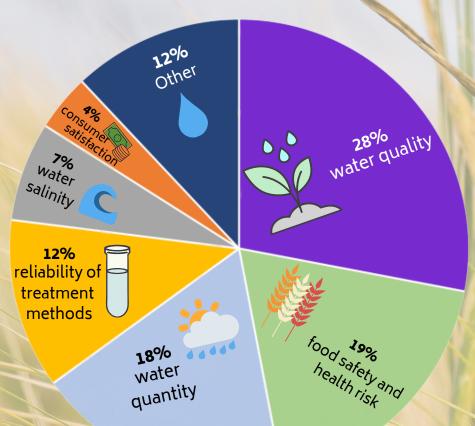
**68%** think nontraditional water is *moderately to very important* 

Farmers willing to supplement with nontraditional water



Farmers willing to supplement with nontraditional water if provided with water quality information

<sup>\*</sup>The term "nontraditional water" defined by the USDA includes untreated surface water to emphasize that its quality can be impacted by external environmental factors such as runoff. The agricultural community (dependent upon region and availability) already uses surface water to irrigate, and considers surface water to be a "traditional water" source.



**CONCERNS** 

Farmers were asked to select their concerns regarding nontraditional water use

## NONTRADITIONAL WATER USES

Farmers were asked for which agricultural activities they would be willing to use nontraditional water

- 1. Irrigation of field food crops (vegetables, fruits, and nuts) (61%)
- 2. Equipment water washing (39%)
- 3. Irrigation of wheat, grain, and barley (36%)
- 4. Irrigation of greenhouse / nursery grown produce (36%)

For more information, please contact Dr. Rachel Rosenberg Goldstein at rerosenb@umd.edu or visit the CONSERVE website at http://conservewaterforfood.org/





Suri, M. R., Dery, J. L., Pérodin, J., Brassill, N., He, X., Ammons, S., ... & Goldstein, R. E. R. (2019). US farmers' opinions on the use of nontraditional water sources for agricultural activities. *Environmental Research*, 172, 345-357.

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