

CLEAN WATER

ADVOCATE

A NACWA MAGAZINE
The National Association of Clean Water Agencies

Exploring Governance

Utility Leader Perspectives On Challenges And Benefits Of Governance Approaches
pg.10



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SPECIAL ELECTION
SEASON 2018 PULLOUT:

Tell The Clean Water Story

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Navigating The Nexus Between The CWA And SDWA



We Clean It. For Everyone's Sake.

For nearly five decades, the National Association of Clean Water Agencies (NACWA) has been the nation's recognized leader in legislative, regulatory and legal advocacy on the full spectrum of clean water issues, as well as a top technical resource for water management, sustainability and ecosystem protection interests.

NACWA represents public wastewater and stormwater agencies of all sizes nationwide. The Association's unique and growing network strengthens the advocacy voice for all member utilities, and ensures they have the tools necessary to provide affordable and sustainable clean water for all.

Our vision is to represent every utility as a NACWA member, helping build a strong and sustainable clean water future.



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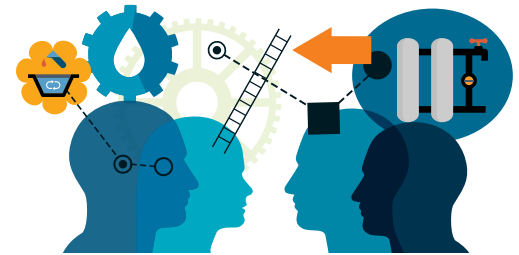


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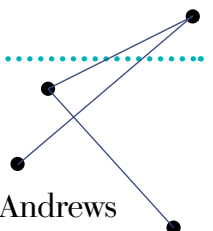


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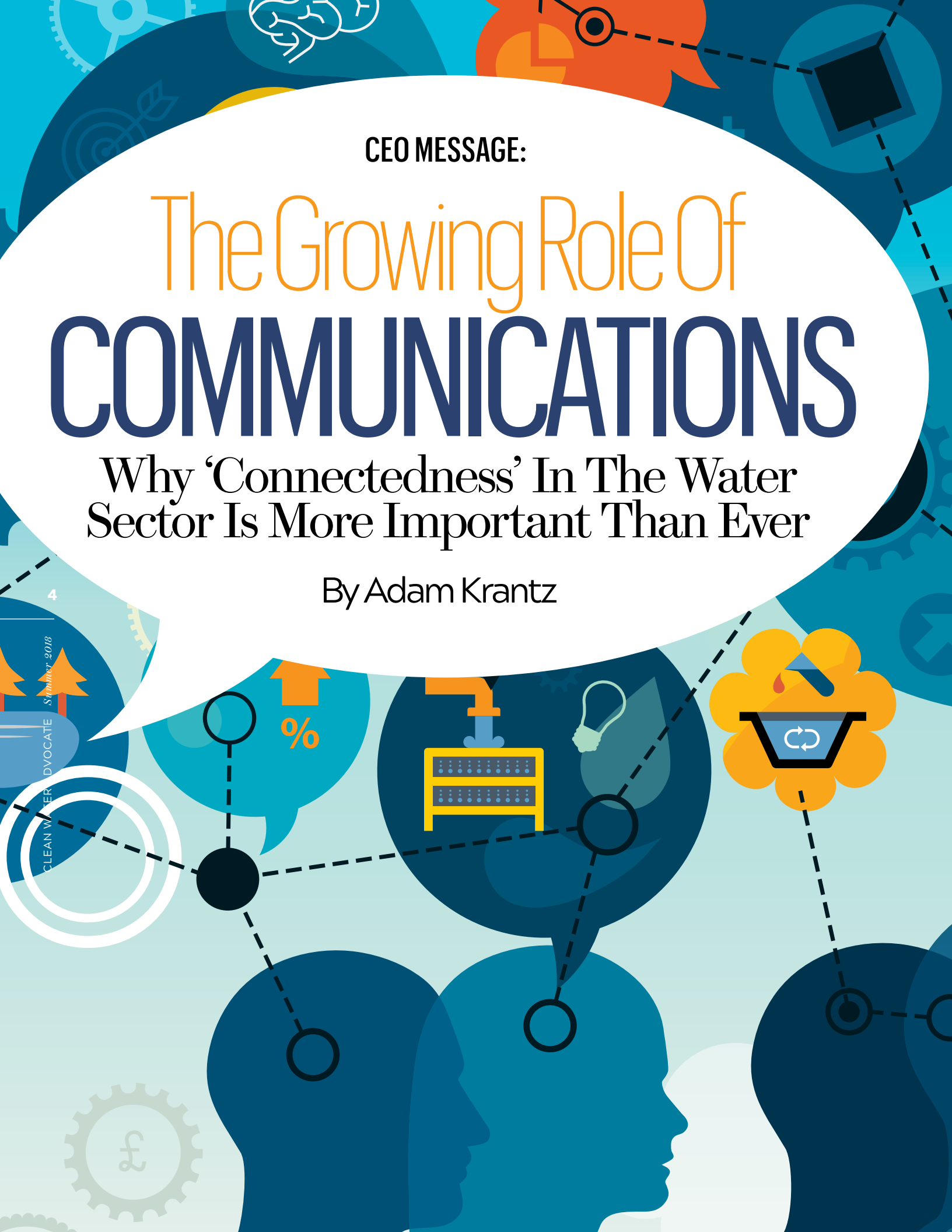
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CEO MESSAGE:

The Growing Role Of COMMUNICATIONS

Why 'Connectedness' In The Water
Sector Is More Important Than Ever

By Adam Krantz





This June, I participated in NACWA's first stand-alone communications conference, Strategic Communications (StratComm): H2O, in Chicago. What took place there was incredibly gratifying—a much larger crowd of clean water communicators and utility leaders than we had anticipated literally buzzing with excitement—interacting, asking questions, discussing their own successes and frustrations, laughing

together, and applauding—but, most fundamentally, they were unifying under the banner of a shared passion for the clean water sector, and for telling its incredible success story.

I started at NACWA (then the Association of Metropolitan Sewerage Agencies) more than 16 years ago as its communications director and remember conversations with our Communications Committee co-chairs—Jamie Samons with the Narragansett Bay Commission in Providence,

Rhode Island, and Lance LeComb with the Metropolitan St. Louis Sewer District – about how the sector needed to expand its investment in communications in terms of both personnel and outreach capacity. We talked then about whether we could get a communications conference together or have a communications session at existing conferences, but we knew there weren't enough utilities with the communications capacity to make this wish a reality.

Fast-forward 16 years, and Jamie, Lance, and I found ourselves in Chicago with over 110 water sector communications professionals at StratComm. I thanked them for their leadership over many years, and we talked about the evolution of the sector in the communications space. It is gratifying not just because our shared vision was now becoming reality but because these two communications leaders from different parts of the country were at a meeting they had envisioned almost two decades ago—their bond through NACWA and commitment to water still as strong as ever; just as energetic, and just as visionary as they were then—but surrounded by over 100 other peers. It is the story of the importance of connectedness that is taking place through NACWA as an association and through the sector more broadly.

SOUND OF THE TIMES



And we must recognize the value of connectedness at this unique juncture in history. The needlessly raised voices, clamor, tumult, and frequent shouting that

characterize much of today's policy discourse are sadly becoming the norm. In the media, we hear more yelling and opining than fact-finding and engaging with diverse experts. In our politics, parties have retreated into their own echo chambers in an almost tribal manner. In the middle of this fog, now more than ever, we need to promote, and in many cases rediscover, the underappreciated art of connecting. Perhaps it is old-fashioned, but I will always strive to keep NACWA committed to the goal of a growing connectedness.

“In the middle of this fog, now more than ever, we need to promote... the underappreciated art of connecting.”

When listening and constructive dialogue too often seem to be distant afterthoughts, NACWA will continue to listen. When minds are closed, we will continue to open ours and others' to the very best ideas. NACWA's leadership will always strive for consensus, and we will use every tool at our disposal—conferences, webinars, committee calls, regional meetings, staff travel, even social media and our online Engage Forum™—to achieve one overarching goal: to remain connected.

IT TAKES WORK



Connectedness in the water sector requires what all good relationships require: committed effort, especially when our organizations are separated by significant geographic distances. By remaining connected individually, clean water agency leaders, as well as municipal, state, federal, private sector, rural, and urban stakeholders and policy-makers, together will see the advancement of the clean water mission.

In the last three years, we have added over 100 members to NACWA—mostly through sustained one-to-one, and even face-to-face, conversations with non-member utility leaders—and our retention and engagement of existing members continues to be unparalleled. The relationships between NACWA staff and our members, and between our members and their peers, grow stronger each year due in large part to members’ impressive efforts to stay unified and engaged. These efforts have paid countless dividends.

“...it is humbling to work for an industry that is characterized by service to others...”

This past year has been filled with incredible achievements on the water policy front. To name but a few, we enjoyed a higher boost in federal clean water funding than at any point in at least a decade; we are witnessing a shift

in mindset from enforcement to compliance assistance; and, at press time, a Farm Bill is poised to pass that meaningfully recognizes the importance of the agriculture and water sectors’ collaboration in addressing water quality and supply challenges. These “larger” victories would simply not be possible without the coordinated, “incremental” efforts of staff and members—individually and collectively, nationally and locally.

IT TAKES PERSPECTIVE



I am proud of what we have accomplished and will accomplish together and encourage you to take a quiet moment to read NACWA’s *Advocate Magazine* and share the views of thought leaders in the sector who have taken the time to write the articles in this edition. And as you read, I hope you’ll read between the lines, so to speak, and see that despite the prevailing trend of disconnection all around us, NACWA’s members and fellow stakeholders are choosing to stay even more connected, and this is leading to positive results.

At a time when cynicism seems predominant, it is humbling to work for an industry that is characterized by service to others and a 24-7 commitment to public safety and environmental improvement. In the years to come, let’s work to build on this foundation by having every utility truly connected with one another, advancing our agencies and our sector to even greater heights. Thanks again for all you do. 💧

Adam Krantz is the CEO of NACWA

IMAGINE A CLEAN WATER SECTOR...



POWERED BY STRATEGIC COMMUNICATIONS

In a year that's already seen a marked advance in Clean Water Advocacy objectives, we must commit to keeping the momentum going.

If we, as the broader clean water sector, are to see the continued elevation of our priorities, public profile and influence, we must continuously improve in *Strategic Communications*. This June, NACWA convened its second annual *Strategic Communications:H2O Conference (StratComm)* in Chicago with this objective in mind.

The gathering was palpably high-energy, as sessions focused on both proactive communications – like community outreach, customer relations and media – and “bread and butter” essentials for utility operations including, crisis management, rate campaigns, project support and return on investment.

With utility representatives from every part of the country – comprising its largest attendance ever – StratComm forged an undeniable unity, while it sparked the beginnings of a long-term blueprint for an effective, national clean water voice, through the continued development of local communications programs.

“ I THOUGHT IT WAS ONE OF THE BEST CONFERENCES IN TERMS OF CONTENT THAT I HAVE RECENTLY ATTENDED. ”



OF ATTENDEES FROM AROUND THE COUNTRY BY EPA REGION

R1 – 3	R6 – 1
R2 – 1	R7 – 10
R3 – 20	R8 – 2
R4 – 17	R9 – 4
R5 – 40	R10 – 9

The future is bright for Clean Water Communications, as StratComm further established itself as a key event on the clean water landscape, with a promise of growth and even greater impact in years to come.



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Exploring Governance

Perspectives On Governance
In The Clean Water Sector

By Andy Kricun,
Bill Teichmiller,
and Brent Fewell



If your high school education included an exploration of classic literature, then you may remember a certain category of titles: among the staples—Hemingway, Dickens, Austen, and so on—there was inevitably a collection of assigned titles that dealt specifically with big ideas about government. Not big G Government, but rather government with respect to humans governing other humans. William Golding’s *Lord of the Flies*, or George Orwell’s *Animal Farm*, immediately come to mind: stories which explored—in symbol—not just the hows of the way people organized themselves into governing bodies but also the whys. And in exploring the whys, the authors hoped to explore aspects of human nature.

What follows are not essays on literature, but articles focused on *Governance*, specifically utility governance structures and their related issues. The articles contain different perspectives on why certain governance models have unique advantages—and can even be superior to other models—as seen by the utility leaders who are operating within them. And at the root of each structure’s case for *governance*, much like what’s at the root of each literary novel’s case for *government*, is the concept of **trust**: in Golding and Orwell’s books, trust given by people to the leaders and systems in which they live; for the clean water sector organizations, trust

given by stakeholders to utility management, or given by management to a board, by a board to a chartered system, by ratepayers to a published rate scale, and so on.

The issue of utility governance structures is receiving more attention than ever before as national, state, and local policymakers engage in discussions over what governance approaches may be best under different circumstances. These public conversations are being driven in part by interest in additional governance models beyond just the “traditional” public model, such

as consolidation, regionalization, private ownership, public-private partnerships, and not-for-profit cooperatives, but they are also occurring because of a small number of high-profile failures at drinking water and clean water utilities, which are leading some to question the continued viability of existing models in the utility sector.

In this context, trust becomes even more relevant, since the clean water utility’s service—and mission—involve providing a resource necessary for a population’s very survival. While not as lofty as an essay by Faulkner, governance policy on board management, financial reporting, voting structure, even meeting protocol—which may, at times, seem like so much red tape—are in actuality part of an endeavor as distinguished as any concept explored by classic literature: serving the public trust. 💧

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Exploring Governance

Public Sector Model:

What's Good About The Public Good

by Andy Kricun

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CLEAN WATER ADVOCATE Summer 2018





CAMDEN, NJ



There has been much debate about the relative merits of public ownership vs. private ownership in the clean water industry. While the public sector has been created to serve the public good, it does not have the profit motive and so is apt to be less efficient. Conversely, the private sector is likely to be more efficient because of the profit motive, but less likely to act in a disinterested way for the public good.

I believe the optimal approach is for the public sector to harness the private sector model of efficiency and use it for the public good. In this way, customers, and the environment, get the best attributes of both models. And, since the private sector must derive a profit, the public sector can actually save ratepayers more money if it can be equally cost efficient.

For example, my agency—the Camden County, New Jersey, Municipal Utilities Authority (CCMUA)—investigated privatization in the late 1990s. Instead, however, the CCMUA implemented an ISO 14001 environmental management system (EMS) to improve efficiency and

environmental performance. As a result, the CCMUA upgraded its wastewater treatment facilities, thereby improving environmental performance while reducing annual operations and maintenance costs. In addition, through automation, cross training, and attrition, the CCMUA reduced its roster from 230 employees

“...It is essential for our public clean water utilities to optimize performance as efficiently and transparently as possible.”

to the present 130. Consequently, the CCMUA’s annual user rate went from \$337 per household in 1996, to only \$352 per household in 2018. While this represents a 4% increase in a 22-year span, it is actually a 40% rate decrease when inflation is factored in. Therefore, it is evident that public sector utilities can be at least as efficient as private sector utilities when it comes to cost efficiency.

Public utilities can also finance their infrastructure at lower rates than private utilities because of the benefits of the state revolving fund (SRF). In New Jersey, for example, the CCMUA can borrow from the New Jersey Environmental Infrastructure Bank at less than 1% interest spread out over 30 years. The resulting annual debt service is so low that it is less than, or equal to, the annual cost savings—that is, lower maintenance and energy costs—realized through infrastructure improvements. The SRF has been a very important factor in the CCMUA’s ability to upgrade its entire wastewater treatment plant and expand its regional sewer system while holding rates steady for the past 22 years.

“...the efficient public utility does not face the tension between optimizing environmental performance and minimizing cost on the one hand, or maximizing profit on the other...”

If public sector utilities can match private utilities in cost efficiency, there is no doubt that they can surpass private utilities when it comes to striving for the public good. Most fundamentally, the public utility does not have a profit margin to maintain. If it is efficient, as described above,



then the extra funds can go into either infrastructure investment or rate relief, or both. In addition, there is no tension between capital and maintenance, as is often the case in private contract operations. The efficient public utility can evaluate the maintenance vs. capital question from the standpoint of lowest lifecycle cost.

Moreover, the efficient public utility does not face the tension between optimizing environmental performance and minimizing cost on the one hand and maximizing profit on the other, which is often seen with private operations. In one instance that exemplifies this freedom, CCMUA gave its ratepayers a 40% rate decrease in inflation-adjusted dollars while simultaneously improving its environmental performance, improving its average solids capture rate by over 30%, and its effluent quality from 25 parts per million (ppm) to 5 ppm.



The most exemplary public utilities—like those in Atlanta, Cleveland, Los Angeles, Louisville, San Francisco, and Seattle, to name a few—are demonstrably committed to public service (NACWA’s *Environmental Justice and Community Service Compendium* lists several more examples). These public utilities are implementing green infrastructure, creating public parks, creating green jobs, and serving as anchor institutions in their communities. In summary, efficient public utilities can provide their customers with rate savings and community benefits while maintaining public infrastructure, and without sacrificing environmental performance.



This is not to say that there isn’t a place for private investment in our clean water industry. There are certainly instances where judicious use of private capital is advantageous to the public utility. The CCMUA entered into a power purchase agreement for the installation of solar panels, for instance. In that transaction, the private entity was able to take advantage of tax credits that the public entity was not eligible for and thereby reduce the overall cost of the project. In addition, the CCMUA has also privatized noncore areas of its operations to maximize efficiency. A hybrid of public ownership and operation of core functions, with a judicious use of private capital or expertise, has enabled the CCMUA to optimize its performance while offering significant rate relief to its customers.

Ultimately, when public utilities can achieve private sector efficiencies, their customers can realize rate savings while also receiving all the benefits that accrue from maintaining public control of critical infrastructure and the environmental and community-service benefits that can be provided by innovative public sector utilities. It is essential for our public clean water utilities to optimize performance as efficiently and transparently as possible to provide customers with the best environmental and community service benefits at the lowest cost. 💧

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Andy Kricun is the Executive Director and Chief Engineer of the Camden County Municipal Utilities Authority in Camden, NJ, which operates an 80 million gallon-per-day wastewater treatment plant and large regional sewer system that services more than half a million customers. He also serves on NACWA’s Board of Directors.

Exploring Governance

Cooperative Model:

Transparency And Accountability

By Bill Teichmiller

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WATER ADVOCATE Summer 2018





DIETRICH, IL



In my sixteen-year experience in leading EJ Water Cooperative, Inc. in Dietrich, Illinois, I've found the not-for-profit (NFP) cooperative model to have extensive advantages over its investor-owned or municipally owned counterparts. Water and wastewater NFP cooperatives have existed in the water sector for decades but are largely unknown among the larger proportion of the municipal or quasi-government and investor-owned utility models. Hopefully that will change, and millions of ratepayers will reap the benefits.

First the details: Water cooperatives are state-chartered corporations and file for a federal not-for-profit status under IRS 501(c)(12), making them exempt from paying income tax. In Illinois, NFP water utilities are exempt from paying real estate and sales tax related to construction, maintenance, and operations of community water supplies, making them nearly equal in tax treatment to their municipally owned counterparts. These inherent advantages at times belie the operational advantages of cooperatives: they are principled, transparent, and bring value to members.

PRINCIPLED

One word that stands out among the many that describe cooperative governance is principled. Cooperatives around the world operate according to the same set of core principles and values adopted by the International Co-operative Alliance. Cooperatives trace the roots of these principles to the first modern cooperative founded in the Philadelphia Contributionship—the oldest property insurance company in the United States—which was founded by Benjamin Franklin in 1752 for the insurance of houses, and still exists today.

The Seven Basic Operating Principles of Cooperatives:

- 1) ***Open and Voluntary Membership;***
- 2) ***Democratic Member Control, One Member One Vote;***
- 3) ***Owner Economic Participation;***
- 4) ***Autonomy and Independence;***
- 5) ***Education, Training and Information;***
- 6) ***Cooperation among Cooperatives; and***
- 7) ***Concern for Community.***

The cooperative governance model is unique because it operates on a not-for-profit basis and is owned by users (the public), who are referred to as members, which offers direct transparency and accountability. Unlike investor-owned models, cooperatives do not have shareholders and are owned by its users or members. This difference is also in stark contrast to municipally owned utilities, where ownership is by a unit of government, typically a city, town, village, county, or township.

The cooperative is governed by its bylaws that are enforced by the fiduciary responsibility of its board of directors, who are elected by the members and who set policies to implement the purpose of the cooperative, pursuant to its articles of incorporation and NFP exemption. Directors typically represent a geographic and demographic area of the cooperative, thereby enabling the board to stay in touch with its varying membership needs and expectations. Aside from establishing and maintaining policies of the cooperative, the board's main responsibility is the hiring and managing of the chief executive officer—at times referred to as manager for smaller cooperatives.

TRANSPARENT

The cooperative holds an annual meeting of the members where operational or financial reports are given, directors are chosen through democratic elections, and bylaw or major business decisions are conducted.

Members may vote in person or by proxy on the business of the cooperative, thereby making key decisions by majority on matters being contemplated by the cooperative, such as major asset sales, which would require a



two-thirds vote of the members. This annual meeting provides transparency and accountability to the members, and if the members are unhappy with the direction of the cooperative, they can vote on a different slate of directors. While seats on the board of directors are elected positions representing the membership body, the terms that directors serve vary. Most board members tend to serve over multiple terms, thus offering cooperative legacy and stability. This allows for a long-term management perspective.

At my cooperative, EJ Water, board members commit to ongoing education and training in governance, fiduciary responsibilities, personality assessment and awareness, director networking opportunities, and attending industry-relevant policy and trade shows. We believe this training provides a unique advantage to cooperatives, as the focus is on long-term mission and vision plans versus the ever-changing short-term election cycles of most elected officials, and thus politicizing the priorities and operations of their owned utilities.

We often refer to cooperatives as a hybrid between municipal and investor-owned models, because cooperatives are owned by their members and are mission driven, just like their municipal counterparts, but can function like businesses, free from the political influences of city- or county-ownership models. Another distinct advantage of cooperatives is that they're not tied to geographically annexed or municipal boundaries like their government-owned counterparts. While nearly all cooperatives operate in small territories, they can grow into multi-state operations like their agricultural counterparts.

VALUE-ADDED

The value proposition of cooperatives is unique in that net



profits—often referred to as margin—are allocated upon the usage of each user and accumulated as membership capital. Over the years of the cooperative’s existence, after its financial and maintenance reserves are met, debt is retired and capital expenditures (CAPEX) are fully funded, and

“Cooperatives are generally free from political influence but are laser focused on delivering mission-driven results...”

excess funds are returned to the users as patronage refunds. These characteristics are unique to the cooperative model.

In operating like most corporations, cooperatives are generally free from political influence but are laser focused on delivering mission-driven results, focusing on the long-term needs of their

members. A prime example of this can be seen in that EJ Water will often invest CAPEX anywhere from 30% to 50% of project costs into new subdivisions, while our municipal counterparts are still waiting on developers to pay for 100% of the infrastructure and then transfer this expensive asset to them for \$1.00. While very popular over the last several decades, today’s high-priced raw land and infrastructure improvements are pushing development costs, leading to capturing only high-end developments rather than middle-class and affordable housing.

While the cooperative governance model has its drawbacks (what system of governance doesn’t?), its pros far outweigh its cons. And as the clean water sector evolves and shifts, this model—in principle and practice—can stand the test of time, as its leadership remains in the hands of capable people who are committed to transparency and accountability.💧

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Bill Teichmiller is the Chief Executive Officer of EJ Water Cooperative, Inc., a not-for-profit organization which is also the largest regional rural water cooperative in Illinois, serving retail, wholesale and contract members representing a population of 75,000 in the south-central area of the state.

Exploring Governance

Private Sector Model:

Resources To Do The Right Things And Do Things Right

by Brent Fewell

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CLEAN WATER ADVOCATE Summer 2018





WASHINGTON, DC



It was a Friday morning when I showed up. I had deliberately chosen the day when the frenetic pace of the agency slowed and I knew I would have their full attention. Several weeks before, I had scheduled a meeting with two former colleagues in the US Environmental Protection Agency’s (EPA’s) enforcement office. While I had disclosed the purposes of the myriad of prior EPA meetings, I did not do the same for this one. It was a personal visit, one that had long been on my mind. One where I was hoping to have a frank and open exchange with two friends who were thoughtful regulators. After we had exchanged pleasantries and stories of our kids’ weekend soccer games, I began to unpack my thoughts regarding a dilemma that I knew full well I was unable to solve. And if it were to be solved, courage in leadership and a fundamental change in the way EPA and public officials behaved would be necessary.

My thoughts on that morning were the culmination of my prior eight years of service as a

senior EPA water official, a practicing lawyer, and a chief environmental compliance officer for a major private water company that oversaw the operations of over 300 water and wastewater systems—more than half of which were municipally owned. My time at United Water (now “Suez”) was characterized by a richness and diversity of experiences that would be difficult to describe in a few words. Mostly, however, my time was focused on ensuring that the company’s operations were compliant with the law.

“Admittedly, there were a few nagging questions in my own mind – those commonly posed by opponents of private water.”

I joined United Water in 2009 with some degree of trepidation. First, I had never worked for a private water company. Admittedly, there were a few nagging questions in my mind—those commonly posed by opponents of private water: Did privatization reduce local control? Did having a profit motive affect the quality of water or the wastewater utility's commitment to the public? Could private water do things as well, or as effectively, as public systems? Moreover, the company and two of its employees were under a federal criminal investigation involving operations associated with one of the company's wastewater contracts. Fortunately, the company and its employees were eventually cleared of wrongdoing, but the incident was a sobering reminder of the seriousness of ensuring compliance with those of the nation's laws that were aimed at protecting the environment and public health.

My time at United Water was among the highlights of my professional career next only to my

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What mattered was having the right leadership and the unyielding commitment at an organization's top level to do the right thing.

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time at EPA. It was an honor to work alongside really smart, dedicated, and conscientious water professionals committed to doing the right thing every day and to work with hundreds of communities caught in the web of the nation's unfolding water infrastructure crisis.

It was a humbling experience as I knew so little about private water going in. But over the course of those few years, I learned a lot, mostly about governance. I learned that what mattered most wasn't whether a system was private or public, small or big, rural or urban. What mattered was having the right leadership and the unyielding commitment at an organization's top level to do the right thing. In this case, a private water company's reputation and very survival depended upon that company doing the right things and

doing things right, ensuring the delivery of safe and clean water to the public. Failure carried significant consequences not only for the public but also for the company. All the nagging questions I had earlier on - I no longer had.

Working alongside many communities, I've learned why many opt for the services of a private company, but I've also learned why many continue to struggle to maintain sustainable systems.

Based on my experience, there are a variety of reasons why a community and utility may choose to pursue partnerships with and/or ownership by the private sector. The vast majority of communities partnering with a private entity simply need the assistance of a company with deep resources and expertise to help them comply with increasingly stringent regulations. There are yet others who have a shrinking tax base that is insufficient to cover the costs of maintenance and operation. Then there are those which, despite having the tax base, are unable or unwilling to raise rates due to political intransigence. There are also the occasional recalcitrants (as they were known by regulators) who resent unfunded mandates from Washington, DC, and simply let their systems slide into disrepair. Lastly, there are those—a large percentage in my view—who are desperate for help and desire to do the right thing but are afraid to openly seek assistance, fearing a hefty enforcement order with a big price tag.

It was the latter type of community that was weighing heavily on my mind on that Friday morning as I met with my EPA friends. I made my pitch. Rightly or wrongly, EPA is often perceived as the big bad ogre, waiting to descend upon communities with a heavy hammer. These communities have been wrongly advised, “Don't be proactive, keep your head down, wait for EPA to come knocking and you'll get a better

deal.” Consequently, we shouldn't be surprised when thousands of systems continue to fail or to be noncompliant year after year as the can is kicked down the road with seemingly little or no consequence. This, I argued to my friends, must change.

Albert Einstein once said,
‘If people are good because
they fear punishment, and
hope for reward, then we are
a sorry lot indeed.’

Albert Einstein once said, “If people are good because they fear punishment and hope for reward, then we are a sorry lot indeed.” In this case, however, we are a sorry lot if some are discouraged from doing good because they fear punishment. And what are we to make of those who do bad and should fear punishment but don't?

I'm grateful to NACWA and its continued leadership on various fronts, including this one. Governance is never about form over substance. It's mostly about doing the right things for all the right reasons. 💧

Brent Fewell is a former Deputy Assistant Administrator for EPA's Office of Water and Founder and Chair of the Earth & Water Law Group based in Washington, DC., where he provides strategic counseling and advises regulated utilities on environmental compliance, including the Clean Water and Safe Drinking Water Acts.

The SWIFT *And* *The*

Utility of the Future: *n.* (yoo-TIL-i-tee **OV** the FYOO-cher) -
Concept defined by clean water utilities that pioneer innovative technologies and cutting-edge practices, with a focus on resource recovery, efficiency and sustainability.



BOLD

By Ted Henifin

Hampton Roads' Water Reuse Initiative
Blazes Trail Toward A Sustainable Clean
Water Future



It wasn't your typical Friday afternoon for the Hampton Roads Sanitation District (HRSD) staff who'd gathered in Suffolk, Virginia. That became obvious when the Mayor of Suffolk, Linda Johnson; the Secretary of Natural Resources, Matt Strickler; a member of the County Board of Supervisors, Sheila Noll; and a Virginia State Senator, T. Montgomery Mason; all stood on a stage before us and other community members to talk about a clean water project initiative using terms like "engineering marvel," "monument to sustainability," and "amazing wonder." What was truly gratifying was not the speeches or the praise, but the HRSD staffers smiling and saying how proud they were to be a part of serving the public and the environment in such a profound way. *This* is what it's all about.

That was May 18, 2018. The gathering was the dedication and ribbon-cutting ceremony for HRSD's Sustainable Water Initiative for Tomorrow (SWIFT) Research Center, a \$25 million advanced treatment facility that would produce one million gallons of "SWIFT Water"—that is, wastewater treated to meet *drinking water standards—daily*, and then use that water to recharge the thirsty Potomac Aquifer deep beneath the Center's building. The ribbon-cutting was a critical milestone for HRSD.



There have been many quotations attributed to great leaders that can be boiled down to "chance favors the prepared." This is certainly true in the case of HRSD's SWIFT initiative. The success of SWIFT can be traced back to decisions and actions taken by HRSD over the course of

SWIFT is merely the current and most visible demonstration of a transformation that has been underway for nearly 80 years.

a decade—even to the foundational elements at the roots in HRSD's creation, nearly 80 years ago. SWIFT is perhaps the poster child of HRSD's transformation into a "Utility of the Future," but SWIFT is merely the current and most visible demonstration of a transformation that has been underway for decades. Perhaps others can learn from our steps.

The following are some of the key factors that have led to HRSD's ability to pivot from having no plan for wastewater reuse to recharging the Potomac Aquifer with one million gallons of purified water daily in less than four years.

INDEPENDENT AGENCY, APPOINTED GOVERNANCE, BROAD POWERS

HRSD was formed by public referendum to address water pollution in Hampton Roads, a region that covers 3,100 square miles in southeastern Virginia, and includes 18 independent local governments. At the beginning of the twentieth century, residents of the region were dumping nearly 30 million gallons of untreated sewage into the local waterways each day. After considerable study and hotly contested political debate, in 1940 the region's voters authorized the



creation of an independent regional agency to intercept the raw sewage before it entered the waterways and convey it to regional plants for treatment.

The referendum created an independent political subdivision of the Commonwealth governed by a commission appointed by the governor, with broad powers to do what was necessary to protect public health and the region's waterways. The commissioners were citizen leaders, not elected officials, and their charge was the promotion of the health and welfare of all residents of the Commonwealth. With independent rate-setting authority and the ability to bill individual homes and businesses for wastewater treatment services, an effective, business-like entity, was created.

HISTORY OF CONSISTENT, OUTSTANDING PERFORMANCE

HRSD quickly grew to serve an expanding region. The passage of the Clean Water Act provided grant funding to expand and modernize HRSD treatment and conveyance facilities. Multiple new plants opened in the late seventies and early eighties, and the local waterways began to recover. Laboratory services were consolidated into a single state-of-the-art facility, a robust industrial waste-permitting program was established, and exceeding permitted requirements became the performance expectation.

CULTURE OF INNOVATION

With high expectations set, a learning organization built, and a highly skilled staff that was constantly encouraged to continue their professional development, HRSD grew into an organization where innovation was valued and nurtured. HRSD developed an in-house training program that introduced all new employees to "Their Role in Quality," and was designed to help identify new ways to get work done and develop those ideas into trials, tests or prototypes. The first class was held more than 25 years ago, and since then, employees throughout the entire organization have come up with great ideas that have been implemented to save time and resources and improve safety and efficiency. The fact that HRSD holds several patents is a direct result of this culture.



The organizational strategy was to keep rates low, keep HRSD's profile lower and do an outstanding job treating wastewater.

EXTERNAL CATALYSTS

At the turn of the twenty-first century, HRSD had largely solved the wastewater pollution issues it was created to address. The focus then moved to optimizing performance and controlling costs. The organizational strategy was to keep rates low, keep HRSD's profile lower, and do an outstanding job treating wastewater. By 2005, HRSD began to see the emergence of two major issues that would fundamentally change that strategy and set HRSD on a path toward SWIFT: wet-weather sanitary sewer overflow (SSO) enforcement, and the Chesapeake Bay total maximum daily load (TMDL).

The EPA established the elimination of SSOs as a national enforcement priority in the late 1990s; the Agency's goal was to put every system discharging more than 100 million gallons per day under federal enforcement. Because HRSD's system consists mostly of larger-diameter force mains, while the localities served were largely gravity systems subject to inflow and infiltration, HRSD had to work with the localities to address wet weather capacity. Collectively it was decided that the most cost-effective solution for the region was for HRSD to assume full responsibility for regional wet weather capacity

and build the appropriate combination of wet weather solutions throughout the region.

It took seven years of working closely with the localities to arrive at this \$2 billion solution, and while it was a great cost-effective outcome for the region, the outcome with the greatest long-term value may have been the strong relationships forged between HRSD and the local governments served.

While the EPA was focused on wet weather, the people of the Hampton Roads region, largely motivated by the Chesapeake Bay Foundation (CBF), were focused on cleaning up the Chesapeake Bay. After various starts and stops over the last three decades, in December 2010 the EPA finally issued the Chesapeake Bay



TMDL, which included challenging nutrient-reduction goals for all dischargers in the watershed, including HRSD, to be met by 2025.

HRSD assisted the Commonwealth by taking on an additional voluntary reduction of nitrogen and phosphorus allocations during the

development of the initial watershed implementation plan. This offer by HRSD to the Department of Environmental Quality (DEQ) accelerated the improvement of relations between the two organizations. By this time, the historically challenged relationship had become one of mutual cooperation and respect, focused on the best outcomes for the Commonwealth.

Despite a strong commitment by the wastewater sector in Virginia and the other states, the EPA was clear that the aggressive nutrient-reduction wastewater goals were only a starting point and that a failure of stormwater or agriculture to meet their goals would require further reductions by the wastewater sector. These were referred to as “backstops” by the EPA. In



response to the TMDL goals, HRSD developed and executed a \$500 million comprehensive nutrient-discharge reduction strategy, which met the TMDL commitment, but the uncertainty of potential future backstop reductions remained.

IMPROVED REGIONAL COMMUNICATION

The regional work on wet weather issues brought an invitation for HRSD to join a monthly meeting of utility directors from the 18 Hampton Roads localities. These coordination meetings had been held for nearly 20 years, with HRSD’s participation limited to an occasional invitation to make a presentation to the group. The meetings would focus primarily on drinking water and wastewater issues, with an occasional foray into stormwater.

Over the years, the primary focus of the meetings would gravitate toward the issue of the day. For some months, the focus would be on drinking water issues, such as water-supply planning, the lead and copper rule, and safe yields. In other months, the focus would be on wastewater issues, often regarding challenges that the localities were having with HRSD. Though the meetings were not always focused on our primary issues, the ancillary result of HRSD’s being at the table was that HRSD representatives were exposed to issues beyond their narrow focus on wastewater. In essence, it was in these meetings that HRSD first learned of the depletion of the groundwater supply in the region.

SWIFT has a long race to run and continues to move rapidly. With the organizational culture it has created over the last 80 years and the key collaborative relationships it has developed, HRSD is well prepared to meet new challenges and complete the SWIFT race, as we all strive toward a sustainable clean water future. 💧

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Ted Henifin, a registered professional engineer, is the General Manager of the Hampton Roads Sanitation District since 2006, and before that, served as the Director of Public Works for the City of Hampton, VA. He is also a Member of NACWA’s Board of Directors.

SAVE THE DATE

WATER WEEK

MARCH 31 - APRIL 6

2019

**NATIONAL WATER
POLICY FLY-IN**

APRIL 2 - 3, 2019

WASHINGTON, DC

ADVOCACY WORKS

Make it work easier for you

Just in time for Election Season
NACWA's Congressional Toolbox



Never met with a US Congressperson or Senator before to push clean water policy? No problem, it's easier than you think! NACWA's online Congressional Toolbox will walk you through everything you need to do to plan and conduct a face-to-face meeting or facility tour with your lawmaker—it'll even help you find them.

Downloadable resources make sure you'll be ready to dialogue. Redesigned and easier than ever to use, the Toolbox will help you make a personal impact this election season!

Visit the Toolbox today!

www.NACWAToolbox.org

ELECTION SEASON 2018

TELL THE CLEAN WATER STORY



Midterm elections are coming in a few months. Now is the time to either introduce or re-emphasize key Clean Water priorities with your local, state, and federal elected officials.

The message is simple, clear and powerful, because **Clean and Safe Water are vital for healthy communities and strong economies!**

Paint the picture. Tell the story. Let your elected leaders know that people are becoming Clean Water Voters. **Educate your elected leaders on how they can make a difference!**

THE HISTORY

1

A CRISIS ONE CENTURY IN THE MAKING

“ 2010-2030
MANY UNDERGROUND
PIPELINE NETWORKS
WILL BEGIN TO FAIL

”

PIPES LAID IN 1880
AVG. LIFESPAN = 120 YEARS¹

PIPES LAID IN 1920
AVG. LIFESPAN = 100 YEARS²

PIPES LAID IN 1940
AVG. LIFESPAN = 75 YEARS³

2010 -
2030

MOST PIPES
REACH
EXPIRATION
DATE



THE SITUATION

2

WATER INFRASTRUCTURE
IN URGENT NEED
OF INVESTMENT

ANNUALLY

> 240,000⁴

Water Main Breaks



> 75,000⁵

Sanitary Sewer Overflows

> \$2.6 BILLION⁶

Lost Due To Leaked Fresh Water &
Untreated Wastewater Discharges

\$1,000,000,000,000

TOTAL COST ESTIMATE OF RESTORING
UNDERGROUND PIPES OVER NEXT 25 YEARS

= \$1 TRILLION⁷

THE SOLUTION

3

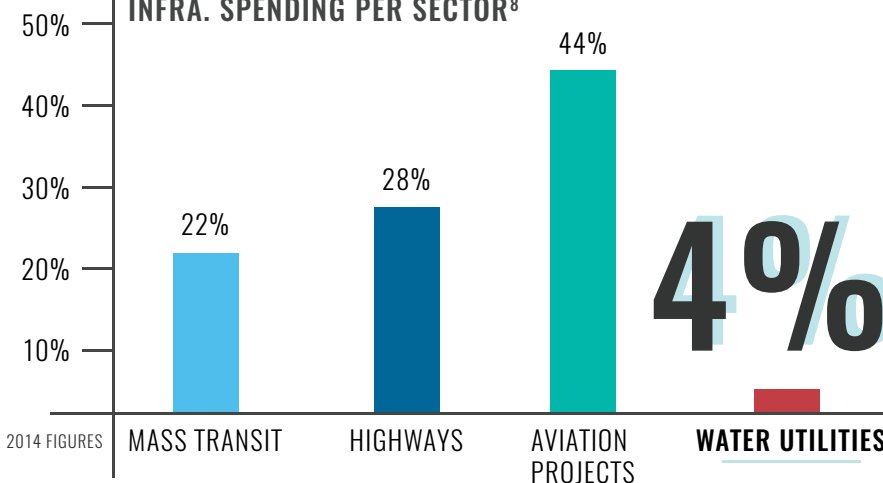
NOT JUST INFRASTRUCTURE
INVESTMENT, *WATER* INFRA-
STRUCTURE INVESTMENT



WATER MUST BE A
GREATER NATIONAL
PRIORITY



FEDERAL INVESTMENTS AS % OF TOTAL
INFRA. SPENDING PER SECTOR⁸



When Americans (rightfully) fight for infrastructure investment, most think “roads & bridges” but not enough “pipes & pumps.”

Increase federal water funding tools like State Revolving Funds (SRF) and Water Infrastructure Finance and Innovation Act (WIFIA).

ELECTION SEASON 2018

TELL THE CLEAN WATER STORY

FOOTNOTES

1. American Water Works Association, *Dawn of the Replacement Era: Reinvesting in Drinking Water Infrastructure* (Denver: American Water Works Association, May 2001), <http://www.win-water.org/reports/infrastructure.pdf>
2. Ibid.
3. Ibid.
4. American Society of Civil Engineers, *2013 report card for America's infrastructure*, <http://www.infrastructurereportcard.org/drinking-water/>
5. United States Environmental Protection Agency, *Aging Water Infrastructure Research, Science and Engineering for a Sustainable Future*, 2010, p.2
6. Colin Sabol, *The state of water in America*, Earth Institute, Columbia University, March 22, 2011
7. American Water Works Association, *Buried no longer*, February 2012, <http://www.awwa.org/Portals/0/files/legreg/documents/BuriedNoLonger.pdf>
8. Danny Vinik, "Is Washington Creating More Flints?", *Politico Magazine*, May 25, 2016

NACWA'S LEGAL ADVOCACY PROGRAM

The field of Clean Water Law is expanding rapidly. The issues are growing in complexity and the stakes have never been higher. Thankfully, you have help. NACWA's Legal Advocacy Program exists to safeguard the interests and rights of NACWA Member Agencies. With its focus on national and regional legal issues with the potential to impact the public clean water sector, NACWA's Legal Advocacy Program is the only one of its kind in the country.

BENEFITS

WE LIVE CLEAN WATER LAW

LITIGATION

NACWA tracks litigation and legal developments across the country that have the potential to impact the clean water sector. We work to establish positive precedent that will benefit utilities nationwide and regularly intervene or serve as *amicus curiae* on issues of importance to our members. The Association engages in litigation to ensure appropriate, reasonable, cost-effective and consistent regulations, and to protect clean water utilities from unreasonable enforcement actions and third-party litigation.

RESOURCES & TOOLS

NACWA provides high-value legal tools for our members and the municipal clean water utility community at large including the *Consent Decree Handbook*, *Consent Decree E-Library*, *Stormwater White Paper*, and the *Stormwater MS4 Permit Guide*.

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NACWA keeps member utilities up to speed on critical legal issues affecting the sector through the *National Clean Water Law and Enforcement Seminar*, quarterly webinars and regular articles, newsletters and alerts.

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NACWA is peerless in offering member engagement and networking opportunities, such as, Legal Affairs Committee Meetings and Networking at the *National Clean Water Law and Enforcement Seminar*.

MEMBERSHIP

NACWA engages top clean water firms and attorneys to help deliver these exceptional legal benefits to our public agency members. Become part of NACWA's defining nationwide network of legal experts by becoming a legal affiliate! For more information on membership, contact membership@nacwa.org.

For more information on the NACWA's Legal Advocacy Program, contact Amanda Waters at awaters@nacwa.org.

www.NACWA.org/Advocacy



Navigating *the* NEXU

By John Sullivan,
Mickey Conway
and Richelle Thomson



It was the late sixties and early seventies and rivers were literally catching on fire. The ill-fated Cuyahoga River near Cleveland, Ohio, became the poster child for the yikes-worthy phenomenon, but other water bodies were also being deemed dead-zones or as severely impaired. The incidents could have remained in the realm of fun party trivia, but flammable water—let that term bake in your mind a bit—became the widespread cultural symbol for the polluted condition of the nation’s waters in general.

Against this backdrop, the federal government enacted the Clean Water Act (CWA) in 1972. It was meant to govern water pollution and maintain the integrity of America’s waters. Not long afterward, the federal government enacted the Safe Drinking Water Act (SDWA) to protect and ensure safe drinking water supplies throughout the country.

In the decades since, the acts have directly produced breathtaking results. There is still plenty of room for improvement to be sure. But remember that we started with rivers on fire, and, today, we have active facilities that can purify wastewater to drinking-water standards. Over time, it could be argued that the CWA and SDWA became textbook examples of the virtues of legislative intervention and government working right.

utilities—are increasingly overlapping and not always in a beneficial way.

There have always been some tensions between the CWA and the SDWA. However, the intersections between the nation’s two premier water laws are becoming more frequent. In some areas, the intersections are leading to increased tension - such as how approaches to addressing lead contamination concerns in drinking water can negatively impact wastewater treatment processes and water quality. But these intersections also highlight issues that cut across the two statutes, for instance, the need to look at affordability challenges in a more holistic manner that accounts for both drinking water and clean water costs.

Clean water thought leaders believe that the overlaps—or the ever-growing “nexus” of issues—will lead to larger operational challenges. Challenges which may require vast amounts of resources in order to address; and may even necessitate major legislative, regulatory, or legal interventions.

What follow are three unique perspectives from authors directly involved in situations in which the CWA/SDWA nexus is creating challenges for clean water utilities. As a sector, we would do well to consider their ramifications because, just as the passage of time gives us the perspective necessary to enjoy the successes of the CWA and SDWA, it gives us the

On The Growing Overlap Between The Clean Water And Safe Drinking Water Acts

However, as is often the case with the implementation of far-reaching legislation over time, laws get problematically complex, with the law of unintended consequences in full effect. The stipulations that have grown directly out of the CWA and SDWA—which define the operations, procedures, and standards for clean water and drinking water

footing—and the responsibility—to evaluate the Acts and prepare for the issues that all clean-and-safe-water stakeholders are dealing with now and will deal with in the future. 💧



The AFFORDABILITY OVERLAP

By John Sullivan

Boston's Efforts To Manage Drinking Water And Wastewater Reveal Affordability Challenges

The water sector has long been known for its “silo” approach to dealing with drinking water and clean water issues. It starts with the fact that there are two entirely different federal statutes—the Safe Drinking Water Act (SDWA) and the Clean Water Act (CWA)—and related regulatory structures dealing with separate drinking water and clean water regulation. This, in turn, has led to different committee oversight structures in Congress and distinct administrative offices at the US Environmental Protection Agency (EPA)—for drinking water on the one hand and for clean water on the other—that often have little interaction with each other.



We see this division in our water sector trade associations as well, with some focused on drinking water issues and others focused on clean water issues. We even see it at the local level in many communities nationwide; there is often one utility for drinking water and an entirely separate one for wastewater—and, sometimes, even a third one for stormwater!

But for those of us who work at joint utilities, providing both drinking water and clean water services, we recognize that these distinctions between drinking water and clean water are not only artificial and wrong, but are also increasingly dangerous and unsustainable. The reality is that the only way we will be able to truly manage water in the twenty-first century is to adopt a holistic one water approach that views drinking water and

Historically, affordability has been viewed as more of a clean water issue... But that dynamic is starting to shift, with drinking water costs rising and gaining more attention.

clean water through the same lens. After all, our customers and the public see water that way. So it's time that we in the water sector started to do the same.

Nowhere do drinking water and clean water concerns overlap more quickly than on the issue of affordability. Historically, affordability has been viewed as more of a clean water issue, driven by the high costs associated with things like combined sewer overflow (CSO) reduction projects, or expensive upgrades to wastewater treatment plants due to ever-increasing federal clean water regulatory mandates. By contrast, drinking

water affordability concerns have historically flown under the radar, with drinking

water rates lower than clean water rates in many communities.

But that dynamic is now starting to shift, with drinking water costs rising and gaining more attention. This is being driven in large part by increased concern over potential lead pollution in drinking water. Moreover, the anticipated changes by EPA to its Lead and Copper Rule (LCR) within the next few years will only accelerate the growing prominence and importance of drinking water costs in the affordability discussion.

My hometown of Boston presents a good example of how affordability has become a holistic water issue, not just a clean water issue. My utility, the Boston Water & Sewer Commission, is responsible for drinking water distribution, wastewater collection and stormwater management for a bustling city of almost 700,000 residents. We are acutely feeling affordability pressures from all sides, including the additional costs of stormwater management to meet total maximum daily loads (TMDLs) under our municipal separate storm sewer system (MS4) permit.

Boston was one of the first cities in the country to receive a federal judicial consent decree to address major wastewater treatment upgrades and tackle CSO issues. This resulted in billions of dollars being invested in both our regional treatment plant and our collection system starting in the late 1980s and early 1990s. The outcome has been incredible progress in the environmental health of Boston Harbor, but it has not come without substantial financial costs.

Major investments in our drinking water system, including significant water treatment plant improvements, have also placed additional financial burdens to our ratepayers. As one of the oldest cities in the country, Boston had a significant number of lead service





lines in its drinking water system. And while we have one of the most aggressive lead prevention programs in the nation—using both monitoring and service line replacement approaches—and don’t have any lead contamination issues, our continued vigilance has not been cheap.

To keep our drinking water systems at their highest possible levels of operation, we’ve made major capital investments in the distribution system over the past 30 years; as a result, we’ve had to raise our water rates. But if requirements of the new LCR force us to spend significantly more on the drinking water side—and there will almost certainly be some level of rate increase resulting from the rule—and are coupled with increased costs of both our stormwater mandates and necessary wastewater collection system improvements, we may well face an untenable affordability situation caused by the collision of the requirements of both the CWA and the SDWA.

I’m well aware that Boston is not the only city or community in the country facing these growing affordability challenges; I know firsthand that many others are as well. I also think Boston has some helpful lessons we could share with other communities on how we have tackled the affordability issue to this point. But the undeniable fact is that it is long past time that we all collectively, as a broader water sector, start looking at the affordability issue from a much more holistic one water perspective that takes into account all

of the drinking water and clean water costs in a given community.

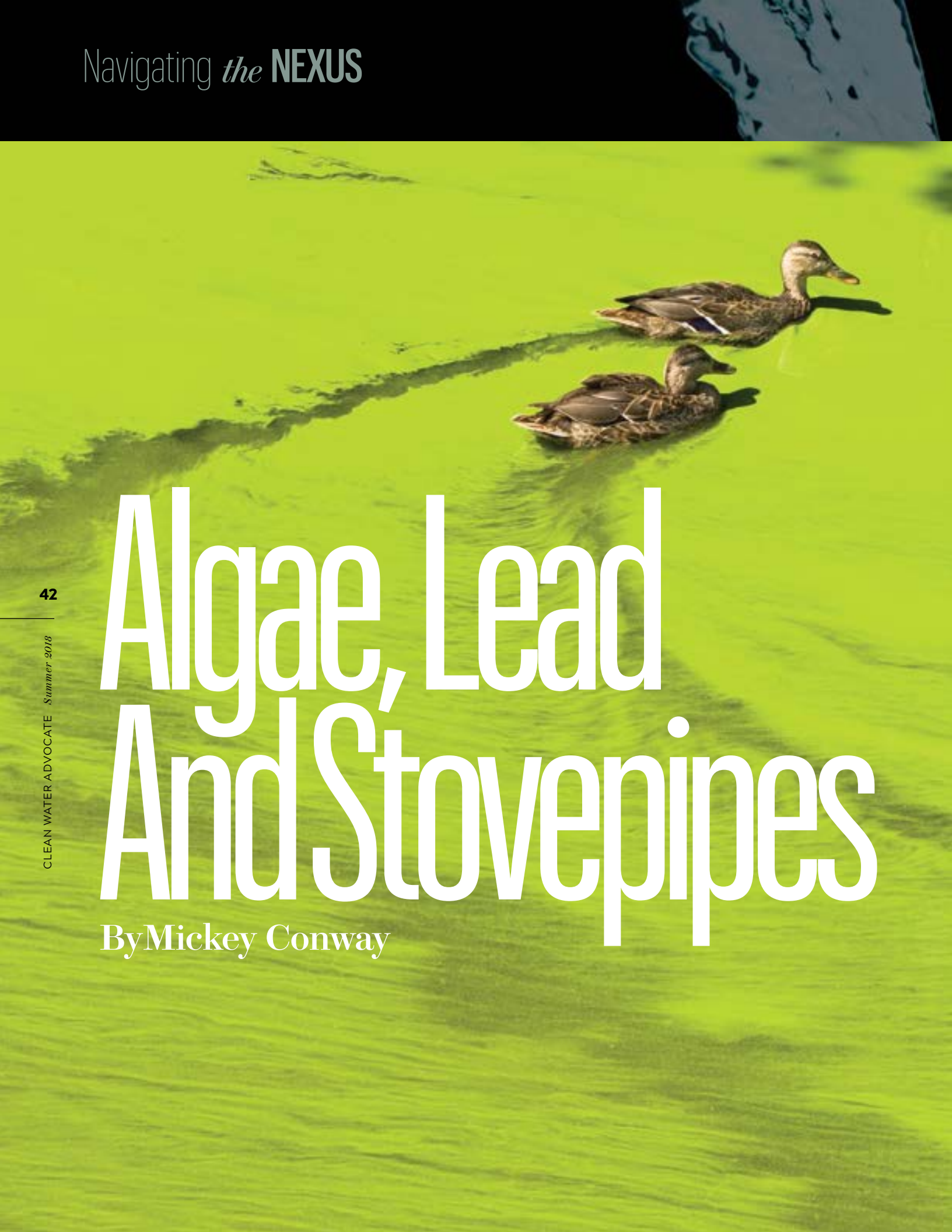
Along these lines, I am very happy that NACWA is partnering with the American Water Works Association (AWWA) to develop a new approach to—and new criteria for—determining affordability, adopting a holistic perspective that incorporates all water costs. This project, which is anticipated to be complete by the end of 2018, will also help inform ongoing work by EPA to update its affordability guidance.

Perhaps one day we will finally do away with the antiquated federal statutory distinction between drinking water and clean water and have a true “One Water Act” that looks at all water issues holistically. But until that time, we must operate under the CWA and SDWA and—where the two laws converge—do our best to make them both work. Affordability is the next big challenge within that effort, and NACWA looks forward to continued work with its water sector partners and federal policymakers to solve this challenge for the benefit of all communities and utilities nationwide. 💧

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John Sullivan serves as an Officer of NACWA, and Chief Engineer of the Boston Water and Sewer Commission, with more than 41 years of experience in water and wastewater engineering.

Algae, Lead And Stovepipes

By Mickey Conway



Denver's Regulatory Challenges Pinpoint Fault Lines In The CWA/SDWA Nexus

The intersection of the Clean Water Act (CWA) and Safe Drinking Water Act (SDWA) is as much about the relationship of legal frameworks as it is about the relationship of water infrastructure investments and holistic water management. As practitioners in the arid western United States, where water reuse and raw water augmentation are vital to sustainable water supplies, we believe it is imperative that decisions that have implications under both the CWA and SDWA take into consideration all elements of our drinking water supply—particularly the sources, treatment processes, and delivery systems.

This collaborative approach reflects an evolution of the water cycle and the relationship between drinking water providers and wastewater



providers. Historically, wastewater treatment facilities were pollution control facilities located at the end of town because wastewater treatment was the end of the water cycle. This is no longer the case. As

the water cycle increasingly incorporates water reuse, the secondary effects of drinking water chemicals on both treatment facilities and the environment are important considerations that must be addressed through mindful and deliberate decision-making.

The CWA and SDWA have matured together, having been established in 1972 and 1974, respectively. Through 45 years of implementing these frameworks across the country, both potable and ambient water quality have substantially improved. As originally conceptualized and drafted, the CWA and SDWA were not

intentionally harmonized; they function in their stovepipes. However, environmental and societal conditions have evolved significantly in the decades since their inception, and examples of the need for better integration are becoming increasingly common. Here in Colorado, there is a situation in which a SDWA requirement could have significant detrimental effects on a CWA requirement as well as on the public health of downstream communities and the South Platte River ecosystem.

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“...the water community is grappling with how to minimize lead contamination in drinking water while also protecting ... downstream communities from phosphorus loading.”
.....

is an infrastructure issue. In most cases lead in drinking water is the result of lead leaching from lead-based infrastructure including service lines and solder in older homes. Unfortunately, the federal Lead and Copper Rule (LCR) is not structured to address this problem as an infrastructure issue but instead focuses on adding chemical solutions that create a protective scale on lead infrastructure.

Under the LCR, drinking water providers are required to minimize lead concentrations in the water by achieving optimal corrosion control treatment (OCCT). There are various approaches to achieving OCCT, including the use of a phosphorus-based chemical called orthophosphate (PO₄³⁻) that functions as a corrosion inhibitor by forming a scale on the inside of lead infrastructure. Orthophosphate is a highly soluble form of phosphorus, which means it is readily available to plants. Other treatment approaches, such as pH adjustment and silicates, are widely used by drinking water providers as viable corrosion inhibitors.

In the Denver metro region, the water community is grappling with how to minimize lead contamination in the drinking water system while also protecting the South Platte watershed and downstream communities from additional phosphorous loading. This issue truly represents the intersection of the two statutes and raises interesting public policy considerations about how to most effectively achieve a shared priority of protecting public health and the environment.

A Clean Water Act issue that has been on the forefront for wastewater treatment facilities for decades is *nutrients*. Although nitrogen and phosphorus are natural components of aquatic ecosystems, if too much of these enter the environment, algae may grow faster than the system can handle, and algal blooms will result. Some algal blooms are harmful to humans because the algae produces elevated toxins and bacterial growth that can make people sick if they drink the algae-polluted water, consume tainted fish or shellfish from it, or even touch it. Other algal blooms simply decrease water quality and diminish aquatic habitat as well as create treatment challenges for downstream drinking water providers. To address these issues, wastewater treatment providers have made significant investments in infrastructure to reduce nutrient pollution.

On the other hand, a prominent national SDWA issue is *lead contamination* in drinking water. At the core of lead contamination in drinking water



“ Unfortunately, the federal Lead and Copper Rule (LCR) is not structured to address this as an infrastructure issue, but instead focuses on adding chemical solutions which create a protective scale on lead infrastructure. ”

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...more than half of the potable water produced during summertime is used for lawn and landscape irrigation and thus a nonpoint source contribution to aquatic systems.
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SEARCHING FOR SOLUTIONS

Denver Water is one of the regional drinking water providers in the Denver region, supplying potable drinking water to approximately 1.4 million people. Denver Water has a track record of providing exceptionally safe drinking water in a water-scarce region for more than 100 years.

In 2012, Denver Water exceeded the lead action level standard by two parts per billion—or about two drops of water in a swimming pool—and has not exceeded it since. Following direction from the Colorado Department of Health and Environment (CDPHE) from 2012 through 2017, Denver Water conducted a robust investigation of OCCT alternatives including a controlled condition pipe loop study using harvested lead service lines. On the basis of this study, Denver Water recommended that pH/alkalinity adjustment be designated as OCCT for Denver Water’s system.

Denver Water’s recommendation was based “on the positive pilot results for pH adjustment, the ability to implement earlier [than other alternatives], ability to increase focus on [lead service line] removal, and the current and future disadvantages associated with orthophosphate.”¹

This recommendation would immediately advance Denver Water’s number one priority: public health. It would provide measurable improvements in the scaling of the lead infrastructure, would accelerate the removal of the source of the contamination (a long-term solution), and would avoid the adverse secondary effects associated with importing a significant new load of highly soluble phosphorus into the South Platte watershed. It is important to note that more than half of the potable water produced during summertime is used for lawn and landscape irrigation and thus a nonpoint source contribution to adjacent aquatic systems.

Several wastewater and drinking water utilities, municipalities, and environmental groups submitted materials to CDPHE in support of Denver Water’s recommendation. These parties supported Denver Water’s recommendation because it was a viable practice in terms of protecting public health at the tap, without an associated negative impact on the environment and downstream water supplies. The supporting parties noted that acute public health, socioeconomic, and ecological risks would be associated with importing a large new source of phosphorus into the South Platte watershed. These risks include harmful algal blooms that create immediate and severe risks to public health, diminished water quality that impairs the use of downstream water, and negative impacts to fisheries, agriculture, tourism, recreation, and real estate. The parties asked that CDPHE consider the full spectrum of public health factors including the adverse secondary effects to public health.

DENIED BUT NOT DEFEATED

On March 20, 2018, contrary to the recommendation of Denver Water and other stakeholders, CDPHE designated phosphorus-based corrosion inhibitor (orthophosphate) as OCCT for Denver Water, based on its interpretation of the



definition of OCCT. Denver Water and several stakeholders filed administrative and judicial challenges to CDPHE’s OCCT determination for Denver Water.

Without question, protection of public health is of utmost importance to every stakeholder

ff Without question, protection of public health is of utmost importance to every stakeholder engaged on this issue.

engaged in this issue. Yet it is evident that the SDWA and CWA, both of which were intended to protect public health, lack the language needed to provide flexibility to do so in this case. Given

the scarcity of water in our region, it is more important than ever that as a community we make decisions today that will not impair future generations’ use and enjoyment of this valuable resource.

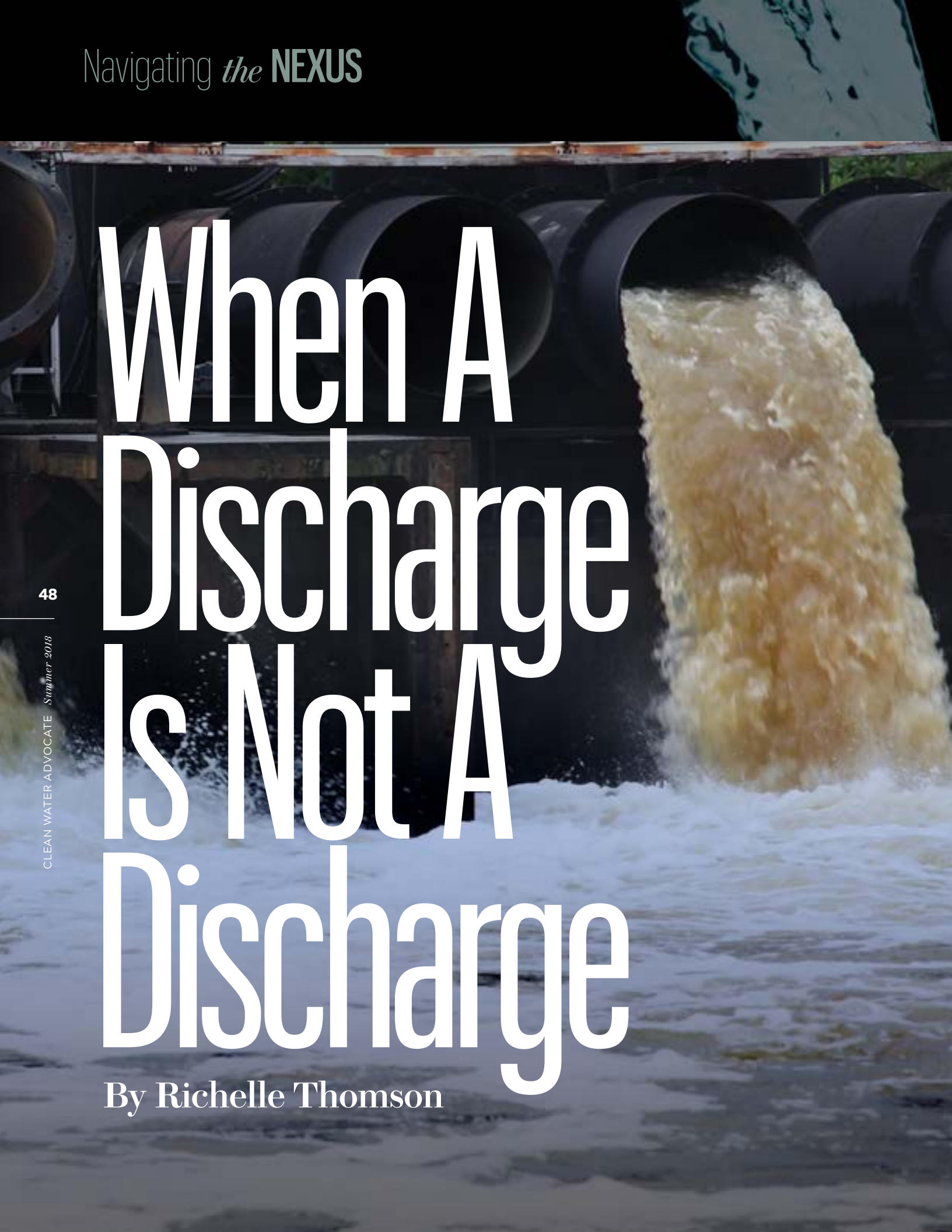
As a wastewater provider in the middle of the water cycle in a water-scarce region, we believe that we will accomplish this through decision-making that keeps all of these interests in mind and with smart infrastructure investments that are coordinated with our drinking water partners. 💧

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Mickey Conway serves as District Manager for the Metro Wastewater Reclamation District in Denver, CO, which operates two treatment plants and extensive collection systems that serve more than 60 local governments and special districts with more than 1.8 million people throughout the Denver Metro Area. He has worked with wastewater and public entities for almost 20 years.

¹D. Ryan Walsh, P.E., *Denver Water Optimal Corrosion Control Treatment Report*, p. 3 (September 20, 2017).

When A Discharge Is Not A Discharge

By Richelle Thomson



Maui's Struggle For Reuse Parameters — A Microcosm Of Nationwide Battles Ahead

A recent decision by the US Court of Appeals for the Ninth Circuit threatens to impose competing, and onerous, obligations on Maui County—and other utilities—and negatively impact or foreclose green infrastructure programs nationwide. The decision also ignores the construct of cooperative federalism that is central to efficient operation of federal environmental statutes. In many states, including Hawaii, this balance of federal and state power relies upon the states' broader authority to regulate intrastate waters, including groundwater.

Hawaii, like most other states, has a robust and long-standing regulatory program for protecting its intrastate waters. Chapter 340E of the Hawaii Revised Statutes (HRS), Hawaii's companion to the Safe Drinking Water Act (SDWA), regulates discharges to groundwater that may impact public drinking water sources or "otherwise adversely



jurisprudence that unequivocally links robust environmental safeguards with the protection of human health.”¹ Hawaii's Constitution embodies the state's commitment to preservation of natural resources, and the state has a long history of

jurisprudence that unequivocally links robust environmental safeguards with the protection of human health. The Ninth Circuit's decision ignores this robust program—and, in reality, the entire SDWA program regulating underground injection control (UIC) wells—and instead shoehorns Clean Water Act (CWA) requirements onto subsurface discharges in a way that is both unworkable and not supported by the statute.

JUDICIAL ACTIVISM

Maui County operates five wastewater reclamation facilities on three islands and has aggressively pursued wastewater reclamation and recycled water reuse for decades. In 2012, a citizens' suit was brought against Maui County,² alleging that disposal of excess recycled water

into the Lahaina facility's four UIC wells violates the CWA (the citizens' goal was to force a stepped-up implementation of land-based reuse).

The lawsuit was based upon a tracer dye study funded by the US Environmental Protection Agency (EPA) and the US Army Corps of Engineers (USACE) that found that dye injected into two of the four wells was initially detected approximately three months later, at a collection of freshwater seeps in the near-shore area. The peak detection occurred more than eight months after injection, with a total transit time of four years. Although dye was also injected into one additional well, it was never found offshore.

Modeling shows that the recycled water/ groundwater enters the ocean along a two-mile stretch of coastline. Less than 10% of the recycled water exits at these near-shore seeps, with the remaining ninety 90% entering as diffuse flow with no identifiable points of entry.

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...liability under the Clean Water Act is triggered when pollutants reach navigable water, regardless of how they get there.

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Ignoring that this disposal method has been regulated for decades under state and federal UIC permits, issued under the SDWA and the equivalent state regulation, and further disregarding that the state administrative rules allow for limitations similar to those of the National Pollutant Discharge Elimination System (NPDES) to be imposed through "equivalent control documents" such as the County's UIC permit, the Hawaii District Court





found the County liable for violating the CWA through its creation of a novel “conduit” theory. The Court stated that “liability under the Clean Water Act is triggered when pollutants reach navigable water, regardless of how they get there.”³

On appeal to the Ninth Circuit,⁴ the EPA filed an amicus curiae brief in support of the plaintiffs/appellees’ position, flipping 180 degrees from its former stance of addressing any potential impacts on ocean water quality via Maui’s EPA-issued UIC permit (for example, adding a nitrogen limit on the tertiary-treated recycled water disposed of in the wells) and advocating for a “direct hydrologic connection” theory, on which EPA recently requested public comments.⁵

In early 2018, the Ninth Circuit rejected both the District Court’s and the EPA’s bases, articulating its own test for CWA liability: the UIC wells require NPDES permits because the recycled water enters the groundwater through point sources (i.e., the wells) and then migrates to the ocean, and more than a de minimis amount of pollutants in the ocean is “fairly traceable” to the County’s recycled water. Taking a position that reads the point source requirement out of the CWA, this, the Ninth Circuit said, makes the release to groundwater the “functional equivalent” of a “discharge into . . . navigable water.”

The Ninth Circuit also held that the County had “fair notice” of CWA regulatory coverage since the construction of the treatment plant in the 1970s, despite neither federal nor state regulators asserting such in several decades of permitting history. The County, which operates three additional facilities utilizing UIC wells, and its state regulators now face

¹ Hawaii Revised Statutes, Section 340E-2.

² Hawaii Wildlife Fund v. County of Maui, 24 F.Supp 3d 980 (D. Hawaii 2014).

³ Hawaii Wildlife, 24 F.Supp 3d 980, 1000.

⁴ 886 F3d 737 (9th Cir 2018).

⁵ “Clean Water Act Coverage of ‘Discharges of Pollutants’ via a DHC to Surface Water,” 83 Fed. Reg. 7126 (Feb. 20, 2018).

a conundrum: under which legal test and set of facts is a “discharge” regulated, and where is compliance measured if there is no direct discharge to a jurisdictional water? This question cuts to the heart of the issue: the NPDES permit program was never intended to regulate this type of discharge.

ON AN ISLAND, ALL (RECYCLED) WATER FLOWS SEAWARD

The County’s recycled water distribution system is gravity-fed; all users are seaward. Recycled water stored in an unlined pond on a golf course, or used to irrigate a resort’s grounds, seeps through the soil, mixes with groundwater, and then flows seaward. Similarly, the very same water-disposed of into the UIC wells at a higher elevation and farther from shore-mixes with groundwater and moves seaward as well. Maui County has already received feedback from recycled-water users, concerned about triggering CWA liability through continued use of recycled water. Others across the nation have expressed concern that onerous and illogical permitting and exposure to CWA liability, flowing from decisions like the Ninth Circuit’s, will hamper green infrastructure projects such as stormwater retention basins or use of recycled water for aquifer recharge.

In an abundance of caution and in response to the lawsuit, the County filed an NPDES permit application for the Lahaina facility in 2012 and filed permit applications for its remaining facilities in 2015. The County went the step further by hiring a respected hydrogeologist to draft an NPDES permit for the Lahaina facility, one that reflected the long transit time, the attenuation of nitrogen and other constituents in the subsurface environment, and geothermal effects (including elevated phosphates and temperature due to this influence). The County’s expert also concluded that halting injection of the tertiary-treated recycled water would not change near-shore water quality.

No permits have yet been issued, at least in part because requiring an NPDES permit for

discharges to groundwater is an adulteration of the regulation and stymies the regulators as much as those being regulated. Congress made an important distinction between point sources and nonpoint sources that has significant practical permitting implications, all of which the Ninth Circuit ignored. NPDES permits regulate discharges from point sources to navigable waters. If this were not a vital foundation of the regulatory scheme, no distinction would have been made between point sources and nonpoint sources, and—importantly—Congress clearly had the groundwater issue before it and decided specifically against including groundwater under CWA coverage. Groundwater is neither a point source nor a “water of the United States.”

WHERE IS CWA COMPLIANCE MEASURED?

Part of the problem, unlike with ocean, lake, or river outfalls where the discharge point is known and a “zone of mixing” can be clearly prescribed, the state regulators have said they will require the County to do what two prior federal- and state-agency-sponsored tracer dye studies have been unable to do—identify the entire area where effluent enters the ocean. This will be a wild-goose chase. A 1993 tracer dye study could not identify this. A 2013 study could identify only where a small fraction of the effluent from



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“ ..the County will face the Sisyphian task of attempting to address ocean water quality using the wrong permitting program without the ability to address the true sources of pollution. ”

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two of the County’s four wells reaches the ocean through freshwater seeps. Moreover, this study acknowledges that the locations of the seeps change over time, as the seeps by which groundwater enters the ocean are ephemeral. The study also recognizes that 90% of the effluent released into the ocean is by diffuse flow, likely further offshore and not detectable.

Even if tracer studies reconfirm a pathway of groundwater flowing generally toward the ocean, the Lahaina-Kaanapali coastline is highly developed and there are a multitude of other

land-based sources of pollution. Fallow farmland continues to leach nitrogen and phosphate into the groundwater and into the ocean through runoff. Residential and commercial development—many using cesspools, septic systems, or other treatment processes far less progressive than the County’s—is impacting ocean water quality. How will the regulators address these multiple other sources of land-based pollution that affect ocean water quality, or will the County, as the sole permittee in the area, be held responsible for the indistinguishable mix of pollutants carried seaward through groundwater? If so, the County will face the Sisyphian task of attempting to address ocean water quality using the wrong permitting program without the ability to address the true sources of pollution.

Recognizing the substantial hurdles of obtaining and complying with NPDES permits for its disposal wells and the environmental, economic, and operational impacts of further treating the recycled water to meet ocean water quality standards at the plant—an illogical, expensive, and potentially impossible task—the County is evaluating alternative disposal methods, including ocean outfalls.

In summary, the illogical application of NPDES permitting to discharges to groundwater has the potential to undo decades of the County’s commitment to reuse with environmentally sound disposal of excess water and will negatively affect green infrastructure projects in Hawaii and potentially across the nation. For these reasons, Maui County will soon file its petition for certiorari to the US Supreme Court. 💧

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Richelle Thomson has been a Deputy with the County of Maui’s Department of Corporation Counsel since 2011 and advises the Department of Environmental Management, which oversees wastewater, solid waste and environmental sustainability programs and services for the County.



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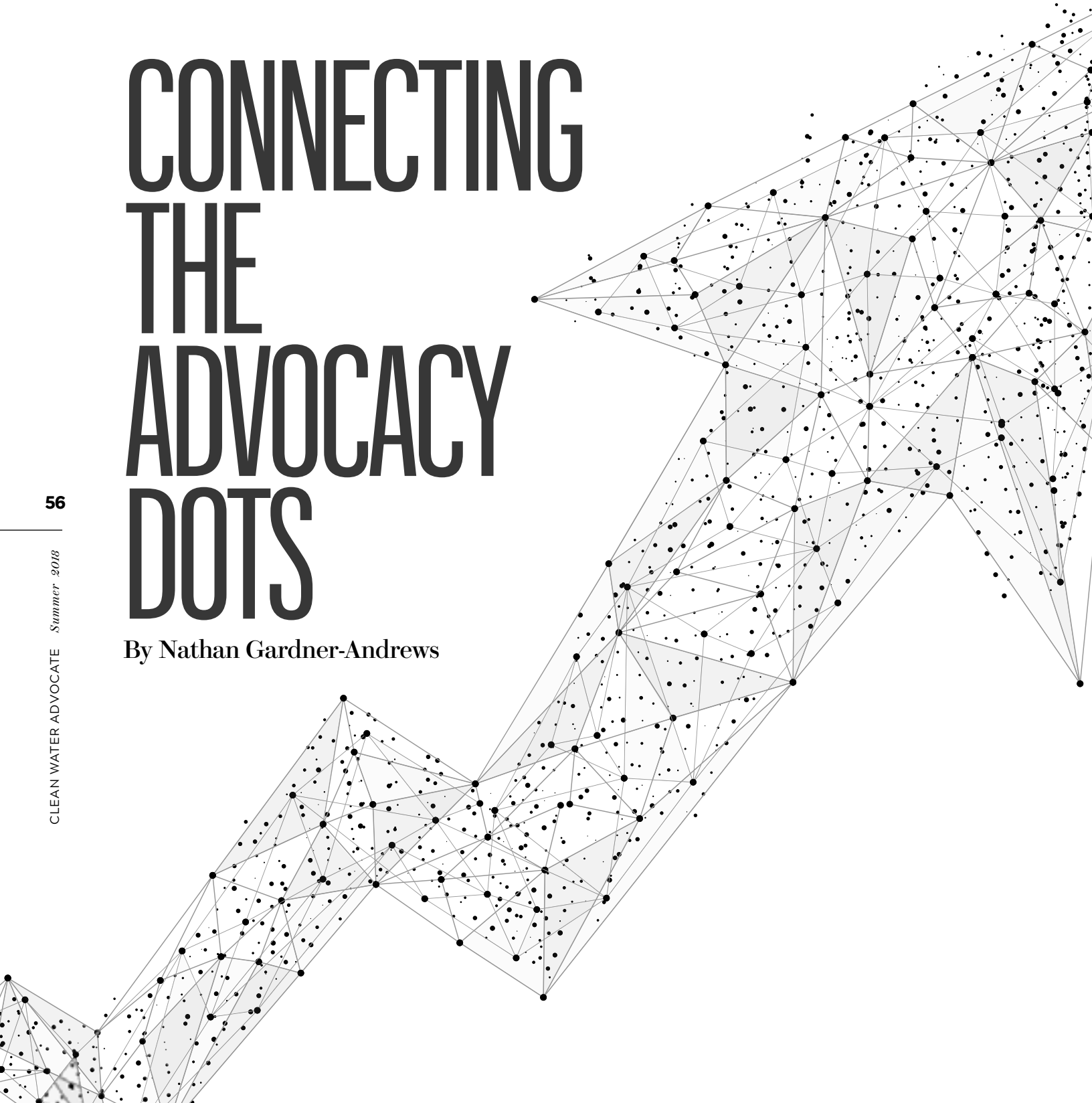
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CONNECTING THE ADVOCACY DOTS

By Nathan Gardner-Andrews

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CLEAN WATER ADVOCATE Summer 2018

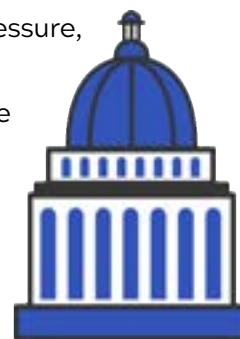


How The Efforts Of Many Become The Advocacy Wins For All

The first half of 2018 has seen some critical advocacy wins for the municipal clean water sector. Most notably, Congress approved a federal Fiscal Year (FY) 2018 budget that significantly boosts funding for water infrastructure, providing \$600 million in additional money for the State Revolving Loan Funds (SRFs). The budget also provides \$63 million in funding for the Water Infrastructure Finance and Innovation Act (WIFIA) program, almost \$20 million above previously authorized levels. These combined appropriation numbers for water infrastructure are higher than anything we've seen in almost a decade and reflect strong bipartisan support for federal water infrastructure funding.

This year has seen important progress on affordability issues as well, both in Congress and at the US Environmental Protection Agency (EPA). On the legislative front, bills are advancing in both the Senate and House that would direct EPA to update its woefully outdated affordability guidance to take a more holistic look at the affordability challenges (drinking water, wastewater, and stormwater) facing communities all across

the nation—urban, suburban, and rural. Sensing this Congressional pressure, and on the heels of an affordability report last year from the National Academy of Public Administration (NAPA), EPA is moving on the regulatory side to fundamentally revise its approach to affordability issues.



Perhaps most notably, 2018 has seen the elevation of water—finally!—as a key component in national discussions over infrastructure, on par with other infrastructure sectors like roads, bridges, and railroads. This increased prominence of water was visible both in President Trump's proposed infrastructure plan and in a plan put forth by Senate Democrats. While the two plans differ significantly in their sources and levels of funding, they both acknowledge directly and unequivocally the importance of water infrastructure as a need co-equal to other infrastructure categories.

But nowhere was the importance of water—and the new, growing energy around national water issues—more evident than during *Water Week*

2018 (April 15-21). In one of the largest water advocacy gatherings ever, hundreds of water professionals from around the country came to DC to collectively elevate water as a national priority with Members of Congress and key policy-makers. The Week also saw the broader water sector collaborate like never before, with multiple national and state water groups combining forces to advance a unified water message.

In truth, there is a lot to be proud of in the arena of water advocacy just this year alone. But it is important to understand that all of these victories, which appear to be individual accomplishments in and of themselves, are actually deeply interrelated with each other. Each one could not have occurred without a series of connected advocacy efforts, both by NACWA and by the water sector as a whole. There are no individual legislative, regulatory, or policy victories. In actuality, they are all one unified effort to accomplish one shared mission: to build and elevate the national Clean Water Interest, in service to all clean water users: namely, every person alive.

“...nowhere was the importance of water—and the new, growing energy around national water issues—more evident than during *Water Week 2018*”



Take the increased federal funding for clean water infrastructure in FY 2018 as an example. While NACWA has been working tirelessly for years on the legislative front to increase federal clean water investment, this is not just a legislative victory. The Association was also making the case for more money through the regulatory comment process; engagement with the EPA and other federal agencies; and through various

legal channels, such as court briefs, for years. The effort has been a “full-court press” across all of NACWA’s advocacy platforms, including most recently a comprehensive communications program that creates clear, concise, and persuasive messaging about the dire need for more federal investment. This distinct legislative victory—increased funding—could not have been possible without support from NACWA’s various advocacy arms and collaboration partners.

The same can be said of the progress being made on affordability and the elevation of water as a key *infrastructure* priority, equal to other infrastructure sectors.

**Sen. John Boozman (R-AR),
Chairman of the Senate
Subcommittee on Fisheries, Water
and Wildlife, speaks during Water
Week 2018 about key water priorities
and water infrastructure investment
proposals.**



Nearly 300 water professionals from around the country participated in a Congressional Briefing as part of Water Week 2018, bringing a message directly to the halls of Congress about the importance of elevating water as a national priority.

NACWA’s coordinated and strategic advocacy engagement over multiple years in key legislative, regulatory and legal arenas—all tied together by comprehensive communications outreach and pointed messaging—created an environment where multiple clean water advocacy priorities could be advanced on multiple fronts.

No NACWA legislative exercise, regulatory engagement, or legal case stands alone as a unique effort; all are connected by a coordinated, overarching advocacy effort to the benefit of NACWA’s members and the larger municipal clean water community. And so far in 2018, we are seeing tangible results and benefits when all those individual advocacy dots are connected, and when the Association and the broader water sector work collaboratively to advance shared water priorities.

Now, however, is not the time to rest on our laurels. We have all collectively achieved some important advocacy wins this year, but there is more work to be done. Some of the many challenges facing NACWA and its members in the

coming months include preserving the increased federal funding levels for FY 2019, engaging the EPA and policymakers on rulemakings related to the “blending and groundwaters” issue, advancing key legal arguments on “nutrients and stormwater,” and communicating a compelling and effective clean water advocacy message. But as long as we all—collectively—continue to connect the clean water advocacy dots with our elected leaders, policymakers, ratepayers and the public, the more advocacy wins are within our reach. 💧

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Nathan Gardner-Andrews is NACWA’s Chief Advocacy Officer.

The Unifying



Value Of Water

By Radhika Fox

After decades of declining federal investment in water infrastructure, the water sector knew it had a communications problem. The sector was siloed in how we communicated about water: some voices were focused exclusively on clean water, others on drinking water, and sometimes stormwater was in the mix. More and more, however, stakeholders from all facets of the combined water sector are understanding that only a unified message will bring success and lead to progress on a national scale.

For the last several years, the Value of Water (VOW) Campaign has embodied that sentiment, representing a unified effort of the water industry to come together and speak with one voice about the value of all water.

When water associations of all types—including the American Water Works Association (AWWA), the Association of Metropolitan Water Agencies (AMWA), the National Association of Clean Water Agencies (NACWA), the National Association of Water Companies (NAWC), and the Water

Environment Federation (WEF)—chose to join forces with leading water and wastewater utilities and water-reliant businesses to create the Value of Water Campaign. It was a strategic choice to increase the understanding of the challenges faced by our infrastructure and the dire need to invest in it. For the past several years, the Campaign has made strides to set the enabling conditions needed for the policy and regulatory priorities of individual organizations to succeed.

Communicating the massive challenges plaguing complex water systems, which often go unseen by the public, is no small task. Water and wastewater services are essential, but most people underestimate what it costs to move water to and from our homes and businesses and back to the environment safely.

Meanwhile, we are at the dawn of the “replacement era” and our systems are aging and failing.

Value of Water
CAMPAIGN 



The US needs to invest a total of
\$123 billion per year
in water infrastructure
over the next 10 years to
achieve a good state of repair.



That's why the VOW Campaign has taken a multi-pronged approach, through strategic messaging research, the creation of economic reports, media blitzes, and advocacy events to get our message out to the audiences who need to hear it the most.

Despite the Campaign's national polling that shows no other policy issue enjoys as much broad, consistent, and bipartisan support, Congress continues to kick the can down the road when it comes to finding the resources necessary to meet current infrastructure needs while also preparing for the future. Political gridlock makes it even more vital that the sector continue to speak with a unified voice, as multiple, varied messages are too easily ignored or misunderstood by policymakers.

VOW's annual Infrastructure Week (May 14-21) event is a quintessential example of the Campaign's work. In its early years, this national week of education, which brings together infrastructure advocates from top organizations in Washington, DC and across the country, was missing a key ingredient: water. The message had drifted—as a general infrastructure message often does—to one focused on surface transportation (“roads and bridges”).

But since the VOW Campaign joined the Infrastructure Week steering committee three

years ago, the water infrastructure profile has increased markedly. For Infrastructure Week 2018, VOW Campaign partners hosted events, tours, and online engagement activities promoting the essential role that water infrastructure plays in our economy, environment, public health and communities. As a result, Infrastructure Week 2018—with its massive reach through in-person events, media coverage, and social media platforms—spotlighted innovative solutions to water infrastructure challenges.

“The Value of Water Campaign’s leadership brought vision, focus, and muscle-power to engaging the water community, and since 2015, water has become a loud and equal partner in Infrastructure Week,”

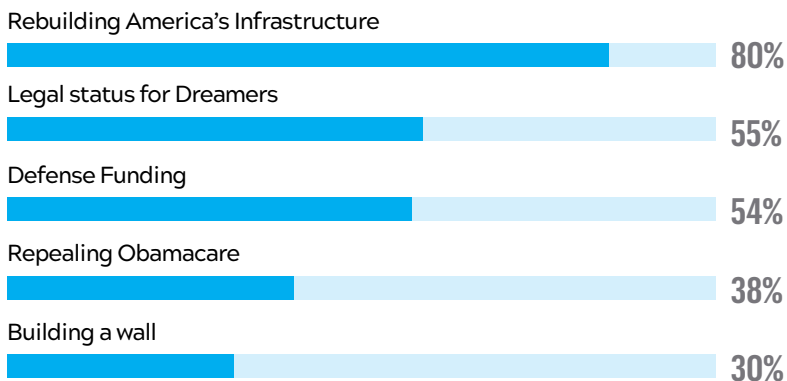
— Zach Shafer, Chief Executive Officer,
Infrastructure Week

The VOW Campaign's strategy has been to educate the public through easily accessible advocacy events, such as Infrastructure Week and Imagine a Day Without Water, while also leveraging those events to target elected officials and regulators with a specific message, often with significant results. For Infrastructure Week 2018 alone, social media mentions of the event, along with its related hashtags or shared topical terms, created 275 million impressions. Additionally, the Campaign has reached at least 25 million Americans through television and radio interviews over the past few years.

THIRD ANNUAL VALUE OF WATER INDEX

80%

Of Americans Say Investing in Water Infrastructure is More Important Than Every Other Top Federal Issue Right Now.



Simultaneously, the VOW Campaign's efforts have been targeted at engaging mayors, city councils, state legislators, governors, and Members of Congress as well. Subsequently, we've seen these leaders sign proclamations, issue resolutions, present on panels, keynote events, and write op-eds in support of our message. A key metric of success for the Campaign is the number of unique instances when we see, hear, or read our message coming from an elected official. This is how we know we're influencing—even winning the hearts and minds of—the very people who we feel will magnify our message.

The Value of Water Campaign has grown substantially in just a few years, and we are grateful to all of its campaign supporters, such as NACWA. We feel the momentum is only growing, as our polling shows that more Americans every year agree with our message, and demand action to support investment in infrastructure.

To that end, we would like to personally invite NACWA members and all who care about clean and safe water to participate in the fourth annual Imagine a Day Without Water on October 10, 2018 (Registration and resources are available on the event website <http://www.ImagineADayWithoutWater.org/>). We hope you'll join us for a high-impact day of action that annually unites the entire sector, and that this action, in microcosm, will spotlight and emphasize a larger and more lasting context: that all waters are indeed connected—as are water's public affairs issues—and only with a unified voice can water advocates and stakeholders continue raising the nation's awareness of the vital role that water plays in everyone's lives every day. 💧

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Radhika Fox is the Director of the Value of Water Campaign, and CEO of the US Water Alliance, a national nonprofit organization advancing policies and programs that build a sustainable water future for all. The Alliance educates the nation on the value of water, accelerates the adoption of "one water" policies and programs, and celebrates innovation in water management.

Year	Water Sector Affiliates	Total Affiliates	Proportion of Water Affiliates
2015	5	101	4.9%
2016	13	155	8.3%
2017	29	298	9.7%
2018	56	434	12.9%



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CONFERENCE
FEBRUARY 5-8, 2019**

start planning now!

NACWA 

The background of the entire page is a scenic photograph of the Washington Monument in Washington, D.C. The monument is a tall, white, obelisk-shaped structure that rises vertically on the left side of the frame. In the foreground, a row of cherry blossom trees in full bloom stretches across the middle ground, their pink and white flowers creating a soft, colorful barrier. The trees are reflected in the calm water of the Tidal Basin in the foreground. The sky is a mix of soft blues and warm oranges, indicating a sunrise or sunset. The overall mood is peaceful and beautiful.

We Clean It. For Everyone's Sake.

For nearly five decades, the National Association of Clean Water Agencies (NACWA) has been the nation's recognized leader in legislative, regulatory and legal advocacy on the full spectrum of clean water issues, as well as a top technical resource for water management, sustainability and ecosystem protection interests.

NACWA represents public wastewater and stormwater agencies of all sizes nationwide. The Association's unique and growing network strengthens the advocacy voice for all member utilities, and ensures they have the tools necessary to provide affordable and sustainable clean water for all.

Our vision is to represent every utility as a NACWA member, helping build a strong and sustainable clean water future.



Stands for PROGRESS

In the last few years, the clean water sector has made significant progress in the areas of science, technology, best practices and leadership. And as recent increases in water infrastructure funding and other policy wins have shown, it is making strides in advocacy and public affairs as well.

Water policy is advancing. Are you a part of it?

As a clean water utility, you're constantly striving to innovate to serve your ever-growing, ever-changing communities better; and to stay relevant and viable in the ever-evolving water landscape. But you can't do this alone.

For nearly five decades, the National Association of Clean Water Agencies (NACWA) has been the nation's recognized leader in clean water issue advocacy, its direct efforts having led to big advocacy wins just this year alone. Its nationwide network of agencies is helping member utilities grow and change via peer-to-peer connection, shared information, and shared resources. Connect with us today!

We keep you connected & proactive.
It's time to engage & collaborate.

Give us a look.
Membership means Progress.

For information about membership, contact Marissa Esguerra at mesguerra@nacwa.org

WWW.NACWA.ORG/MEMBERSHIP