Mayor David Berger,  
City of Lima OH  
Co-Chair, Mayors Water Council

Just a few days ago, we had an intense cloud burst in the center of Lima. We had 4 inches of rain in 45 minutes. The result was localized flooding, safety services called in for rescues and damage to commercial and residential properties.

Of course, Lima’s experience does not begin to compare with the 30+ inches of rain in North and South Carolina from Hurricane Florence.

But these occurrences underscore the urgent needs of communities to deal with the limits of local infrastructure, systems and resources in confronting Mother Nature’s onslaughts, large and small.

The Mayors Water Council is a vehicle for assuring that Mayors have access to the expertise of lived experience and the expertise of engineers and scientists. The Council also provides a forum in which we as Mayors can engage with state and national legislators and regulators whose

Continued on next page
Mayor Gary Soiseth, City of Turlock (CA) was elected by the Mayors to the Conference of Mayors Advisory Board at the 86th Annual Meeting in Boston in 2018 and has served the USCM as a member of 2 standing committees and the Mayors Water Council. Soiseth, a Turlock native, local farmer, and the 22nd Mayor of Turlock was first elected to serve a four-year term on November 4, 2014. The USCM Advisory Board is elected, and it provides direction, guidance and advice to the USCM on policy and best practices.

Mayor Soiseth has been sharing news in the Water Council about progress on the North Valley Regional Recycled Water Program Partnership - a major regional water supply project involving several cities, counties and the U.S. Bureau of Reclamation. The $98 million project is designed to help communities and agriculture to continue to have access to water supply in a drought-prone environment.

Mayor John Cook, City of Tigard (OR) has just released a newsletter (www.oregonmayors.org) on city priorities in Oregon. The priorities are stated by the Oregon Mayors Association, where Cook serves as Member President. Cook, a member of the Mayors Water Council, has addressed the Council on the fine art of partnering with multiple jurisdictions on a major regional water supply project. Cook was first elected mayor of Tigard in 2012. He has been recognized for his efforts on ballot measures approved by Tigard voters regarding light rail and urban renewal; finishing the Lake Oswego Tigard Water Partnership construction to secure Tigard’s 35-year water supply, unincorporated island annexations and Downtown Tigard urban renewal. During his tenure as mayor Cook attracted more than $5 million in federal, state and regional funding for projects designed to bring jobs and improved economic conditions to the city. Mayor Cook has announced his retirement from office when his term ends on December 31, 2018.
Left l. to r.: David Hogg, Parkland (FL); Cameron Kasky, Parkland (FL); Mayor Jill Techel, City of Napa (CA) at the Boston Public Library in June 2018 in association with the Conference of Mayors Annual Meeting. Survivors of the school shooting, Mr. Hogg and Mr. Kasky addressed mayors on youth engagement and gun violence at the Boston meeting.

**Local Government is Spending on Public Water and Sewer/Stormwater Every:**
- **Day** $338 Million
- **Week** $2.37 Billion
- **Month** $10.3 Billion

**Local Government Investment in Water and Sewer Systems, 1993-2016**

- Local Government Investment in Public Water and Sewer Hits a Record $123.7 Billion in 2016
Flint Update

Mayor Karen Weaver Addresses the Mayors Water Council in Boston

“Halfway done and here we go again!”

“Flint is a city where trust has been broken at the local, state and federal level”.

Staff Report

Weaver addressed a rapt audience of mayors from across the nation as she described Flint’s recovery efforts from lead contamination in the City’s water supply, (at the Conference of Mayors 86th Annual meeting in Boston, June 8, 2018). Mayor Weaver stated that 7,000 of the 18,000 lead service lines have been replaced, and the 3-year—6,000 replacements/year program is succeeding. The replacement program was made possible by financial support awards from the state of Michigan ($97 million) and from Congress ($100 million). This achievement provided the breathing room for the city to focus on economic development, not just lead line replacement because continued progress will rely on local revenues and economic development in the long run. Lead in household drinking water remains a high priority for Flint, and service line replacements continue to gain ground. The mayor said that the service lines are important but there is a growing list of related issues emerging that city broadens the scope and deepens the complexity of the problem.

Amid these positive signs of progress, in April, the Governor put an abrupt halt to providing bottled water to the citizens. Prior to the halt the Governor and his staff came to Flint and held a press conference stating that bottled water would be provided until the lead lines are replaced. The curtailment of state support triggered local resentment and a renewed lack of trust in government. Weaver stated, “Halfway done and here we go again!” The mayor appealed to the state to reduce rather than eliminate the bottled water because there are still vulnerable households. The state agreed to restart open public meetings over the summer months.

Emerging Issues

Mayor Weaver stated that the city filed an intent to sue the State, adding that the issues were not focused solely on bottled water. Subsequently all communications with the Governor’s office was cut off. Weaver said that immediate attention remains on replacing service lines and restoring water service. New information shows some schools are testing high for lead and the city is concerned about the plumbing. Weaver also commented on the immediate need to continue to monitor and administer proper health care for the children showing high blood lead levels.

A suite of impacts are now in focus

Mayor Weaver talked about secondary impacts in addition to public health concerns. In homes where water was testing high for lead, home plumbing fixtures were also found damaged. Building plumbing and hot water heaters were damaged. Local manufacturing was impacted: GM said that their manufactured parts were rusting. The city faces civil liability because of what happened. Public as well as private assets were damaged. City fire trucks and hydrants were rust damaged.
Another concern the city is dealing with is EPA pressuring the city to sign a consent decree to improve the water distribution system and pay fines for noncompliance, the mayor stated. Weaver asked the EPA to identify specific points of non-compliance in writing, but the EPA had not responded at the time. EPA said the city had to change water sources and hire adequate staff. The city complied yet, then mayor stated EPA wants to fine the city for noncompliance.

The city had a loss of population and loss of revenues as a consequence of the increased lead levels in the city drinking water and households. Water affordability was a problem before the water crisis, rates in Flint were 8 times higher than the national average. Regulators are pressuring the city to sign a consent order but the city is resisting because no one in the city trusts EPA, said the mayor. The city has turned, once again, to the Congressional delegation for help. Weaver said “In order to promote economic development people and companies need to know the water is safe. For the first time in 30 years a new factory was built in Flint with a $31 million investment to manufacture seats for GM. “

Replacement dam near San Francisco built to better withstand quakes, giving key reservoir resiliency
By Clint Robinson

The same Calaveras dam holding back a reservoir that helps supply the San Francisco region with reliable water also was a source of angst, regulators declared in 2001 in ruling the impoundment atop an active fault line vulnerable to the next big quake. Any failure could send a devastating, likely deadly torrent of water racing through densely populated areas.

Given all of that, the reservoir was ordered lowered to less than 40 percent of its capacity. That soon will finally change with the arrival of a replacement dam – one more seismically sound.

“It is only a matter of time until we experience another major earthquake, and our critical infrastructure needs to be ready,” San Francisco Mayor London Breed said.

Aided by construction management help from Black & Veatch, the San Francisco Public Utilities Commission has announced completion of a new 220-foot-tall dam that will replace the nearly century-old one. The new embankment will begin impounding water this winter, returning the 4-mile-long reservoir to full volume of 31 billion gallons for the first time in nearly two decades.

At a cost of $823 million, the new dam is just 1,000 feet downstream from the existing embankment it replaces and designed to withstand a 7.2-magnitude earthquake, ensuing clean, safe water to 2.7 million Bay Area customers.

“This new dam, without question, was a massive undertaking, and now San Francisco-area water consumers will benefit from water supply reliability for decades to come,” said Chris Mueller, Black & Veatch’s project director.

Robinson is a registered engineer and Black & Veatch’s associate vice president of government affairs
Perspective

Cost-Effective Infrastructure Investments: How Open Competition Can Improve Utility Sustainability and Public Safety

By: Bruce Hollands, Executive Director of the Uni-Bell PVC Pipe Association

Waiting for Congress to act with the hope that grants will be available to renew the nation’s 54,000 regulated drinking water systems, and 16,000 regulated sewer systems is risky. While increased federal aid to cities is desirable, it is not necessary to begin to improve the financial sustainability of these public utilities. Currently, underground infrastructure consists of three million plus miles of water distribution and sewer collection pipes in America. A considerable portion of pipes are aging, at or beyond their design life, and are increasingly subject to performance impairment and/or failure. Repair and replacement along with new construction is a critical (growing and recurring) cost driver. Closed procurement practices stifle competition among pipe materials and rote reliance on preferential pipe materials has the effect of raising the price point at a time when scarce public resources are available. Competitive bidding among different pipe materials has been demonstrated to yield cost-savings and meet service and safety expectations.

Water and Sewer Infrastructure Investment Needs

Communities struggle to raise the funds needed to provide continuous, high-quality service to the public. Utility rates have increased 5.7 per cent annually over the past five years, outpacing average annual inflation of 1.9 per cent. Rates are expected to continue falling short of reinvestment needs. Federal construction grants reached a peak of $9 billion in 1976, when local government invested an additional $11 plus billion. Today Congress grants roughly $2 billion a year to State Revolving Loan Programs which is subsequently distributed to local government in the form of low interest loans, and this low level of support forces cities to turn to tax exempt bonds for construction. In 2015 local government invested $118 billion in water and sewer. Despite ever-increasing public spending on water and sewer infrastructure the list of public safety concerns continues to grow (e.g., climate change, algal blooms, storm water control). Cost-savings, therefore, are critical to achieve sustainable systems and services.

Efficiencies are Possible Now with Competitive Pipe Investment

There may never be enough money available to upgrade the entire water and sewer inventory, but local government continues to invest annually using rate revenues as well as long-term borrowing. Pipe investments represent 60 percent of the total investment needed to upgrade our underground infrastructure, it is here that open procurement practices can be focused to achieve cost-savings. Competition is a critical prerequisite to achieve improved cost structures and system performance. Piping materials which meet current standards and technical specifications should be included in water and sewer projects. Alternative pipe materials have been developed to improve performance and extend system design life. Savings accrue from less replacement and repair of more resilient pipe materials. The toll in pipe breakage related to iron pipes in corrosive soils (which affect 75 percent of utilities) is driving consideration of alternative pipe materials, but, as stated in a USCM 2013 report, “Closed procurement processes lead to unnecessary costs, and may diminish the public’s confidence in a local government’s ability to provide cost-effective services.”
Questioning Closed Procurement Policies

Outdated procurement specifications effectively exclude safer, more durable and more affordable materials like polyvinyl chloride (PVC) pipes from participating in municipal bids. A study by the Water Research Foundation quantified the life expectancy of PVC pipe at more than 110 years—making it ideal for long-term asset management. Utah State University’s Buried Structures Laboratory reports that PVC pipe has the lowest break rate of all pipe materials and a service life in excess of 100 years. In Europe, dig ups and testing after 70 years of use confirm that PVC pipe will last in excess of 170 years. In US Mayor former USCM Water Council Co-Chair, Pleasanton (CA) Mayor Jennifer Hosterman wrote that her community not only found PVC pipe more durable but also 70 percent less expensive than ductile iron pipe.

Livermore (CA) Mayor John Marchand, a former drinking water chemist, not only praises the performance benefits of PVC pipe, but also lauds its ability to better protect water quality compared to other materials. Dr. Lok Pokhrel, Toxicologist at Temple University in Philadelphia, PA says that the best way to avoid Legionella outbreaks is for utilities to switch to PVC pipes, which don’t release iron (which provides a food source for pathogens) when exposed to corrosive water. It makes little sense for cities to deny their residents the health benefits open bidding can deliver. And competition drives down costs. A recent report by Massachusetts-based BCC Research compared the cost of pipe replacement in cities with open bidding processes versus cities with closed competition. The study found that communities with open competition enjoyed lower pipe cost, on average, for water main installation or replacement projects, reaching average savings of 27% for 8-inch pipe and 34% for 12-inch pipe, or up to $114,000 per mile of pipe, compared with municipalities with closed competition. Significantly, the researchers found that competitive bidding lowers the cost for ductile iron pipe by up to 30 percent.

Sixty-six percent of water supply pipes in the U.S. are 8-inches or smaller. Nationally, using PVC instead of ductile iron pipe in this size range could save $21 billion in pumping costs over 100 years. If PVC were used instead of HDPE pipe, $37 billion could be saved.

Based on all the available evidence, PVC pipe provides affordability as well as environmental and public health benefits for use in a variety of underground infrastructure applications, including life cycle cost advantages and the opportunity to substantially reduce GHGs compared to other materials, enabling communities to more effectively meet their sustainable infrastructure goals.

Bruce Hollands, Executive Director, Uni-Bell PVC Pipe Association

The Uni-Bell PVC Pipe Association, a non-profit organization that serves the engineering, regulatory, public health and standardization communities.
EPA Seeks Public Comment on Blending and Peak Weather Flows

In an August 2018 Federal Register Notice the Agency stated that it is considering changes to blending, bypass and bacteria mixing zones policy that has been struck down by one circuit court (8th). Cities with NPDES permits that practice blending have a chance to reverse a policy that requires permittees to treat the bypass flow to secondary treatment levels before blending in with other treated waters before discharge. If you plan to comment please copy jsheaghan@usmayors.org and/or randerson@usmayors.org. The USCM plans to submit comments by the due date October 31, 2018.

THE QUESTIONS FROM EPA


Public Listening Session; Stakeholder Input on Peak Flows Management

AGENCY: Environmental Protection Agency (EPA).


III. Areas of Feedback Requested for Public Listening Sessions

Interested members of the public who plan to provide oral or written testimony at the listening sessions, or to submit written material to EPA separately as detailed in the instructions provided in the ADDRESSES section of this notice, are welcome to provide their input on any issue related to the topic of peak flow management at POTW treatment plants with separate sanitary sewer systems. But EPA particularly welcomes feedback from the public on the following specific questions.

• What strategies have you found to be successful in reducing peak flow volumes at the POTW treatment plant?
• What permitting or other regulatory approaches are you aware of that in your opinion provide a good basis for any rulemaking in this area?
• What treatment technologies have POTWs with sanitary sewer systems used successfully to manage peak excess flows during wet weather?
  • How effective are these technologies at meeting effluent limitations?
  • What are examples of technologies addressing other pollutants not typically subject to discharge requirements in NPDES permits (e.g., pathogens)?
  • Related to these questions, do you have supporting treatment efficacy data that you would be willing to share with EPA for this rulemaking?
• What are your specific suggestions regarding conditions that could be included in NPDES permits to allow diversions of some peak flows around biological treatment units to protect the treatment plant? Considerations could include:
  —What information might the NPDES permitting authority need in order to determine whether such diversions are necessary to protect the treatment plant?
  —Should the number of times such diversions are permitted to occur be limited or reported?
  —Are there any requirements that should be considered for ensuring that the treatment plant is operated and maintained in an effective manner to minimize the number of peak flow diversions that occur?
  —What requirements would be appropriate for ensuring that maintenance of the collection system to minimize the introduction of stormwater into the sanitary system through inflow and infiltration is occurring?
  —What monitoring and reporting requirements would be important to demonstrate that applicable effluent limits are still being met?
  —How may the permit ensure that public and ecological health is protected?
Lead and Copper Rule (LCR): The LCR established action levels of 0.015 mg/L (15 ppb) for lead and 1.3 mg/L (ppm) for copper, based on the 90th percentile sample level. The action level for copper is set at the health-based maximum contaminant level goal for copper. The action level for lead is based upon EPA’s evaluation of available data on corrosion control’s ability to reduce lead levels at the tap. Corrosion control treatment (CCT) typically involves the addition of chemicals such as orthophosphate, or chemical adjustment of drinking water pH, to reduce the corrosivity of drinking water and thus the level of leaching of lead and copper from plumbing materials. The LCR is subject to periodic review as a primary drinking water standard. The new rule may require local government to remove lead service lines and comply with stricter alert level and greater levels of risk communication with customers. EPA planned to propose revisions in 2017 but missed that milestone.

PFAS: Acronym for Perfluoroalkyl substance (PFAS) are a group of manmade chemicals used to manufacture products around the globe including the USA and imports from foreign countries. These chemicals are persistent in the environment and in the human body, and there is evidence that it may cause harm. US manufacturers have agreed to a Stewardship Program (voluntary) in which 8 major manufacturers in the US agreed to eliminate the use of PFOA and related chemicals in their products and their emissions. EPA held a national summit in May 2018, started visiting impacted communities over the Summer of 2018, and is slated to develop a management plan in the Fall of 2018.

Risk Management Program: Obama Administration rulemaking to implement Section 778(r) of the 7556 Clean Air Act amendments. It requires facilities using hazardous substances to develop risk management plans, that must be revised every 5 years. The rule was criticized by the USCM because it would impose significant new costs on local government without a clear understanding of the benefits. Then Administrator Scott Pruitt signed a reconsideration rule proposal in May 2018, but an August circuit court ruling requires EPA to reinstate the Obama era rule.

Waters of the US (WOTUS): Also called the Clean Water Rule, it designates the authorities of the EPA and the US Army Corps of Engineers (USACE) and their ability to set and approve state certification programs, NPDES permits, spill prevention and planning programs. In February 2017 President Trump signed an Executive Order to review and revise the rule. Meanwhile, several pending court cases yielded at least one decision to reinstate the WOTUS rule. The Administration is anticipated to appeal that decision.

Blending: Wastewater operators practice blending when, to protect the treatment works secondary treatment with biological treatment from storm events, they purposely by-pass storm flows to retention areas and later mix the by-passed water in with effluent that has secondary treatment levels. Additionally, in a
related move, EPA restricted the use of bacteria mixing zones in favor of compliance at the end of pipe discharge. A court decision in the 8th circuit vacated the rule because the court determined the EPA prohibitions exceeded their authority by not establishing a formal rule in compliance with the Administrative Procedures Act. EPA has initiated a new rulemaking that deals with peak weather flows. EPA made a request for public comment by October 31, 2018 to provide EPA with recommendations.

**Guidance to Determine Community Financial Capability (Affordability) under Revision:** The EPA adopted Guidance in 1997 that established the protocol for assessing whether or not communities can afford long term control plans to manage combined and/or sanitary sewers from overflows. The USCM and many other organizations representing local government have argued over the regressive nature of the Guidance and how it imposes a substantial and widespread burden on moderate and low income households. Congress directed EPA to reconsider how the Agency uses median household income as the metric for affordability. A Congressionally mandated study by the National Academy of Public Administrators made nearly two dozen recommendations to change the Guidance. EPA has established a work plan to consider the changes, and they are engaging with stakeholders for advice. This effort has been initiated and will be conducted over the next year or more.

**Perchlorate:** Perchlorate is of concern because of infant and fetal exposure may cause nervous system impacts. EPA is evaluating environmental levels of perchlorate, treatment methods and technology availability, and the cost/benefit of potential standards. The Science Advisory Board (SAB) has recommended that EPA apply a biologically based dose response model to determine an maximum contaminant level guideline.

L. to R. Mayor Jill Techel, City of Napa (CA), Mayor Karen Weaver, City of Flint (MI), Mayor Jon Mitchell, Mayor of New Bedford (MA), Mayor David Berger, City of Lima (OH). Mayors discussing water and Energy issues at the 86th Annual Meeting of the USCM in Boston June 2018.
**Water/Sewer Legislation**

**Integrated Planning Legislation**

USCM policy supports Integrated Planning (IP), a permit based approach to achieve national clean water goals with high local cost by sequencing investments with consideration of community affordability. Bills in the House and Senate. The Senate adopted a bipartisan IP bill that was inserted into the Water Resources Development Act (WRDA), an every 2-years reauthorization of the US Army Corps of Engineers (USACE) work plan and budget authorization policy. The House WRDA version does not contain an IP provision. Pre-conferencing of the Senate IP provisions with the House failed to reach agreement and the IP provisions were jettisoned. House IP sponsors are considering moving the policy as a stand-alone bill on infrastructure after the mid-term elections.

**Water Resources Development Act (WRDA) (Reauthorization Legislation)**

**Drinking Water State Revolving Fund (DWSRF) Capital Grant to States**

Reauthors the DWSRF for three years:
- $1.174 billion in 2019
- $1.3 billion in 2020,
- $1.95 billion in 2021

**WIFIA Reauthorization:**

Reauthors WIFIA at $50 million for 2020 and 2021

**Workforce Development**

A $1 million competitive grant program in 2019 and 2020 to develop innovative workforce development and increase public awareness of utilities

**Schools, Children and Lead**

- $25 million authorized for each year 2019-2021 for a Voluntary School and Child Care Program Lead Testing Grant Program for technical assistance to identify the source of lead contamination in schools
- $5 million authorized for each year 2019-2021 for a School Drinking Water Fountain Replacement for fountains installed before 1988
Mayors Water Council

A Task Force of The U.S. Conference of Mayors

The Mayors Water Council (MWC) provides a forum for discussions of issues impacting how cities provide safe, adequate and affordable water and wastewater services and infrastructure in America’s Principal Cities in the 21st Century. It is open to all Mayors, and functions as a USCM Task Force. The MWC focuses on water resources issues, including: watershed management; water supply planning; water infrastructure financing; rehabilitation of surface and sub-surface water infrastructure; water conservation; wetlands construction and education programs; water system program management and asset management.

The MWC will continue to develop nonpartisan local government positions on Federal legislation, regulations and policy. The MWC acts through the USCM Environment Committee, and other Committees as appropriate, to propose and adopt resolutions on water related matters that benefits the nation’s cities.
MAYORS WATER COUNCIL

Jill Techel, Mayor of Napa, CA
David Berger, Mayor of Lima, OH

John Marchand
Mayor of Livermore, CA

Jill Techel (Co-chair)
Mayor of Napa, CA

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