

2016  
ANNUAL REPORT

LEADERS  
IN WATER FOR  
35 YEARS



**ASSOCIATION OF  
METROPOLITAN  
WATER AGENCIES**  
35th ANNIVERSARY

# MISSION

AMWA's primary objective is to be the unified and definitive voice for the nation's largest publicly owned drinking water systems on regulatory, legislative and security issues. To this end, the association works with Congress and federal agencies to ensure safe and cost-effective federal drinking water laws and regulations and to develop federal-local partnerships to protect water systems and consumers against acts of terrorism.

AMWA is also committed to the collection and exchange of management, scientific and technical information to support competitive utility operations, effective utility leadership, safe and secure water supplies and effective public communication on drinking water quality.

January 2017

Dear Colleagues,

Thirty-five years ago, the executives of 16 large metropolitan drinking water systems from around the nation recognized the need to join forces to address the issues and challenges that are unique to utilities of their size and settings. The Association of Metropolitan Water Agencies (AMWA) grew from that core group into a force of more than 180 of the nation's largest urban and suburban systems.

In the years since 1981, we've learned a lot about the power of working together to advance the interests of water customers. We've also learned that water systems don't exist in isolation. We are part of our communities, part of our regions and part of our nation. So the association provides resources, services and opportunities for water utilities to operate and excel on the local, regional, national and even international levels.

The local crisis in Flint, Michigan spilled over onto the national stage in 2016, and AMWA worked with members of Congress on legislation that promotes clean and safe water without undue burdens on consumers. And, after years of concerted effort by AMWA, Congress in 2016 appropriated federal funds for much-needed local infrastructure loans through the Water Infrastructure Finance and Innovation Act pilot program.

On the regulatory front, AMWA supported EPA's engagement with the drinking water community to better implement existing Lead and Copper Rule requirements and gave voice to local utilities on proposed regulatory changes.

By collaborating with water industry groups, EPA, the Department of Homeland Security, regional and state intelligence fusion centers and others, AMWA was able to serve as a resource for members on security and resilience.

While our first responsibility is to our customers, we cannot adequately serve their interests without reaching out into our communities, partnering in our regions, making our voices heard on issues of national importance and sharing the experience and expertise of water utilities around the globe.

I urge you to consider how you can be involved in AMWA in the coming year, expanding your horizons and taking on new levels of commitment. The entire water sector benefits when we work together.



Sincerely,

A handwritten signature in blue ink that reads "Scott Potter". The signature is fluid and cursive, written over a light blue background.

*Scott Potter  
2016 AMWA President  
Director, Nashville Metro Water Services*

# LEGISLATIVE ACHIEVEMENTS

Collaboration was an essential component of AMWA's 2016 strategy on Capitol Hill, as the water crisis in Flint, Michigan put drinking water policy under the microscope of federal lawmakers. As the voice of the nation's largest public drinking water systems, AMWA worked with members of Congress on both sides of the aisle to develop and enact legislation that promoted clean and safe water without new unfunded mandates on communities.

AMWA secured a key victory in December when Congress approved legislation that delivered the first funding appropriation for loans through the Water Infrastructure Finance and Innovation Act (WIFIA) pilot program. AMWA and other water sector associations spent years working with

lawmakers to establish WIFIA, and the inclusion of \$20 million for the program in a year-end spending bill puts EPA on track to begin offering WIFIA loans in 2017.

2016 also saw AMWA help shape and strengthen legislation enacted in direct response to concerns about lead in drinking water. On a bill to finance lead service line replacement efforts, AMWA encouraged eliminating proposed limits on the amount of funding available to help low-income homeowners replace lead service lines and specifying that no federal program assistance be spent on partial lead service line replacements. These suggestions were accepted in the five-year, \$300 million Get the Lead Out Act.




AMWA secured a key victory when Congress approved legislation that delivered the first funding appropriation for loans through the WIFIA program.

AMWA in 2016 also played strategic defense to protect existing policies and programs such as tax-exempt municipal bond interest, which could be at risk as part of a comprehensive tax policy overhaul. When a House committee released a “Better Way” tax reform blueprint that suggested taxing all interest income, AMWA warned that new municipal bond interest taxes would lead to billions of dollars of additional water infrastructure financing costs for communities nationwide.



ASSOCIATION OF  
METROPOLITAN  
WATER AGENCIES  
35th ANNIVERSARY



AMWA and its members remain at the leading edge of effective Lead and Copper Rule implementation and finding equitable long-term solutions for removing lead service lines.

# REGULATORY DEVELOPMENTS

Effective advocacy on policy or regulatory issues requires active engagement across all levels of government and with a diverse array of stakeholders. From the offices of large federal bureaucracies to small community meeting rooms, open and transparent discussions are the drivers for effective dialogues on complicated and often contentious issues. The past year provided a textbook case of the need for this type of broad engagement and the role AMWA plays in its facilitation.



In large part, lead in drinking water was the defining focus of EPA's regulatory agenda in 2016. At the federal level, EPA leadership issued several memoranda to engage the drinking water community in efforts to better implement existing Lead and Copper Rule (LCR) requirements while the agency continued to work on regulatory changes in the aftermath of the Flint, Michigan lead crisis. Those letters served to fully engage state primacy agencies and drinking water utilities in the renewed implementation efforts. In response, AMWA provided feedback to EPA, requesting necessary clarification on interpretations set forth in the letters and provided assurances that AMWA and its members would remain at the leading edge of effective LCR implementation and finding equitable long-term solutions for identifying and removing lead service lines. In addition, AMWA served as a clearinghouse for

lead information with the creation of its new Lead Resources webpage as well as through coordination with member utilities to identify and address issues arising from state primacy agency interactions.

Ultimately, the solution to solving lead problems lies in the local community, where the tough decisions regarding the best path forward for removing lead service lines need to be made. To assist in this local part of the solution, AMWA served on the steering committee of the Lead Service Line Replacement Collaborative, a diverse coalition of 23 national public health, water utility, environmental, labor, consumer, housing, and state and local governmental organizations, to develop an online toolkit designed to help communities across the U.S. accelerate removal of lead service lines. The Collaborative's efforts, including additional outreach to communities, will continue to ramp up in the coming year, with a focus on getting local communities working together to find the best solutions to solve their lead issues.

AMWA members also participated in outreach sessions that helped define EPA's priorities and approaches to addressing a wide range of drinking water issues, which the Agency articulated in its Drinking Water Action Plan published at the end of the year. From better stakeholder engagement to rethinking the process for setting health advisories, EPA's plan sets a renewed vision for transparency and engagement in which AMWA and its members will continue to be proactively engaged.

Whether at the national, state or local level, AMWA and its collective membership provide an extremely effective network for sharing information, taking action and achieving drinking water policy and regulatory outcomes that are effective and make sense for consumers.



ASSOCIATION OF  
METROPOLITAN  
WATER AGENCIES  
35th ANNIVERSARY

# SUSTAINABILITY SUCCESSES

AMWA's sustainability program continues to help member utilities address key resilience issues facing them now and in the future.

In 2016, AMWA advocated for financing for resilient and sustainable infrastructure and examined the topic of green bonds. A survey of members was initiated to learn their interests and concerns in the green bond market, which led to the development of a white paper on the topic. The paper provides an overview of the market and highlights case studies from several members that issued green bonds. With input from the association's Sustainability Committee, AMWA submitted comments to organizations developing green bond and climate bond standards, including Moody's Financial Services Green Bonds Assessment and the Climate Bonds Initiative (CBI) water climate bond standard. AMWA's work in developing comments and fostering a relationship with CBI personnel helped to ensure that the water criteria for the climate bond standard was consistent, applicable and achievable for water utilities.

AMWA advocated in the resilience area by submitting comment letters on many relevant federal proposals and policies. For example, in comments to the Federal Emergency Management Agency on its draft regulations to implement the Federal Flood Risk Management Standard (FFRMS), AMWA asked for clarity on FFRMS implementation. AMWA noted that a consistent, community-wide implementation approach to the FFRMS across federal agencies will help decision makers prioritize projects for funding to support community resilience.

At the 2016 Executive Management Conference, AMWA convened a brainstorming session to discuss key sustainability considerations for the future of water utilities and for member agencies in particular. Discussion themes included community and regional planning, economic viability and energy sustainability, among others. From the discussion, it became clear that many of these



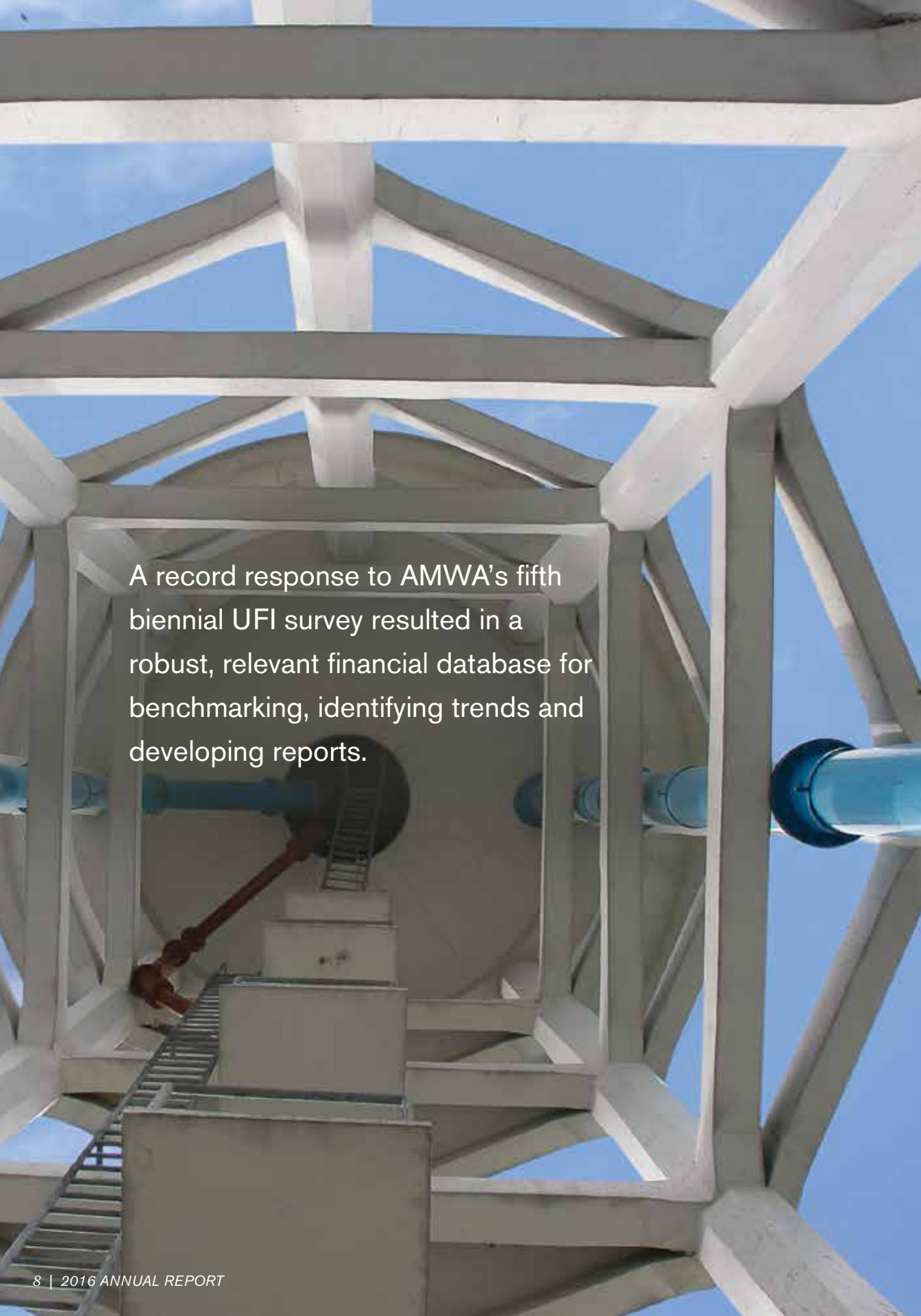
concerns are imminent. In 2017, AMWA will build on this discussion by engaging members through listening sessions, webinars and other avenues to better understand how utilities are thinking about the future. AMWA will mobilize the knowledge, innovation and best practices employed by member utilities across the association's network of members.





ASSOCIATION OF  
METROPOLITAN  
WATER AGENCIES  
35TH ANNIVERSARY

AMWA advocated with organizations developing green bond and climate bond standards, helping ensure that the water criteria for such standards was relevant and achievable for water utilities.



A record response to AMWA's fifth biennial UFI survey resulted in a robust, relevant financial database for benchmarking, identifying trends and developing reports.

# UTILITY MANAGEMENT ADVANCES

Throughout 2016, AMWA spearheaded and guided programs aimed at improving the management of drinking water utilities.

The year marked AMWA's fifth biennial Utility Financial Information (UFI) survey. The record response of 117 member utilities was a 15 percent increase in surveys submitted over the prior survey in 2014 – resulting in an extremely robust, relevant database for benchmarking, identifying trends and developing financial reports. In conjunction with the survey, AMWA developed an online financial dashboard with dynamic visualizations of the UFI data aimed to help users understand results more easily than viewing tabular information. The new database, data analyses and dashboard have been rebranded as INSIGHT and will be introduced in early 2017.

In February, the Effective Utility Management (EUM) Steering Group submitted its final report to AMWA, EPA and the other EUM Collaborating Organizations. The group explored how the operating context of water sector utilities had changed since EUM began in 2007 and recommended refinements to the EUM framework. A second group of industry leaders was then convened to revise the EUM Primer, the document widely used to promote adoption of the management framework. The Primer revisions, with particular focus on the document's measures section, is slated for release in January 2017.

To recognize the exceptional management and performance of AMWA members, the association honored 20 utilities with awards at its 2016 Executive Management Conference in Scottsdale, Arizona. Sustainable Water Utility Management Award winners were DC Water, Louisville Water Company, San Diego County Water Authority, San Diego Public Utilities and Western Virginia Water Authority. Earning the Platinum Award for Utility Excellence

were Beaver Water District, Fort Wayne City Utilities, Kansas City Board of Public Utilities, KC Water, City of Mesa Water Resources Department, Phoenix Water Services Department, City of Raleigh Public Utilities Department, San Antonio Water System, Suffolk County Water Authority and Tacoma Water. And, Gold Awards for Exceptional Utility Performance went to Central Arizona Project, Coachella Valley Water District, Montgomery County Environmental Services, Sewerage & Water Board of New Orleans and City of Richmond Department of Public Utilities.

AMWA's active involvement in the Water and Wastewater Leadership Center continued in 2016 as 17 of the 30 water professionals who took part in the program were from AMWA member utilities.

AMWA joined with local, regional and national organizations in the work of the Value of Water (VOW) Coalition to raise awareness about the importance of funding water infrastructure. The Coalition played a prominent role in national Infrastructure Week with its "Local Innovators Tour" of water systems across the country and conducted its second annual "Imagine a Day Without Water" advocacy day.



ASSOCIATION OF  
METROPOLITAN  
WATER AGENCIES  
35th ANNIVERSARY

# SECURITY AND RESILIENCE HEADWAY

Continuing support to members on security and resilience remained a priority for AMWA in 2016.

AMWA was involved in the development of the *National Infrastructure Advisory Council's Water Sector Resilience: Final Report and Recommendations*, released July 2016. AMWA CEO Diane VanDe Hei was the vice chair of the working group that developed a water sector study to inform much of the report. Several AMWA members either sat on the working group or were interviewed as subject matter experts. The final report is being used to guide federal policies to improve sector resilience.

Through newsletters and the AMWA website, the association delivered guidance and tools on physical security, cybersecurity and natural disaster resilience produced by EPA's Water Security Division and the Department of Homeland Security (DHS). At the 2016 Executive Management Conference, AMWA featured experts who discussed what CEOs should know about enterprise and industrial control system cyber risks and solutions.

Staff also maintained relationships with water industry groups, EPA, DHS, regional and state intelligence fusion centers, other sectors and private organizations to support collaborative partnerships.

AMWA continued its management of the Water Information Sharing and Analysis Center (WaterISAC), the water sector's primary and most comprehensive resource for physical and cyber threat information and preparedness. WaterISAC hosted monthly webcasts and disseminated hundreds of articles and documents containing physical and cyber threat alerts, mitigation resources and best practices.

Both AMWA and WaterISAC remained active on the Water Sector Coordinating Council, comprising utility representatives and industry staff who advise EPA and DHS on federal water sector security programs.





ASSOCIATION OF  
METROPOLITAN  
WATER AGENCIES  
35th ANNIVERSARY

AMWA led the development of water sector resilience recommendations and delivered to members guidance and tools produced by EPA and DHS on physical security, cybersecurity and natural disaster resilience.



AMWA partnered with the Canadian Water Network to develop a workshop of utility peers, scheduled for 2017, to share strategies for sensible decision making on environmental, community and economic challenges.

# INTERNATIONAL IMPETUS

Since AMWA established its International Committee in 2008, global interaction of water executives has been an important aspect of the association's programming.

Many issues impacting utilities are increasingly worldwide in nature, and AMWA's outreach to the international water community allows members to share with and learn from their peers from all corners of the world. Members can look beyond borders and across oceans for innovative ideas and original solutions to water system challenges.

In 2016, International Committee Chair John Sullivan of Boston Water and Sewer Commission and AMWA CEO Diane VanDe Hei served on the United Nations Educational, Scientific and Cultural Organization (UNESCO) International Hydrological Programme's Water and Human Settlements Advisory Committee. The international committee was organized to focus water sector expertise on water consumption issues in developing and developed countries and its activities will continue in 2017.

AMWA established a partnership in 2016 with the Canadian Water Network (CWN) to develop a workshop of utility peers to discuss and share strategies for sensible decision making in the context of environmental, community and economic challenges. CWN's Canadian Municipal Water Consortium Leadership Group, comprising senior executives of large Canadian municipal water agencies, has an affinity with AMWA's members because of their role as leaders and their focus on moving their organizations toward adaptive, resilient municipal water management approaches. The workshop will take place in May 2017, the day before CWN's flagship Blue Cities Conference in Toronto.

The association continues its support of W-SMART, an international experience-sharing forum for private and public metropolitan water and wastewater utilities that originated in the aftermath of 9/11. John Sullivan serves as Vice President – North America for the group, which promotes collaboration for upgrading utilities' capabilities to ensure sustainable water safety and security with regard to terrorism, and industrial and natural disasters.



ASSOCIATION OF  
METROPOLITAN  
WATER AGENCIES  
35th ANNIVERSARY

# LEADERSHIP MOMENTUM

AMWA's cadre of top water utility executives is an unparalleled source of industry leadership, and the association provides a wide range of occasions and opportunities for them to volunteer their expertise and sharpen their skills. The association amended its bylaws in 2016 to expand its Board of Directors and establish term limits for Board members to take greater advantage of its deep bench of water leaders.

AMWA committee chairs in 2016 included:

- Legislative Committee – Jeff Szabo, Suffolk County Water Authority
- Regulatory Committee – Carrie Lewis, Milwaukee Water Works
- Utility Management Committee – Linda McCrea, Tacoma Water, and John Spatz, DuPage Water Commission
- Security Committee – Dean Dickey, Prince William County Service Authority, and Kevin Gertig, Fort Collins Utilities
- Sustainability Committee – Jim Lochhead, Denver Water
- Policy Committee – John Carman, Fort Worth Water Department
- International Committee – John Sullivan, Boston Water and Sewer Commission

The winner of AMWA's 2016 President's Award, John Sullivan of the Boston Water and Sewer Commission, was recognized for his extraordinary contributions to the association and the drinking water industry. Long-time AMWA member Michael O. Vann of Birmingham Water Works was honored with the posthumous 2016 Donald R. Boyd Award for his lifetime of service to the drinking water field.

AMWA representatives to the Water Research Foundation Board of Trustees were Scott Potter of Nashville Metro Water Services, Steve Schneider of St. Paul Regional Water Services and John Sullivan of Boston Water and Sewer Commission.

Michael Wallis of East Bay Municipal Utility District represented AMWA on the AWWA Water Utility Council.

John Sullivan chaired the WaterISAC Board of Managers, which also included AMWA members Sue Schneider of Spartanburg Water and Kevin Gertig of Fort Collins Utilities. John Sullivan and Dean Dickey of Prince William County Service Authority were AMWA representatives on the Water Sector Coordinating Council. Sue Schneider and Mike Hooker of Onondaga County Water Authority also served on the coordinating council.

AMWA member Carrie Lewis of Milwaukee Water Works served as a member of EPA's National Drinking Water Advisory Committee (NDWAC) and in October was appointed to chair the committee. She also served – with Robert Steidel of the City of Richmond Public Utilities and David Lipsky of the New York City Department of Environmental Protection – as AMWA representatives to the Lead Service Line Replacement Collaborative. Andrea Song of Denver Water served as AMWA's representative on the Partnership for Safe Water Steering Committee.

The Utility Leadership Group tasked with updating the Effective Utility Management (EUM) Primer included John Sullivan, Kathryn Sorensen of Phoenix Water, Barry Gullet of Charlotte Water and Frank Roth of Albuquerque Bernalillo County Water Utility Authority.

Scott Potter of Nashville Metro Water Services and Tiruasu Asefa of Tampa Bay Water presented case studies about how their agencies use information accessible via the National Oceanic and Atmospheric Administration's Water Resources Dashboard during NOAA webinars featuring these resources.

At AMWA's 2016 Executive Management Conference in Scottsdale, Arizona, members shared their insights and experience with



colleagues on a broad range of water utility topics of local, regional and national significance:

- *Restoring Customer Confidence in Drinking Water*: Cathy Bailey of Greater Cincinnati Water Works and Timothy Thomure of Tucson Water;
- *Community Engagement to Build Understanding and Support*: Maureen Stapleton of San Diego County Water Authority, Rosemary Menard of Santa Cruz Municipal Utilities and Suzanne Grendahl of Scottsdale Water;
- *One Water LA – A Collaborative Approach to Regional Water Challenges*: Martin Adams of Los Angeles Department of Water and Power;
- *Automating the Grievance Process – Minimizing Demands on HR and Legal Resources*: Mark Sanchez of Albuquerque Bernalillo County Water Utility Authority;
- *Foraging for Sustenance in the Search for Appropriate Rate Structures*: Angela Licata of New York City Department of Environmental Protection;
- *Hydrating Arizona – Smart Water Management in the Valley of the Sun*: Kathryn Sorensen of Phoenix Water Services, Brian Biesemeyer of Scottsdale Water and Brian Draper of Mesa Water Resources Department;
- *Building the Next Generation Water Workforce*: Gary Brown of Detroit Water and Sewerage Department and Cedric Grant of Sewerage and Water Board of New Orleans;
- *Tapping Talent for the Utility Industry*: Jim Flynn of South Central Connecticut Regional Water Authority;
- *Cloud, Big Data and Analytics – Driving Business Value*: Chris Dermody of Denver Water, Cecil McMaster of New York City Department of Environmental Protection and Tom Miller of Metropolitan Water District of Southern California;
- *Asset Management 2.0 – Overhauling Legacy Systems*: Halla Razak of San Diego Public Utilities and Joel Thompson of Fairfax Water.



ASSOCIATION OF  
METROPOLITAN  
WATER AGENCIES  
35th ANNIVERSARY

The association amended its bylaws in 2016 to expand its Board of Directors and take greater advantage of its deep bench of water leaders.

# AMWA 2016 OFFICERS AND BOARD OF DIRECTORS



## PRESIDENT

Scott Potter  
*Director*  
*Nashville Metro Water Services*



## TREASURER

Michael Wallis  
*Director of Operations and Maintenance*  
*East Bay Municipal Utility District*



## VICE PRESIDENT

Mac Underwood  
*General Manager*  
*Birmingham Water Works*



## SECRETARY

Steve Schneider  
*General Manager*  
*Saint Paul Regional Water Services*



Irene Caminer  
*Director of Legal Services*  
*Chicago Department of*  
*Water Management*



Carrie Lewis  
*Superintendent*  
*Milwaukee Water Works*



Sue McCormick  
*Chief Executive Officer*  
*Great Lakes Water*  
*Authority*



John Carman  
*Director*  
*Fort Worth Water*  
*Department*



Robert Hunter  
*General Manager*  
*Municipal Water District*  
*of Orange County*



Charles M. Murray  
*General Manager*  
*Fairfax Water*



Jun Chang  
*Deputy Director*  
*Houston Public Utilities*  
*Division*



Angela Licata  
*Deputy Commissioner*  
*New York City Department of*  
*Environmental Protection*



William Stowe  
*Chief Executive Officer*  
*and General Manager*  
*Des Moines Water Works*



John Entsminger  
*General Manager*  
*Las Vegas Valley Water*  
*District*



Jim Lochhead  
*Manager and Chief*  
*Executive Officer*  
*Denver Water*



John P. Sullivan Jr.  
*Chief Engineer*  
*Boston Water & Sewer*  
*Commission*



Julia Hunt  
*Assistant Regional*  
*Manager/Operations*  
*Trinity River Authority*



Ron Lovan  
*President and Chief*  
*Executive Officer*  
*Northern Kentucky Water*  
*District*



Douglas Yoder  
*Deputy Director*  
*Miami-Dade Water*  
*& Sewer Department*

## AMWA STAFF

Diane VanDe Hei  
*Chief Executive Officer*

Michael Arceneaux  
*Deputy Executive Director*  
*WaterISAC Managing Director*

Scott Biernat  
*Director of Regulatory Affairs and*  
*Scientific Program Development*

Erica Brown  
*Director of Sustainability and*  
*Climate Change Programs*

Dan Hartnett  
*Director of Legislative Affairs*

Carolyn Peterson  
*Director of Communications and*  
*Public Affairs*

Eugenia Cadena  
*Administration and Conference*  
*Coordinator*

Tim DeVenney  
*Administrative Assistant*

Robert Saner  
*Counsel*



ASSOCIATION OF  
METROPOLITAN  
WATER AGENCIES  
35th ANNIVERSARY

An aerial photograph of a city, likely Washington D.C., showing a river winding through the urban landscape. A large stadium is visible in the center. The image is overlaid with a semi-transparent blue map of the United States, with the city's location highlighted in a darker blue. The text is centered at the bottom of the image.

ASSOCIATION OF METROPOLITAN WATER AGENCIES

1620 I Street, NW, Suite 500  
Washington, DC 20006  
(202) 331-2820

[www.amwa.net](http://www.amwa.net)