

DCVWQMP: An Acronym Worth Deciphering

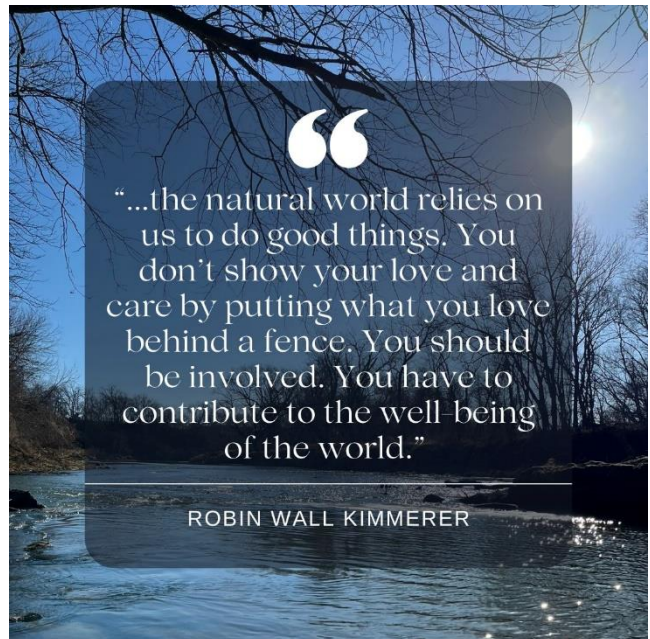
Zach Moss, Naturalist/Natural Resource Manager

During a recent public program, the participants and I spent time marveling at the miracle of the substance of water. This H₂O has many amazing properties on the molecular level that make life possible—come hang out with me by the river sometime if you'd like to ponder these properties together. It makes up 60 to 70 percent of our body, about 71 percent of our planet's surface, and it's the substance that researchers look for in outer space to search for signs of extraterrestrial life. Iowa's recent drought periods have shined a bright spotlight on the value of water in our state.

Because water is so vital to our existence, I'd bet my life that you have taken a sip of H₂O in the past few days. Thanks to the federal Safe Drinking Water Act of 1974, the water coming out of your tap is rigorously and frequently tested before it's pumped through pipes to your kitchen sink (Unless you have a private well. You can [get your well tested for free*](#) through the county Environmental Health Department*). However, the rivers and creeks flowing through Dallas County severely lack abundant, timely water quality data.

The Iowa DNR is mandated by the Environmental Protection Agency to monitor water quality in our rivers (and some creeks) under guidelines outlined in the Clean Water Act, sections 305(b) and 303(d). This data is published every two years. However, due to staffing and funding constraints, the DNR can't monitor every single water body during every two-year monitoring period. In fact, during the monitoring period included in the 2022 report, the DNR was able to collect adequate data from only 36.9 percent of our state's river and stream segments to determine whether or not a water body is "impaired." The rest of the state is a question mark for that monitoring period.

In *Braiding Sweetgrass*, Robin Wall Kimmerer wrote, "...the natural world relies on us to do good things. You don't show your love and care by putting what you love behind a fence. You should be involved. You have to contribute to the well-being of the world." Out of reverence for the miracle of water, and in light of the DNR's constraints on data collection and publication, Dallas County Conservation Board started a new Dallas County Volunteer Water Quality Monitoring Program (DCVWQMP) in late 2023! Our site locations and data are visible to anybody on the [Clean Water Hub](#),** a public-facing and user-friendly national water quality database.



We currently have 14 generous volunteers who have been collecting data from their monitoring sites during the first week of each month since November 2023. These dedicated people attended

a training to learn about DCVWQMP's standardized data collection protocol, and they've volunteered to adopt anywhere from one to 12 sites for monthly monitoring. The 36 site locations have been pre-selected based on their locations within our county's major watersheds (areas which drain to a common body of water).

The tests are simple; if you participated in the DNR's IOWATER program, you'll recognize them. We use field test kits to easily monitor dissolved oxygen, phosphate, nitrate, pH, chloride, transparency, and temperature. As I'm writing this in February, we've had pretty boring results from our testing so far (which is a good thing!). This is to be expected due to the low precipitation of winter paired with our current drought conditions. However, it's vital to the scientific process that we collect data regularly to establish a baseline of what's "normal" in a water body. This allows us to accurately identify when we find a result that's atypical from that site's history.

As this program moves forward, we're looking to create connections and build upon partnerships with organizations, agencies, schools, businesses, etc. that can utilize our data for local decision-making and education. If you'd like to get involved with the growing program and help lighten the load of our current volunteers, stay tuned to our public programs calendar for an upcoming DCVWQMP training.

Time is our most valuable asset in life, so I'll sign off with a big THANK YOU to our current volunteers for taking a chance on spending their time and efforts to get this brand-new program up and off the ground!

*<https://www.dallascountyiowa.gov/services/health-and-social-services/health-department/environmental-health/private-well-information>

**<https://www.cleanwaterhub.org/organization/116>