

## DIANE E. BOELLSTORFF

Professor and Extension Water Resource Specialist  
Dept. of Soil and Crop Sciences, Texas A&M University, College Station, Texas

### Education/Training

1991 PhD Zoology, University of California, Davis  
1983 MS Ecology, University of California, Davis  
1980 BS Animal Ecology, Iowa State University

### Positions and Employment

2020-present Professor and Extension Specialist, Soil and Crop Sciences, Texas A&M University System  
2015-2020 Associate Professor and Extension Specialist, Soil and Crop Sciences, Texas A&M University System  
2009-2015 Assistant Professor and Extension Specialist, Soil and Crop Sciences, Texas A&M University System  
2001-2009 Program Specialist, Texas A&M AgriLife Extension Service, Soil and Crop Sciences, Texas A&M University System  
1998-2001 Lecturer, Dept. of Biology, Texas A&M University  
1991-1993 Fish and Wildlife Biologist, U.S. Fish and Wildlife Service, East Lansing, MI

### Program Overview

My primary areas of focus are developing educational outreach and applied research programs involving water resource management, including water conservation, water quality and aquatic ecosystems, watershed protection planning, and groundwater and private water well protection. Investigations concern identifying, evaluating and mitigating bacteria and nutrient loading to streams. Outreach includes developing and delivering educational programs involving supporting source water protection for residents using drinking water wells and facilitating community-driven watershed planning efforts. Program areas are aquatic ecosystems; drinking water and public health; water and wastewater treatment; and water quality and watershed protection.

### Significant 5 Year Accomplishments

Extension: Banner programs and major accomplishments include outreach to more than 11,000 private water well operators to provide well water quality screening and remediation that protects human health and groundwater quality. I promote the importance of urban residential water conservation primarily through an outreach program titled the 40 Gallon Challenge. Voluntary implementation of the program is equivalent to securing a 61% increase in residential water availability without new water being acquired, treated and transported. Author/co-author for 92 extension and research peer-reviewed publications.

Applied Research: Water resource attitude and behavior survey that examines Texans' perceptions of water issues and indicates topics and information delivery preferences related to social demographics. Analyses and interpretation of the database developed from the results of ongoing screening of private water well samples. Characterization of natural, baseline contributions of *E. coli* and nutrients to surface waterbodies. Teaching: I work with program specialists and teach adults by invitation in informal settings. We have delivered more than 1,000 educational outreach events to the public and targeted audiences. Advised/co-advised 5 PhD students, and 13 MS students.

### Publications: Five most recent Extension and five most recent Research publications

1. **Boellstorff, D.E,** R.C. Reedy, B.R. Scanlon, M.C. Dozier, D.J. Pigg, and J.W. Smith. 2020. Drinking Water Problems: Arsenic. Texas A&M AgriLife Extension Service Publication L-5467.

2. Gilliland A.E., D.M. Gholson, **D.E. Boellstorff**, K.J. Pieper, S. Straif-Bourgeois, and A. Katner. 2020. Natural Disaster Emergency Response to Private Water Well Owner Needs: Evaluation of a Pilot Outreach Approach. Feature article for the *Journal of Environmental Health*. 2019-JEH-091.
3. Gitter, A.C., K.D. Mena, K.L. Wagner, **D.E. Boellstorff**, K.E. Borel, L.F. Gregory, T.J. Gentry and R. Karthikeyan. 2020. Human Health Risks Associated with Recreational Waters: Preliminary Approach of Integrating Quantitative Microbial Risk Assessment with Microbial Source Tracking. Selected as “Editor’s Choice” article for *Water* 12(2):327. <https://doi.org/10.3390/w12020327>.
4. Allen, M.E., D.M. Gholson and **D.E. Boellstorff**. 2019. Protect your Well Water and the Edwards-Trinity Aquifer. Texas A&M AgriLife Extension Service Publication ESC-050.
5. **Boellstorff, D.E.**, D.M. Gholson and M.C. Dozier. 2019. How to Disinfect a Water Well through Shock Chlorination. Texas A&M AgriLife Extension Service Publication ESC-059.
6. **Boellstorff, D.E.**, D.M. Gholson and R.A. Gerlich. 2019. How to Ready your Well for the Next Flood: Preparation, Evacuation and Return Home. Texas A&M AgriLife Extension Service Factsheet ESC-058.
7. Gholson, D.M., **D.E. Boellstorff**, S. Cummings, K. Wagner and M. Dozier. 2019. A Survey of Public Perceptions and Attitudes about Water Availability Following Exceptional Drought in Texas. *Journal of Contemporary Water Research and Education*. 166:1-11. <https://doi.org/10.1111/j.1936-704X.2019.03297.x>
8. Dozier, M.C., J.W. Smith and **D.E. Boellstorff**. 2019. Solving Water Quality Problems in the Home. Texas A&M AgriLife Extension Service Publication ESC051, revision to L-5450.
9. Ertl, H.M., M.A. Mora, **D.E. Boellstorff**, D. Brightsmith and Katherine M. Carson. 2018. Potential Effects of Neonicotinoid Insecticides on Northern Bobwhites. *Wildlife Society Bulletin* 42(4):649-655. <https://doi.org/10.1002/wsb.921>.
10. Gholson, D.M., **D.E. Boellstorff**, S. Cummings, K. Wagner and M. Dozier. 2018. Consumer Water Quality Evaluation of Private and Public Drinking Water Sources. *Journal of Water and Health* 16(3):369-379. Online abstract available at <https://doi.org/10.2166/wh.2018.206>.

#### Awards and Honors

- 2018, Texas Environmental Excellence Award for the Texas AgriLife Extension Service Texas Well Owner Network. Awarded by the Texas Commission on Environmental Quality.
- 2016, Texas A&M AgriLife Extension Superior Service Team Award—Texas Well Owner Network.
- 2015, Special Achievement Award for Extension Faculty, Dept. of Soil and Crop Sciences, TAMU.
- 2015, American Society of Agronomy Extension Educational Materials Award for publications > 16 pages. *Texas Well Owner Network: Well Owner’s Guide to Water Supply*.
- 2011, AgriLife Extension Superior Service Team Award for the Texas Watershed Stewards Program.
- 2011, Southern Region Project of Excellence. Southern Region Down-Well Camera Team. Awarded by the USDA National Water Program.
- 2011, Southern Region Project of Excellence. Development of a Web-based Training for the Regional Watershed Steward Program. Awarded by the USDA National Water Program.
- 2009, Special Achievement Award for Extension Project Support. Soil and Crop Sciences Department, Texas A&M University.
- 2009, Texas AgriLife Extension Superior Service Team Award for the Plum Creek Watershed Protection Plan.
- 2008, American Society of Agronomy Extension Educational Materials Award for the Southern Region Water Quality Regional Website (<http://srwqis.tamu.edu>).
- 2008, American Society of Agronomy Extension Educational Materials Award for the Texas Watershed Stewards Handbook.