

Testimony of Joe Gysel, President of EPCOR Water USA, Inc. and  
President of the National Association of Water Companies (NAWC)

“The Federal Role in Keeping Water and Wastewater Infrastructure  
Affordable”

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Good morning, Chairman Inhofe, Ranking Member Boxer and Members of the Committee. I am Joe Gysel, President of EPCOR Water USA, Inc. and the current President of the National Association of Water Companies – the association that represents the regulated private water service industry, as well as professional water management companies. I am pleased to join you today on behalf of NAWC to talk about water infrastructure and the actions the federal government can take to unleash innovative and sustainable solutions to meet this nation’s water infrastructure needs. NAWC believes that by embracing the powerful combination of public service and private enterprise - we can improve water infrastructure in communities across the country. The NAWC applauds this Committee for bringing water infrastructure issues to the forefront and for providing us with the opportunity to discuss the transformational solutions that the private water industry can bring to the table.

NAWC members are located throughout the nation and range in size from large companies that own, operate or partner with hundreds of systems in multiple states to individual utilities serving a few hundred customers. Through NAWC’s various innovative business models, private water and wastewater professionals serve more than 73 million Americans, nearly a quarter of our country’s population.

EPCOR Water USA is an Arizona-based water and wastewater utility providing service to over 350,000 people in Arizona and New Mexico across 22 communities and seven counties, with more than 125 years of history in the business and care of water resources and systems.

## **I. Private Water Companies**

Private water systems have existed in the United States for well over 100 years. In fact, NAWC’s oldest member utility, York Water in Pennsylvania, is celebrating its 200<sup>th</sup> anniversary this year. The private water utility sector is highly regulated both by the state Public Utility Commissions (PUCs) which set the water rates that may be charged, and by the EPA for water quality. Private water companies consistently uphold the Clean Water Act and Safe Drinking Water Act standards to ensure quality drinking water and/or wastewater services for the communities they serve.

In fact, NAWC members have the best compliance track record in the industry. A 2011 survey by *American Water Intelligence* of EPA Safe Drinking Water Act violations for the previous five years found over 2,900 sites in violation among government-owned systems—only 14 violations were found among regulated private utilities. Given the private industry’s expertise and exemplary compliance record, NAWC members are often asked by state regulators to revitalize non-compliant public systems.

Our members meet all regulatory requirements and are 100% in compliance on vulnerability assessments and emergency response plans as required by law. They go beyond these federal mandates by advancing preparedness and resiliency measures, voluntarily investing heavily in extreme contingency measures and conducting frequent updated bio-terrorism assessments; develop business continuity plans; and generate successful, innovative and forward-thinking resiliency measures so that the communities they serve are protected and have access to the safest drinking water in the face of extreme weather events or terrorism.

The private water utility sector focuses on long-term planning by making the appropriate and necessary investment for our nation's communities. Such investments and strategies are required by Public Utility Commissions in the ratemaking process throughout the United States. As a result, private water companies are generally more fiscally responsible and consistently perform with measurable efficiency gains over municipally owned utilities.

Investor-owned water utilities operate on a larger scale and serve multiple communities, thus they have the ability to leverage economies of scale unavailable to public systems and can competitively bid operational and capital projects. Investor-owned companies maintain highly specialized staffs of scientific experts and engineers – across multiple water systems in a variety of geographic settings. This gives the private sector an edge over most public systems, and is thus well positioned and prepared to play a substantial role in meeting our nation's critical infrastructure needs.

## **II. Water Infrastructure Today**

Our water infrastructure systems are the backbone upon which communities survive and thrive. Water service is a critical part of the physical platform of the U.S. economy. Not a single business in any community can survive, nor be established, without a sustainable water supply. Communities must have reliable and resilient water infrastructure systems to attract and retain industry, business, and qualified workers. Simply put, capital investment in water infrastructure means job creation across the country. The Associated General Contractors and the U.S. Conference of Mayors have stated that \$1 billion in water infrastructure investment will support 28,500 jobs. Clearly, water plays an essential role in any thriving community and our nation's economy.

Unfortunately, aging and deteriorating public water systems threaten economic vitality and public health, and communities nationwide are faced with massive fiscal challenges to replace critical water and wastewater infrastructure and effectively manage their systems, as was evidenced in Flint, Michigan. On average there are 650 water main breaks every day across the country and two trillion gallons of treated water is lost every year due to leaking pipes at an estimated cost of \$2.6 billion. The estimates for maintaining, replacing, upgrading and operating the nation's water infrastructure are staggering. The U.S. EPA and the Government Accountability Office (GAO) estimate that the current water infrastructure funding gap to be as high as \$1 trillion. The American Society of Civil Engineers gives U.S. water infrastructure a D grade. The nation clearly faces a significant challenge in replacing aging infrastructure. Water related services require miles of complex underground systems and extensive treatment plants. The complex nature of the water industry makes it twice as capital-intensive as electricity and three times as capital-intensive as natural gas. In this context, the importance of bringing in private capital cannot be underestimated.

EPCOR Water continues to proactively replace aging and failing water and wastewater infrastructure across its service territory. Our long-term capital investment plan includes over \$500 million dollars of investment in the next 10 years. This includes replacing drinking water wells that were originally placed into service before WWII and as far back as the Depression era. We believe that this level of investment is vital to continue to provide safe and reliable water and wastewater services to our customers.

Water systems are the most expensive asset a municipality must maintain. Many municipally owned utilities today cannot afford to improve their systems, or issue bonds to finance improvements. They have a limited taxpayer and revenue base which must service all the needs of the community, not just water and wastewater services. The expense associated with maintaining water systems is making cities not in financial difficulty consider choosing to partner with the private sector, or to sell some or all of their water systems – Miami-Dade County is one example.

Addressing these dramatic needs will require focused, dedicated and robust participation by both public and private sectors. Thus, it is important that the federal government look to all sources of capital – both public and private – to invest in water infrastructure. Federal funds alone will not bridge the growing investment gap. As Congress examines future funding for drinking water and wastewater programs, NAWC recommends that all policies be examined to ensure that the private water industry is not disadvantaged and in fact, be incentivized to add additional resources to this effort.

### **Challenges Bring Opportunities**

The challenges we face to protect and maintain our water and wastewater systems and make the investments needed for continuing growth and new public health and environmental standards are vast, but they are not insurmountable. As the Johnson Foundation, in collaboration with American Rivers and Ceres, says in the report, “*Financing Sustainable Water Infrastructure*”, released on January 26, 2012, as part of its Charting New Water initiative:

*These challenges can be viewed as drivers of much-needed change in how we finance and develop our water systems to meet future demands. New financing models and pricing flexibility, which are necessary to pay for new infrastructure and to support legacy systems, provide enormous opportunity for positive transformation necessary to keep pace with the rapid changes being experienced by counties, municipalities and investor owned utilities.*

The guiding questions that the Johnson Foundation asked of the diverse group of experts it convened for the report were: 1) “What new financing techniques can communities use to pay for integrated and sustainable infrastructure approaches?” and 2) “How can we direct private capital toward more sustainable water management projects?”

### **III. Private Utility Role in Today’s Water Sector**

The private sector is already helping the water sector in the following ways via: 1) substantial private capital investment in water; 2) the use of innovative technology, and 3) successful partnerships between the public and private sectors.

#### **Investment**

Ensuring the high standard of quality private water delivers requires extraordinary amounts of capital investment. NAWC estimates that its six largest members are collectively investing more than \$2 billion each year in their systems – and these six companies provide service to about six percent of the U.S. population. NAWC’s largest member utility, American Water, alone invested \$1.2 billion in 2015 and

plans to invest \$1.3 in 2016 in community water and wastewater systems across the country. This is significant when one notes that the total federal appropriation for the clean water and drinking water state revolving fund (SRF) programs for the current fiscal year was approximately \$2.254 billion. While a number of other financing sources and programs are being used to invest in water and wastewater infrastructure, several groups estimate that there is a significant lag in total industry spending compared to what is actually needed.

### **Innovations to Conserve Water and Address Supply Challenges**

Effective, sustainable water supply management in the 21<sup>st</sup> century require innovative technologies, innovative strategies for long-term resource planning and regional solutions. Given that NAWC Member operate in multiple political subdivisions, and oftentimes multiple regions, they are uniquely positioned to develop such solutions. Innovative technological and regional solutions are key to addressing aging infrastructure, urbanization, resource shortages, emerging contaminants, sustainable development, demographic changes, and obtain greater value for customers, more efficient operations and less waste.

#### **Technology.**

- American Water and EPCOR Water have implemented water loss programs and leak data collection systems that actively locate leaking water services and water mains. Once identified, repairs or replacements are made immediately. By identifying and fixing water leaks quickly we can begin to reduce the waste of this precious resource.

EPCOR Water is proud to have an average water loss below 10%, which is lower water loss than most of our municipal partners. This saves money on infrastructure investment and ultimately saves money for customers.

#### **Resource agreements to address water supply challenges.**

- EPCOR Water recently entered into long-term public-private water resource agreements in Arizona and New Mexico local communities to develop a water leasing program where farmers or private well owners can sell water to EPCOR. This shifts water use from agriculture to municipal use, reducing withdrawals from strained sources and creates partnerships that share risk and expedite construction timelines for public benefit.
  - Both parties make capital investments – farmers are required to invest in their wells and EPCOR invests in the installation of transmission lines and pays the private well owner for the water, maintenance and operations of the well.

Innovative agreements like these are vital to long-term resource planning, an area of expertise for EPCOR and one of particular importance as arid states grapple with the effects of water scarcity and lingering drought. These unique programs could be replicated across the nation by leveraging the technical, operational and long-range planning expertise of investor-owned utilities.

**Regional Planning.**

- California Water Service (Cal Water), a large NAWC member company that has operations in multiple western states operates and maintains the distribution system of West Basin Municipal Water District's Edward C. Little Water Recycling Facility. Today, the distribution system includes approximately 100 miles of pipeline that cross multiple political subdivisions in southern Los Angeles County, and the facility itself produces about 40 million gallons of recycled water every day that is retailed to Cal Water's customers across its service area. This regional approach has worked incredibly well, and Cal Water has expanded the model and has entered into a partnership with the City of Sunnyvale, the Santa Clara Valley Water District, and Apple to bring more than 150,000 gallons per day of recycled water to the new Apple 2 Campus in Cupertino.

**Maximizing the use of existing sources of supply through recycling.**

- Cal Water engaged in an aggressive research strategy to identify the most cost-effective treatment technology after the state set a new chromium-6 standard for drinking water. Cal Water secured a \$5 million grant to support a full-scale demonstration of treatment utilizing strong-base anion-exchange resin to remove chromium-6 from drinking water. In addition to reducing compliance costs, the technology minimizes the amount of waste generated from the treatment process by recycling a portion of the salt brine regeneration stream. This solution saves Cal Water's customers hundreds of thousands of dollars each year, and provides water utilities across the state with a model to cost-effectively meet the state's new standard.
- The San Gabriel Valley Water Company recently established a recycled water expansion project which delivers non-potable recycled water to the City of South El Monte for large landscape irrigation purposes. This saves precious drinking water and avoids the need to purchase costly imported water from distant sources like Northern California and the Colorado River.

**Partnerships with Municipalities**

We know that neither government nor any one sector, whether public or private, can solve the nation's water challenges on its own. It is far more efficient to work together, and we believe the financial tools that are discussed later in this testimony will benefit us all. Incentivizing capital formation through public-private partnerships (P3s) can be a critical tool in addressing the infrastructure challenge. NAWC Members partner with municipalities in the following ways: 1) we provide management and operating services; 2) we enter into long-term lease or concession arrangements, and 3) sometimes we purchase municipal water systems.

**IV. Public-Private Partnerships in the Water Sector Explained**

Our member companies have longstanding experience with public-private partnerships (P3s) which deliver benefits to communities by combining the best practices, skills, assets, and resources of both government and private sectors to deliver superior water service or efficiently maintain a water facility to meet the growing demands of citizens. P3s can reduce municipal costs and shift debt burdens allowing municipalities the ability to address other important city priorities. Three basic P3 models exist in the

water space today. Under the first two models, the governmental entity contracts day-to-day management, operation and maintenance responsibility to a private partner under a fee arrangement. Private companies have entered into more than 2,000 such P3s.

- a) Servicing/Consulting Arrangements (1-5 years);
- b) Operations and Maintenance Agreements, which include qualified management contracts (5-20 years); and
- c) Long-term concession-lease agreements (30 years or longer).

Yet, due to the complicated nature of operating water systems the structuring of P3s in this space require lengthy analysis, contractual negotiations, and oversight, which can overwhelm and burden municipalities from the onset and be a significant diversion from the core services they provide to the communities they serve. There are ways to find efficiencies and reduce this burden.

### **Benefits of P3s with long-term lease contracts**

The concession-lease agreement is a relatively new model in the U.S. water sector but has been used effectively for other types of infrastructure projects. There is a growing interest among local governments today in entering into these long-term lease agreements as a means of improving the management and financial and operational condition of their drinking and wastewater systems. Water utilities are, by far, the most capital intensive services that a local government manages and is the most expensive asset to maintain and this model offers considerable benefits to debt-constrained cities or townships. The private entity assumes responsibility for all water system operations and for providing financial capital for infrastructure maintenance and upgrades, along with an upfront payment to the city in the beginning of the contract (a fee for the real property interest in return for the right to operate the facility or system for a specified long-term period (usually 30 years or longer). The payment may consist of one upfront payment or a stream of periodic payments, such as lease rents, over the life of the agreement, which allows the local government to shore up its municipal balance sheet. At the same time, the public authority continues to retain legal ownership of the assets and contractual oversight.

- Two recent concession projects show the significant capital investments that are made in communities under these agreements. In Bayonne, NJ, SUEZ along with KKR is investing \$110 million over 40 years to modernize the city's drinking water, wastewater and storm water systems while in Rialto, CA, Veolia and its partners are investing \$41 million over 30 years in the city's drinking water and wastewater systems.

A concession agreement provides local governments with the ability to realize value from their water and wastewater assets which helps restore their budgets for other important public expenditures and allows the municipality to avoid adding to its own long-term debt obligations. All this occurs while they continue to grow their tax base since concession agreements ultimately create new jobs as a result of the water system upgrades that ensue as part of the transaction.

Given the current state of the US economy, and that infrastructure planning is deferred to state and local governments, leaders are challenged to think in new ways to improve their financial flexibility to address

other important municipal priorities and to ensure critical infrastructure investment in their water systems. To do this, they look to the private sector for assistance. Municipalities sometimes make a determination that their water service can be provided more effectively either by selling to or partnering with a private water company that has greater resources and expertise and thus is more efficient than the municipality in providing the same service

### **Barriers to P3s with long-term contracts**

Current tax rules and regulations have the practical effect of barring many municipalities from entering into cost saving and efficiency driven partnerships with private water companies for the operation of municipal water supply and treatment facilities. These tax regulations can impose a significant added financial price tag to long-term concession transactions on municipalities that sell or lease their water system to a private company when the municipality has outstanding tax-exempt debt related to the water system. As a general rule, the tax exemption on such bonds is lost if a private-sector business acquires a long-term interest in the project. A long-term concession arrangement is designated by the IRS as “private business use”. When a municipality has outstanding tax exempt debt on the water system such “private business use” designation triggers a loss of tax exempt status on the bonds – i.e., tax on interest received by the bondholders. This means that the tax exempt status of the debt would shift to a taxable status, and the interest on that debt becomes taxable. It is this shift which causes the price of an otherwise beneficial transaction to become 15-20 percent higher.

Treasury rules offer alternative approaches or remedial actions that could be taken to avoid shifting the tax exempt debt to taxable status. However, these approaches were developed 3 decades ago and they are infeasible in today’s economic environment.

### **Alternative Approaches Under Current IRS Rules Not Feasible Today**

Defeasance. One such alternative approach is referred to as “defeasance”. The defeasance remedy, however, was established decades ago when interest rates were higher; but in today’s low-interest-rate environment it is prohibitively expensive as it requires outlays of 15-20 percent more of the outstanding principal amount of the bonds. This issue is discussed more thoroughly in Section V under Recommendation 2.

Issuing private activity bonds (PABs). Another remedy Treasury offers for avoiding the shift to taxable status is to obtain from the state an allocation of PABs sufficient to cover the principal amount of the outstanding bonds. PABs are municipal bonds secured by facilities in which a private business has a significant interest; such bonds are under a state volume cap. This means there is no assurance that at the time a municipality starts planning and negotiating a P3 transaction—which can take 2-4 years from start to finish—a sufficient allocation of PABs (which are under volume cap) will be available when the transaction is completed. Thus, the volume cap requirement can be an insurmountable hurdle to the long-term P3 arrangement. Further, in certain states the applicable volume cap allocation legislation or process seems not to permit volume cap to be used for bonds previously issued as regular municipal bonds. Thus, even though the volume cap has, for the most part, been plentiful in recent years in many states, there is no assurance at the time of the P3 decision-making process that there will be sufficient volume of PABs



available for the municipality in order to make its “go or no go” decision. The problem with a volume cap on PABs for water projects is discussed more thoroughly in Section V under Recommendation 1.

## **V. Federal Role in Stimulating Investment in Water**

Although 98 percent of investment in water is made at the local level, federal policy plays an important role in establishing incentives for water investment. Congress and the Administration can act to remove barriers to unleash the vast potential of private capital in much-needed water infrastructure improvement projects. NAWC believes the fundamental goal of any federal program should be to fill market gaps and leverage federal funds and private co-investment to provide additional investment in America’s water infrastructure. All federal program supporting local drinking water and wastewater systems should require that the project be procured and delivered efficiently on a life-cycle basis and delivers the greatest value for the money invested by federal taxpayers. Below are five recommendations that could release private capital and allow for more efficient partnerships to go forward. NAWC seeks two principal tax code changes. Both play a supporting role in engaging in productive and beneficial public-private partnerships (P3s).

### **Recommendation 1:**

#### **Remove state volume caps on private activity bonds (PABs) for water projects**

One of the most effective financing tools of the federal government for long-term, capital-intensive infrastructure projects is the private activity bond (PAB)—tax exempt financing granted to the private sector for public-purpose projects, like water. The PAB is a critical tool water and wastewater systems need and use for drinking water and wastewater projects. PABs make infrastructure repair and construction more affordable for municipalities and ultimately for users or customers. The use of PABs spurs capital investment in public projects during a time when governmental budgets are tight; and investors prefer PABs because interest accrues tax-free.

The Sustainable Water Infrastructure Investment Act (introduced in the 114th Congress as S. 2606) recently introduced in the Senate by Senators Menendez and Crapo would remove water projects from state volume caps for private activity bonds and thus spur increased private investment in systems throughout the country. A removal on bond caps for water projects will bring financing of this piece of the nation’s critical infrastructure in line with airports, high-speed rail and solid waste disposal, all of which are currently exempt from existing caps. This same legislation received extraordinary bipartisan support in the 112<sup>th</sup> Congress, garnering 101 bipartisan co-sponsors spanning the full political ideological spectrum, and was supported by dozens of business and other groups from the Clean Water Council to the U.S. Chamber of Commerce to Operating Engineers and Laborers’ Unions and the U.S. Conference of Mayors because of the measure’s undeniable merit.

The economic and public health benefits of using PABs for water and wastewater infrastructure improvement projects are noteworthy.

- Generates \$2 billion in new investment each of the first few years and grow to several times that as the market opens up.
- Increased state and local tax revenue up \$400-500 million.
- Increased jobs up to 142,500 in the first 2-3 years.
- Minimal cost to the federal government: only \$354 million over 10 years.

NAWC believes that greater access to PABs by removing state volume caps for PABs used for community water projects is an approach that makes considerable sense.

### **Recommendation 2:**

#### **Clarify Internal Revenue Code (avoid defeasance) for Beneficial P3s**

Most municipal infrastructure projects are financed by tax-exempt municipal bonds. As a general rule, the tax exemption on such bonds is lost if a private-sector business acquires a long-term interest in the project. However, the IRS has issued rules meant to give state and local governments a reasonable path for preserving the tax-exempt status of these bonds in such an event; though governments can take certain prescribed remedial actions to preserve the tax exemption. Unfortunately, as currently drafted, these remedies are not practicable for water utility projects and, thereby, deter beneficial water P3 projects.

#### **Remedies to preserve tax-exempt bond status under Section 141**

- a) One remedial action is to reissue the outstanding bonds as private activity bonds; but the tax code places an annual volume cap on such bonds and a state may have no available volume.
- b) A second remedial action is defeasance of the bonds, but defeasance is prohibitively expensive in the current low interest rate environment; defeasance imposes costs of up to 15-20 percent of the project costs.
- c) The third remedy is for the state or local government to use all cash proceeds received in the transaction from a sale of a bond-financed water system only for other public purposes, such as other infrastructure needs.

Only the third remedial action is realistic, but Treasury guidance is needed to clarify that cash proceeds from a P3 transaction—such as a concession/lease agreement—would also qualify under this action. The Treasury rules currently refer only to the disposition of proceeds from a sale, but not from a lease.

NAWC seeks a narrowly tailored modification to the third remedial action under Section 141 of the Internal Revenue Code. Specifically, NAWC has asked Treasury to revise its rules under the third remedy to provide that long-term concession agreements also be included in the description of cash proceeds. (The Treasury already applies such a rule in the case of the sale of bond-financed water systems.) NAWC simply requests that this remedy also apply to long-term leases (as upfront cash payments are usually the norm in these arrangements). Thus, as long as the municipality in a P3 uses any of the funds it receives in the transaction for governmental services or investments, the bonds can remain outstanding and remain tax exempt (thus avoiding defeasement). We believe this change can be done in a manner that reasonably protects the tax policy concerns of the Treasury.

**Recommendation 3:**  
**State Revolving Funds and Eligibility**

NAWC supports the State Revolving Fund (SRF) program. However, we strongly hold that any federal program be established fairly so that all taxpayers benefit. Since drinking and waste water systems are a necessary public good and serve the public, the taxpayers in territories serviced by private water providers should benefit equally from the same government loan and grant programs extended to municipally owned water systems. Currently, private water utilities are limited in their use of Clean Water SRF funding. Although EPA has construed the 2014 WRRDA amendments to allow limited use of CWSRF funding for “resiliency” projects by private utilities, these amendments did not put to rest the long-standing discrepancy pertaining to private utilities’ access to CWSRF funding for centralized wastewater treatment.

We, therefore, ask Congress to fix this arbitrary and unnecessary impediment that, if removed, would help to support many communities struggling to maintain their aging water infrastructure. Moreover, while the Safe Drinking Water Act gives states the option to make private water utilities eligible for the Drinking Water SRF, nearly half the states have not done so. We believe that the Congress and the EPA should encourage and incentivize them to do so.

**Recommendation 4:**  
**WIFIA**

The 113<sup>th</sup> Congress approved an innovative financing approach for large water infrastructure projects via a pilot program under the Water Resources Reform and Development Act of 2014 (WRRDA), known as the Water Infrastructure Finance and Innovation Authority (WIFIA). A primary objective of this new program is to attract private capital to these projects, to be used along with state and local capital and a low-cost federal subsidy loan. NAWC believes this program will be truly innovative if it is implemented to encourage and facilitate significant new private investment in the nation’s water infrastructure. The aim is to lower the cost of water infrastructure investment by increasing availability of lower-cost capital to public and private utilities.

NAWC believes that both private companies should have an equal opportunity to participate in the program, to ensure that financing is adequately leveraged.

**Recommendation 5:**  
**Centralized Office to Navigate the Complex P3 Terrain**

The EPA’s new Water Infrastructure and Resiliency Financing Center, for example, which was established to provide technical advisory assistance and professional services to assist small and rural municipalities and to link them up with potential private investors, might take Canada’s approach by expanding this Center’s focus to also advise on P3 formation. The Canadian P3 office has enabled Canada’s P3 landscape to evolve considerably. The office provides a source of P3 expertise to help navigate the complexities of P3s and has thus produced greater competition and lower costs for those entities in the public sector

entering into partnerships with private entities. As a result, Canada has become one of the more significant P3 geographies in both volume and size of capital transactions. NAWC believes it may be advantageous to consider expanding the EPA Water Finance Center to also address P3s.

Mr. Chairman and Members of the Committee – thank you again for inviting the National Association of Water Companies to testify today. Water infrastructure is critical to our economy and way of life. With your leadership on this issue, I am confident we will continue to make progress towards meeting the immense drinking water and wastewater needs across this country. The private water industry stands ready to partner with you and our industry colleagues seated with me at the table today, and I'm happy to answer any questions you may have.