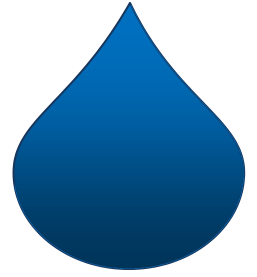




Capital Area Ground Water Conservation District



Watching out for A Treasured Earth Resource

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

Volume 45, Issue 1

NEWSLETTER

Summer, 2019

Drilling Commences on Initial Test Well

The Capital Area Groundwater Conservation Commission (CAGWCC) has contracted with Griner Drilling for the first of several possible “test wells” needed to identify a suitable location for a possible scavenger well in the “2,000-ft” sand. The first well is being drilled near the intersection of Myrtle Avenue and Thomas H. Delpit Drive in Baton Rouge, just south of the approach to the I-10 bridge.



Scavenger wells have been employed successfully at select locations around the world as an inexpensive, practical solution for the long-term development of fresh groundwater. In a stratified aquifer, scavenger wells work by pumping saline water from the bottom of the aquifer without mixing with the overlying freshwater. The saltwater is pumped to waste. There are many advantages to the scavenger well approach, the most important of which are low capital costs, rapid improvement in water quality, and optimal capture of freshwater and saline water.



Baton Rouge Water Company currently operates a scavenger well system in the “1,500-foot” sand on North Street between N. 31st and N. 32nd streets to protect the at the Lula Street Pumping Station from further saltwater encroachment. Nearly four years of data show the “scavenger” system to be working as predicted.

Water Institute of the Gulf

Long-Range Planning Project Underway



The Capital Area Ground Water Conservation Commission has hired the Water Institute of the Gulf to launch the first phase of a project to support long-term planning for CAGWCC.

The work getting underway now is the first step in a three-phase process that includes an evaluation of the state of the science, identifying data and science gaps, and facilitating and structuring the decision-making process for the commission members. This process will be used to aid the commission members in developing a suite of possible alternatives the commission could employ over the long-term resulting in a sustainable aquifer and water resources.

Work in the next two phases depends on the completion and results of phase one, which should be completed by the end of the year.

Phase one includes a meeting and workshops, with the first full meeting on July 24th and three workshops following shortly thereafter (2 workshops in August and one workshop in September). The meeting and workshops include CAGWCC members and are open to the public.

The Commission voted on June 19, 2018, to pursue working with the Water Institute of the Gulf to enter into a cooperative endeavor through the Coastal Protection and Restoration Authority (CPRA) to assist the Capital Area Ground Water Conservation Commission to develop a long-range management plan to ensure the protection and sustainability of the Southern Hills Aquifer.

PROJECT OBJECTIVES

Objective 1: Work with the CAGWCC and other technical stakeholders to identify and evaluate feasible, realistic, and cost-effective science-based alternatives which meet long-term water resource needs.

Objective 2: Evaluate the state of the science/information related to groundwater use and aquifer conservation needed to evaluate alternatives and inform decisions.

Objective 3: Work with the CAGWCC to identify management alternatives that are economically feasible and acceptable, and to develop a strategic plan for the long-term water supply for the District.



THE WATER INSTITUTE
OF THE GULF™

The Water Institute of the Gulf is a non-profit, non-advocacy research institute headquartered in Baton Rouge, LA. The Institute has technical expertise in groundwater as well as experience in evaluating and developing science that specifically supports decision-makers. The Institute's unbiased approach to producing science in support of resource management and helping to resolve water-related issues makes it ideally situated to work with the CAGWCC. CPRA is established as the single state entity with authority to articulate a clear statement of priorities and to focus development and implementation efforts to achieve comprehensive coastal protection for Louisiana.



Aquifer Recharge and Aquifer Storage and Recovery

(first in a series)

Adapted from USEPA Website (<https://www.epa.gov/uic/aquifer-recharge-and-aquifer-storage-and-recovery>)

Aquifer recharge (AR) and aquifer storage and recovery (ASR) are manmade processes or natural processes enhanced by humans that convey water underground. The processes replenish ground water stored in aquifers for beneficial purposes. Although AR and ASR are often used interchangeably, they are separate processes with distinct objectives. AR is used solely to replenish water in aquifers. ASR is used to store water, which is later recovered for use.

Background

Projects for AR and ASR are increasing in number nationwide, especially in areas with potential for water shortages. AR and ASR projects are frequently found in areas of the United States that have high population density, proximity to intensive agriculture, dependence and increasing demand on ground water for drinking water and agriculture, and limited ground or surface water availability. Northeastern and midwestern states with relatively abundant water supplies may not have used AR and ASR widely. However, in many southeast, southwest, and western states, AR and ASR are popular options to provide a reliable water supply.

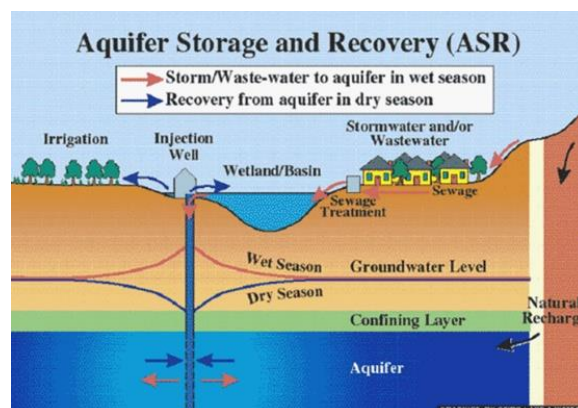
The objective of AR is to replenish water in an aquifer. Injecting water into AR wells can prevent saltwater intrusion into freshwater aquifers and control land subsidence. In contrast, ASR wells are used to store water in the ground and recover the stored water for drinking water supplies, irrigation, industrial needs, or ecosystem restoration projects. The stored water may be recovered from the same well used for injection or from nearby injection or recovery wells.

Several methods of introducing water into an aquifer exist including:

- surface spreading
- infiltrations pits and basins
- injection wells

Injection wells are used for AR and ASR in areas where surface infiltration is impractical. EPA's UIC program regulates AR and ASR injection wells. The UIC program does not regulate the recovery of the stored water.

Construction of injection wells for AR and ASR varies depending upon site-specific conditions and project objectives. Wells may be either deep pits draining into porous layers above a USDW or use multiple layers of casing and tubing to inject water directly into a USDW.



DISTRICT STAFF

Anthony J. Duplechin, Executive Director
Shawn O. Scallan, Assistant Executive Director

BOARD OF COMMISSIONERS

Nelson Morvant, Chairman
William Daniel, IV Vice-Chairman
Mark Frey, Treasurer

Ronnie Albritton
Kenneth Dawson
Jens Rummeler
John Jennings
Barry Huggins
Hays Town
Mark Walton

Matthew Reonas
Joey Normand
Ryan Scardina
Todd Talbot
Dennis McGehee
Julius Metz
Tom Stephens

Visit our website at www.cagwcc.com