STATE OF LOUISIANA OFFICE OF CONSERVATION BATON ROUGE, LOUISIANA

ORDER NO. ENV 2011-GW014

August 19, 2011

Order declaring a temporary ground water emergency in accordance with LSA R.S. 38:3097.3.C(8) and the August 15, 2009 Ground Water Emergency Response Contingency Plan to implement water conservation measures and limit use of Carrizo-Wilcox and Upland Terrace aquifer system ground water withdrawn from industrial, irrigation, domestic and public supply water wells located in certain areas in Southern Caddo Parish, Louisiana during extended extraordinary drought conditions.

Pursuant to power delegated under the laws of the State of Louisiana, and particularly LSA-R.S. 38:3097.1, et seq., the following Order is issued and promulgated by the Commissioner of Conservation as being reasonably necessary to assure the most advantageous use of the State's ground water resources consistent with their protection, conservation and replenishment. This Order is issued pursuant to Act 49 of the 2003 Louisiana Legislature, as amended and using the intent and language provided therein.

DEFINITIONS

"Community public supply water well" shall, for the purposes of this Order, mean a public supply well which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. A community public supply well may be owned by a municipality or community, a water district, a corporation, a private individual or by a local, state or federal governmental agency.

"Domestic purpose" shall, in the context of water use and for the purposes of this Order, mean water used exclusively to supply the household needs of the owner lessee or his family. Uses may include drinking, cooking, washing, sanitary purposes, garden watering and caring for pets. Uses shall also include water used on private farms and ranches for the feeding and caring of pets.

"Domestic well" shall, for the purpose of this Order, mean a well used exclusively to supply the household needs of the owner lessee or his family. Uses may include drinking, cooking, washing, sanitary purposes, lawn and garden watering and caring for pets. Domestic wells shall also include wells used on private farms and ranches for the feeding and caring of pets and watering of lawns, excluding livestock, crops, and ponds.

"Industrial well" shall, for the purposes of this Order, mean a well used to supply water for plants that manufacture, process or fabricate a product. The water may or may not be incorporated into the product being manufactured. The water is usually used to cool machinery, to provide sanitary facilities for employees, to air condition the plant, and water grounds at the plant. Well water used for mining, processing, exploration, development or production of natural resources shall be included in the industrial category.

"Irrigation well" shall, for the purposes of this Order, mean a well used for irrigating cultivated plants, for watering stock, for crawfish and catfish farming, and for similar agricultural activities. Most irrigation wells supply water for farm corps, but this category also includes wells that are used for watering parks, golf courses, cemeteries and wells which are used exclusively for watering lawns in urban areas.

"Noncommunity public supply well" shall, for the purposes of this Order, mean a public supply water well which serves either fewer than 15 service connections or fewer than 25 year-round residents or no year-round residents. Examples of the former case are small public water supplies for mobile home parks, subdivisions, etc. which fall below the 15 connections/25 persons criteria for community water supplies. The latter case includes public water supplies which serve no year-round residents, such as bars and lounges, motels, camps, office buildings, restaurants, rest stops, service stations, recreational facilities, schools, commercial establishments, etc.

"Public supply well" shall, for the purposes of this Order, mean a well which provides water for drinking, cooking or washing use by the public, or transients, or by persons other than the immediate family of the owner of the supply. A public supply water well may be either a community water well or noncommunity water well.

"Replacement well" shall, for the purposes of this Order, mean a well located within 1,000 feet of the original well and within the same property boundary as the original well, installed within the same aquifer over an equivalent interval with an equivalent pumping rate, and used for the same purpose as the original well.

FINDINGS

The commissioner finds that:

- 1. Ground water levels at several registered water wells screened at a depth of 160 feet below land surface or less located in the vicinity of Keithville, Louisiana (Keithville) and Ellerbe Road area south of Shreveport, Louisiana (Ellerbe Road) in South Caddo Parish have been reported to have recently dropped to levels insufficient for ground water production.
- 2. South Caddo Parish, Louisiana has been designated by the National Drought Mitigation Center's U.S. Drought Monitor as an area experiencing moderate to exceptional drought conditions for nearly 15 consecutive months beginning on May 18, 2010 to present.
- 3. Data reported by the United States Geological Survey (USGS) indicates that the Carrizo Wilcox aquifer system is a low yield aquifer system that generally produces water suitable for drinking water purposes which has been and is currently being used predominately for domestic and public water supply in mostly rural areas of Northwest Louisiana. However, water production from the aquifer system is reported to be physically restricted due to the aquifer's discontinuous nature and typically thin, lenticular and fine textured sand beds.
- 4. The Upland Terrace Aquifer System of North Louisiana occurs as a discontinuous band along the northwestern edge of the Red River Valley and the western edge of the Mississippi River Valley. The aquifer is generally unconfined or partially confined and consists of high yield sands and gravels that are rapidly recharged by direct infiltration of rainfall (LDEQ 2007). The Upland Terrace aquifer in the Ellerbe Road Area of Interest identified in Order Item No. 2 is suitable for drinking water purposes and is currently being used for domestic water supply.
- 5. USGS data further indicates that recharge of the Carrizo-Wilcox and Upland Terrace aquifer systems is primarily dependant upon localized rainfall and surface water infiltration, particularly in areas lacking significant surface water features.
- 6. The State's water well registration database indicates that the Keithville and Ellerbe Road areas population depend on the Carrizo-Wilcox and/or Upland Terrace aquifer systems for potable private domestic and public water supply. Specifically, 89% of all registered water wells located in the Keithville area identified in Order Item 2.A of this Order are either domestic (80%) or public supply (9%) wells and 93% of all registered water wells located in the Ellerbe Road area indentified in Order Item 2.B of this Order are either domestic (90%) or public supply (3%) wells.
- 7. The U.S. Environmental Protection Agency (EPA) estimates about 30% of household water use is devoted to outdoor uses. This percentage is reported to be up to 50% in southern states.
- 8. The August 15, 2009 Ground Water Emergency Response Contingency Plan originated from LRS 38:3097.3.C(8) which mandates said Plan "shall provide that groundwater needed for human consumption shall have the highest priority."
- 9. Several domestic and public supply wells registered in the State's water well registration database located in the Keithville and Ellerbe Road areas are reported to have a total well depth of 200 feet or less.
- 10. Since domestic water wells installed prior to 1985 are not required by State law to be registered, it is expected that there are unregistered domestic water wells in the Keithville and Ellerbe Road areas that were installed prior to 1985 that have a total well depth of 200 feet or less.
- 11. Based on the enumerated Findings regarding Louisiana Statutory Law, aquifer characteristics, local drought conditions, recent ground water level reports, registered water well depths and expectations of unregistered water well depths, temporary emergency response in accordance with LRS 38:3097.3.C(8) has been deemed necessary in order to prevent long-term adverse effects on the Carrizo-Wilcox and Upland Terrace aquifer systems in the Keithville and Ellerbe Road areas.

ORDER

NOW, THEREFORE, IT IS ORDERED THAT:

- 1. The above Findings are hereby adopted and ordered.
- 2. A declaration of Ground Water Emergency is hereby issued for the following areas of South Caddo Parish Louisiana, hereinafter referred to as "Areas of Interest"
 - A. Keithville Area (Exhibit "A")
 - a. Sections 25, 26, 27, 34, 35, and 36, T16N, R15W
 - b. Sections 1, 2, and 3, T 15N, R15W
 - c. Sections 29, 30, 31, and 32, T16N, R14W
 - d. Sections 5 and 6, T15N, R14W
 - B. South Shreveport Ellerbe Road Area (Exhibit "B")
 - a. Sections 12, 13, and 24 of T16N R14W
 - b. Sections 7-9, 16-22, and 26-36 of T16N R13W
 - c. Portions of Section 38 T18N R13W as depicted on Exhibit "B"
- 3. All persons shall implement judicious use of ground water withdrawn from Carrizo-Wilcox and Upland Terrace aquifer system water wells located in the Areas of Interest by practicing sound water conservation measures. Information and guidance on water conservation measures can be obtained by contacting Office of Conservation staff at 225-342-8244 or by visiting the Department of Natural Resources, Office of Conservation web page at: http://dnr.louisiana.gov/groundwaterconservation.

4. All Wells, Registered or Unregistered, of Any Type

No person shall allow ground water use from registered or unregistered water wells, of any type, producing water from the Carrizo-Wilcox or Upland Terrace aquifers located in the Areas of Interest, a) to be used for watering of residential lawns and golf course fairways; however this prohibition shall not apply to garden watering; b) to be used for washing of vehicles and equipment beyond what is necessary to achieve proper maintenance of said vehicles and equipment; c) to be used for the filling of ponds for aesthetic use; and d) to be used for filling of swimming pools beyond what is necessary for proper maintenance.

5. <u>Public Supply (Community and Non-community)</u>, <u>Domestic and Irrigation Wells</u>, <u>Registered or Unregistered</u>

All persons shall reduce to the maximum extent possible the withdrawal and use of ground water resources from the Carrizo-Wilcox and Upland Terrace aquifers from Public Supply (Community and Non-Community), domestic and irrigation wells located in the Areas of Interest for all reasons other than a purpose for human consumption such as domestic purposes defined herein and similar basic water needs at other non-household facilities and for agricultural purposes.

6. <u>Industrial Wells, Registered or Unregistered</u>

All persons shall eliminate the withdrawal and use of ground water resources from the Carrizo-Wilcox and Upland Terrace aquifers from industrial wells located in the Areas of Interest for all reasons other than a purpose for human consumption such as domestic purposes defined herein and similar basic water needs at other non-household facilities and for agricultural purposes. All other uses from industrial wells exceeding 300 gallons per day shall require authorization from the Commissioner of Conservation.

- 7. This emergency Order shall remain in effect until such time this office has sound and objective information that demonstrates the aquifer water level in the Areas of Interest have sufficiently improved to a level that no longer poses a significant risk of adverse impact to the aquifer or existing water wells.
- 8. This emergency Order may be supplemented, amended, suspended or terminated as deemed necessary pursuant to power delegated under the laws of the State of Louisiana, and particularly LSA-

R.S. 38:3097.1, et seq., by the Commissioner of Conservation to assure the most advantageous use of the ground water resources subject to this Order consistent with protection, conservation and replenishment thereof.

- 9. No person shall install a new water well in the Areas of Interest to produce water from the Carrizo-Wilcox or Upland Terrace aquifers for any purpose without advance written approval of the agency except for replacement wells as defined herein.
- 10. Violations of this Order, any applicable laws or rules, or any other applicable order may subject the well owner to enforcement action(s), including the imposition of civil penalties.

This Order shall be effective on August 19, 2011.

OFFICE OF CONSERVATION OF THE STATE OF LOUISIANA

James H. Welsh

Commissioner of Conservation

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