

# Gulf Coast Water Conservation Symposium

## Capitalizing on Water Conservation: Benefits, Opportunities, Requirements & Lessons Learned

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**Allen Boone Humphries Robinson LLP** was formed by some of Houston's most experienced public law attorneys and is devoted solely to the practice of public law and finance. Our exclusive focus on public entities and those doing business with public entities allows us to best serve our clients in this unique area of the law. ABHR attorneys have a background in all aspects of public law and public finance. With experience and innovation, we represent municipal utility districts, water districts and authorities, tax increment reinvestment zones, municipal management districts, cities, counties, non-profit student housing corps and other public entities with their finance needs. Visit ABHR at [www.abhr.com](http://www.abhr.com)

**Brown and Gay** was established in 1975 and provides a comprehensive range of civil engineering and surveying services for municipal, drainage, transportation, traffic, and land and site development projects throughout Texas. Each project is managed by a principal engineer to provide responsiveness through leadership. Brown & Gay Engineers is ranked in the Top 500 Design Firms in the country by *Engineering News-Record*, as one of the Top 10 Civil and Structural Engineering Firms by the *Houston Business Journal*. Brown & Gay Engineers is a privately owned corporation with office locations in Houston, Austin, Dallas, Fort Worth, Frisco, Katy, San Antonio, and The Woodlands. <http://www.browngay.com/default.htm>

**The City of Sugar Land** places a priority on ensuring a safe, reliable water supply for the future of its 84,000 citizens and regional partners. This is accomplished through collaborative, forward-thinking efforts to diversify and preserve this valuable resource. The City meets an annual system demand of more than 6 billion gallons through the operation and maintenance of a state-of-the-art surface water treatment plant, 17 ground water wells, 15 ground storage tanks, five elevated storage tanks, 431 miles of distribution lines and supporting infrastructure. Sugar Land is one of only three cities -- out of more 7,000 public water systems -- in Texas to be awarded the "Outstanding Public Water System Award" for 2013. Sugar Land is also recognized by the state as a "Superior Public Water System," a recognition the City has maintained for many years. <http://www.sugarlandtx.gov>

**Freese and Nichols, Inc.** is a full-service professional consulting firm and the first engineering/architecture firm to receive the Malcolm Baldrige National Quality Award. With offices in Texas and North Carolina, Freese and Nichols provides services in engineering, architecture, environmental science, planning, construction services, energy and program management. For more information about Freese and Nichols, visit [www.freese.com](http://www.freese.com).

The **Galveston Bay Foundation** was founded in 1987 as a nonprofit organization to preserve, protect and enhance Galveston Bay -- one of the world's most productive estuaries. Its balanced programs in advocacy, conservation, education, and research strive to ensure that Galveston Bay remains a beautiful and productive place for generations to come. The mission of the Galveston Bay Foundation is to preserve, protect and enhance the natural resources of the Galveston Bay estuarine system and its tributaries for present users and for posterity. Visit GBF at <http://galvbay.org/index.html>.

**The City of Houston:** As the regional water provider, the City of Houston ensures that 2.8 million citizens receive high quality drinking water at sufficient pressure to meet their daily needs. The City of Houston's Department of Public Works and Engineering is responsible for protecting our regional water supply, operating and maintaining three water purification plants and 92 ground water pumping stations. Houston's water system is spread across a four-county, 600 square mile area, making it one of the most complex water systems in the nation. For more information about the City of Houston's Department of Public Works and Engineering, please visit: [www.publicworks.houstontx.gov](http://www.publicworks.houstontx.gov).

**The Lone Star Chapter of the Sierra Club** is an outdoor recreation and conservation organization representing over 23,000 Texans. The Sierra Club is a partner in the Texas Living Water Project. Through the project we collaborate with water policy specialists, public officials, and the communities of Texas to ensure adequate water for all needs, including environmental as well as human consumptive needs, to reduce the future demand for water and foster efficient use of existing supplies, to educate decision makers and the general public about the environmental and economic impacts of water development and the availability of cost-effective, environmentally sound alternatives, and to involve citizens in decisions about water resource management at the local and state levels. [www.texaslivingwaters.org](http://www.texaslivingwaters.org).

**Lone Star Groundwater Conservation District** was authorized in 2001 by the 77<sup>th</sup> Texas Legislature through House Bill 2362. The creation of the District was confirmed by the voters of Montgomery County on November 6, 2001, with 73.85 percent of the voters casting favorable ballots. Since its creation, the District has carried out its statutorily-mandated functions to conserve and protect the groundwater resources of Montgomery County, and has expended considerable resources to ensure that the groundwater supply in Montgomery County will remain a sustainable resource for years to come. The District continues to strive to develop, promote, and implement water conservation, augmentation, and management strategies to protect water resources for the benefit of the citizens, the economy, and environment of Montgomery County. <http://www.lonestargcd.org>

**Masuen Consulting LLC** is a Water Resource and Horticultural Consulting firm founded in 1995. The company is comprised of professional Landscape Architects, Site Planners, Agronomists, Horticulturalists, Agricultural Engineers, Environmental Engineers, Civil Engineers, and Construction Managers. The team is focused on providing forward looking, efficient, effective, and proven site solutions that conserve water and minimize long term maintenance and operation (M&O) costs. These goals are consistently realized while ensuring a client's short and long term vision for a project are always achieved; both in terms of aesthetics and function. Offices in Florida, Texas, Georgia, and Washington State. [www.masuenconsulting.com](http://www.masuenconsulting.com)

**The National Wildlife Federation** is America's largest conservation organization, working with more than 4 million members, partners and supporters in communities across the country to inspire Americans to protect wildlife for our children's future. Dedicated staff, members, volunteers and affiliates of NWF are focused on protecting all of America's great waters from coastal Louisiana and the Great Lakes to biologically-rich wetlands across the country. In all, National Wildlife Federation's work from coast to coast, community by community, helps protect, connect and restore habitat to ensure a healthy wildlife legacy for future generations. Learn more at [www.nwf.org](http://www.nwf.org).

**The North Fort Bend Water Authority** was created by the 79TH Texas Legislature, with the passage of Senate Bill 1798 in May 2005. The Authority was created to facilitate compliance with the Fort Bend Subsidence District's groundwater reduction mandates. It is the Authority's mission to acquire, develop and deliver a long-term supply of potable surface water to the water users participating in the Authority's Groundwater Reduction Plan (GRP). The Authority encompasses approximately 183.8 square miles, and includes 69 utility districts and 2 cities, Fulshear and Arcola, with 76 permitted wells (60 producing) that are subject to Authority pumpage fee. <http://www.nfbwa.com>

**The North Harris County Regional Water Authority** was created by the 76<sup>th</sup> Texas Legislature in 1999 (and confirmed by a public vote in January 2000) to act on behalf of about 160 municipal utility districts within its boundaries to facilitate compliance with the Harris-Galveston Subsidence District's (HGSD) mandate to reduce dependence on groundwater in order to arrest the occurrence of subsidence and allow critical aquifers to recharge. The Authority adopted a regional approach to addressing water supply issues, and successfully negotiated with the City of Houston for an adequate, long term supply of top quality, potable surface water to meet the HGSD's phased conversion schedule. Since 2003, the Authority has designed and constructed more than 85 miles of new water lines to deliver surface water to northwest Harris County communities. Today, the first conversion milestone (2010) has been successfully reached in compliance with the Subsidence District's mandate to reduce reliance on groundwater by 30 percent, and the Authority is actively pursuing the expansion of the water infrastructure necessary to meet the 2025 reduction goal of 60 percent surface or alternate water. The Authority has been committed to promoting the efficient use of water since its inception, and has had comprehensive water conservation outreach and education programs in place since 2000. <http://www.nhcrwa.com>

**The San Jacinto River Authority** is a multi-county governmental agency created in 1937 by special act of the Texas Legislature. SJRA's mission is to plan for and develop adequate and reliable long-term water supplies; treat and distribute safe drinking water; provide regional wastewater treatment services; deliver raw water for municipal, industrial, and agricultural use; monitor and protect source water quality; ensure safe, dependable reservoir operations; and educate the public about water conservation and resources. This mission is accomplished through four operational divisions: Highlands, GRP, Lake Conroe, and Woodlands. Visit them at <http://www.sjra.net>

**Texas Water Foundation** is a non-profit organization established for the purpose of generating a heightened public awareness among all Texans regarding the vital role water plays in our daily lives. Water impacts key elements of the quality of life Texans enjoy, from human health and economic growth to our natural environment. Visit us at [www.texaswater.org](http://www.texaswater.org).

The **West Harris County Regional Water Authority** was created by the 77<sup>th</sup> Texas Legislature (HB 1842, 2001) to obtain and deliver a long-term supply of drinking water at the lowest responsible cost for the water users within its boundaries in order to comply with Harris-Galveston Subsidence District mandates to reduce dependence on groundwater. The WHCRWA negotiated with the City of Houston for a long-term, secure source of surface water to reduce groundwater withdrawals; constructed the first phase of a new water transmission infrastructure and related facilities; and successfully complied with the 2010 HGSD-mandated 30 percent reduction in groundwater pumpage. WHCRWA has actively participated in public education efforts to promote the efficient use of finite water resources since its inception and has invested in hands-on, water conservation education programs for students in Cy Fair and Katy ISDs. <http://www.whcrwa.com>

**The Woodland Joint Powers Agency** is the central management agency for the eleven Municipal Utility Districts (MUDs) that currently serve The Woodlands in Montgomery County. The services they provide are water distribution, wastewater collection, storm drainage and tax collection services. The principal objective of TWJPA is to provide the MUDs they serve with professional, reliable and quality services consistent with fiscal responsibility. They are also committed to improving efficiency and effectiveness at maintaining the utility infrastructure and enhancing communication with customers. <http://www.wjpa.net>