WWEMA’s 109th Annual Meeting, held November 8-10, at the Omni Scottsdale Resort & Spa at Montelucia in Scottsdale, Arizona earned rave reviews with nearly 100 attendees and member prospects coming together for an exceptional program. The theme of this year's meeting was *Finding Success in Uncertain Times*.

Sessions included discussions on Cooperative Federalism with the Executive Director of the Environmental Council of the States; a working session on American Iron and Steel with a senior environmental engineer at the U.S. Environmental Protection Agency (EPA); a panel session on mergers and acquisitions (M&As); a national overview of state-level funding initiatives for water infrastructure; a panel on direct potable reuse; and a session on terms and conditions for WWEMA manufacturer representative members.

The meeting culminated on Friday with a three-hour workshop on recruiting, retaining, and engaging across all generations with the research director at BridgeWorks LLC. This session focused on communication, work ethic, dress code, career progression, and how to create a functioning work "family" among Baby Boomers, Gen-Xers, Millennials, and Gen Zers.

Thank you to Gold Sponsor **JCM Industries, Inc.**, and Bronze Sponsor **KLa Systems, Inc.** for your support of the annual event!
Welcome from Meeting Chair

Mark Turpin, President of Duperon Corporation, Chair of the Annual Meeting, and the 2017 WWEMA Chairman of the Board, opened the 109th Annual Meeting with a special welcome to WWEMA members and invited guests. Turpin reviewed the agenda and the great line-up of speakers noting that WWEMA continues to live up to its mission to Advocate, Inform, and Connect our members. Turpin characterized a water industry in transition, and noted while this is not the first time in WWEMA’s history that there has been transition, now is a time of great opportunity and risk for those leading companies. Turpin shared how WWEMA has made strides in bringing together water and wastewater manufacturers over the past year from launching new programs for the membership, to incentive programs for first-time attendees from within and outside the membership, to developing new outreach materials and programs to grow Association membership, to a new dues restructuring program aimed at reducing member dues, WWEMA is geared toward the future and looking forward to expanding our programs and service offerings for our members in 2018.

Keynote Address

The Annual Meeting keynote address was provided by Trevor Baggiore, Director of the Water Quality Division, Arizona Department of Environmental Quality (ADEQ). Baggiore welcomed WWEMA members and invited guests to Arizona and shared some of the pressing challenges facing the state and the opportunities for technology solutions providers. He noted that arsenic, nitrate, lead, and disinfection by-products are the predominant drinking water challenges. Sanitary sewer overflows remain a challenge and 20 facilities are currently not meeting discharge permit limits.

Baggiore shared some key facts about Arizona noting that with a population of 6.9 million, Arizona has 1,511 drinking water systems, over 100,000 private drinking water wells, approximately 350 wastewater treatment plants, and 570,000 on-site wastewater treatment systems. While the population in Arizona has significantly increased since the 1960s, water usage has dropped.

Other fun facts include:

- Arizona is the sunniest state in the country. The sun shines in Phoenix and Tucson 85% of the year.
- Arizona is the 6th largest state by area and the 15th largest by population.
- According to some climatologists, the Sonoran desert is the wettest desert in the world.
- Arizona is currently in the 21st year of a long-term drought.
- Reservoirs in Arizona are about 60% full.
- Arizona is 47th for rainfall (13 inches…and that is an average…the desert gets less).
- The original London Bridge is in Lake Havasu City.

Baggiore noted that 41 percent of the state’s water comes from the Colorado River, 40 percent from groundwater, 16 percent from in-state rivers, and three percent from reclaimed water. Seventy-four percent of the water is used for agriculture, 21 percent for municipal, and five percent for industrial uses. While Arizona has approved reclaimed water for agriculture and industrial processes, the state is currently looking at direct potable reuse (DPR) as a source for future water. He referenced the AZ Pure Brew Challenge that took high quality recycled water from Flagstaff, Phoenik, and Tucson facilities and ran it through an advanced treatment system to provide a water source for locally brewed beer. This was a successful educational initiative designed to help citizens understand the concept of DPR and improve their understanding of the treatment processes and the safety of the resulting produced water.
Cooperative Federalism 2.0: A Deeper Look Into a Rebooted EPA-State Relationship

The Environmental Council of the States (ECOS) developed the Cooperative Federalism 2.0: Achieving and Maintaining a Clean Environment and Protecting Public Health document through a consensus-based process among the ECOS members that began in April 2017 and was released in June 2017. ECOS stepped into the space created by EPA Administrator Scott Pruitt’s commitment to an increased role for states in carrying out environmental programs as well as a conversation about funding, according to Alexandra Dunn, the Executive Director and General Counsel for ECOS. In developing the case for a changing state-Federal Government relationship, Dunn noted that states have assumed more than 96 percent of delegable authorities under Federal law; a recalibration of the relationship can lead to more effective environmental management at lower cost; implementation flexibility is necessary to account for unique local ecological, social, and economic conditions; and states have undertaken many continuous improvement efforts to address environmental challenges and streamline decision-making processes.

The Cooperative Federalism principles are:

1. States should be engaged, as key partners with the Federal Government, in the development of national minimum standards.
2. States are the preferred implementing entities for national environmental regulatory programs.
3. States should have flexibility to determine the best way for their programs to achieve national minimum standards.
4. States should engage local governments, regulated entities, tribes, and the public.
5. States should be the primary enforcement authority for programs delegated to the states.
6. States should gather, maintain, and share information transparently with EPA.
7. States should be encouraged through flexible Federal requirements to develop, pursue, and implement state innovations to effectively and efficiently achieve desired environmental outcomes.
8. States should work cooperatively with EPA in development of shared services, implementation toolkits, and other key resources.
9. States that choose to implement Federal programs should be adequately funded by the Federal Government to do so as Congress directed in authorizing statutes.

Cooperative Federalism 2.0 incorporates the following changes and Dunn stated ECOS will hold periodic webinars on Cooperative Federalism 2.0 to discuss these issues.

1. **DELEGATED PROGRAM OVERSIGHT**: Improve program oversight by reducing EPA’s day-to-day oversight and enhancing its programmatic audits.
2. **COMPLIANCE AND ENFORCEMENT**: Better align Federal enforcement approaches with state compliance assistance efforts and integrate them with programmatic functions.
3. **INFRASTRUCTURE**: Leverage the states’ willingness to contribute to the national discussion about water and sewer and other infrastructure priorities; demonstrate how state permitting is modernizing to raise timeline and transparency of permits.
4. **BROWNFIELDS AND SUPERFUND**: Establish roles and responsibilities around both Records of Decisions and remedial design that creates a more proactive and efficient relationship between state and Federal regulators, potentially responsible parties, and the public.
5. **RESEARCH**: EPA is strong at research; find ways to align EPA research priorities to answer pressing state needs, share research and tool development at EPA.
6. **STATE ROLE IN RULEMAKING**: Emphasize the state role in Federal rulemaking especially how implementation issues most effectively enter the rulemaking discussion and for existing rules; identify key substantive areas where inefficiencies are embodied in regulations, guidance, and/or procedures; and work on improving the service delivery/decision-making in those areas.
7. **LEAN**: Performance improvement in inspections and enforcement; electronic permitting and data sharing; and measures, metrics, and outcomes development.
8. **BUDGET**: Assure stable state and tribal assistance grant (STAG) funding and increased flexibility in STAG appropriations (e.g., fewer line items) to enable states to become more efficient and effective and to assume greater responsibilities with no increase in Federal funding from current levels.
Upgrading Our Water Systems - National Overview of State-Level Funding Initiatives for Water Infrastructure

Managing Director of State Policy for New Jersey Future, Chris Sturm, shared findings from a recent report titled, *Upgrading Our Systems: A National Overview of State-Level Funding for Water Initiatives*. The report highlights state initiatives that raise new funds for water infrastructure projects. Sturm provided a national overview of funding and discussed the role of states in funding water infrastructure. She shared findings from four states: Maryland, New York, California, and Massachusetts. In addition, Sturm provided information on Jersey Water Works – a collaborative of over 300 members that promotes the transformation of New Jersey’s inadequate drinking water, wastewater, and stormwater infrastructure.

Founded in 1987, New Jersey Future is a nonprofit, nonpartisan organization that promotes sensible growth, redevelopment, and infrastructure investments to foster vibrant cities and towns; protect natural lands and waterways; enhance transportation choices; provide access to safe, affordable, and aging-friendly neighborhoods; and fuel a strong economy. The organization does this through original research, innovative policy development, coalition-building, advocacy, and hands-on technical assistance.

Mergers, Acquisitions, and Growth – Where has the Water Market Been, Where is it Heading, and What You Need to Know to Successfully Navigate the Waters

Facilitated by Mike Dimitriou, President of WRT LLC, this interactive panel session provided information on recent mergers and acquisitions (M&A), as well as future opportunities. James Adducci, Director of Investment Banking at Boenning & Scattergood, discussed general M&A activity and valuations, plus water market drivers. An M&A snapshot from Adducci showed that activity has followed overall market trends but likely will end the year on pace or slightly ahead of 2016, and mega deals abound as 2017 has seen six deals over $1B pushing total deal value over $17B vs. $6B in 2016. However, Adducci stated that the majority of transactions are less than $50M in value. Some other interesting deal trends and observations include: big data/technology and smart water solutions continue to attract buyers. Some other interesting deal trends and observations include: big data/technology and smart water solutions continue to attract buyers; foreign buyers continue to focus on U.S. assets to gain a foothold; foreign buyers are using <100 percent stakes in transaction structures; IPOs are being used as alternatives to sale exits; private equity buyers show increased level of activity vs. strategic buyers; and alternative sources of capital continue to be important and needed players. There are significant opportunities for mid-sized niche players to achieve strategic, multiple enhancing roll-ups; scale and awareness of sector-focused funds will continue to set the pace; and buyers, particularly strategics, are driven by very specific parameters focused around technology, geographic footprint, management quality. Given the dearth of opportunities, there will continue to be a tremendous amount of enthusiasm when good assets come to market and the current seller’s market (for quality assets) shows no signs of abating.

Sam Saintonge, Principal at XPV Water Partners, shared best practices whether you’re buying or selling noting that attention is needed in several key areas including objectives, alignment, people, processes, and tools in order to be successful. He also provided insights on some of XPV’s success stories. Larry Scully, President of Scully Capital Securities Corporation shared information from a seller’s perspective mapping out an M&A timeline of activities in three phases – planning, solicitation, and closing.

Finally, Bill Decker, Vice President and General Manager at Aqua-Aerobics Systems shared some excellent insights on being acquired. Decker provided some information from the Harvard Business Review that stated that between 70 and 90 percent of M&As fail to deliver the anticipated return on investment. He shared some important questions that companies need to answer before taking that leap. Questions such as: Does everyone understand why the acquisition/merger makes sense? Is the leadership team actually leading the change? How are you communicating and how often? Decker stressed the keys to success are leaders must lead, communicate, embrace the new culture, don’t lose sight of the people or your customers, train, and access and correct course early and often.
New SplashLink OEM/Distributor Tools Unveiled

Jason Wuliger, Co-Founder and Vice President of SplashLink, previewed new services designed exclusively to support the unique relationship between industry OEMs and their representatives in addition to providing a brief overview of SplashLink’s core offerings. SplashLink had heard from both principals and distributors that a more streamlined communication process was needed to facilitate project information sharing and accountability. The new features allow principals to more easily search and share potential projects with reps and track follow-up and status and allows reps to create individual worksheets to track projects and easily communicate status with principals. The information can interface with a company’s project management tracking software to make communication more seamless and efficient. This is a new feature of SplashLink that was unveiled first to WWEMA members at the meeting along with some preliminary thoughts on introductory pricing of the tool.

Working Session on American Iron and Steel

Kiri Anderer, a senior environmental engineer with the EPA led a working session on the status of American Iron and Steel (AIS) implementation with an opportunity for attendees to share their experiences, learn about the status of various waivers, and to understand some of the compliance challenges being identified by EPA. Kiri noted that the original EPA AIS Guidance was developed after Congress included AIS language in the 2014 Consolidated Appropriations Act. Since that time, the requirements have been made permanent for the Clean Water Act but are still authorized annually for the Safe Drinking Water Act (SDWA). While the Federal Government is under a Continuing Resolution the requirements are in affect for the SDWA. She provided an overview of the requirements, sample AIS certification letters, and discussed the waiver process. There are currently five national waivers in affect and 49 project-specific waivers have been approved to date. Examples of the types of projects covered by the project-specific waivers include large diameter butterfly valves, stainless steel products, ductile iron threaded flanges, plunger valves, well casings, specialty fittings, and basket strainers. No waivers have been issued since February, 2017 and it is likely that any future waivers will undergo significant scrutiny considering the current Administration’s position on Buy American.

Kiri opened the conversation to engage attendees on a number of questions including: Are there any AIS success stories? Have product lines been expanded? Have new facilities been constructed to meet AIS needs? What are the challenges with AIS implementation? Are there certain products not made in the U.S.? and Why are the lead times so long for specialty valves?

The Status of Direct Potable Reuse and Lessons Learned from the AZ PURE Brewery Challenge — Where Technology Meets Public Policy and Public Perception

This panel session addressed the status of direct potable reuse (DPR) in Arizona framed around the work being done on the AZ PURE Brewery Challenge. Charles Graf, principle hydrogeologist for the ADEQ, provided an overview of the new ADEQ rules to advance water recycling and DPR. The first reclaimed water rules were published in 1972 with a comprehensive rewrite in 2001. These revisions helped spur water reuse in AZ. Today, 82 percent of reuse occurs in just four states with one being Arizona. Arizona is second highest nationally in per capita reuse. The first wastewater treatment plant (WWTP) in the U.S. built specifically to allow reuse was constructed in 1926 at Grand Canyon Village, AZ and the state’s 1972 rules were the first in the Nation.

The 2001 rules require stringent treatment standards and permits and created five classes of allowed end uses. Currently Class A+ and A allowed uses include irrigation of food crops, recreational impoundments, residential/schoolyard irrigation, toilet and urinal flushing, fire protection systems, snowmaking, and more. Ninety-three percent of Arizona’s 98 largest WWTPs distribute reclaimed water for reuse/recharge and 56 percent distribute Class A+ water. The state is currently revising its rules to address advances in reuse and to address potable reuse. Recycled water will be classified as reclaimed water, grey water, recycled industrial wastewater, or potable reuse. Under the potable reuse definition, the water from an
Advanced Reclaimed Water Treatment Facility (ARWTF) will be considered a surface water for purposes of the SDWA and all SDWA requirements will apply. The state is currently developing reclaimed water quality standards for DPR and developing detailed infrastructure/technology criteria.

Jeff Prevatt, Research and Innovation Leader for the Pima County Regional Wastewater Reclamation Department and John Kmiec, Director for the Town of Marana Water Department then presented information on the AZ Pure Water Brew Challenge. The Challenge spanned a year and involved utilities, engineering firms, equipment suppliers, outreach experts, state regulators, sponsors, and craft brewers. It was designed to demonstrate that wastewater can be used for direct potable reuse – in this case as craft beer. The recycled wastewater went through ultrafiltration, reverse osmosis, UV/advanced oxidation, granular activated carbon, and chlorine disinfection to produce pure water that was the basis for brewers to construct their flavor profiles. The technologies were mounted on a semi-truck that could be opened on one side to demonstrate the use of the technologies. The truck was sent around the state to wastewater utilities involved in the Challenge to purify their water for delivery to craft brewers. Craft brewers throughout the state developed special craft brews with the water, held educational festivals and taste testings, and entered their brews in a tasting contest to determine the best beers. This educational and fun way to address people’s concerns about DPR was very successful.

Manufacturers Rep Session – Terms & Conditions: What You Don’t Know CAN Hurt you!

A special session was held at the Annual Meeting for WWEMA Manufacturers Representatives to provide additional value to our rep members. This session focused on terms and conditions, and was facilitated by James Brown, an experienced corporate lawyer, who has facilitated terms and conditions sessions at WWEMA’s annual Finance & Contract Administration Council meetings. This session, Terms & Conditions: What You Don’t Know CAN Hurt You, focused on what Brown refers to as the Dirty Dozen Contract Terms:

1. Limitation of Liability
2. Waiver of Consequential Damages
3. Liquidated Damages
4. Indemnity
5. Warranty
6. Payment Terms
7. Dispute Resolution
8. Force Majeure
9. Incorporation of Prime Contract/Specifications
10. Insurance and Bonding
11. Incorporation Clause
12. Liens

This session highlighted these important terms that equipment manufacturers and their representatives see in many of their contracts, and the attendees had the opportunity to discuss the terms in a roundtable-like format. Brown focused on how these terms affect the supplier, contractor, and owner.

Identifying and Implementing Opportunities for Industrial Water Reuse

Justin Mattingly, Research Manager at the Water Environment and Reuse Foundation (WE&RF), and Brian Moore, Industrial Water Use Practice Leader for ARCADIS-US, Inc., presented a session on opportunities for on-site industrial water reuse and shared information about a WE&RF research project to develop web-based and downloadable tools to help facilities calculate the business case for water reuse projects, including monetization of water risk. Mattingly began with a discussion on the differences between industrial and municipal reuse and identified eight general industrial water use categories. He identified various drivers and challenges that lead to water reuse decisions and shared several case studies. An earlier two-day workshop identified common barriers to implementation including regulatory and quality, motivation, data and knowledge gaps, and resources (funding and people). The bottom line is that water is a business and the true cost of water needs to be evaluated to make treatment decisions. Mattingly concluded with an overview of the components of the Water Toolbox and a projected timeline for tool completion.
Moore did a deeper dive into the cost of water and return on investment (ROI) tools focusing on the inputs and outputs a user can expect from the tools. While currently in Excel format, the final tool will be user-friendly, web-based, and downloadable. The ROI tool allows a facility to input information about their current operations and compare it with proposed changes. The tool will calculate information on projected water savings, OpEx savings, CapEx, and payback period for the proposed project. The presentation ended with a brief overview of the LIFTLink program. Also of note, the WE&RF and the Water Research Foundation are merging to create a single water research foundation in January 2018.

Generational Blind Spots: How to Recruit, Retain, and Engage Across All Generations

The Annual Meeting wrapped up on Friday with a three-hour workshop on recruiting, retaining, and engaging across all generations with Hannah Ubl, the Research Director at BridgeWorks LLC. This session focused on communication, work ethic, dress code, career progression, and how to create a functioning work “family” among Baby Boomers (1964-1964), Gen-Xers (1965-1979), Millennials (1980-1995), and Gen Zers, or Generation Edge (1996 to present). The session provided in-depth information about each generation. In discussing Baby Boomers, the message was clear – the boomers are competitive, optimistic, non-conformist, disciplined, and have a strong work ethic. Boomers are experts in face-to-face communication as they entered the workforce before there was internet and email.

Gen Xers feel like the “middle child” with only 60 million of them. They are resourceful, independent, skeptical, and entrepreneurial. They are known as the latchkey kids as this is the generation when both parents began to work, and the divorce rate more than doubled. Gen Xers are independent, have an unfiltered style of communication (blunt), and are unwilling to sacrifice family time to get ahead.

Millennials are known as the “me” generation. They are collaborative, globally connected, media-savvy, and environmentally-conscious. Millennials are actually real grownups now with responsibilities. They have a desire to make a real difference while bringing their whole selves to work seeking to integrate their work and personal lives.

Finally, the Gen Zers are growing up on a literal cultural edge. They are maturing with an edge – created by exposure to constant streams of violence and first hand news from social media. They are connected, diverse, resilient, and pragmatic. They will not pick up a phone, and expect constant digital connectivity that will follow them to the workplace.

Annual Meeting attendees really enjoyed this session as they shared their workplace stories about all the generations, and learned a lot from each other in this interactive session. To read more about the generations in the workplace, go to the Members-Only Section of the WWEMA website and view the archived presentation from BridgeWorks.

THANK YOU TO OUR SPONSORS
UPCOMING MEETINGS

45th Washington Forum
   April 17-19, 2018
   Gaylord National Resort & Convention Center
   National Harbor, MD (DC Area)

Finance & Contract Administration Council Meeting
   May 16-17, 2018
   Barnes and Thornburg Law Offices
   Indianapolis, IN

AWWA ACE
   June 11-14, 2018
   Mandalay Bay Resort and Convention Center
   Las Vegas, NV
   Booth #25081

Presidents Council Meeting
   September 2018
   Location and Date TBD

WEFTEC
   September 29 - October 3, 2018
   New Orleans Morial Convention Center
   New Orleans, LA
   Booth #1213

110th Annual Meeting
   November 7-9, 2018
   Eau Palm Beach Resort & Spa
   Manalapan (West Palm Beach), FL