

Profile

Which Boards would you like to apply for?

Wake County Water Partnership: Submitted

Please select your first Board preference: *

Water Partnership

Please select your second Board preference: *

None Selected

Please select your third Board preference: *

None Selected

Please select your fourth Board preference: *

None Selected

Please select your fifth Board preference: *

None Selected

Please select your sixth Board preference: *

None Selected

John
First Name

Middle Initial

Burt
Last Name

6601 burt rd
Street Address

Suite or Apt

Fuquay Varina
City

NC
State

27526
Postal Code

What district do you live in?

None Selected

Mobile: (919) 971-5437
Primary Phone

Business: (919) 552-3929
Alternate Phone

ironhorsefarms@gmail.com
Email Address

Self
Employer

From owner/ operator
Job Title

If you live in an Extraterritorial Jurisdiction Area, select Yes:

Yes No

In order to assure countywide representation, please indicate your place of residence:

Unincorporated Wake County

Interests & Experiences

Why are you interested in serving on a Board or Commission?

I am the president of wake county farm bureau and a 9th generation farmer in southern wake county. Preserving and improving soil and water quality in this rapidly growing area is critical for everyone's quality of life

Work Experience

I grow hay and grain to feed horses and cows on our farm, I have also advised local farms on best management practices for improving their pastures and livestock operations. I served 11 years in the army and deployed twice to Iraq.

Volunteer Experience

I am an active member with my church and their ministries in the community, I serve as the president of wake county farm bureau and the chairman of the nc farm bureau equine advisory committee

Education

B.s. degree from nc state in agronomy with a concentration in crop production.

Comments

Upload a Resume

If you have another document you would like to attach to your application, you may upload it below:

Please upload a file

Demographics


Date of Birth

Gender *

Male

Ethnicity *

Caucasian

Other

How did you become aware of Wake County volunteer opportunities?

Other

If you selected "Other" above, how?

One of our county commissioners made me aware of the opening and requested a farmer serve on this committee.

Please upload a file

ETHICS GUIDELINES FOR COUNTY ADVISORY BOARDS AND COMMISSIONS

By submitting this electronic application, if appointed, I pledge by my signature below that I have read and will comply with the ethics guidelines for advisory boards and commissions as adopted by the Wake County Board of Commissioners, found [here](#).

Profile

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Please select your first Board preference: *

Wake County Water Partnership

Please select your second Board preference: *

None Selected

Please select your third Board preference: *

None Selected

Please select your fourth Board preference: *

None Selected

Please select your fifth Board preference: *

None Selected

Please select your sixth Board preference: *

None Selected

Tiffany

First Name

J

Middle Initial

VanDerwerker

Last Name

3216 Manor Ridge Drive

Street Address

Suite or Apt

Raleigh

City

NC

State

27603

Postal Code

What district do you live in?

None Selected

Mobile: (540) 212-3181

Primary Phone

Home: (540) 212-3181

Alternate Phone

tjvander@ncsu.edu

Email Address

NC State University

Employer

PhD Student

Job Title

If you live in an Extraterritorial Jurisdiction Area, select Yes:

Yes No

In order to assure countywide representation, please indicate your place of residence:

Raleigh

Interests & Experiences

Why are you interested in serving on a Board or Commission?

My husband and I recently purchased a home in Wake County with a private well for our drinking water supply. As a hydrogeologist, I was very excited for the opportunity to practice what I preach. However, my husband who is not a scientist, has had so many questions about groundwater and wells in general. It made me realize that my knowledge and experience could be really helpful with regards to outreach and education to citizens of Wake County. In general, I'm passionate about water and the environment which probably explains why I've spent my entire career dedicated to it! Honestly, one thing I really miss from working in State government, is coordinating with folks from different agencies, community groups, and backgrounds, which I understand is a pivotal component of this group. I enjoy discussing environmental issues and understanding varying perspectives around those issues. Finally, I'm interested in serving on the Wake County Water Partnership because I care about the citizens that live here and I care about the sustainable future of Wake County.

Work Experience

2016—2021: Hydrogeologist, Maryland Geological Survey, Baltimore, MD. Responsibilities include conducting local and regional hydrogeologic investigations; interpreting water-quality data in relation to geology, land use, well construction, and other factors; preparing interpretive reports, maps, and data layers. 2012—2014: Staff Geologist, Draper Aden Associates, Blacksburg, VA. Responsibilities included overseeing monitoring well drilling and installation, determining groundwater flow rate and direction, soil sampling for hazardous substances, and validating groundwater data.

Volunteer Experience

MEAS Graduate Student Assembly (May 2022 – present) PFAS Workgroup - State of Maryland (October 2020 – May 2021) Environmental Advisory Council for Carroll County, Maryland (April 2018 – April 2021) Virginia Tech Graduate Student Assembly (August 2014 - May 2016)

Education

North Carolina State University, Raleigh, NC: Earth Sciences, Ph.D., in progress Virginia Tech, Blacksburg, VA: Geosciences/Hydrogeology, M.S. 2016 Virginia Tech, Blacksburg, VA: Geosciences/Geochemistry, B.S. 2012

Comments

Awards and Accolades January 2022 – Recipient of Graduate Student Research Grant from the Water Resources Research Institute of the University of North Carolina (WRRI-UNC) and North Carolina Sea Grant: “Assessing Water Quality in the Upper Cape Fear Aquifer, a Potential Alternate Drinking Water Source for Chemours-Area Residents” April 2021 - Recipient of NC State University Provost’s Doctoral Fellowship for academic year 2021-2022 Provost’s Fellowships are one-year awards and are designed to help in college and departmental efforts to recruit outstanding new doctoral students to NC State University. November 2018 - Sponsored attendee of the Emerging Leaders Alliance Conference in Falls Church, VA by the National Groundwater Association to foster leadership in the engineering and scientific community.

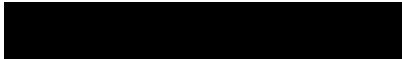
[CV_VanDerwerker.pdf](#)

Upload a Resume

If you have another document you would like to attach to your application, you may upload it below:

Please upload a file

Demographics



Date of Birth

Gender *

Female

Ethnicity *

Caucasian

Other

How did you become aware of Wake County volunteer opportunities?

County Website

If you selected "Other" above, how?

Please upload a file

ETHICS GUIDELINES FOR COUNTY ADVISORY BOARDS AND COMMISSIONS

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Tiffany J VanDerwerker

Tiffany J. VanDerwerker, P.G.
Ph.D. Student
Marine, Earth and Atmospheric Sciences
North Carolina State University
3154 Jordan Hall | Raleigh, NC
tjvander@ncsu.edu

Education

North Carolina State University, Raleigh, NC: Earth Sciences, Ph.D., in progress
Virginia Tech, Blacksburg, VA: Geosciences/Hydrogeology, M.S. 2016
Virginia Tech, Blacksburg, VA: Geosciences/Geochemistry, B.S. 2012

Professional Experience

2016—2021: Hydrogeologist, Maryland Geological Survey, Baltimore, MD. Responsibilities include conducting local and regional hydrogeologic investigations; interpreting water-quality data in relation to geology, land use, well construction, and other factors; preparing interpretive reports, maps, and data layers.

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Boards and Committee Memberships

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PFAS Workgroup - State of Maryland (October 2020 – May 2021)
Environmental Advisory Council for Carroll County, Maryland (April 2018 – April 2021)
Virginia Tech Graduate Student Assembly (August 2014 - May 2016)

Selected Publications and Reports

Furlong, E.A. and VanDerwerker, T.J., In Prep., Temporal variations in specific conductance in groundwater and streams in a subwatershed of Great Seneca Creek in the Maryland Piedmont, December 2020 to July 2021: Maryland Geological Survey Administrative Report 22-02-01

VanDerwerker, T.J., In Prep., Effects of Road-Deicing Salt on Groundwater in the Maryland Piedmont: Maryland Geological Survey Report of Investigations No. 89

VanDerwerker, T.J., 2019, Water Quality and Temporal Variations in Chloride Concentrations in Groundwater in the Maryland Piedmont: Maryland Geological Survey Administrative Report 19-02-01

VanDerwerker, T.J., Bolton, D.W., and Gemperline, J.M., 2019, Wellwater Quality in the Appalachian Plateau Physiographic Province of Maryland: Maryland Geological Survey Report of Investigations No. 85

Gemperline, J.M., VanDerwerker, T.J., and Andreasen, D.C., 2018, Effects of increased withdrawals from the Aquia aquifer on the Mayo Peninsula, Anne Arundel County, Maryland with an evaluation of water quality: Maryland Geological Survey Report of Investigations No. 84

VanDerwerker, T.J., Zhang, L., Ling, E., Benham, B., and Schreiber, M.E., 2018, Evaluating Geologic Sources of Arsenic in Well Water in Virginia (USA), *International Journal of Environmental Research and Public Health*, vol. 15, 4, pp. 1-17.

VanDerwerker, T.J., 2016, Evaluating Sources of Arsenic in Groundwater Using a Logistic Regression Model: Blacksburg, Virginia, Virginia Tech, Master's Thesis, <https://vtechworks.lib.vt.edu/handle/10919/77957>

Warburton, T., Schreiber, M., VanDerwerker, T., Ling, E., Benham, B., and Spiller, A., 2019, Spatial Mapping of Trace Element Concentrations in Well Water in Virginia, Dennis Dean Undergraduate Research and Creative Scholarship Conference, Blacksburg, VA (poster).

Selected Presentations

“Groundwater quality in deep aquifers near Fayetteville, NC: Testing the waters for an alternate drinking water source” Tiffany VanDerwerker, December 14, 2022 conducted as a talk for the North Carolina Water Resources Research Institute meeting

"Road Salt Impacts on Groundwater and Water Quality" Tiffany VanDerwerker and Andrew Lazur, November 13, 2020 conducted as a virtual presentation for the University of Maryland AGNR Cornerstone Event.

“Road Salt Contamination in Groundwater and Surface Water in the Maryland Piedmont” Tiffany VanDerwerker, February 13, 2020 conducted as a talk for the Maryland Delaware Water Well Conference.

“Road Salt Contamination in Groundwater and Surface Water in the Maryland Piedmont” Tiffany VanDerwerker, December 6, 2019 conducted as a talk for the Maryland Water Monitoring Council Annual Conference.

“Temporal Variations in Chloride Concentrations in Groundwater in the Piedmont Physiographic Province of Maryland” Tiffany VanDerwerker, December 7, 2018: conducted as a poster for the Maryland Water Monitoring Council Annual Conference.

“Effects of Increased Withdrawals from the Aquia Aquifer on the Mayo Peninsula, Anne Arundel County, Maryland with an Evaluation of Water Quality” Tiffany J. VanDerwerker, September 27, 2018: conducted as a talk for the Maryland Groundwater Symposium.

“Groundwater 101” Tiffany J. VanDerwerker, September 25, 2018: conducted as a talk for the Central Atlantic States Association (Food and Drug Officials) Baltimore Conference.

“Evaluating Geologic Sources of Arsenic in Groundwater in Virginia using a Logistic Regression Model” Tiffany J. VanDerwerker, February 13-14, 2018: conducted as a talk for the Virginia Water Well Association Winter Conference.

“Evaluating Geologic Sources of Arsenic in Groundwater in Virginia using a Logistic Regression Model” Tiffany J. VanDerwerker and Dr. Madeline Schreiber, October 13, 2017: conducted as a webinar for the Virginia Cooperative Extension.

“Wellwater Quality in the Appalachian Plateau Physiographic Province of MD”, Tiffany J. VanDerwerker, September 28, 2017: conducted a talk for the Maryland Groundwater Symposium in Baltimore, MD.

Awards and Accolades

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