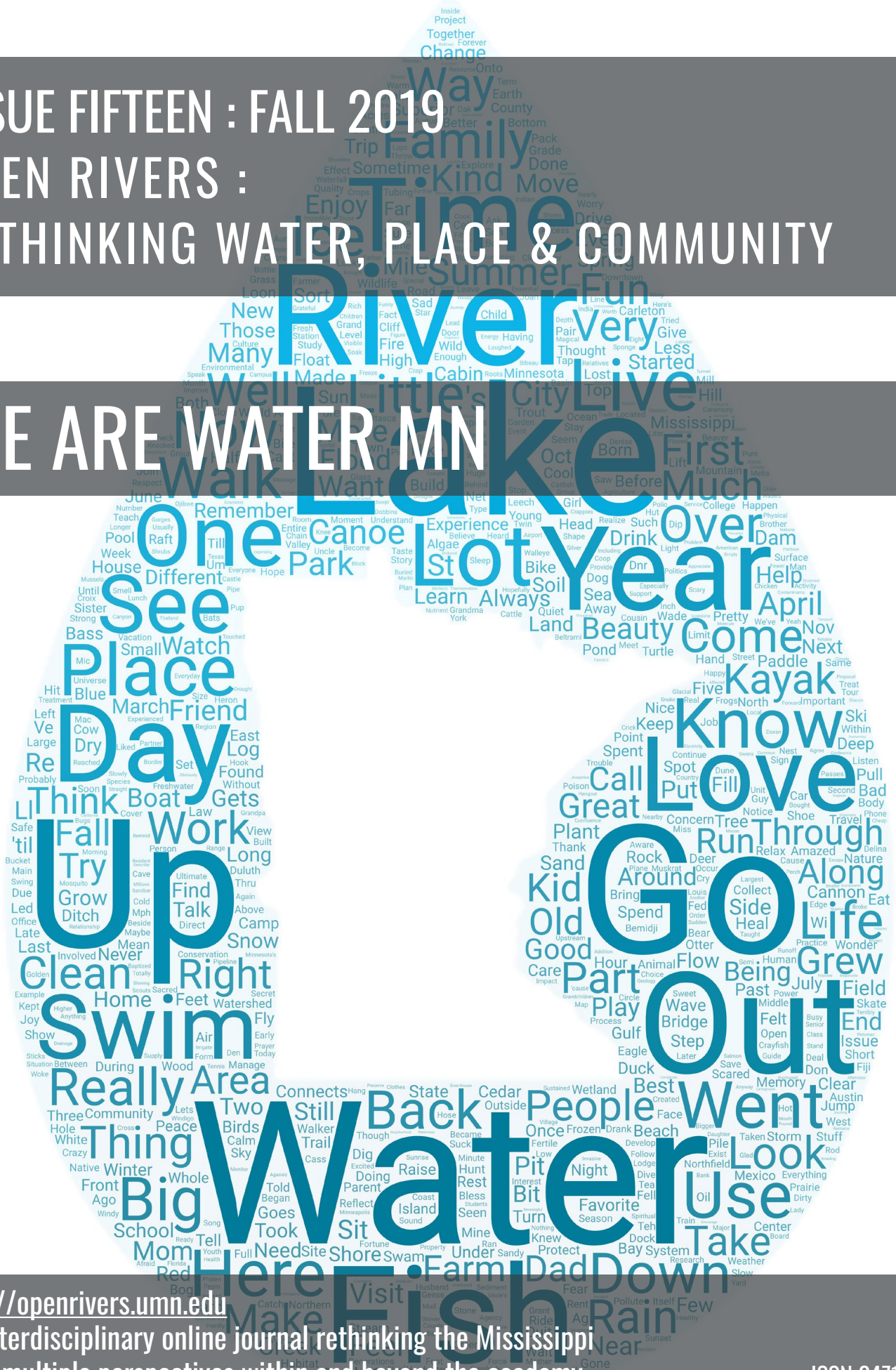


# ISSUE FIFTEEN : FALL 2019

## OPEN RIVERS :

### RETHINKING WATER, PLACE & COMMUNITY

# WE ARE WATER MN



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An interdisciplinary online journal rethinking the Mississippi from multiple perspectives within and beyond the academy.

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The cover image is a word cloud made from narratives representing We Are Water MN. Image courtesy of Minnesota Humanities Center.

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PERSPECTIVES

# CULTIVATING AND STEWARDING A COMMUNITY OF “WATER PEOPLE”

By Melissa Miller

I didn't set out in life to be a Water Person.

Despite growing up on the Mighty Mississippi, with water as the backdrop to so many of my childhood memories, I didn't think of myself as a Water Person.

Despite spending time living in the eastern U.S. near the Chesapeake Bay, where fishing, crabbing, swimming, and boating shape the identity

of the towns along its shores, I didn't think of myself as a Water Person.

When I joined the [Iowa Water Center \(IWC\)](#) staff in 2012 with very little understanding of the water research needs in Iowa, I especially didn't think of myself as a Water Person.

I didn't think of myself as a Water Person for most of my life. I began to reconsider in the



*Tipton Creek runs through the community that the author's family calls home. This water winds through farmland, eventually connecting to the Iowa River, a tributary of the Mississippi River. Image courtesy of the author.*

spring of 2017 when IWC ran an essay contest for high school students asking them to consider a body of water familiar to them and write about why it was worth protecting. This contest was established by a gift to IWC from a couple devoted to instilling a love of the environment in youth. As part of the promotion for this contest, IWC staff each wrote a piece answering the essay prompt.

At that point, I was five years into my position at IWC and I knew plenty about water and water research. I pondered my essay topic for a bit. I could write about nutrient leeching into the Mississippi River and flowing down to the Gulf of Mexico, or about the sediment loading that

threatens the recreational value of Iowa lakes, or about the chemicals of emerging concern in our drinking water sources.

But as I sat to consider a *familiar* body of water, I realized—for perhaps the first time—that water is a part of who I am and who I’ve always been. From the creek at the end of my dead-end street, to the lake I fished with my grandpa, to that beautiful Mississippi River that still draws me in like a magnet no matter where I stand on her banks, water, to me, is home.

Water resource management is inherently a local issue—making it a personal one. When the United States Congress passed the Water Resources



*The Mississippi River seen on a visit by the Iowa Water Center staff to the Minnesota Water Resources Center in summer of 2019. Image courtesy of the author.*



Research Act in 1964, they recognized that states had both the need and the capacity to address water resource concerns at the local level. This legislation birthed the Water Resources Research Institutes (WRRI), housed today in universities in all fifty states and four territories, including IWC. Administered through the United States Geological Survey, we are charged with engaging stakeholders to identify water resource issues, coordinating research at the state level to address those issues, and getting research results into the hands of those who need it the most—all while training the next generation of future water scientists. Communication is at the heart of the work we do.

As IWC's associate director, I play a significant role in determining the strategic direction of the Center while balancing the needs of our many constituents. Truth be told, this has been a daunting task at times. Who is not a constituent of an institution focused on water? Where do we begin to address the vast concerns of a state so rich in water? What strategies do we employ to engage the government agencies, legislators, water resource managers, and citizens who both determine research priorities and also benefit the most from solutions found through good water science? And how do we do this successfully with extremely finite financial resources?

There was a time when information dissemination was limited to technical reports, peer-reviewed journal articles, and presentations at academic conferences. Judging by many of the grant proposals I review, that time has not completely gone by the wayside, but increasingly we see relationship-building activities taking center stage in how we communicate scientific information. Dr. Faith Kearns (2015), who coordinates research and outreach programs for the California Water Research Institute, champions the use of emotional intelligence and empathy in communicating about controversial topics like climate change. A recent article published in *American Entomologist* urges scientists to

engage with the government and other civic institutions, and to communicate their science via social media channels like YouTube and Twitter (Hulcr, Dharampal, Hamm et al. 2019). This multi-pronged, relationship-centric approach permeates the activities we conduct at IWC. We believe we must cultivate our stakeholders to be willing participants in the discussion about water science. We have to help them realize they are Water People.

My first job out of college was in nonprofit fundraising. One of the concepts explained to me during my departmental orientation was the donor cultivation cycle. There are various examples out there, but the simplest version is this: once you have identified a potential donor, you must cultivate them before you make an ask. Once you've made the ask, you have to steward their gift and show them how it matters. Cultivate, ask, steward, repeat.

Disseminating water science information is really not that different. If we can draw people in and cultivate them to care about our science, then the ask we make is for them to invest their trust in the science and take action accordingly (arguably a bigger ask than a piece of one's disposable income!). We've taken some risks over the years to meet people where they are to connect them to science through emotion, art, and community. The Spirit of the Water essay contest (the one that helped me realize I'm a Water Person) is one example of many. We strive to incorporate arts and humanities into our annual Iowa Water Conference, such as when Jennifer Tonko from the Minnesota Humanities Center gave a plenary address at the 2019 Iowa Water Conference to introduce our state to We Are Water MN. We engage high school youth in project-based learning using watershed boundaries to define their communities through The Watershed Project. This fall, we started a learning community for faculty engaged in water research to inspire interdisciplinary collaboration and teach methods for engaging policy makers and fostering healthy



*As part of The Watershed Project, Davenport North High School students worked with Harrison Elementary students to create this mixed media mural of The Life of a Watershed. Students in grades K–5 each contributed a facet of the ecosystem. Image courtesy of the author.*



teams. We have a YouTube series, *Ask a Scientist*, where Iowa researchers explain simple land and water phenomena in one minute or less. Our researcher profile videos ask scientists to consider questions like “If your research were an athletic sport or a game, what would it be?” And yes—we’re on [Twitter](#).

Because we don’t treat science communication as a transaction, we feel we’re building venues where our stakeholders trust not just science, but the scientists themselves. So, when we do

communicate water resource management solutions, our stakeholders are ready to invest. Stewardship, then, is the dialogue we have with stakeholders about their lived experiences with the same things we are studying, developing shared language and concepts, and incorporating that knowledge into our future research and outreach activities. Over time, we all see ourselves as Water People.

And the cycle continues.

## Resources cited:

Hulcr, Jiri, Prarthana S. Dharampal, Ronda L. Hamm, Gwen Pearson, and Cara Gibson. 2019. “Influence Is Power: Strategic Communication for Entomologists.” *American Entomologist* 65 (2): 92–96. doi:10.1093/ae/tmz024.

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## About the Author

Melissa Miller is the associate director at the Iowa Water Center, the state’s Water Resources Research Institute. In this role, she forges relationships across the state and region to advance and elevate Center initiatives that address the water research needs of Iowa. Melissa’s work typically centers around building team capacity for interdisciplinary research, outreach, and education projects, with special emphasis on internal and external communication and strategy. Melissa has been with the Iowa Water Center since 2012. She holds a B.S. in community and public health and M.S. in community development with a focus in natural resource management, both from Iowa State University. Melissa lives on a farm in the South Fork of the Iowa River watershed in central Iowa with her husband and three daughters.