



## LCCN Presentation

### Monthly Meeting of the Board of Directors, San Jacinto River Authority

March 24, 2016

My name is Michael Massey. I and my fellow LCCN officers/board members are here to present and discuss LCCN's 2015 Petition Drive and its overall findings.

LCCN is disappointed that SJRA did not grant its request for consideration as a full agenda item. Instead we have been relegated the Board's standard "Public Comment" period, complete with its 5 minute limit and a prohibition on dialog. Constrained as that makes us, we will do our best to accomplish something here today.

We refer you to the homepage of our website for the two previous presentations we have given – one to the Lone Star Board and one to the Commissioners Court.

LCCN will devote its limited time here to its concerns about key technical representations and business positions SJRA has taken over the years regarding both groundwater and surface water management (Lake Conroe Reservoir). We offer the following as examples.

#### **1. Link Between Groundwater Crisis and SJRA "Alternative Water" Program**

- a. Without a groundwater crisis to compel it, the GRP Program is not a viable means by which to expand Lake Conroe water use and revenue
- b. SJRA has aggressively used its board seat first to drive Lone Star's perceptions of a groundwater crisis and then to sustain that perception in the face of all challenges. It has done so:
  - i. Despite strong/growing evidence to the contrary that emerged before the crucial "selling period" of its GRP Program (2009 - 2012)
  - ii. Despite fundamental/irreconcilable business level conflicts of interest

#### **2. Land Surface Subsidence (LSS)**

- a. SJRA has been the primary promoter of LSS since 2001, with only brief support from the USGS in 2004/5, a position they quickly began correcting by 2009
- b. Despite clear evidence to the contrary, SJRA used this argument to sell its "alternative water" program throughout the critical period of 2009 through 2012.

#### **3. Mining of the Aquifer**

- a. SJRA is the source/promoter of the fatally flawed concept that an increasing cone of depression at a well is a technical indicator of losses in aquifer storage and pumping capacity.
- b. Further, there is no technical evidence that storage levels in either the county's two operating aquifers or the entire Gulf Coast Aquifer have declined at all despite decades of use, often at rates in excess of 500,000 ac-ft/yr.

- c. Further, despite compelling contradictory technical evidence, SJRA championed that the recharge rate for the entire Gulf Coast Aquifer is known and only 64,000 ac-ft/yr.
- d. Despite a lack of substantial technical evidence, SJRA preaches & teaches that any groundwater use in excess of 64,000 ac-ft/yr amounts to mining of the aquifer.

#### **4. Stability of Lake Conroe @100,000 ac-ft/yr diversion**

- a. As early as 2008/9, SJRA's own consultants showed impacts that contradict SJRA's public position -- particularly in 2009-2012 -- that GRP program diversions will not have a material impact.
- b. More recently, SJRA worked with Bill Beran to extend the work of its 2008/9 consultants and then ignored Beran's clear conclusions of significant impact.
- c. SJRA continues to characterize 100,000 ac-ft/yr withdrawals simplistically as the equivalent of 4 ft of lake level. Substantial TWDB measured data show that impact to be 6 ft – taking into account the actual shape of the lake bottom.
- d. SJRA continues to characterize the lake as having an “average” of 7 ft/yr of release from the dam, “far in excess of planned withdrawals”. Realities are:
  - i. Lake evaporation (4-1/2 ft/yr) now exceeds lake rainfall (4 ft/yr) and the gap is growing.
  - ii. Lake level stability is therefore determined by the performance of the lake's watershed.
  - iii. Despite its critical importance, SJRA has no watershed monitoring program.
  - iv. The predominant economic value of the lake lies in shallow, perimeter areas; these high risk areas are not addressed at all in SJRA's assessments/mitigations of the impacts of GRP Program withdrawals.

#### **5. Role of Sedimentation in Lake Stability**

- a. For all practical purposes urbanization has ended the concept of more reservoirs in Montgomery County. Permanently preserving what exists is now of paramount priority.
- b. Lake Houston and Lake Conroe share comparable sedimentation rates (~600 ac-ft/yr -- TWDB); the cumulative impacts to date on Lake Houston are a loss of about 1/3 of total reservoir capacity.
- c. Sediment settles disproportionately in shallow, high economic value perimeter areas of the Lake Conroe Reservoir. Some shallow areas have already lost over 2 ft of lake depth to sedimentation (Source: TWDB)
- d. Despite the above, SJRA has no active programs to manage lake sediment.

#### **6. Channeling of Lake's Inherently Public Value/Use to Private Use**

- a. It appears that only through membership in the essentially private SJRA GRP Program can MUD's and other public entities gain critically needed use of the Lake Conroe Reservoir
- b. Lost are such benefits as community “bed and banks programs” and the use of water transferred from the Trinity River Basin.