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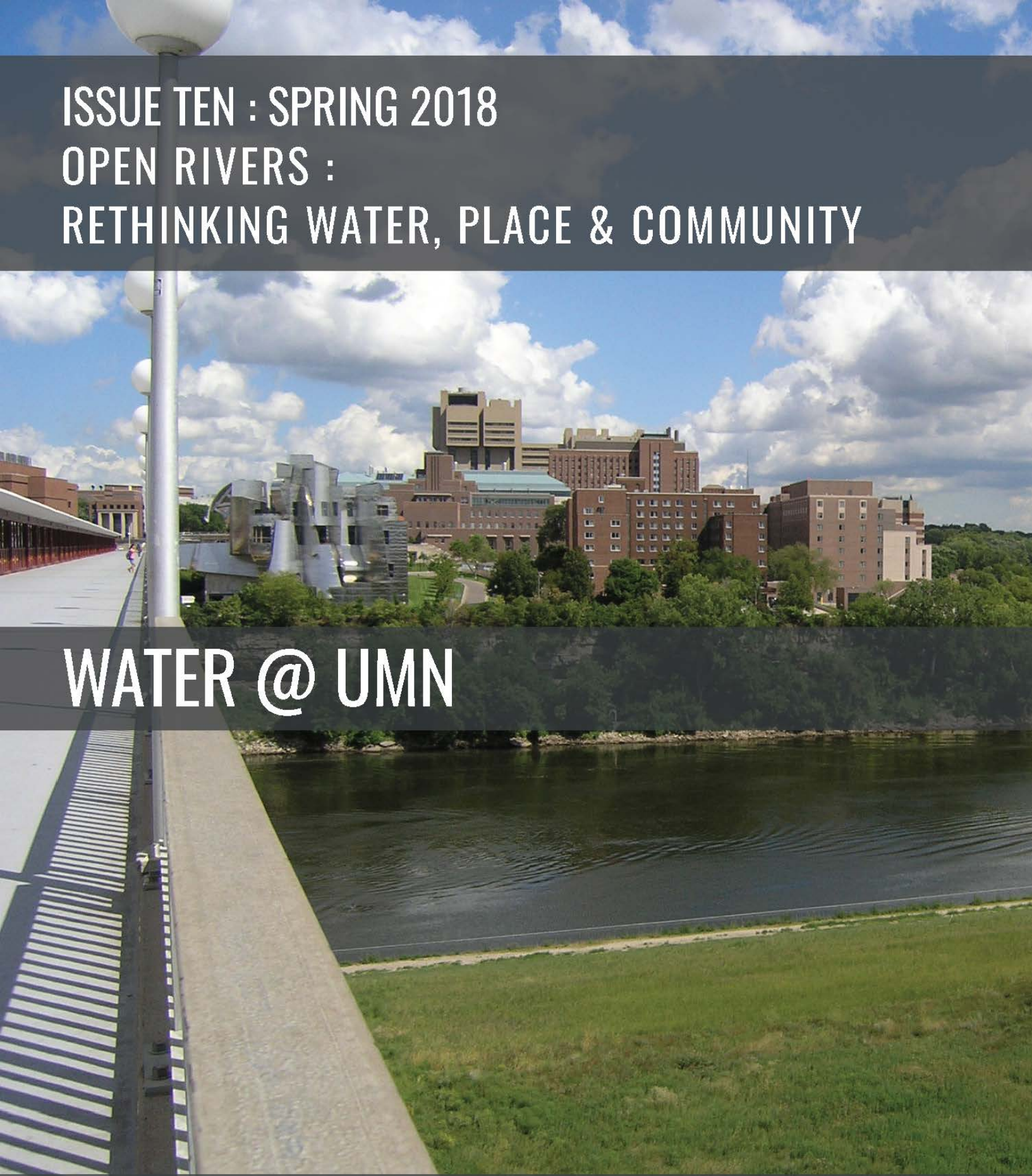
# OPEN RIVERS : RETHINKING WATER, PLACE & COMMUNITY



## WATER @ UMN

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The cover image is of The East Bank of the Minneapolis campus of the University of Minnesota and the Mississippi River from the Washington Avenue Bridge. Image courtesy of Patrick Nunnally.

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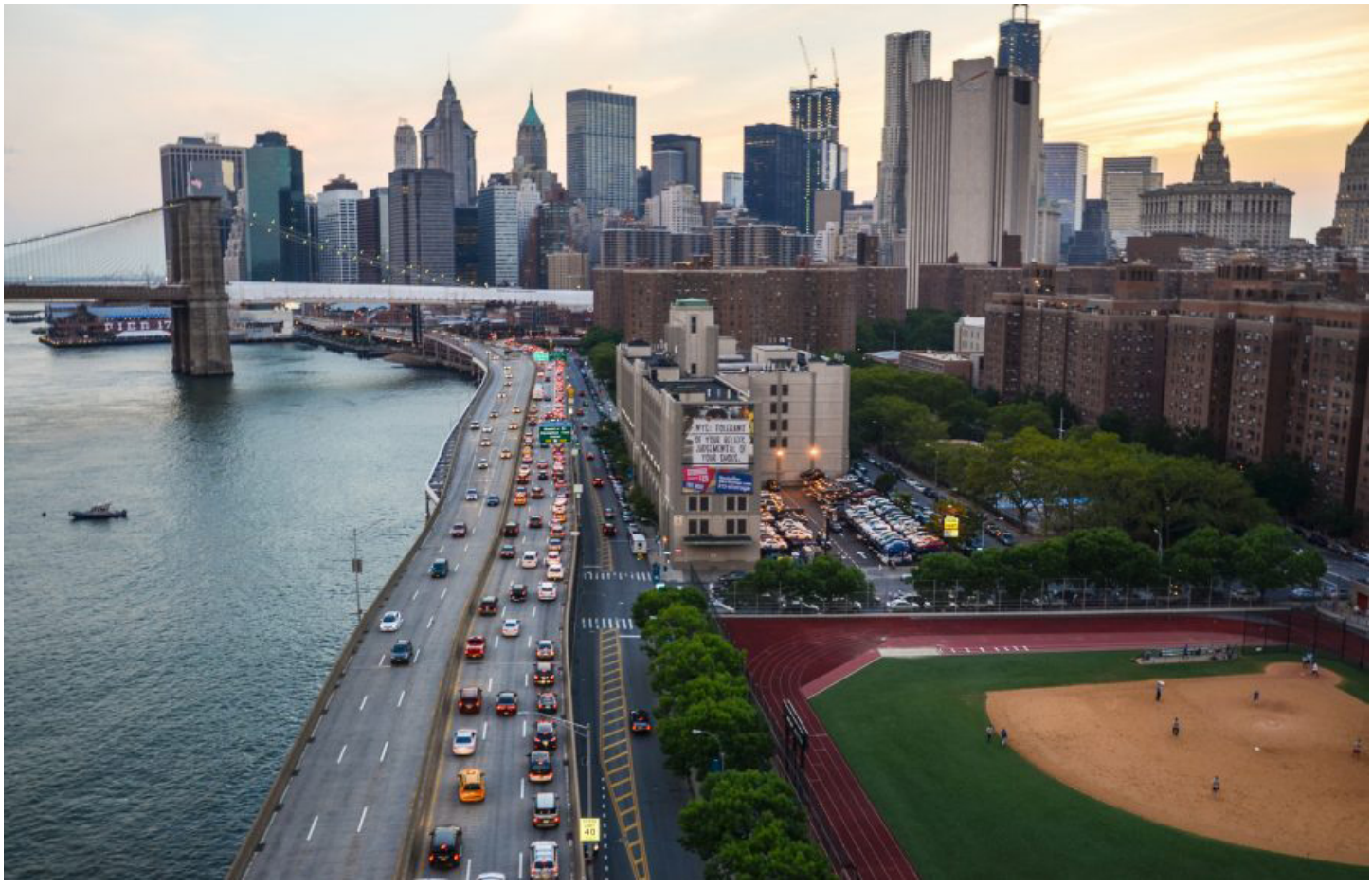
PERSPECTIVES

# ONE WATER: A NEW ERA IN WATER MANAGEMENT

## By Jeremy Lenz

Under the leadership of the US Water Alliance, a multi-sector coalition of leaders from more than 940 industry, government, and community organizations has joined forces to develop and advance practical solutions to the toughest water challenges facing our nation. As part of the "One Water for America" initiative, this diverse group collaborated to create the recently published One Water for America Policy Framework. Leaders and stakeholders from the One Water initiative gather annually, and will hold their annual One Water Summit in the Twin Cities, Minnesota on July 10th-12th.



*The complex urban waterfront in New York city is emblematic of the balance between the challenges and solutions regarding our water infrastructures.*

# Context on the complexities of water issues

Water is a familiar, essential, and ubiquitous part of our daily lives. As a result, it is easy to engage people in conversations about the importance of "water" and build consensus on the need to "solve water issues"—but that is where the simplicity ends.

As a society, we have high expectations. We expect on-demand access to abundant clean water for industrial, commercial, agricultural, and residential uses. We expect pristine lakes and rivers. We expect ample low-cost food from domestic agriculture. We expect all wastewater to disappear, without a thought. And we expect to receive this societal infrastructure while paying little to nothing for it.

Faced with the ever-growing demands of water consumers and static or shrinking budgets to meet those demands, our physical and regulatory water infrastructure is breaking under its own weight. Consider this: there are more than 51,000


*This wicket gate removal at the Grand Coulee Dam on the Columbia River illustrates the massive scale of our water infrastructure. Image courtesy of Bonneville Power Administration.*

community water systems in the U.S., more than 80 percent of which serve fewer than 3,300 people and 55 percent of which serve fewer than 500 people. And there are nearly 15,000 wastewater treatment plants in the U.S. By contrast, there are approximately 3,000 electricity providers.

As our nation's water infrastructure fractures, communities around the country face environmental and public health crises, such as widespread flooding, drinking water contamination, and drought. Moreover, our nation's water management challenges take place in the context of global environmental trends stressing global water resources.

Although water management problems are often understood and addressed as local, community issues, they are actually interconnected national problems that require multi-sector, system-wide solutions at every level of government.

# One Water introduces its big ideas

Acknowledging the interconnected nature of water management throughout the United States and the need for multi-sector coordination and collaboration, in 2017, the US Water Alliance along with partners developed a One Water Roadmap to help shape this concept into seven arenas for action that can help transform how our nation views, values, and manages water.

"Through its One Water framework, the US Water Alliance is playing a unique role in our nation. They are the only organization bringing together the most diverse set of voices on water, and this will lead to more holistic solutions," explained Snehal Desai, Executive Vice President and Chief Growth Officer for Evoqua, former Global Business Director for Dow Water and Process Solutions, and current US Water Alliance board member. "The solutions must be at all levels because, although water is local, the context of funding and regulations are often at a state and national level."

Over the past year, the US Water Alliance held listening sessions with 500 leaders from government and industry to hear their best ideas for sustainable management of water. From those conversations, US Water Alliance identified seven big ideas that it believes can best accelerate solutions to water management problems. In its One Water for America Policy Framework, the US Water Alliance introduced its big ideas and offered concrete actions that can be taken at the local, regional/state, and national levels.

The Policy Framework document provides an in-depth explanation of each big idea, and corresponding policy recommendations. At the highest level, the big ideas are:

1. **Advance regional collaboration on water management.** Pointing to the myriad of siloed water managers, this big idea stresses the importance of regional collaboration, and advocates for watershed-scale planning, coordinating services to better operate and maintain infrastructure assets, and consolidating utility service.

2. **Accelerate agriculture-utility partnerships to improve water quality.** Noting that agriculture is a major water consumer and a primary source of non-point source pollution, this big idea highlights the importance of identifying new ways to fund land management best practices that balance conservation with productivity.

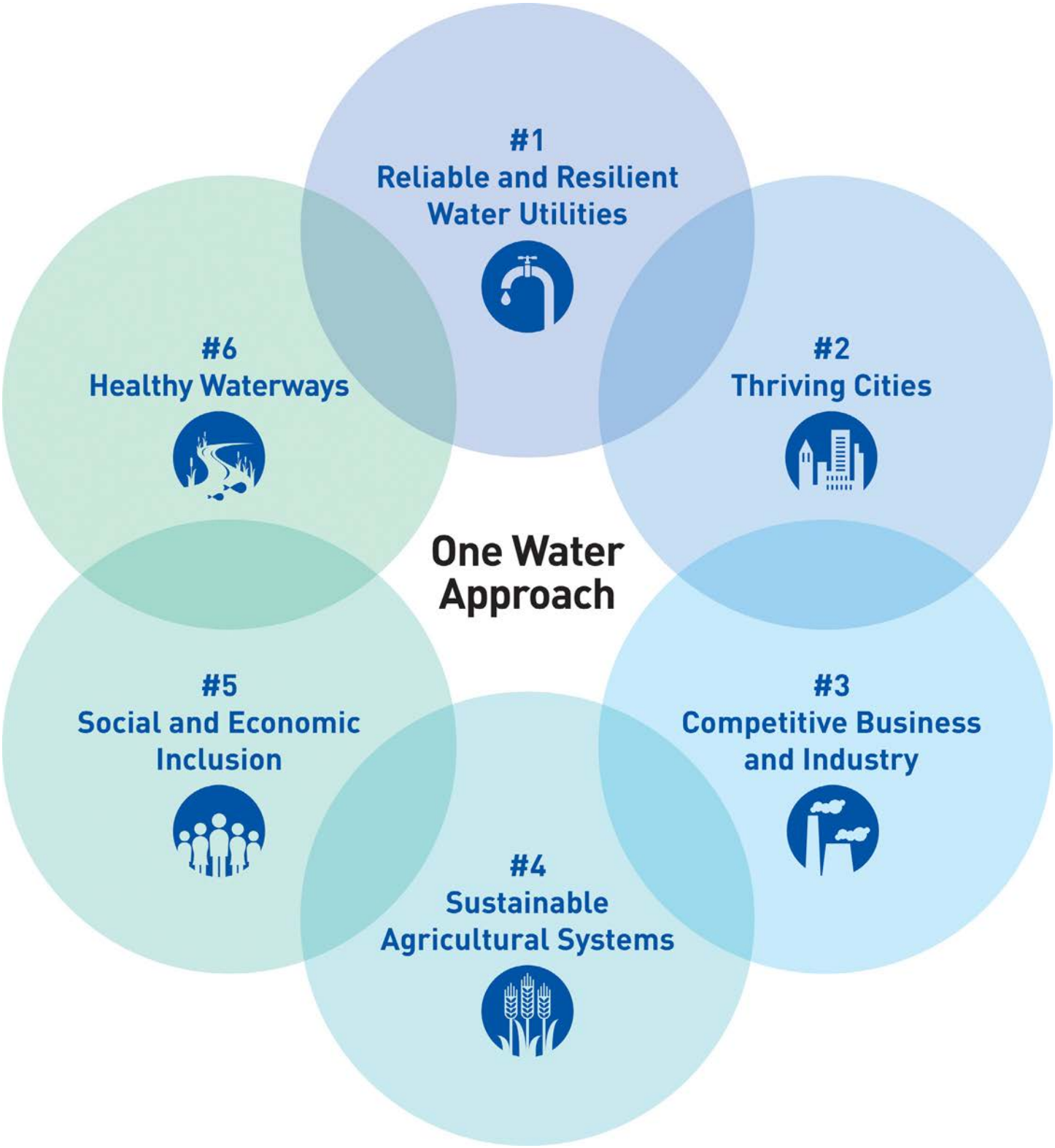



*Illustration of the One Water approach that involves complex and interwoven solutions with many partners across jurisdictions. Image courtesy of the US Water Alliance.*

3. **Sustain adequate funding for water infrastructure.** Acknowledging that water infrastructure is, and will continue to be, primarily funded by water, sewer, and storm-water rates and charges, this big idea stresses the importance of measuring the actual cost of water management and reducing that cost by optimizing current practices and adopting technology innovation.

4. **Blend public and private expertise and investment to address water infra-structure needs.** Defining the water utility sector as both public and private, this big idea identifies the importance of public-private partnerships as a promising source for new investment and innovation in water manage-ment, and suggests ways to remove current barriers to mutually beneficial public-private partnerships.

5. **Redefine affordability for the 21st Century.** Affirming the challenge of guaran-teeing universal access to affordable water and sewer service, while also ensuring financial viability of water utilities, this big idea identi-fies policy solutions aimed to make and keep water affordable for all.

6. **Reduce lead contamination risks, and embrace the mission of protecting health.** Citing the present-day challenge of lead in drinking water, this big idea encour-ages multi-sector community-wide solutions to make safe drinking water a public health priority.

7. **Accelerate technology adoption to build efficiency and improve water service.** Recognizing the unique potential for new technologies to solve water problems, this big idea identifies important policy and regulatory hurdles to technology adoption and recom-mends specific changes to those hurdles.

"During the listening sessions, one of the issues we heard about was the challenges around the state of our water infrastructure," said Radhika Fox, CEO of the US Water Alliance. "The water infrastructure needs are like what we haven't seen in 50, 100, 150 years, when previous leaders made a generational investment. Today, we are at this dawn of a replacement need. We want to make 2018 the year of water investment."

# One Water Summit

The One Water movement is gaining national momentum. 250 people attended the Water Summit in 2015, and the 2018 Water Summit is expected to draw almost three times that number—a demonstration of the One Water initiative's importance and potential impact. Last year, 650 people attended the One Water Summit near the Mississippi River delta in New Orleans. On July 10–12 2018, the One Water Summit will occur near the Mississippi headwaters in the Twin Cities, Minnesota. Hosting grand scale solution-based summits at the Mississippi River headwaters and delta symbolize the whole-system thinking and partnerships needed to enter a new era of water management.

The University of Minnesota is an active sponsor of the summit, providing expertise, speakers, and tour venues. On the University of Minnesota's role, Paige Novak, Joseph T. and Rose S. Ling Chair in Environmental Engineering, Department of Civil, Environmental, and Geo- Engineering,

says, “As educators and researchers we can play a strong role in advancing the ‘one water’ concept: helping to ingrain this approach to water management in our students and helping managers determine, through research, how changing up-stream or down-stream processes could alter, positively and negatively, the water system as a whole.” One Water is a call to action that invites all of us to participate in solving our nation’s water challenges through the concrete solutions proposed in the One Water for America Policy Framework.

## Recommended Citation

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## About the Author

Jeremy Lenz is a strategy and industry relations consultant who helps public and private clients tackle water technology challenges. (The US Water Alliance [USWA] is a client for Lenz.)