

HOUSE COMMITTEE AMENDMENTS

Substitute for Original House Concurrent Resolution No. 52 by Representative Foil as proposed by the House Committee on Natural Resources and Environment

This document reflects the content of a substitute bill but is not in a bill form; page numbers in this document DO NOT correspond to page numbers in the substitute bill itself.

Regular Session, 2014

House Concurrent Resolution NO. 52 (Substitute for House Concurrent Resolution No. 52 by Representative Foil)

BY Natural Resources and Environment

WATER/RESOURCES: Provides relative to the management regime for the Southern Hills Aquifer System

1 A CONCURRENT RESOLUTION

2 To urge and request the commissioner of conservation to continue monitoring the health and

3 sustainability of the Southern Hills Aquifer System and to use the results of

4 simulations conducted by the U.S. Geological Survey on the fifteen hundred foot

5 sand and the two thousand foot sand to develop management regimes for the health

6 and sustainability of the Southern Hills Aquifer System.

7 WHEREAS, the Southern Hills Aquifer System is a system of several aquifers

8 underlying the parishes of East and West Baton Rouge, Pointe Coupee, and East and West

9 Feliciana with ten of those north of a fault line that bisects East Baton Rouge Parish; and

10 WHEREAS, the Southern Hills Aquifer System is the major source of drinking water

11 for the Capital Area Region and there are numerous industrial facilities that withdraw potable

12 water from the aquifer system for their industrial processes; and

1 WHEREAS, there has long been concern about the viability, sustainability, and health
2 of the Southern Hills Aquifer System; even as long ago as the early 1960s there were
3 concerns about saltwater being drawn from the southern portions of the system below the
4 fault line into the freshwater portions of the aquifer north of the fault line; and

5 WHEREAS, the concern about the sustainability of the aquifer system has been
6 growing recently and has resulted in many activities, discussions, studies, and public hearings
7 culminating in the July, 2013, release by the U.S. Geological Survey (USGS) of their
8 "Simulation of Groundwater Flow in the '1,500-foot' Sand and the '2,000-foot' Sand and
9 Movement of Saltwater in the '2,000-foot' Sand of the Baton Rouge Area, Louisiana" report
10 (USGS report); and

11 WHEREAS, according to the abstract of that report, "Groundwater withdrawals have
12 caused saltwater to encroach into freshwater bearing aquifers beneath Baton Rouge,
13 Louisiana. Groundwater investigations in the 1960s identified a freshwater-saltwater
14 interface located at the Baton Rouge Fault, across which abrupt changes in water levels
15 occur." and;

16 WHEREAS, the same abstract also states, "Groundwater withdrawals from an aquifer
17 that is 2,000-feet (ft) deep in East Baton Rouge Parish (the "2,000-foot" sand of the Baton
18 Rouge area) have caused water-level drawdown up to 356 ft and induced saltwater
19 movement northward across the fault. Groundwater withdrawals from the "2,000-foot" sand
20 averaged 23.9 Mgal/d 2010. Groundwater encroachment threatens wells that are located
21 about 3 miles north of the fault, where industrial withdrawals account for about 66 percent
22 of the water withdrawn from the "2,000-foot" sand in East Baton Rouge Parish."; and

23 WHEREAS, the USGS presented five hypothetical scenarios simulating the effects
24 of different groundwater withdrawal options on the water levels in the "1,500-foot" sand and
25 the "2,000-foot" sand with the first scenario simulating a continuation of the 2007
26 withdrawals being used as the base for comparison; and

27 WHEREAS, the findings of these simulations indicate that scenario 2, " . . .
28 discontinuation of withdrawals from seven selected industrial wells located in the northwest
29 corner of East Baton Rouge Parish, and water levels within the "1,500-foot" sand were

1 predicted to be about 15 to 20 ft higher under this withdrawal scenario than under scenario
2 1." (USGS report) and scenario 3 which simulated " . . . the effects of a scavenger well,
3 which withdraws water from the base of the "2,000-foot" sand at a rate of 2 Mgal/d, at two
4 possible locations on water levels and concentrations within the "2,000-foot" sand." finding
5 that " . . . operation of the scavenger well in the locations specified in scenario 3 reduces the
6 chloride concentrations at all existing chloride-observation well locations." (USGS report);
7 and

8 WHEREAS, scenario 4 simulated a 3.6 Mgal/d reduction in total groundwater
9 withdrawals from selected wells in the "2,000-foot" sand resulting in " . . . the median and
10 mean plume concentrations are slightly lower than scenario 1." (USGS report), and scenario
11 5 simulated the effect of " . . . total cessation of groundwater withdrawals from the "2,000-
12 foot" sand in the industrial district." finding that " . . . the chloride-concentration distribution
13 in scenario 5 reflects the change in groundwater flow direction. Although some saltwater
14 would continue to cross the Baton Rouge Fault and encroach toward municipal supply wells,
15 further encroachment toward the industrial district would be abated."; and

16 WHEREAS, in a letter dated November 27, 2013, from Commissioner of
17 Conservation James H. Welsh to the chairman-elect and the director of the Capital Area
18 Groundwater Conservation Commission (letter to the CAGCC), the commissioner states that
19 the USGS " . . . scenarios for the 2,000-foot sand indicate that simply reducing or ceasing the
20 industrial area pumping center's withdrawals from that sand would lessen saltwater
21 encroachment between that pumping center and the fault to the south, but at the same time
22 likely would result in accelerated saltwater encroachment at greater concentrations toward
23 the public supply wells further south and east . . ." in the two thousand foot sand " . . . due
24 to their closer proximity to the saltwater source."; and

25 WHEREAS, in the same letter, the commissioner acknowledges that " . . . modeling
26 of potential scavenger well impacts . . . indicates that this protection would likely come at
27 the expense of accelerated encroachment toward wells between the scavenger well and the
28 fault to the south."; and

1 WHEREAS, management of the Southern Hills Aquifer System to ensure the health
2 and sustainability of the aquifer must be based in science and any decisions by the
3 commissioner of conservation that apply to withdrawal rates, placement of wells and
4 scavenger wells, and saltwater encroachment mitigation projects must be carefully
5 considered for their impact on the entire region and such decisions must have a scientific
6 basis.

7 THEREFORE, BE IT RESOLVED that the Legislature of Louisiana does hereby urge
8 and request the commissioner of conservation to continue monitoring the health and
9 sustainability of the Southern Hills Aquifer System and to use the results of simulations
10 conducted by the U.S. Geological Survey on the fifteen hundred foot sand and the two
11 thousand foot sand to develop management regimes for the health and sustainability of the
12 Southern Hills Aquifer System.

13 BE IT FURTHER RESOLVED that a copy of this Resolution be forwarded to the
14 commissioner of conservation.

DIGEST

The digest printed below was prepared by House Legislative Services. It constitutes no part of the legislative instrument. The keyword, one-liner, abstract, and digest do not constitute part of the law or proof or indicia of legislative intent. [R.S. 1:13(B) and 24:177(E)]

Foil

HCR No.

Requests the commissioner of conservation to continue monitoring the health and sustainability of the Southern Hills Aquifer System and to use the results of simulations conducted by the U.S. Geological Survey on the fifteen hundred foot sand and the two thousand foot sand to develop management regimes for the health and sustainability of the Southern Hills Aquifer System.