

Semper Sky recently held a water monitoring practice near the Smith Lake Reservoir in Stafford County, Virginia. Smith Lake is a 295 acre lake managed by Stafford County for the production of drinking water. Rob Turner, Stafford County Smith Lake Plant Manager, piqued our interest when he helped participants understand how Semper Sky's practice collection is a microcosm of the large-scale testing that the plant performs regularly. So, we spoke with Jessica Burger, Stafford County's Community Engagement Officer to learn more. Check out our Q&A below.

Stafford County performs hundreds of tests to provide "better-than-required" water. Can you briefly name and describe some of those tests?

The most frequent tests we perform are for pH, E. Coli, and chlorine. We test both at the plant and throughout the distribution system, most importantly at the farthest reaches where a problem is most likely to occur. In addition, there are many other parameters required to be tested by The Virginia Department of Health (VDH). Each different class of contaminants is tested on a predetermined cycle. The testing performed by the County is summarized in the Water Quality Report (WQR) released each year around June for the previous year. All WQRs going back to 2009 are available on the Stafford Utilities website.

Can citizens perform any of those tests and receive accurate results?

Any citizen could send samples to a certified lab and receive accurate results. At home testing is less accurate and unreliable. If a citizen is not on Stafford water and has a well instead, it is highly recommended to have your water periodically tested.

What do citizens usually do with their findings after monitoring samples from Virginia's waterways?

Some Non-Governmental Organizations (NGOs) environmental groups have tested and published their own findings. Both the Department of Environmental Quality (DEQ) and VDH have ways for people to submit water quality concerns.

What happens if there are discrepancies between citizen monitored results and DEQ results?

We are not aware of this happening. Resampling would most likely be the first step, but that would be at DEQ's discretion.

As required by the Virginia Department of Health and the Environmental Protection Agency, the Stafford County Department of Public Works Utilities presents a yearly Water Quality Report. What happens if the water provided does not meet all state and federal requirements?

The Stafford County Department of Utilities ensures every year that our drinking water meets or exceeds every state and federal requirement that safeguards public health. The response to water quality issues would be dependent on the nature of the issue. All results are reported directly to the state, and reviewed. If there is an issue, VDH will work with the utility to bring the water back within standards and coordinate any additional actions necessary.

What, if anything, can Ecopreneurs do to maintain or enhance water quality?

Education and outreach may be the most important role that many people forget about. Reducing source water pollution from pesticides, herbicides, fertilizers, oil, and litter is one of the greatest challenges facing the water industry.



Since 2015, Ava Noelle Rogers (now 13), has portrayed notable Black women in a picture tribute during Black History Month. In recognition of the month long celebration of Black perseverance and accomplishments, we are sharing two of Ava's portrayals of Black women who worked hard to "make the impossible look routine." Photos by: Chauncia Boyd Rogers



Patricia S. Cowings is an aerospace psychophysiologist, author, and patent holder. She was the first American woman to be trained as a scientist astronaut by NASA. Patricia helps astronauts better adapt to space by studying the effects of gravity on human physiology and performance. She is known for developing motion sickness cures and helping people learn voluntary control of bodily functions.



Willa Beatrice Brown was an African-American aviator, lobbyist, teacher, activist, and woman of many firsts. She was the first Black woman to earn a pilot's license in the US, the first Black woman to run for US Congress, first Black officer in the Civil Air Patrol, and first woman in the US to have both a pilot's license and an aircraft mechanic's license. Willa also co-founded the first Black owned and operated private flight training academy in the US. Willa's training efforts created the Tuskegee Airmen.

