



Comments of Central Texas Water Coalition in Response to Texas Water Development Board Proposed Methodology for Developing Draft Irrigation, Manufacturing, and Steam-Electric Water Demand Projections, November 4, 2016

Kevin Kluge
PO Box 13231
Austin, Texas 78711-3231

The Central Texas Water Coalition (CTWC), a non-profit stakeholder organization advocating for responsible water management policies and practices, appreciates the opportunity to offer these comments on TWDB's proposed draft methodology for the State's Regional Water Planning Groups (RWPGs) to use as the baseline for the Irrigation Demand for the upcoming cycle of the State Water Plan.

In the TWDB Draft the following summary describes the proposed methodology for Irrigation Demand:

1.1 Irrigation water demand projection methodology summary

The baseline methodology for draft irrigation water demand projections is the most recent five-year water use estimates held constant between 2020 and 2070. In counties in which the total groundwater availability over the planning period is projected to be less than the groundwater-portion of the baseline water demand projection methodology, the irrigation water demand will begin to decline in 2030 or later, commensurate with the groundwater availability.

In the proposed methodology document, TWDB notes that Irrigation water use accounts for 58 percent of the most recent water use estimates, and, as such, represents a critical component of the State's water usage. However, while gross historical demand does provide a simplistic gross basis for what was actually used, it does not explain the components of the water use, and does not provide any information on the magnitude of normal conveyance system losses or other unexplained "uses".

CTWC suggests utilizing a more robust and comprehensive approach that would include an analysis of sufficient detail to generate a clear understanding of current water uses and losses as well as a baseline that can be utilized to provide an understandable foundational basis for improvement by key component area of water usage. In essence, this would provide an accurate baseline to better assess supply and demand, and help focus water planning and management on

areas of greatest need for conservation, efficiency and supply projects, consistent with approaches utilized for municipal demand.

Key components of a comprehensive validation analysis could include:

- Demonstration that the historical water use data is reasonably accurate
- Identification of water uses by major water user groups, supported by an associated build-up of need based upon the major demand factors, i.e. cultivated acres by crop, water use metrics by crop, such as the water use per acre
- Incorporation of appropriate water use standards, particularly waste, including identified overages in historical use data utilized in the baseline analysis
- Estimates of conveyance loss numbers in rivers, canals and other distribution systems
- Estimates of other unexplained usage or losses to provide a baseline for “unaccountables”, which can be tracked for improvement, typical of approaches utilized in business and industry to better manage key raw materials

NOAA’s Greg Waller shared information about a National Water Center housed at the University of Alabama, which shows that historical data may not be an effective baseline in our new normal.

It is also recommended that current water pricing assumptions, current and projected increases, and their effect on demand should also be considered in the planning scenarios versus holding them constant between 2020 and 2070, as demand will likely decrease as the price increases, particularly where there are surcharges for high usage.

It is also recommended that the demand analysis document include the major external factors and assumptions that are driving the demand projections, such as commodity prices, subsidies, weather, etc. In the case of weather variations, water demand may also be influenced by available water sources such as rainfall, which could also influence water availability and cost between surface water and groundwater sources. As such, these assumptions should also be included to better understand the requirement and help plan as situations change.

CENTRAL TEXAS WATER COALITION
P O BOX 328, SPICEWOOD, TX 78669
www.CentralTexasWaterCoalition.org

Central Texas Water Coalition is a 501(c)(4) non-profit, non-tax deductible organization.