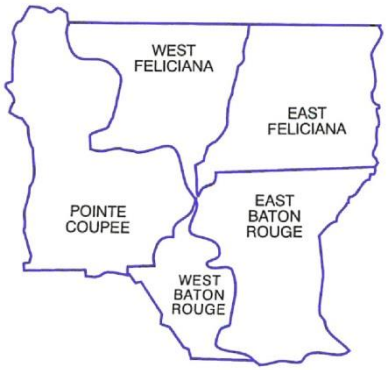

Capital Area Ground Water Conservation District

Watching out for A Treasured Earth Resource

Dedicated to the conservation, orderly development and protection of quality of ground water in the Capital Area

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Ground Broken on $22.4 Million Water Institute of the Gulf Research and Conference Center

(adapted from Water Institute of the Gulf Press Release)

BATON ROUGE – Nov 13, 2015 – Today, Governor Bobby Jindal and President and CEO Charles "Chip" Groat of The Water Institute of the Gulf joined Baton Rouge Mayor-President Kip Holden, President and CEO John Davies of the Baton Rouge Area Foundation, and LSU President F. King Alexander in breaking ground for the construction of the $22.4 million Water Institute of the Gulf Research and Conference Center along the Mississippi River, between downtown Baton Rouge and LSU. To be built at the site of Baton Rouge's former municipal dock, the elevated three-story structure will extend over the river, providing a plaza surrounding the structure for unprecedented public viewing of the Mississippi River beyond the levee. The centerpiece of the structure will be The Water Institute of the Gulf, which will occupy offices on the first and second floors of the34,000 square-foot structure. On the third floor, a major conference space will play host to academic conventions, research conferences and public meetings and hearings, all focused on the preservation of Louisiana's coast, and related efforts worldwide. Applied research projects of the 4-year-old Water Institute of the Gulf are taking place on a global scale and will inform major public policy decisions and public works projects in Louisiana, along the Gulf Coast and around the world.

The Water Institute headquarters joins two other facilities under construction nearby – the state Coastal Protection and Restoration Authority headquarters and the LSU Center for River Studies – as anchors of the 35-acre Water Campus that eventually will be home to an estimated 1.2 million square feet of commercial office, retail, restaurant, hospitality and residential space, along with an estimated 4,000 direct and indirect jobs between Nicholson Drive and the river.

Governor Jindal said, "Here at the foot of the Interstate 10 Bridge on the Mississippi River, where millions of drivers pass each year, we are developing a world-class campus of water management research, development and project activity. This new Water Institute of the Gulf headquarters will

serve as the centerpiece of our efforts to glean innovative new applications that can be put to work in the protection and restoration of Louisiana's coastline. We will not only be providing invaluable assistance to our state, but we will become a magnet for water management research worldwide and we will lay the foundation, over the next two decades, for as many as 45,000 new direct and indirect jobs in the water management sector in our state. We're proud that the collaboration of many partners has made this day possible, and that Louisiana will accomplish great environmental and economic advances because of the water management expertise being developed in our capital city."

Construction of the Water Institute headquarters will include vehicular and pedestrian pathways connecting the river facility to River Road and to LSU and downtown Baton Rouge via the existing Mississippi River levee trail. The design of the state-funded facility encourages collaboration of water management professionals across the Water Campus while also enabling the public to see and feel the river in a way they've never experienced before.

"Today is an exciting day for Louisiana and for our team at The Water Institute of the Gulf," Groat said. "We believe our work is important because throughout the world, life happens at the water's edge. We strive to conduct world-class applied research focused on sustaining the vitality of the world's great coasts and deltas. Our roots are in Louisiana's great delta and coast. We will be proud to carry out our mission from this iconic building on the edge of the mighty Mississippi. It's a fitting home for the institute and we will work tirelessly to be a worthy tenant."

Construction will be completed in the summer of 2017, when the Water Institute will move from its current office in downtown Baton Rouge to the new headquarters. Now employing 45 research scientists, engineers and technologists, the Water Institute will employ an estimated 55 people at the time of its 2017 move and plans to grow to more than 80 employees in the five years following the move.

"I've worked with governors, mayors and legislators up and down the Mississippi River to sustain our river and coast, and what we have assembled on the Water Campus in Baton Rouge is unparalleled," Mayor-President Melvin L. "Kip" Holden said. "The Water Institute of the Gulf is the next step in Louisiana's global leadership in coastal science and research, and there is much more to come."

"We are excited to be a part of the Water Institute, an international research center on coastal issues housed right here in Baton Rouge," said LSU President F. King Alexander. "Our LSU faculty and students look forward to working with researchers from around the world who come to the Water Institute to study and help solve the world's growing coastal problems."

"The building will bring us back to where our city began," said President and CEO John Davies of the Baton Rouge Area Foundation. "And the scientists who work within it will offer solutions for a hopeful future, not only for the people living on our coast but also for the billions of people who live on or near water around the world."

About The Water Institute of the Gulf

The Water Institute of the Gulf is the Center of Excellence and a not-for-profit, independent research and technical services resource for resilient coasts and sustainable water systems worldwide. The work of the Institute helps ensure livable communities and a thriving economy and environment. For more information, visit TheWaterInstitute.org.

Our water pipes crawl with millions of bacteria

Researchers from Lund University in Sweden have discovered that our drinking water is to a large extent purified by millions of "good bacteria" found in water pipes and purification plants. So far, the knowledge about them has been practically non-existent, but this new research is about to change that.

A glass of clean drinking water actually contains ten million bacteria! But that is as it should be -- clean tap water always contains harmless bacteria. These bacteria and other microbes grow in the drinking water treatment plant and on the inside of our water pipes, which can be seen in the form of a thin, sticky coating -- a so-called biofilm. All surfaces from the raw water intake to the tap are covered in this biofilm.

Findings by researchers in Applied Microbiology and Water Resources Engineering show that the diversity of species of bacteria in water pipes is huge, and that bacteria may play a larger role than previously thought. Among other things, the researchers suspect that a large part of water purification takes place in the pipes and not only in water purification plants.

"A previously completely unknown ecosystem has revealed itself to us. Formerly, you could hardly see any bacteria at all and now, thanks to techniques such as massive DNA sequencing and flow cytometry, we suddenly see eighty thousand bacteria per milliliter in drinking water," says researcher Catherine Paul enthusiastically.

The work of doctoral student Katharina Lührig, who works together with Catherine, professors Peter Rådström and Kenneth Persson, and colleagues Björn Canbäck and Tomas Johansson has been published in *Microbes and Environments.*

The results have led to lively discussions within the industry about the role of biofilms in drinking water.

At least a couple of thousand different species live in the water pipes. According to the researchers there is a connection between the composition of bacteria and water quality.

"We suspect there are 'good' bacteria that help purify the water and keep it safe -- similar to what happens in our bodies. Our intestines are full of bacteria, and most the time when we are healthy, they help us digest our food and fight illness, says Catherine Paul.

Although the research was conducted in southern Sweden, bacteria and biofilms are found all over the world, in plumbing, taps and water pipes. This knowledge will be very useful for countries when updating and improving their water pipe systems.

"The hope is that we eventually may be able to control the composition and quality of water in the water supply to steer the growth of 'good' bacteria that can help purify the water even more efficiently than today," says Catherine Paul.

Lund University. "Our water pipes crawl with millions of bacteria."

Science Daily, 16 December 2015.

<www.sciencedaily.com/releases/2015/12/151216082553.htm>.