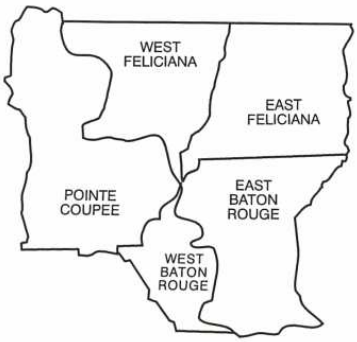


Capital Area Ground Water Conservation Commission

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 36, Number 1 **NEWSLETTER** *July 2010*

Commission & District News

Scheduled Meetings – The Technical Committee will meet at 1:30 p.m. Tuesday, September 14, 2010 in the conference room of the U.S. Geological Survey at 3535 South Sherwood Forest Boulevard, Baton Rouge, Louisiana. The regular meeting of the Board of Commissioners will be held at 9:30 a.m., Tuesday, September 21, 2010 in the conference room of the U.S. Geological Survey. The Administrative Committee will meet at 8:30 a.m. in the Commission office, Suite 129, 3535 South Sherwood Forest Boulevard, one hour before the regular meeting.

June Meetings – The Technical Committee met Tuesday, June 8, 2010 at 1:30 p.m. in the U.S. Geological Survey conference room, 3535 South Sherwood Forest, Baton Rouge, Louisiana.

Jason Griffith, USGS, gave a quarterly review of the "1,500/2,000-foot" sand modeling project. Model calibration involves matching of simulated water levels, for example, with observed historic water levels. Parameters that affect the model output are applied and re-adjusted a number of times to obtain the best match during the process of calibration. A summary of progress and significant findings was handed out to the Committee.

Jeff Jones, DNR, gave a presentation on their role in managing the state water well registration. Application for a new well requires a 60-day notification by the owner. The advance notice allows DNR to review and evaluate the proposed well.

In March 2010, the Water Resources Section at DOTD transferred all their ground-water files, including well registration and well driller's licensing to DNR. Well registration forms are sent to DNR within 30 days after completion of the well. Future plans are to transfer the DOTD database into DNR's file known as SONRIS.

The Commission's involvement in the "1,500-foot" sand scavenger well study was discussed but no action was taken. Copies of the proposal will be sent to each Commissioner and will be on the agenda at the June 15th meeting.

Other discussion included the proposal to limit future development of the "1,200-foot" sand to public-supply use. This subject was brought up before the Commission at our June 15th meeting and deferred until the September meeting. In the meantime, industries will be contacted so that they may have the opportunity to respond.

Commission Meeting – At the June 15th meeting the Board approved a sum of $40,000 to support a modeling study to determine the effectiveness of encroachment in the "1,500-foot" sand. The modeling study is under the direction of Dr. Frank Tsai at LSU. In recent years, chloride concentrations at the Lula Station have shown an increase. A report on the modeling results will be released in September 2010.

Pumpage Summary 2009

The total pumpage recorded for 2009 was 167 million gallons per day. Table 1 lists the pumpage by parish and by aquifer. The total for 2009 was essentially unchanged from 2008. In recent years, the highest total was approximately 174 million gallons per day in 2006 which probably reflects the mass migration of people to Baton Rouge after hurricane Katrina.

The five major aquifers are listed, showing the percentages for industrial and public supply use in the five-parish area for the year 2009.

Sand	Total (mgd rounded)	% Industrial	% Public Supply
2,800-foot	35	59	41
2,000-foot	23	72	40
1,200-foot	23	40	60
2,400-foot	21	24	76
1,500-foot	19	15	85

- Public-supply use from all aquifers in 2008 – 53%
- Industrial use from all aquifers in 2008 – 47%
- Public-supply use from all aquifers in 2009 – 55%
- Industrial use from all aquifers in 2009 – 45%

Pumpage by Aquifer, 2009 (MGD)						
Aquifer	East Baton Rouge	East Feliciana	Pointe Coupee	West Baton Rouge	West Feliciana	Total
Shallow	.130				.001	0.130
400	3.763					3.763
400/600	5.676					5.676
600	6.479					6.479
800	3.377			1.282		4.659
1,000	8.065			1.346		9.411
1,200	20.467	0.016	0.960	1.156	0.001	22.600
1,500	15.474	0.095	0.210	3.343		19.122
1,500/1,700	8.327					8.327
1,700	6.298		0.477	0.152		6.927
2,000	20.705	0.030	0.323		2.391	23.449
2,400	19.608	0.381	0.307		1.001	21.297
2,800	30.956	1.705	1.381		0.772	34.814
Catahoula		1.758				0.758
TOTALS	49.325	2.985	3.658	7.279	4.166	167.413

Other News

An interesting situation has developed in Washington D.C. that was reported on the opinion page of Water World, June 2010. The Government Accounting Office (GAO) nullified fees levied by the DC Water and Sewer Authority to improve the quality of storm water runoff. GAO ruled that the fees appear to be a tax on property owners, and instructed the Treasury Department not to make payment to the Water and Sewer Authority. As a property owner, the federal government owns upwards of 20 percent of the property in DC. The fees were imposed because of an EPA proposed permit to improve the quality of storm water runoff in DC. The Administration is also committed to improving the water quality in Chesapeake Bay which receives all of the runoff from DC. The case is under review by the Department of Justice.

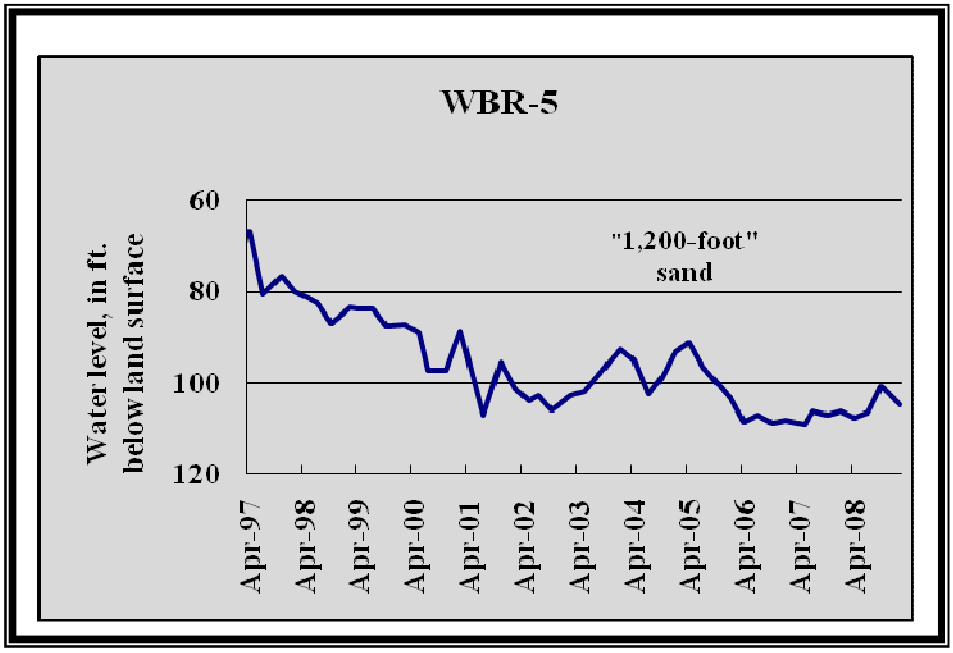
In another development, the Department of Energy has abandoned plans to develop the Yucca Mountain site in Nevada into the nation's nuclear waste repository. In response, a group of electric companies have filed a petition in federal court. A trade group known as the National Association of Regulatory Utility Commissioners (NARUC) argues that the federal government is committed to the plan because it has been assessing fees amounting to billions of dollars from nuclear power plants. This money was intended to be used for transportation and disposal of nuclear waste. According to David Coen, president of NARUC, nuclear utility customers have faithfully contributed nearly 20 billion into the Nuclear Waste Fund. DOE has announced that it will delay closing the Yucca site until the legal proceedings are completed. (Condensed from an article in *Waste & Recycling News*, April 26, 2010)

"1,200-Foot" Sand

A proposal was made before the Commission at the March 16, 2010 meeting requesting that the "1,200-foot" sand be reserved for public-supply use only. The long-range plan for public-supply water involves the development of an area north of the main industrial area near the old Mississippi River bridge and the U.S. 190 loop.

A potentiometric map of the "1,200-foot" sand for the year 2001 was published as Water-Resources Investigations Report 03-4020 in a cooperative study with the U.S. Geological Survey. At that time the water level was about 140 feet below land surface (sheet 2 of report) in the industrial area. The nearest observation well, WBR-5, at Port Allen shows a current water level of about 100 feet below land surface (see graph).

As mentioned earlier, the effectiveness of a scavenger well system is being studied for the well field at Lula Station. At present, six wells pump from the "1,500-foot" sand.



Successful collection of saltwater from the base of this sand will add years of production from the pumping wells.

In the April 2010 issue of the newsletter, we did a summary of saltwater encroachment problems for the ten major aquifers in the Capital Area. Unfortunately, the "1,200-foot" sand was left out and is discussed below.

- "1,200-foot" sand. – Over the past decade well EB-621 at Westminister Station has shown chloride concentrations above background level (>10 mg/L). The well is located on the Baton Rouge fault line, and some leakage across the fault is suspected. No well logs are located nearby on the south side of the fault (downthrown side). Mentioned earlier, however, well EB-805 located at Nesser Overpass, 1 ½ miles to the east in the "1,000-foot" sand is known to contain salty water.

Water-Saving Tips

Occasionally we need to refresh our memories about water conservation practices around the household. Most of us are aware of the ideas listed below, but like most procedures such as safety regulations or defensive driving, we may become lax in following them.

Indoor tips. –

- Toilet tank leaks are a common source of water waste. Add a little food coloring to the tank. If there is a leak, color will appear in the toilet bowl. Replacement parts may be needed to correct the problem.
- Don't flush the toilet unnecessarily. Dispose of tissues, insects and other waste in the trash can instead of the toilet.
- Take shorter showers. Replace old shower heads with a low-flow version.
- Operate dishwashers and clothes washers only when fully loaded, or set the water use for the size of load being washed.
- Don't use running water to thaw meat or frozen foods. Defrost overnight in the refrigerator or use the defrost setting on the microwave.

Outdoor tips. –

- Don't overwater your lawn. A heavy shower eliminates the need for watering as long as two weeks.
- Don't water the street, driveway and sidewalk. Water the lawn and forget the paved areas.
- Don't use the garden hose to sweep down the driveway. Use a broom or blower instead.
- If you use a hose nozzle for watering, when finished shut off the hose at the faucet to avoid a leak at the nozzle.
- If you have a water well, check the pump occasionally to see if the pump kicks on and off when no water is being used. If it does, you may have a leak somewhere.

These are only a few suggestions. You can find others by going to the internet.