



WATERREUSE


SYMPOSIUM

Awards for Excellence
WaterReuse Association
Annual Awards Luncheon
September 10, 2019

#WaterReuse19

COLLABORATE TO INNOVATE





The **WaterReuse Association's Awards for Excellence** recognize individuals and projects that have made significant contributions in support of water recycling. Recipients are successfully advancing the development of alternative water supplies or developing a novel approach to meet water needs through the use of water reuse systems and/or approaches.

Advocacy Achievement

The **Advocacy Achievement Award** recognizes individuals and organizations for significant achievements in advancing policy reforms that facilitate greater adoption, implementation or acceptance of recycled water, and/or has provided exemplary service to the water reuse sector. Awardees in this category have demonstrated leadership, creativity and persistence in supporting recycled water projects.

Paula Kehoe, California

Paula Kehoe has been an exceptional champion of onsite non-potable water reuse at the San Francisco Public Utility Commission (SFPUC), where she established SFPUC's Non-Potable Water Program that matches the right water source for the right use. In 2012, after two years of research and the installation of a pilot blackwater system in the SFPUC's new headquarters building, San Francisco became the first municipality to adopt groundbreaking legislation that allowed buildings to collect, treat, and use non-potable water to meet demands such as toilet flushing and irrigation. In 2015, the ordinance became a mandatory requirement for new commercial, mixed-use, and multi-family development projects over 250,000 square feet. Her leadership on the National Blue Ribbon Commission for Onsite Non-potable Water Systems has helped broaden the understanding of how decentralized water



recycling systems can be an effective tool for multiple water resource challenges. For the past five years, Paula has chaired a partnership with public health regulators and utilities from across the US, along with US Water Alliance, Water Research Foundation, and WaterReuse Association, to develop new water quality standards and oversight programs for onsite water systems to protect public health. Paula Kehoe is a visionary leader, inspiring the utility sector to re-imagine our urban water systems.

William “Bill” Van Wagoner, California

William “Bill” T. Van Wagoner recently retired from the Los Angeles Department of Water and Power (LADWP) with 32 years of service in the City of Los Angeles. Bill continuously supported the use of recycled water to diversify the City of Los Angeles’ water supply, and was one of the founding members of the LA Chapter of WaterReuse. He led the development of the recycled water program as part of LA’s Integrated Resources Plan, and spearheaded major projects including the Los Angeles Groundwater Replenishment Project and the concept for 100% recycling at Hyperion Water Reclamation. Known as the “Braveheart of Water Recycling”, Bill passionately and tirelessly drove LADWP’s recycled water program, paving the way for a sustainable LA.



Community Water Champion

The **Community Water Champion Award** recognizes utilities and/or local government entities that ensure a safe, reliable, locally controlled water supply through the development of water recycling treatment facilities, infrastructure, and/or other water reuse projects. Awardees in this category showcase exemplary water reuse projects, systems, and/or facilities that demonstrate the value of water reuse to the community served by them.

Eastern Municipal Water District, California

Eastern Municipal Water District's (EMWD) Accelerated Retrofit Program is an innovative conservation-focused program designed to convert facility-adjacent landscape irrigation sites from potable to recycled water to maintain community benefit during periods of potable water restrictions due to drought. Through coordination with eight different organizations (six governmental, two private), EMWD was able to convert 20 community landscape irrigation sites to recycled water use and save more than 400 acre feet of potable water annually. EMWD provided immediate cost-savings to customers, through a special rate, allowing customers to recognize immediate savings. Although the customer was responsible for construction management during retrofit, EMWD performed design and permitting work, which expedited the \$2.2 million project and also helped strengthen EMWD's working relationship with key stakeholders and partner agencies.



Marana Water, Arizona



In 2018, Marana Water completed the expansion of the Marana Water Reclamation Facility which included the construction of the Marana Water Reclamation Facility Recharge Project (MWRP). The MWRP has been master planned to be a future multi-benefit recreational park with wildlife habitat components. The MWRP has added renewable resources to Marana's water supply portfolio and laid the groundwork for a naturalistic site providing a haven and destination to benefit residents and wildlife. It is a model project emphasizing the desert environment and the importance of water to sustain a growing and thriving community.

WISE Partnership, Colorado

The Water Infrastructure and Supply Efficiency (WISE) Partnership is a regional water supply project between Aurora Water, Denver Water and South Metro Water Supply Authority (SMWSA)



established in 2009. This innovative regional partnership for a sustainable water future is one of the first of its kind in the country. It will reduce groundwater reliance and bolster renewable water supplies to the South Metro area, while maximizing existing water assets belonging to Aurora and Denver Water. Several years of engineering study identified opportunities to achieve efficiencies within the partners service areas through sharing and cooperative uses of infrastructure and water supplies. Ten of the 13 SMWSA members have contracted to receive reclaimed water under the WISE Partnership including: Centennial Water and Sanitation District, Cottonwood Water and Sanitation District, Dominion Water and Sanitation District, Inverness Water and Sanitation District, Meridian Metropolitan District, Parker Water and Sanitation District, Pinery Water and Wastewater District, Rangeview Metropolitan District, Stonegate Village Metropolitan District, and the Town of Castle Rock.

Excellence in Action

The **Excellence in Action Award** recognizes users of recycled water, including utility customers, commercial enterprises, government agencies, NGOs, or partnerships between utilities and their customers, that showcase how recycled water is used for commercial operations, watershed restoration projects, irrigation or other projects. Awardees in this category showcase exemplary water reuse projects, systems, and/or facilities that demonstrate the value of water reuse to the community served by them.

San Diego Regional Airport Authority, California

Serving over 20 million passengers per year, the San Diego International Airport sustainability achievements include widely



noted condensate and rain water reuse projects operating since 2014 and 2016. The Airport's reuse of air conditioning condensate for washing vehicles and planes saved significant volumes of potable water during the drought. The

Airport added a rainwater capture, filtration and reuse system that provides 300,000 gallons of reusable water to the airport cooling system. The Airport is now expanding its condensate and rain water reuse program in order to manage the larger volumes of water being captured.

Western Reserve Land Conservancy, Ohio

The Western Reserve Land Conservancy direct potable reuse project demonstrates a pathway to sustainable on-site water reuse. It provides employees and visitors of its 16,000 square-foot headquarters with highly purified drinking water produced from 100% closed-loop recycling of the building's wastewater. Visionary collaborators with the Western Reserve Land Conservancy included the Tangent Company (technology provider) and its founder the late Bill Prior, Ohio State legislators, and the Ohio Department of Health and EPA regulators. Protocols were established for permitting and monitoring of the system that combines commonly available water treatment technologies with fail-safe systems. In addition to demonstrating safe onsite direct potable reuse, the facility supports acceptance of onsite treatment of blackwater for non-potable reuse and surface discharge.

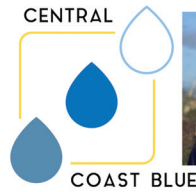


Outreach and Education

The **Outreach and Education Award** recognizes significant success in advancing public acceptance of recycled water. Short-term campaigns, educational programs, and events are eligible.

Central Coast Blue, California

Central Coast Blue is a regional water sustainability program made possible through collaboration of five partner agencies to provide a new reliable indirect potable resource for improved groundwater



supply and quality. Central Coast Blue's integrated team of planners, technical leaders, and creative specialists—led by the City of Pismo Beach and Water Systems Consulting, Inc. — demonstrates how a timely, integrated, creative and technical approach to outreach and education builds support and excitement for the project years ahead of implementation. The project's five partner agencies—South San Luis Obispo County Sanitation District, City of Pismo Beach, City of Arroyo Grande, City of Grover Beach, and the Oceano Community Services District—are working toward completion of an advanced water purification facility and indirect potable reuse project. The project will increase groundwater supplies for the area by more than 40 percent, reduce seawater intrusion, reduce ocean discharge, and increase the region's water supply resiliency.

Transformational Innovation

The **Transformational Innovation Award** recognizes technological advances, research breakthroughs, and/or innovative practices that advance the adoption, implementation and/or public acceptance of recycled water. Awardees in this category can be pilot or full-scale projects, or research for which follow-on demonstration projects are planned.

City of Abilene, Texas

With chronic droughts reducing reservoir levels to 30 percent capacity or less, the West Texas City of Abilene recently completed installation of an advanced water treatment system as part of a major upgrade project to the city's Hamby Water



Reclamation Facility (WRF). The new system allows the plant to directly pump highly treated wastewater effluent into Lake Fort Phantom Hill and increase clean water supplies for the city's residents and businesses. The

Hamby WRF and Reuse Project is the first part of a multi-phase drought response initiative aimed at addressing the city's alarmingly low raw water supplies. The city's WRF facility is the largest membrane bioreactor facility in Texas and provides up to an additional 9 MGD of water supply through indirect potable reuse. Improved system redundancy, implementation of an automated supervisory control and data acquisition system, enhanced energy efficiency and biological and chemical nutrient removal capability are all key components for the treatment objectives.

Hampton Roads Sanitation District, Virginia

HRSD's SWIFT (Sustainable Water Initiative for Tomorrow) Research Center is a first of its kind advanced water treatment facility, aquifer recharge facility, public education facility, water treatment and aquifer science research facility and an operator training facility. This one million gallon per day facility takes a portion of the fully treated effluent from HRSD's Nansemond Treatment Plant and uses an 8 step carbon based advanced water treatment process to produce water that meets drinking water standards (SWIFT Water). The SWIFT Water is then used to recharge the Potomac Aquifer, a confined drinking water aquifer that supplies water to over 200,000 individual drinking water wells throughout eastern Virginia. The SWIFT Research Center's primary purpose is to demonstrate, at scale, the ability to successfully recharge the Potomac aquifer with water sourced from a wastewater treatment plant. Based on what has been learned



already at the SWIFT Research Center, HRSD is moving forward with the full-scale implementation of SWIFT with a goal of recharging the Potomac aquifer with 100 million gallons per day of SWIFT Water by 2030.

Pure Water Monterey, California

Pure Water Monterey will be the first full-scale indirect potable reuse project in northern California.

Coming online in fall 2019, the project emphasizes an innovative, regional approach to providing cooperative water solutions. New water supplies will be produced by recycling used and under-utilized



waters from municipal wastewater, wash water from the food packaging industry, drainage water from crop irrigation, and urban stormwater runoff. These sources will allow Pure Water Monterey to diversify the area's potable water supply by 3,500 acre feet per year through groundwater replenishment and increase the availability of recycled water for an existing non-potable reuse project supporting food crop irrigation. Thanks to regional benefits and ground-breaking collaboration between disparate water resource interest groups, the future of water is near for the communities in the Monterey region.

Up and Comer

The **Up and Comer Award** recognizes a water reuse professional with less than 10 years in the recycled water sector for his/her leadership and commitment to pursuing water recycling as a career path.

Daniel Gerrity

As a Postdoctoral Researcher at the Southern Nevada Water Authority (SNWA) and then as a Senior Engineer at Trussell Technologies, Dr. Gerrity focused on the use of ozonation and other advanced oxidation processes for the oxidation of trace organic compounds in water reuse applications.

Dr. Gerrity subsequently served as a tenured Associate Professor in Civil and Environmental Engineering at University of Nevada, Las Vegas where he received an Early Career U.S. EPA STAR grant to study quantitative microbial risk assessment and the sustainability of potable reuse systems. He also received funding from National Science Foundation, The Water Research Foundation, and U.S. Department of Agriculture to study the rise of antibiotic resistance and innovations at the nexus of food, energy, and water systems. Dr. Gerrity is now the Principal Research Microbiologist in Water Quality R&D at SNWA.



WateReuse President's Award

The **President's Award** recognizes significant contributions to the advancement of water reuse through exceptional service and leadership. It is given at the discretion of the WateReuse Association president.

National Blue Ribbon Commission for Onsite Non-Potable Water Systems

Founding Partners:

- San Francisco Public Utilities Commission (SFPUC)
- US Water Alliance
- Water Research Foundation

The Founding Partners of the National Blue Ribbon Commission for Onsite Non-Potable Water Systems are being recognized for their dedication and diligence in managing and growing this important Commission that is advancing broader reuse applications throughout the United States. Through the leadership of SFPUC, The US Water Alliance (Alliance), and The Water Research Foundation (WRF), this national group of water and wastewater agencies, public health departments,

and research institutions from across North America have met regularly since May 2014, when the SFPUC hosted the Innovation in



**National Blue Ribbon
Commission
for Onsite Non-potable
Water Systems**

Urban Water Systems meeting to discuss onsite water treatment systems. The Commission focuses on establishing model policy frameworks and research to support local implementation of onsite water reuse, and shares knowledge and lessons learned toward overcoming institutional barriers to onsite water treatment. The National Blue Ribbon Commission has made significant research contributions and advanced policies and regulations for onsite water reuse. As a result of this work, there has been a paradigm shift in the perspective of many participating public health regulators who now have the appropriate framework and tools to develop regulations. Twelve states and the District of Columbia currently participate in the Commission.

WaterReuse Awards Committee

Pamela Kenel, *Loudoun Water (Chair)*

Micah Vieux, *Loudoun Water (Vice-Chair)*

Sean Bothwell, JD, *California Coastkeeper Alliance*

Maria Brady, *Stantec*

Keli Callahan, PE, *Carollo Engineers*

Brad Hill, *City of Flagstaff*

Jeff Hansen, *HDR*

David W. Sloan, PE, BCEE, *Freese and Nichols*

Shannon Spurlock, *Denver Urban Gardens*

Amy Tracy, *Hydro Solutions Consulting*



BLACK & VEATCH

WASTE NOT

Decades of leadership in water resources reclaimed and recycled for any level or type of demand

WANT NOT

From flagship projects to the latest research and regulatory insights, for all things reuse it's Black & Veatch

bv.com/water