

**The House Committee on Natural Resources Summary**

**AUSTIN (3/22/12, E2.010, 9:00 AM)**

The House Committee on Natural Resources, under the direction of Chairman Ritter, met today in the Capitol Extension for invited testimony on the following interim charges:

Number 1 - Relating to the ongoing statewide drought and the performance of state, regional and local entities in addressing it. Examine the impact of the drought on the state water plan, including an evaluation of how well the state's existing water resources can meet demand, the need for additional funding sources to implement the plan, and the effectiveness of current drought planning and drought management policies. Identify short-term and long-term strategies to help the state better cope with drought and assess any obstacles, including state and federal regulations, to implementation of these strategies.

Number 3 - Relating to the status of desalination projects in Texas. Include an evaluation of the regulation of brackish groundwater and whether opportunities exist to facilitate better utilization of this groundwater to meet future needs.

Number 4 - Relating to ways to water conservation in agricultural irrigation.

(9:00) The committee convened at 9:00 a.m. Chairman Ritter made opening comments regarding the drought in Texas.

The committee heard invited testimony on interim charge 1 regarding the drought.

(9:04) John Nielsen-Gammon, state climatologist, said La Nina is weakening but the drought is worsening in west and south Texas due to below normal rainfall.

(9:12) Chuck Phinney of TDEM said the Drought Council is increasing stakeholders' input and discussed the state's efforts in preparing for future federal drought declarations. He discussed the data collection study of the vulnerability of electric power system as well as strategies/prevention of a jurisdiction "running out of water." He spoke of a drought workshop in west Texas for contingency planning.

(9:20) L'Oreal Stepney of TCEQ said the agency curtailed 1,200 water rights of which 1,160 are now lifted. Stating "communication is the key, she described its outreach and weekly meetings with stakeholders and multiple jurisdictions. Regarding public water systems, the agency is engaged in monitoring and, if necessary, providing assistance. She told the members how conservations plans are "key tools" with regard to drought.

(9:30) The members and Ms. Stepney discussed the draft water management rules, water systems, and lack of uniformity of adjacent water systems with drought restrictions.

(9:36) Drew DeBerry of TDA testified on the deleterious effects of the drought on ranching and farming. He said the wildfires consumed 4 million acres and 6,200 miles of fencing, which will cost \$10,000 per mile to replace. The most recent economic impact of the drought is \$7.6 billion on agriculture and \$3.4 billion in timber losses, which is not included in the \$7.6 billion figure. The beef cattle sector declined by 600,000.

(9:45) Michael Lemonds of General Land Office discussed the negative impacts of the drought on its Permanent School Fund portfolio of 600,000 west Texas acres, 9,700 central Texas investment acres and 5,500 east Texas timber acres.

(9:56) Tom Currah of the Comptroller's Office said 2011 direct losses total \$7.6 billion and indirect losses are \$3.5 billion. He told the members by 2060 40% of the water will be from unconventional sources.

(10:00) Travis Miller of Texas AgriLife Extension Service said the cotton industry lost 57% of its crop, resulting in losses of \$2.2 billion. Corn lost 55% of its crop, peanuts lost 60%, and soybeans lost 69%. Livestock losses were \$3.23 billion and forestry losses were \$660 million. Discussion ensued about 2012-13 cotton projections, future agriculture losses, and the "long time" for rangeland recovery.

(10:14) Mitchell Harris of AgTexas Farm Credit Services in Lubbock and representing the Texas Farm Credit System said its \$8.9 billion loan portfolio has not suffered significant losses due to the drought. He told the member price protection will be 30% less this year. Rural communities are enduring volatile commodity prices, increasing input costs, water constraints, federal farm policy and regulation, and adverse weather. Mr. Harris said the federal deficit, "bias" to cut

federal farm programs, and weather is a "perfect storm" for west Texas. Discussion ensued about water metering, water conservation, and the "more brutal environment" for 2012-13 agriculture.

(10:39) Russell Boening of Texas Farm Bureau stated crop insurance is only a "stop gap" measure. The drought impacts on livestock resulted in culling of herds and selling of young livestock.

(10:46) Jay Evans of Texas and Southwestern Cattle Raisers Association discussed its drought survey which found 35% reduction in breeding herds. He spoke of the continuing drought, loss of producers, and the need for resource recovery and habitat protection.

(10:59) Becky Motal of LCRA said its Highland Lakes are less than 50% full. During the 2011 summer, the 200,000 acre-feet lost to evaporation was greater than lake inflows. She told the committee of increased enforcement of water taken from the lakes by residents and the LCRA is "committed" to new water sources of 100,000 acre-feet.

(11:14) Robby Cook, former state representative and representing the Lakeside Irrigation Division in Colorado County, testified on the stakeholder group's input on the LCRA's recent water release decision and its potential impacts on the rice industry and downstream farmers. He discussed the State's Water Plan and the declining availability of water for agriculture as well as who should be represented on water management planning groups. He said water should be "preserved" for agriculture and the State Water Plan should be "properly funded."

(11:24) Chairman Ritter inquired about LCRA's commitment to develop more water sources and to "aggressively push" for implementation of the state water plan. Mr. Cook discussed laser leveling and other conservation efforts with the members.

(11:34) Ken Kramer of the Lone Star Chapter of the Sierra Club said the state's drought response should be to "maximize" existing water resources and discussed the effectiveness of water management by municipal providers. He criticized the water restriction "triggers" and stated they should be based on criteria other than reservoir or aquifer levels. He criticized the "lack of consistency" with regard to differing water restrictions of adjacent municipalities. He spoke of the "revenue concerns and disincentives" of suppliers regarding their drought plans. He said TCEQ can provide guidance and technical assistance to entities for drought and water management.

(11:58) Carolyn Brittin of TWDB said 2060 projections are for 27% higher demand as supplies dwindle. Further, municipal needs will increase and eventually equal agriculture's water consumption. She stated the State Water Plan will cost \$53 billion over a 60-year timeline and flood control will cost \$231 billion. The economic losses of not implementing the State Water Plan are \$116 billion by 2060.

(12:07) Responding to Rep. Callegari of the status of the 22 future reservoir sites, Ms. Brittin said 2 are built and 5 are in the permitting process. She discussed the issues of regulatory burdens, cost/financing, and property acquisition.

The committee heard invited testimony on interim charge 3 regarding desalination.

(12:26) Robert Mace of TWDB said 44 desalination plants in Texas produce 134,000 acre-feet yearly of which 56,000 acre-feet is surface water. He said cost is dependent on many factors and seawater desalination costs range \$1,200 - \$2,400 per acre-foot. By 2060, desalination in the State Water Plan is projected at 180,000 acre-feet of brackish water and 125,000 acre-feet of seawater.

(12:35) The members and Mr. Mace discussed deep aquifer knowledge, if more science is needed, recharge impacts, pilot plants, geology information, salinity range in groundwater and seawater, cost, varying salinity around the state, disposal of concentrate, well injections, land applications, and the Carrizo-Wilcox Aquifer.

(12:59) L'Oreal Stepney of TCEQ said 9 desalination plants are approved but not built and 21 have submitted plans which await approval. She spoke of its research project with TWDB for alternatives to the current testing process and the agency's purview over water quality standards. Discussion ensued regarding pilot program, its cost and technological advances.

(1:11) Tom Pankratz, editor of the Water Desalination Report, discussed desalination projects in London, England and Perth, Australia. He discussed cost and environmental impacts. He said desalination is not a "panacea" but is part of water management and planning.

(1:23) Rep. Larson and Mr. Pankratz discussed declining costs due to technological advances and how cost will not continue to decline.

(1:25) Tyson Broad of the Lone Star Chapter of the Sierra Club testified on the potential for removing "pressures" from current water supplies and the need to diversify water sources. He said desalination is a component of water conservation and drought management. He discussed the energy usage cost and water usage of desalination.

(1:35) Mike Irlbeck of NRS Consulting Engineers said there are fewer conventional options and it is necessary for diversifying with alternative sources.

(1:42) Bill Norris of NRS Consulting Engineers and a Texas Desalination Association board member "dispelled" the myths of desalination with regard to cost and recommended the state continue "leadership" in desalination.

(2:07) Les Lampe of Black and Veatch testified on the lessons learned from desalination in Australia, some of which were how "urgency led to inefficiencies" and its crisis "streamlined permitting." Discussion ensued regarding disposal of concentrate, financing and blending desalinated water with pure water.

(2:26) Genoveva Gomez of the Brownsville Public Utilities Board testified on its desalination plant expansion to 10 million daily gallons and how the city choose desalination over buying surface water rights.

(2:33) Hector Gonzalez of the El Paso Water Utilities Board testified on the Fort Bliss expansion and its desalination plant's capacity of 18 million daily gallons, which is blended with water to total 27.5 million daily gallons. He said reclaimed water for non-potable uses is 15%-17% of total water usage. The members and the panelist discussed cost.

(2:49) Bill West of the Guadalupe-Blanco River Authority testified on its desalination efforts with the Texas Sustainable Energy Research Institute at UT-San Antonio, which is a regional approach to address future needs by co-locating water and power generation along the south Texas coast. He said they are ready to begin a cost feasibility study of this joint endeavor.

(2:56) Tim Finley of the Dow Chemical Company discussed its reverse osmosis technology, the never-built Freeport plant, desalination and benchmarking.

(3:12) Chuck Ahrens of the San Antonio Water System testified on conservation, its recycled water of 17 million daily gallons, the water-energy nexus, its aquifer storage and recovery (ASR) facility, 30,000 acre-feet saved by its drought management efforts, and a 11 million yearly acre-feet brackish desalination plant in the design phase.

(3:33) Kirk Holland of the Barton Springs/Edwards Aquifer Conservation District Holland testified on developing desalination as an alternative source for water, the need for funding of feasibility studies, and the need for a "public dialog" about the legal prohibition against injecting saline Edwards Aquifer water back into the aquifer.

The committee heard invited testimony on interim charge 4 regarding agricultural water conservation.

(3:46) L'Oreal Stepney of TCEQ spoke of the agency's jurisdiction over water conservation plans and water rights holders.

(3:48) Robert Mace of TWDB testified its agriculture water conservation plan projects 1.5 billion acre-feet of water savings by 2060, which will require loans and grants for greater efficiencies and conservation. He discussed its efforts with the Natural Resources Conservation Service to reduce agriculture water irrigation.

(3:51) Vivien Allen of Texas Tech University testified on irrigation in the High Plains and how the area is facing water depletion. She discussed competing uses, water quality, extraction costs, the savings of integrating cattle and cotton production, and other efforts to reduce water usage.

(4:08) C.E. Williams of the Panhandle Groundwater Conservation District said 88% of the water usage in the Panhandle is irrigated water. He told the members a "cultural change" is needed regarding agriculture's water usage and conservation.

(4:16) Dr. Garry McCauley of Texas AgriLife Research discussed water

conservation efforts by flushing, tilling, leveling and other techniques. Adoption of only 2 best practice methods will result in savings of 40%, he stated.

(4:31) Wayne Halbert of the Harlingen Irrigation District testified on its various conservation efforts.

(4:51) Matt Phillips of the Nature Conservancy cited a water conservation program in Georgia with yielded 250,000 acre-feet of savings and recommended state investment in agriculture conservation.

The House Committee on Natural Resources adjourned at 4:54 p.m.