

Office of Conservation

APR 18 2012

Environmental Division

1166 TARA BLVD  
BATON ROUGE, LA 70806  
APRIL 16, 2012

Department of Natural Resources  
Office of Conservation  
Ground Water Management  
P.O. Box 94275 - Capitol Station  
Baton Rouge, LA 70804-9275

Gentlemen:

To let our drinking water supply continue to be used by plants in this area - thus causing the salt water intrusion - is a terrible situation. Please protect our drinking water from further salt water invasion!

Sincerely yours,  
A. J. Harris

PARISH OF ASCENSION  
STATE OF LOUISIANA  
UNITED STATES OF AMERICA

RESOLUTION

URGING AND REQUESTING THE LOUISIANA COMMISSIONER  
OF CONSERVATION TO CALL A HEARING REGARDING THE  
LOWERING OF THE WATER TABLE UNDER THE PARISH OF  
EAST BATON ROUGE DUE TO EXCESSIVE PUMPING OF GROUNDWATER  
AND THE ACCELERATOR OF THE INTRUSION OF SALT  
WATER INTO ASCENSION PARISH'S DRINKING WATER

WHEREAS, the Ascension Parish Council is seriously concerned about the acceleration of salt water intrusion into the aquifer under East Baton Rouge Parish and the subsequent loss of natural fresh drinking water that Ascension Parish residents have long enjoyed:

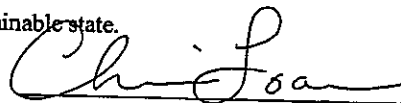
WHEREAS, because of large withdrawals from the aquifer system in the capital area, historical patterns of groundwater flow have been altered over the years; and

WHEREAS, the drinking water in the parish is nationally known to be among the best natural drinking water available in the United States and the loss of this natural fresh ground water would cause our citizens to pay increased costs of purifying and transporting treated less desirable Mississippi River water; and

WHEREAS, the Ascension Parish Council requests that the Commissioner of Conservation, Mr. James Welch, call a hearing to determine whether saltwater intrusion is being exacerbated by industries which pull excessive amounts of groundwater from the aquifer system in the parish area.

NOW, THEREFORE, BE IT RESOLVED by the Ascension Parish Council of the Parish of Ascension that the Council hereby urges and requests that Mr. James Welch, the Louisiana Commissioner of Conservation, call a hearing in order to take testimony to determine if the water table under East Baton Rouge parish is being lowered because of excessive pumping of groundwater, and whether the lowering of the water table is causing the acceleration of the intrusion of salt water from south of the Baton Rouge Fault into the fresh water north of the Baton Rouge Fault, thereby rapidly moving toward the fresh water wells supplying the people of surrounding parishes, including Ascension Parish, with drinking water.

NOW, THEREFORE, BE IT FURTHER RESOLVED that if it is determined that the above is the case, that the Ascension Parish Council requests that the Commissioner of Conservation declare East Baton Rouge Parish an area of concern and proceed with the necessary gathering of facts to undertake necessary actions to reduce this acceleration of infiltration of salt water in order to prolong the life of the aquifer to a sustainable state.



Chairman Chris Loar  
Ascension Parish Council

TESTIMONY ON BEHALF OF BATON ROUGE WATER COMPANY  
AT PUBLIC HEARING ON APRIL 12, 2012  
LOUISIANA DEPARTMENT OF CONSERVATION DOCKET ENV 2012-02

I am Eugene H. Owen, Executive Chairman, Baton Rouge Water Works Company. The stated purpose of this public hearing is for the purpose of discussing all relevant data arising out of the potential for saltwater intrusion into the ground water aquifers designated the 1,500 ft. and 2,000 ft. sands in East Baton Rouge Parish. The following comments and testimony are submitted on behalf of the Baton Rouge Water Works Company.

Today's hearing officer has announced that testimony and comments offered in the March 8, 2012, public meeting on this same subject of the 1,500 ft. and 2,000 ft. sands will be made a part of the transcript of this hearing today. Accordingly, my testimony today is submitted solely for the purpose of supplementing that previous testimony offered by this Company on March 8, 2012. Upon completion of my testimony today, I will file with the hearing officer a transcript of my testimony as presented today. This transcript includes an exhibit designated "Exhibit A" which tabulates all the active wells owned and operated by the Baton Rouge Water Works Company and its subsidiaries which are screened in the 1,500 ft. and 2,000 ft. sands. Exhibit A contains data for each of our wells in the 1,500 ft. or 2,000 ft. sand which detail the identification of the well; the depth of the well; the date that the well was drilled or placed into operation; the static water level obtained at the earliest date after the well was placed into operation; and the static water level at the most recent date; chloride levels at the earliest available date; and the latest available measurements of chlorides. Exhibit A also includes a tabulation of wells that Baton Rouge Water Company and Parish Water Company operate in the 1,700 ft. sand as well as wells jointly screened in the 2,000 ft. and 2,400 ft. sands.

I request concurrence of the hearing officer to submit Exhibit A without the necessity for reading into the record the detailed data included in that exhibit.

Providing some historical perspective on changes in chloride levels and static water levels may be of assistance to the Commission in analyzing the questions which are the subject of this hearing today. The Baton Rouge Water Company, in 1914, drilled two wells in the 2,000 ft. sand at our Lafayette Street station, which is located adjacent to the present Capitol House Hotel. These were our first wells in the 2,000 ft. sand. In 1916, a third well located in the same station was drilled in the 2,000 ft. sand. The data for this well completed in 1916 show that the static water level upon completion was 105 ft. above ground surface. A later well drilled in the 2,000 ft. sand in 1939 at our Lafayette Street station showed a static water level of 49 ft. above the ground surface. At the outset, all of these wells showed essentially zero chlorides. None of these early wells have survived to the present. The oldest surviving well in the 2,000 ft. sand at Lafayette Street was drilled in 1956 and remains in service today. This well, EB630, has been relegated to an emergency basis only because of its high chloride levels under prolonged pumping.

The most recent well drilled in the 2,000 ft. sand, Lafayette No. 18, was drilled in 1993. This well is unique because it is screened in two sands — the 2,000 ft. and the 2,400 ft. The action of the interconnection is that during periods when the well is not being pumped, which is most of the time, the 2,400 ft. sand actually recharges the 2,000 ft. sand which effectively has acted as a partial barrier retarding the rate of saltwater intrusion in the 2,000 ft. sand.

With this sole exception of Lafayette Well No. 18, there is only one other well in the 2,000 ft. sand that has been drilled subsequent to 1975, and that was the Convention Well No. 2, which was drilled in 1987.

Our Lula Station was constructed in 1927. The early wells at Lula were drilled in the 1,500 ft. sand and were also flowing wells. In 1927, static water levels in the 1,500 ft. sand upon completion of these original wells at Lula ranged from 38 to 76 feet above ground surface. All of these wells flowed to the Lula reservoir, a concrete ground surface reservoir, which is still in use today. Booster pumps later increased pressure for pumping into the system from the Lula reservoir. As the static pressure became lower in these wells, ultimately a combination of vacuum pump and booster pump were employed, and finally these wells were replaced by wells which were large enough in diameter to allow for the insertion of turbine pumps within the well as the water level declined from below ground surface. All six of the wells at Lula in the 1,500 ft. sand are replacement wells for these earlier wells drilled in the late 1920's and early 1930's. Water quality, particularly with reference to chlorides, was background level or zero.

In 1946 and again in 1963, Baton Rouge Water Company drilled two wells in the 1,500 ft. sand at Government Street. These two wells are in use today. The most recent wells drilled in the 1,500 ft. sand were drilled in 1973 and in 1975 at N. 45<sup>th</sup> Street and at Cortana. These wells are also in use today.

In our testimony of March 8, 2012, I testified regarding the efforts that Baton Rouge Water Company is currently undertaking in addressing the potential problem of chloride encroachment in the 1,500 ft. sand as it works its way towards Lula. We have previously provided the Commissioner of Conservation with copies of two different studies which detail the remedial approach of installing scavenger wells south of our Lula station for the purpose of intercepting the saltwater as it approaches our Lula station. If these prior submittals of these studies, one by Dr. Frank Tsai of LSU and one by Layne Hydro, Division of Layne Christensen Company, are not already included in the record of this hearing, I request the latitude to file electronic copies of these works so as to make it a part of this hearing. Early completion of this remedial initiative by Baton Rouge Water Company is vital to our efforts to preserve the purity of our production from the 1,500 ft. sand at Lula. We urgently request that any impediments to our early proceeding with this remedial scavenger system be removed through expedited permitting and approval of this action.

I will be happy to supplement this information with any other information that we may possess. Thank you for this opportunity of testifying.

\* \* \*

Attachment: Exhibit A

EXHIBIT A

BATON ROUGE WATER COMPANY and PARISH WATER COMPANY 1500ft., 1700 ft. and 2000 ft. WELLS

Company	Well Site	No.	USGS ID	SAND (Ft.)	T.D. (Ft.)	DRILLED	Oldest Available		Most Recent		Oldest Available		Most Recent	
							SWL	Date	SWL	Date	Chloride	Date	Chloride	Date
BRWC	CORTANA	05	EB-961	1500	1548	Nov-75	100.0	Aug-75	137.7	Oct-11	3.9	Jul-83	0.0	Nov-04
BRWC	GOVERNMENT	03	EB-413	1500	1745	Dec-46	55.4	Sep-58	171.9	Oct-11	5.0	Dec-46	60.7	Dec-11
BRWC	GOVERNMENT	06	EB-771	1500	1755	May-63	72.0	Aug-63	174.0	Oct-11	4.2	Aug-68	28.7	Dec-11
BRWC	LULA	17	EB-510	1500	1605	Jan-51	77.7	Sep-58	191.0	Oct-04	4.0	May-51	35.0	Mar-12
BRWC	LULA	18	EB-657	1500	1612	Sep-55	72.2	Sep-58	194.4	Oct-11	6.0	Jul-01	18.0	Mar-12
BRWC	LULA	19	EB-658	1500	1604	Sep-56	75.4	Sep-58	185.4	Oct-11	3.6	Jun-76	167.0	Mar-12
BRWC	LULA	20	EB-726	1500	1604	Aug-60	89.4	Oct-60	197.0	Oct-10	2.6	Jul-91	15.0	Mar-12
BRWC	LULA	22	EB-938	1500	1621	Jun-72	151.0	Feb-74	186.4	Oct-11	2.1	Jun-76	60.0	Mar-12
BRWC	LULA	23	EB-939	1500	1595	Jul-74	165.0	Feb-74	192.5	Oct-11	3.0	Nov-77	21.0	Mar-12
BRWC	N. 45TH	03	EB-927	1500	1516	Jun-73	135.0	Feb-74	181.0	Oct-11	2.5	Jun-76	4.0	Dec-11
BRWC	ROBIN	01	EB-773	1500	1413	Jul-64	64.0	Aug-64	155.8	Oct-11	14.0	Jan-75	0.0	May-10
PWC	BELLINGRATH	01	EB-614	1700	1794	Jul-55	n/a	n/a	89.8	Apr-09	8.8	Mar-56	0.0	Jul-11
PWC	BELLINGRATH	02	EB-994	1700	1710	Jul-76	n/a	n/a	n/a	n/a	3.2	Jul-77	0.0	Jul-11
BRWC	CORTANA	03	EB-873	1700	1898	Apr-70	110.0	Jul-70	169.0	Oct-11	3.9	Jan-75	4.1	Sep-04
BRWC	CORTANA	06	EB-1356	1700	1885	Jun-07	168.0	Jun-07	145.5	Oct-10	7.7	Aug-07	7.7	Aug-07
BRWC	ROBIN	03	EB-828	1700/2000	1994	Apr-66	169.0	Feb-67	182.5	Oct-11	n/a	n/a	0.0	Mar-05
BRWC	SOUTER	01	EB-1303	1700	1707	Oct-00	135.0	Jul-00	169.8	Oct-11	n/a	n/a	4.6	Sep-04
BRWC	STUMBERG	02	EB-1295C	1700	1840	May-99	66.0	May-99	94.0	Oct-11	44.3	Sep-04	241.0	Dec-11
BRWC	SOUTER	06	EB-1375	1700	1708	May-10	162.4	May-10	172.0	Oct-11	n/a	n/a	10.0	May-10
BRWC	CONVENTION	02	EB-1150	2000	2260	Apr-87	207.0	Apr-87	259.6	Oct-11	11.0	Jul-91	230.0	Dec-11
BRWC	CORTANA	04	EB-878	2000	2190	Aug-71	203.0	Aug-71	208.4	Oct-11	3.6	Oct-71	2.9	Sep-04
BRWC	LAFAYETTE	15	EB-630	2000	2253	Aug-56	138.7	Feb-61	261.5	Oct-09	8.0	Dec-61	189.0	Dec-11
BRWC	LULA	21	EB-814	2000	2169	Aug-66	180.6	Nov-66	250.7	Oct-11	3.2	Jul-91	15.2	Jan-05
PWC	MALLARD	02	EB-1319	2000	2740	Feb-03	+ 29.0	Jan-03	+20.0	Jun-10	7.9	Sep-04	0.0	Jul-09
BRWC	N. 45TH	02	EB-774	2000	2145	Jan-64	126.0	Apr-64	254.5	Oct-11	3.0	Aug-68	4.0	Dec-11
BRWC	O.L.O.L.	02	EB-874	2000	2262	Jul-70	306.0	Dec-76	268.4	Oct-11	2.5	Jul-83	4.0	Dec-11
PWC	OLD MCDONALD	03	EB-1306	2000	1753	May-01	111.0	May-01	108.0	May-10	3.4	May-01	0.0	Dec-09
PWC	SIDES	01	EB-1280	2000	1685	Oct-97	137.0	Oct-97	148.0	May-10	4.1	May-01	0.0	Sep-04
BRWC	GOVERNMENT	02	EB-151	2658	2658	Dec-44	+5.6	Aug-44	219.1	Oct-11	7.2	Oct-49	4.0	Dec-11
BRWC	GOVERNMENT	05	EB-733	2637	2637	May-61	86.0	Jul-61	226.0	Oct-05	1.2	Jun-76	2.5	Apr-05
BRWC	LAFAYETTE	18	EB-1253	2687	2687	Aug-93	165.0	Aug-93	224.0	Oct-11	2.8	Dec-93	5.6	Jan-11

Notes:

SWL is static water level above or below ground level at well head. SWL above ground is preceded by + sign.  
 Sources for SWL and Chloride Results are the BRW/PW data files, the LaDNR and the USGS Online Databases.  
 "Oldest Available" and "Most Recent" data points are the oldest and latest available from any and all sources.

APR 26 2012



Environmental Division

P.O. Box 430  
1000 W. Mount Pleasant Road  
Zachary, Louisiana 70791  
(225) 654-1861

Keith W. Wahoske  
Vice President

**To: Commissioner James Welsh**  
*Office of Conservation-9th Floor*  
*617 N. 3rd Street, Baton Rouge, Louisiana 70802*  
*(225) 342-5540*

**RE: Comments on the April 12, 2012 Public Hearing--Docket No. Env. 2012-02**  
**From Georgia-Pacific Port Hudson Operations**

- Georgia-Pacific Port Hudson Operations has a commitment to water conservation and sustainability.
- Georgia-Pacific practices utilizing materials, natural resources, and energy efficiently to produce products and services that support sustainable growth.
- The Port Hudson Operation employs almost 1,100 people with an annual payroll of over \$85 million including benefits and an annual economic impact to Louisiana of more than \$200 million.
- Port Hudson has made significant investments in the facility including our most recent modernization project that accounted for over 500 construction jobs.
- Port Hudson Operations continues to work with the Capital Area Groundwater Conservation Commission to protect the Southern Hills aquifer system based on sound scientific research.
- During the past 20 years, the facility has instituted several projects that reduced water usage for the Port Hudson mill by 20 percent.
- The sands yielding water for the facility are termed the shallow, middle and deep sands occurring at depths of 200–400 feet, 1,100–1,500 feet and 2,000–2,800 feet below ground.
- Port Hudson obtains one third of its process water needs from the shallow portion of the Southern Hills Aquifer System at a significant expense due to relatively poor water quality. These sands are not part of the Baton Rouge drinking water aquifer.
- Another third of the groundwater used at Port Hudson is from the 2,800 foot sands.
- Port Hudson was awarded the Capital Area Groundwater Conservation Commission Leo Bankston Award in 2005, 2006, and 2007 for implementing significant reductions in ground water use.
- Port Hudson installed a reliable system to measure process water flow in 2008.
- Port Hudson is constantly evaluating additional reduction, reuse, and recycling projects that will help in conservation efforts.
- The United States Geological Survey studies have indicated that the pumping from Port Hudson has no significant effect on the water elevations in the city.

## John Adams (DNR)

---

**From:** Charlotte Hardison on behalf of Environmental-Div  
**Sent:** Wednesday, April 25, 2012 8:54 AM  
**To:** John Adams (DNR)  
**Cc:** Gary Snellgrove  
**Subject:** FW: BR Water Company Area of Concern Request

-----Original Message-----

**From:** Jeffrey Dubinsky [mailto:jeffrey.dubinsky@gmail.com]  
**Sent:** Wednesday, April 25, 2012 8:24 AM  
**To:** Environmental-Div  
**Cc:** jeffrey  
**Subject:** BR Water Company Area of Concern Request

I formally ask that DNR support the request by the Baton Rouge Water Company to declare our area aquifers an Area of Concern. As you know Baton Rouge Area ground waters have been suffering from increasing salinity issues. Industry consumes 50% of our drinking water for production of goods. This is unacceptable.

While there are other resources of water for industry to be using there is only one source of drinking water for the citizens. Please declare Baton Rouge Area ground waters as an area of concern. Which hopefully will help lead the way towards the cessation of industrial pumping of our aquifers.

Thank you,  
Jeffrey Dubinsky  
16944 Apache Drive  
Greenwell Springs, LA 70739  
225-261-6815

### CONFIDENTIALITY NOTICE

This email communication may contain confidential information which also may be legally privileged and is intended only for the use of the intended recipients identified above. If you are not the intended recipient of this communication, you are hereby notified that any unauthorized review, use, dissemination, distribution, downloading, or copying of this communication is strictly prohibited. If you are not the intended recipient and have received this communication in error, please immediately notify us by reply email, delete the communication and destroy all copies.

Mr. Scott A. Angelle, Secretary  
Department of Natural Resources Office of Conservation  
Office of Conservation  
LaSalle Bldg.  
617 N. Third Street  
Baton Rouge, LA 70802

April 18, 2012

APR 19 2012

Environmental Division

Dear Mr. Angelle:

Please accept this letter as my comment to the Office of Conservation pertaining to the hearing about the Baton Rouge drinking water problem caused by salt water intrusion into the aquifers. For decades we have heard warnings from experts on the subject that overuse of the aquifers used for our drinking water would cause salt water intrusion. Lobbyists for the Big Business interests that take much of the water from the aquifers have been successful in preventing corrective changes while our drinking water problem increases.

The records and actions (or lack of actions) under recent Republican Governors indicate why Big Business supports them. Under the last Republican Governor, DEQ and DHH did not warn LA citizens when Businesses had polluted and was continuing to pollute their ground water or drinking water. Remember this culminated in the DEQ Secretary resigning after embarrassing that Administration by saying, "he didn't know he was required to notify the landowner." Remember that DHH didn't notify the Myrtle Grove Trailer Park residents that tests of water samples of their drinking water showed contamination with chemical toxins. Litigation resulted and just recently settlements were reached costing the State. The settlement really costs taxpayers with no cost to or even exposure of those who failed to protect the LA citizens. Whoever was responsible and failed or refused to protect the citizens could still be involved in a LA government agency. I recently read that an aquifer used for Plaquemine's drinking water was being contaminated for years with no warning to LA citizens. LA Citizens must be concerned that the present Republican Governor is so pro-business that the missions of the Departments will again favor Business interests over protecting LA citizens.

Mr. Angelle, I believe I may have a situation that shows a specific damage occurring when there is extremely high usage from Baton Rouge Water Co. Allow me to explain.

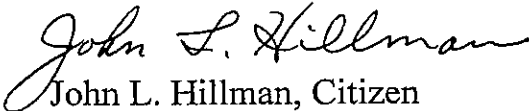
I have lived in Baton Rouge since graduating from LSU in 1960 and lived at my current residence since 1976. For some 25 years I've had a raised soil bed for some 30 hybrid tea roses. Late summer and fall last year the plants deteriorated more than normal and some mysteriously slowly died by winter. With the long drought conditions I irrigated with Baton Rouge Water more than usual. The soil analysis from LSU (which I have attached) shows Sodium to be excessive. At the time when I was watering so heavily, others are having to do the same and caused peak usage from Baton Rouge Water Company. Does the excessive sodium indicate there may already be salt water intrusion when peak usage occurs?



The Baton Rouge area is the most densely populated in the State and has severe air pollution. Please attempt to prevent further damage to our drinking water which is already expensive. Please bring about requested hearings and meetings to compile needed information to lay out a solution. Since the LA Citizens have no lobbyist don't invite the Business Lobbyist to participate before the Experts are allowed to propose a solution. The Big Oil and Chemical Industries which contribute the most to our environmental degradation already, should voluntarily change. They have the were withal with record profits and access to the Mississippi River water.

Can the Louisiana Citizens and especially the Baton Rouge Citizens count on you to do the right thing for them?

Sincerely,



John L. Hillman, Citizen  
9756 Diane Avenue  
Baton Rouge, LA 70815

c: Mr. Robert Romero  
Ground Water Resource

Attachments: LSU Soil Analysis  
Baton Rouge Water Bill

Office of Conservation

APR 19 2012

Environmental Division

Baton Rouge Water Company  
 8755 Goodwood Boulevard  
 Office Hours: 8:30 a.m. - 5:00 p.m.  
 Monday - Friday (excluding holidays)  
 Customer Service: (225) 925 - 2011

City of Baton Rouge  
 East Baton Rouge Parish  
 Service Fee Business Office  
 1100 Laurel Street Suite 234  
 Office Hours: 8:30 a.m. - 4:30 p.m.  
 Monday - Friday (excluding holidays)  
 Customer Service : 389 - 5378

Account Number	Service Address	Reading Date
01 01 05 121 1120 03	09756 DIANE AVE	NOV 01 2011

Baton Rouge Water Company			
Meter Readings			Amount
Current	Previous	100 Cubic Feet	
Billing Summary for Water Service:			
1419	1394	25	32.13
CITY EXCISE TAX			1.61
LA DHH OPH SDWA FEE			.26
GROUNDWATER FEE			.04
Amount for Water Service:			34.04

City of Baton Rouge/East Baton Rouge Parish		
NOV 2011	100 Cubic Feet	Amount
Billing Summary for Sewer and/or Solid Waste Service:		
SEWER	12.7	42.65
GARBAGE		19.00
Amount for Sewer/Solid Waste Service:		61.65

TOTAL AMOUNT DUE BY NOV 28 2011 \$95.69

*Note: Only 2 inhabitants  
 \* the LA-DHH fee must bring in sizeable revenue. Citizens have to wonder if DHH will warn them about polluted drinking water.*

*#4374  
 11/10/11*

Office of Conservation

APR 19 2012

Environmental Division

*OVER →*



# Soil Test Results

Soil Testing and Plant Analysis Laboratory  
School of Plant, Environmental and Soil Sciences  
Louisiana State University  
Baton Rouge, LA 70803  
Website: [www.lsuagcenter.com/stpal](http://www.lsuagcenter.com/stpal)

Hillman, John L  
9756 Diane Avenue  
Baton Rouge, LA 70815

Date Received: 04/10/2012  
Lab Number: 1112063100  
Sample ID: Old Raised Bed

## roses

### Nitrogen source (Choose One)

- 1.32 lb/100 sq.ft. of Ammonium sulfate
- 0.61 lb/100 sq.ft. of Urea
- 0.83 lb/100 sq.ft. of Ammonium nitrate

### Phosphate source

Use 0.00 lb/100 sq.ft. of Triple super phosphate

### Potash source

0.23 lb/100 sq.ft. of Muriate of potash

For additional crop information please see (<http://www.stpal.lsu.edu/recsheets/H-840.rtf>)

## RESULTS

Element (Mehlich3)	Value	Roses
pH (1:1 Water)	6.20	Optimum
Phosphorus, ppm	175.54	Very High
Potassium, ppm	53.01	Medium
Calcium, ppm	3,019.28	Very High
Magnesium, ppm	196.39	Very High
Sodium, ppm	109.52	Excessive
Sulfur, ppm	14.29	Medium
Copper, ppm	171.08	High
Zinc, ppm	38.99	High

Is this from the heavy irrigation with B.R. City water because of extreme drought conditions? There was peak usage during late summer & fall. Could this be why some rose bushes died mysteriously?

Office of Conservation

APR 19 2012

Environmental Division

OVER →

If there are any questions about this report, please contact your local extension service office at (Telephone 225/389-3056). The extension office also receive a copy of this report.

Note: ppm is equivalent to mg/Kg for soil and plant samples and is equivalent to mg/L for water samples. For a description of methods used, please visit our web site at: <http://www.stpal.lsu.edu>

13217 Berwick Ave.  
Baton Rouge, LA 70815  
April 14, 2012

Office of Conservation-Ninth Floor  
Environmental Division  
P.O. Box 94275  
Baton Rouge, LA 70804-9275

Dear Sir/Madam:

Realizing the urgency of addressing the salt water intrusion phenomenon, I wish to express my hopes that any group or agency, and of course, individual will quickly respond to this crisis in whatever effort possible in order to lessen the loss of available quality drinking water for Baton Rouge.

A few suggestions are as follows. If industrial plants, golf courses, car washes, etc. could somehow have access to river water or recycled Baton Rouge Water Co. water, it would be a beginning to much needed clean water conservation.

In addition, educating the public of the crisis must be continued as well as each individual's efforts to conserve. Ex. Using less running water for hand washing, tooth brushing, showering, using full dishwasher/washing machine loads to name a few. Using rain barrels and planting drought tolerant plants must also be encouraged.

If we must allow the fracking process for natural gas drilling, extreme oversight must be used to monitor and limit the use of our ground water as well as the chemicals that potentially could infiltrate our aquifers.

While I advocate the least government possible, out of dire necessity, I must support any reasonable regulations / laws / taxes required for enforcement of these regulations / laws that might be enacted to preserve our quality drinking water.

Finally, billboards and public service announcements in newspapers, magazines, TV, and radio must be utilized to get this urgent situation to the public.

Thank you for allowing me to express my concerns.

Sincerely,



Martha S. Anderson

Office of Conservation

APR 16 2012

Environmental Division

Office of Conservation

APR 25 2012

Environmental Division



April 16, 2012

Environmental Division  
Office of Conservation  
Department of Natural Resources  
P.O. Box 94275  
Baton Rouge, LA 70804-9275

Re: East Baton Rouge Parish Drinking Water/Groundwater

The Baton Rouge Group of the Sierra Club submits the following comments in response to the public hearing held by the Commissioner of Conservation on April 12, 2012 to address the issue of aquifer depletion and groundwater use in East Baton Rouge Parish.

A number of key considerations were articulated during the public comments at this hearing:

- Concerns over salt water intrusion into the parish groundwater supply go back several decades.
- State law prioritizes drinking water above other uses.
- About half of the groundwater pumped in the parish aquifer system is used by industry.
- A number of industrial users, primarily oil and gas refiners, have already begun to increase their use of Mississippi River water and decrease their use of groundwater, showing that this can be done.
- There are local actions that can be taken in terms of water conservation and use, but state action is required to address the issue of private industrial extraction of groundwater for their operations.

The hearing was held in response to a request by the East Baton Rouge and Ascension Parish Councils, along with the Baton Rouge Water Company, and the Capital Area

BRSC – Letter on BR Groundwater – 2

Legislative Delegation. The parish councils and the Baton Rouge Water Company, as well as a number of concerned citizens, have requested an official declaration of an Area of Concern so that the process for state action may be initiated.

We support this request. It is clear that the parish groundwater situation needs to be addressed, since a critical public resource is at risk. The Baton Rouge area has had some of the best drinking water in the world, but change is needed if this resource is to be protected. Industrial users must reduce their use of groundwater and increase their utilization of the Mississippi River. We support as well expanded public action at the local level to conserve and improve responsible water use.

Sincerely,



Sam Wilcher  
Executive Committee  
P.O. Box 80361  
Baton Rouge, La 70898

Office of Conservation

APR 25 2012

Environmental Division

Statement presented to Office of Conservation at Public Hearing  
Thursday, April 12, 2012

Good Evening,

My name is Anthony Duplechin. I am the Director of the Capital Area Groundwater Conservation District.

The District and its Commission were created by Act 678 in the 1974 Regular Session of the Louisiana Legislature and can be found at La. R.S. 38:3071 (et. Seq.), and became effective on January 1, 1975. The Capital Area includes the parishes of East Baton Rouge, West Baton Rouge, East Feliciana, West Feliciana and Pointe Coupee. The Commission consists of fifteen members, one member from each of the parishes composing the district, three members representing the industrial users in the district, three members representing private or public water supply for rural or municipal use in the district, with the condition that at least one of said three members shall always be from the nominees of privately owned users furnishing a municipal water supply, one member representing the office of public works of the Louisiana Department of Transportation and Development, one member representing the Louisiana Farm Bureau Federation and the Louisiana Cattlemen's Association, one member representing the Louisiana Department of Environmental Quality, and one member being the nominee of the board. Current members of the Commission are:

Mr. Melvin Argrave, III  
Public Supply (BR Water Co.)

Mr. Jody Burleson  
Industry (Exxon)

Mr. Zahir "Bo" Bolourchi  
Louisiana DOTD

Mr. Jonathan Causey (Chair)  
Public Supply (Louisiana DHH)

Mr. Brian Chustz  
Industry (Entergy)

Mr. John Cadenhead  
East Feliciana Parish

Mr. John Hashagen (Vice- Chair)  
West Feliciana Parish

Mr. Joey Hebert  
Industry (Georgia-Pacific)

Mr. John Jennings  
Louisiana DEQ

Dr. John Westra  
East Baton Rouge City-Parish

Dennis McGehee  
Public Supply (BR Water Co.)

Mr. James Rills (Treasurer)  
West Baton Rouge Parish

Ms. Rosemary Rummeler  
Pointe Coupee Parish

Mr. Harold Kirby  
Louisiana Farm Bureau & Cattlemen's Association

Mr. Mark Walton  
Commission Nominee

As early as the 1930's, it was realized that water levels in Baton Rouge's city supply wells were dropping. The Louisiana Legislature established a Louisiana Water Resources Study Commission around 1936, which met a few times and did not take much action.

In 1964, a USGS report titled "Salt Water Encroachment in Aquifers of the Baton Rouge Area" was published, in conjunction with the Louisiana Office of Public Works, recommending a drilling and monitoring program be implemented. Later that year, a water commission was proposed to Mayor Woodrow Dumas by Leo Bankston and others. East Baton Rouge Resolution 53:24 established a special Water Conservation Commission to study groundwater conditions, with particular interest in saltwater encroachment, and to make recommendations for remedial action.



In 1965, the Louisiana Water Resources Research Institute proposed a study of possible solutions to the saltwater encroachment threat.

In 1970, a legislative act (No. 682 - RS 38:3051 et seq.) allowed establishment of the Greater Baton Rouge Water Conservation District (RS 38:3051) and a twenty member Board of Commissioners was appointed to administer District affairs. This Commission gathered enough information to determine the need for control legislation. Such legislation was presented to the Louisiana Legislature, but failed to pass.

In 1974, a similar bill was introduced that expanded the District to include the five parishes in the capital area (East Baton Rouge, West Baton Rouge, East Feliciana, West Feliciana and Pointe Coupee). The bill passed (No. 678), creating the Capital Area Groundwater Conservation District (RS 38:3071) and a Board of Commissioners to administer the affairs of the District. An organizational meeting was held on January 14, 1975.

Since its creation, the Capital Area Groundwater Conservation District has been involved in the efficient administration, conservation, orderly development and supplementation of groundwater resources in the five-parish area. The CAGWCC has driven investigative efforts and policy changes and fostered an atmosphere of cooperation to promote the responsible development of the groundwater resources in the Baton Rouge area and to protect the quality of these resources. Numerous actions have been taken by the Commission to study, assess and address the matters of subsidence, salt water encroachment and water level decline in the district, including:

#### Actions by the Capitol Area Ground Water Conservation Commission (CAGWCC)

<u>Date</u>	<u>Action</u>
November 1975	Requested industry to reserve the "1,000-", 1,500-", and "1,700-foot" sands for public supply wells
July 1988	Re-affirmed above resolution and called attention to the fact that the "1,500-foot" sand south of the Baton Rouge fault in West Baton Rouge Parish is included
October 1991	Adopted the following conservation policy for the "2,000-foot" sand in the Baton Rouge area. The policy would apply to the area bounded by Chippewa Street, the Mississippi River, Irene Road-

Heck Young Road extended east, and Plank Road. This is known as the Industrial Area:

1. Requested a moratorium on installation of new industrial wells in the "2,000-foot" sand in the area defined above, except for replacement wells or as approved by the CAGWCC.
2. Established a limit for the annual pumping rate in the "2,000-foot" sand in the area defined above of 26 million gallons per day.
3. Proposed a maximum water level for the "2,000-foot" sand in the defined area of 320 feet below land surface.
4. Encouraged development of alternate aquifers or surface water sources as sources of supply.
5. Encouraged use of shallow aquifers or the Mississippi River for cooling water and deeper aquifers for process, boiler feed and drinking water.

- April 1992 CAGWCC advised Senator John Breaux on the saltwater problems in Baton Rouge and the CAGWCC's concerns for protecting the area water supply and requesting funding support for planning and implementing remedial measures.
- July 1992 Passed a resolution accepting, in principle, Baton Rouge Water Company's proposed construction and lease back of saltwater remediation facilities; also authorized the District Director to send a letter to all pumpage users informing them of the details of the proposed remediation project.
- October 1992 Authorized the CAGWCC to proceed with the Baton Rouge Water Company (BRWC) proposal, when approved, to install 1-3 scavenger wells in the "2,000-foot" sand. (This project was cancelled due to insufficient funding).
- June 1994 District Director briefed CAGWCC on proposal to obtain EPA grant under Section 319(h) of the Clean Water Act aimed at controlling saltwater encroachment using the recharge effect of connector wells.
- January 1998 Successful bid for connector well construction received.
- April 1999 Connector well placed in operation.

- December 1999 CAGWCC received National Ground Water Association's 1999 Outstanding Ground Water Project Commendation for connector well project.
- June 2002 Technical Committee asks the CAGWCC to consider alternative water sources and recommended a feasibility study be undertaken to document the potential costs versus benefits.
- December 2002 CAGWCC approved proposal by URS Corporation to conduct a feasibility study for alternative water supply sources, with funding to be split 50/50 between CAGWCC and East Baton Rouge Parish.
- December 2003 URS Corporation reports to CAGWCC results of study for alternative water supply sources for industrial users, stating that the use of reclaimed treated effluent is technically feasible, but would require economic and financial incentives, or strong political and legislative initiatives.
- March 2004 CAGWCC approved URS study.
- March 2007 CAGWCC approved moving forward with US Geological Survey project entitled "Simulation of Ground-Water Flow in the "1,500-foot" and "2,000-foot" Sands and Movement of Saltwater in the "2,000-foot" Sand in the Baton Rouge Area, Louisiana" to be funded in part by joint CAGWCC - City of Baton Rouge and East Baton Rouge Parish and CAGWCC - USGS cooperative agreements.
- June 2010 CAGWCC approved entering into an agreement with BRWC to fund research by Dr. Frank Tsai entitled "Scavenger Well Operation Model to Assist BRWC to Identify Cost-Effective Approaches to Stop Saltwater Intrusion toward the BRWC Water Wells in the "1,500-foot" Sand of the Baton Rouge Area."
- June 2011 Commission approved sending a Letter of Recommendation to the Louisiana Board of Regents for proposed study by Drs. Frank Tsai and Jeff Hanor of "Unconventional Hydraulic Control Deep-Aquifer Saltwater Intrusion Mitigation Under Uncertainty", in which they will study the feasibility of using horizontal wells as saltwater scavenger wells.

As you can see, the matter of saltwater intrusion into the "1500-foot" and "2000-foot" sands has been specifically addressed by the CAGWCC. The "connector-well" to recharge the "1500-foot" sand and create a pressure barrier was placed in operation in 1999, resulting in partial mitigation of saltwater movement toward the Baton Rouge Water Company's (BRWC) "1500-foot" wells at their Government Street pumping station. Dr. Jack Whitman of Layne Christensen, in a presentation on a report titled "Remedial Options for Saltwater Encroachment in the 1,500 Foot-Sand", called the installation of the connector well a "brilliant move." This report was funded by Baton Rouge Water Company.

Thank you for affording the CAGWCC the opportunity to present these facts to the Office of Conservation.