

# 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 34, Number 4

NEWSLETTER

April 2009

### Commission & District News

**Scheduled Meetings.** – The Technical Committee will meet at 1:30 p.m. Tuesday, June 9, 2009 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, June 16, 2009 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.

**March Meetings** – The Technical Committee met Tuesday, March 10<sup>th</sup>, 2009 at the Georgia-Pacific plant at Port Hudson. The group was shown a video presentation of the plant's history of operations. The plant's location in northern East Baton Rouge Parish allows for minimal pumping interference with the industrial area in Baton Rouge. Much of the plant's ground-water usage is from the shallow "400- and 600-foot" sands. (This was done by design, so that the plant location and pumpage would have minimal effect on the deeper

heavily pumped aquifers in Baton Rouge.)

A tour through the plant started with a view of the incoming logs which are stripped of bark and ground up into wood chips. Both hardwood (oak, gum, etc.) and softwood (pine) are used. The chips are converted to pulp, which is run through a bleaching process resulting in a pure white product. The final products at the plant are paper towels, toilet tissue and copy paper.

### Water Reclamation

Innovative techniques to reclaim and reuse water are being employed in different areas of the country. In water-starved California, the West Basin Municipal water district has been in operation since 1947 to inject imported water into a coastal aquifer to act as a barrier between seawater and fresh ground water. The pressure ridge created by injection prevents the seawater from moving further inland. On a smaller scale the Commission's connector well serves as a barrier against encroaching saltwater in the "1,500-foot" sand.

In 1995, West Basin began using effluent from a Los Angeles water treatment plant. With further

improvements over time, the water was additionally purified through an advanced treatment process. As a result, the district was recently authorized to inject 100% of the treated water into barrier wells.

Another water reclamation project, reported in U.S. Water News (July, 2008) involves returning wastewater to a wetlands area by means of a PVC pipeline (see photo, page 2). The pipeline is supported on wooden cradles. Treated wastewater is returned to the wetland area. This water is distributed evenly by placing spigots along the pipeline at 50-foot intervals.

Technology for the conservation and reuse of water is more advanced than the public's perception and acceptance of it. As we see populations increasing and using a finite amount of available water, the public mindset will be forced into looking at different options.

In 2003 the Commission and East Baton Rouge City-Parish signed a contract to retain URS Corporation to do Phase 1 of a study involving alternative sources of water for industrial use. One conclusion was that, in the long term, reclaimed water use will probably become more

common as the perception of water-quality issues change.

The Commission, City-Parish and DOTD are currently sponsoring a modeling study of the "1,500- and 2,000-foot" sands in cooperation with the U.S. Geological Survey. The completed model will be used in a variety of simulated conditions to evaluate and possibly regulate future ground-water use.

In the future it is not inconceivable that reclaimed water in Baton Rouge, which would be recycled ground water, could be used to supply barrier wells to counter salt-water encroachment. This activity is standard procedure in the West Basin (Los Angeles) as already noted. The compatibility of water quality should be no problem because the injected water would be returned to its source.

Addressing public attitudes about reclaimed water is the theme of an article in *Opflow* (October 2008). Because technical people are solution-oriented, they may present a solution before their audience realizes there is a problem. Therefore, it is important to have good communication at all levels and to explore the alternatives

that are available. If there is public understanding of a problem, the people will respond more willingly.

### Water Levels in East Baton Rouge Parish

Hydrographs for four sands in East Baton Rouge Parish are shown on page 3. For the period shown, well EB-824 in the "600-foot" sand showed a water-level decline of about 0.6 ft/year. Pumpage of 6.6 million gallons per day (2007) is about equally distributed between industrial and public-supply use.

Well EB-782A in the "1,000-foot" sand showed a water-level decline of 1.6 ft/year over 13 years. Pumpage from the "1,000-foot" sand is virtually all for public-supply use. Pumpage for 2007 was 6.5 million gallons per day.

Water levels in well EB-146 in the "1,200-foot" sand declined about 2.3 ft/year for the period shown. Total pumpage for 2007 was about 20 million gallons per day of which 40% was industrial and 60% public supply.

Water levels in the "1,500-foot" sand

are indicated by the hydrograph of EB-168. Water levels declined about 1.9 ft/year for the period of record. The total pumpage of nearly 20 million gallons per day in 2007 was 38% industrial and 62% public-supply use. The July 2009 newsletter will look at water levels in the four deepest sands.

### Why Measure Water Levels?

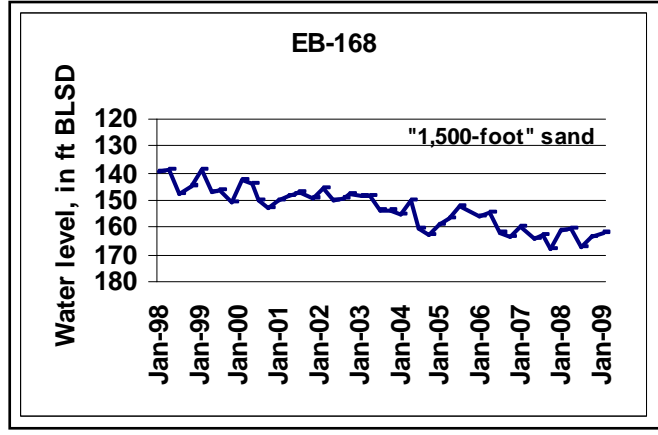
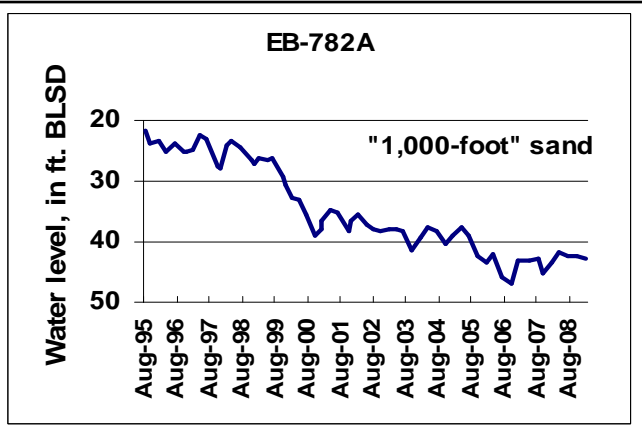
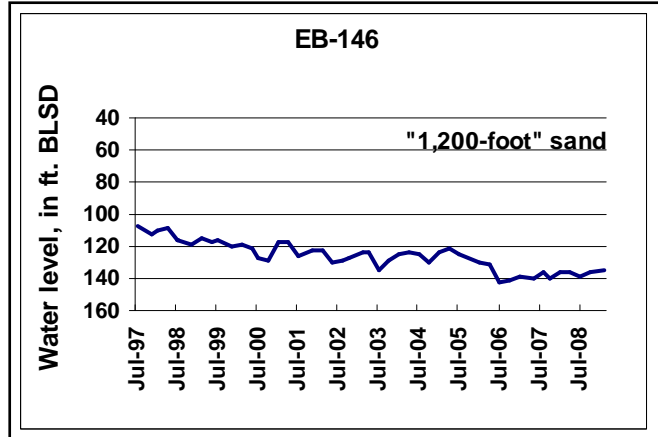
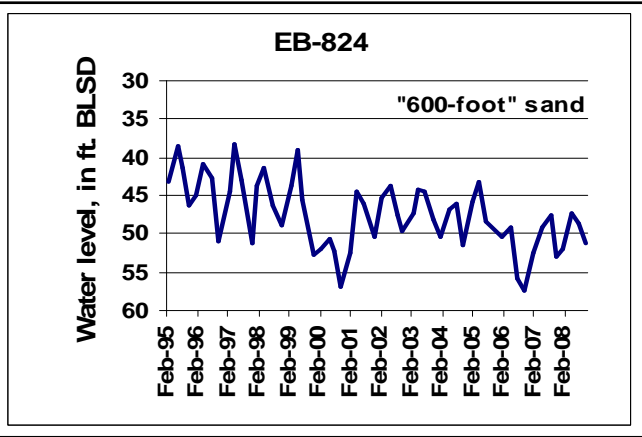
In the Capital Area District there are eleven different sands from which water is pumped. Water levels in each of these sands is measured periodically to keep a historical record of the effects of pumping. Each sand is separated from adjoining sands by confining layers (clays). Therefore, the water level in each particular sand reflects the amount of withdrawal from the sand, and each sand responds independently.

Observation wells located throughout the District are measured quarterly. Contour maps of the water-level surfaces reflect any changes that are taking place over a period of time. For example, heavy pumping in the "2,000-foot" sand in the industrial area prompted the Commission to restrict pumping within a defined area to stabilize water-level declines in that sand. Other measures were taken to reserve the "1,000-, 1,500- and 1,700-foot" sands for public-supply use.

The parishes contribute funds to the water-level program which are matched by the U.S. Geological Survey. The history of each well is recorded in the USGS data base. Some useful information from water levels is listed.

- Water-level trends – Hydrographs give a pictorial record of water-level decline and recovery periods.
- Pump settings – intake of pump is set well below static water level.





- Total dynamic head determines the size and capacity of pump needed to move water from static level to delivery point.

**Vignettes**

An article in a recent trade magazine reported that the president signed a memorandum March 9<sup>th</sup> to restore “scientific integrity” to information used in making policy decisions. The Office of Science and Technology Policy was given 120 days to develop a strategy to ensure the integrity of scientists and technology professionals. Is the implication here that scientists have become something less than forthright? This will surely come as a slap in the face to honest and dedicated professionals who seek accuracy in their work instead of today’s headlines. We might suggest

of the president that he also call on the Office of Truth in Politics (fictitious) to develop a strategy to ensure “political integrity”. At this point, it seems to be more in demand.



Receiving minimal media coverage, an international conference on climate change met March 8-10 at the New York Marriott Marquis Hotel. About 800 people attended the event sponsored by Heartland Institute and 60 co-sponsoring organizations. The theme of the conference: **WAS IT EVER A CRISIS?** This was the largest-ever gathering of global-warming skeptics.

The conference was devoted to answering questions overlooked or ignored by the United Nations Intergovernmental Panel on Climate Change (IPCC). IPCC concluded that

global temperatures may have already reached crisis proportions and human activity was a key driver in raising temperatures, notably the release of carbon dioxide into the atmosphere. Some substantially different viewpoints were presented among the 80 speakers at the conference. A few speakers are highlighted below.

- Vaclav Klaus, president of the Czech Republic – “Environmentalism and global warming alarmism is challenging our freedom. I’m afraid the current crisis will be misused for radically constraining the market economy around the world.”
- Astronaut Dr. Jack Schmitt, a geologist PH.D. – the last living man to walk on the moon – “too many of my colleagues lost grant money

when they haven't gone along with the political consensus that we're in a human-caused global warming".

- William Gray, Colorado State University, claims global warming alarmists have hijacked the American Meteorological Society.
- Arthur Robinson, curator of a petition signed by more than 32,000 American scientists, rejecting the assertion that global warming has put the earth in a crisis caused primarily by mankind.

**COMMISSION STAFF**

*Don C. Dial, Director*  
*Shawn O. Scallan, Administrative Assistant*

**BOARD OF COMMISSIONERS**

*Jerry Klier, Chairman*  
*John Hashagen, Vice-Chairman*  
*Jake Causey, Treasurer*

<i>Dale Aucoin</i>	<i>John Jennings</i>
<i>Zahir "Bo" Bolourchi</i>	<i>Harold Kirby</i>
<i>Brian Chustz</i>	<i>Bill Lane</i>
<i>Phillip Crochet</i>	<i>James Rills</i>
<i>Joey Hebert</i>	<i>J.A. Rummeler</i>
<i>Roland Jackson</i>	<i>Mark Walton</i>

*Visit our website at [cagwcc.com](http://cagwcc.com)*