# Advancing the Use and Regulation of Brackish Groundwater

Bob Harden, P.E. Vice President R.W. Harden & Associates <u>bob@rwharden.com</u> <u>www.rwharden.com</u>



#### House Bill 30

"local or regional brackish groundwater production zones"

that

 are separated by hydrogeologic barriers sufficient to prevent significant impacts to water availability or water quality in other aquifers, subdivisions of aquifers, or geologic strata;



#### Similarities to Chapter 36

- (6) "Groundwater reservoir" means a specific subsurface water-bearing reservoir having ascertainable boundaries containing groundwater.
- (7) "Subdivision of a groundwater reservoir" means a definable part of a groundwater reservoir in which the groundwater supply will not be appreciably affected by withdrawing water from any other part of the reservoir, as indicated by known geological and hydrological conditions and relationships and on foreseeable economic development at the time the subdivision is designated or altered.



#### HB 30 Brackish Production Zone Exclusions

- Edwards Aquifer (EAA), Barton Springs-Edwards Conservation District, Harris-Galveston Subsidence District, Fort Bend Subsidence District
- Any aquifer that has an average TDS of more than 1,000 mg/L and is serving as a significant source of water supply at the time of zone designation



#### Day Case Decision

Groundwater is private property

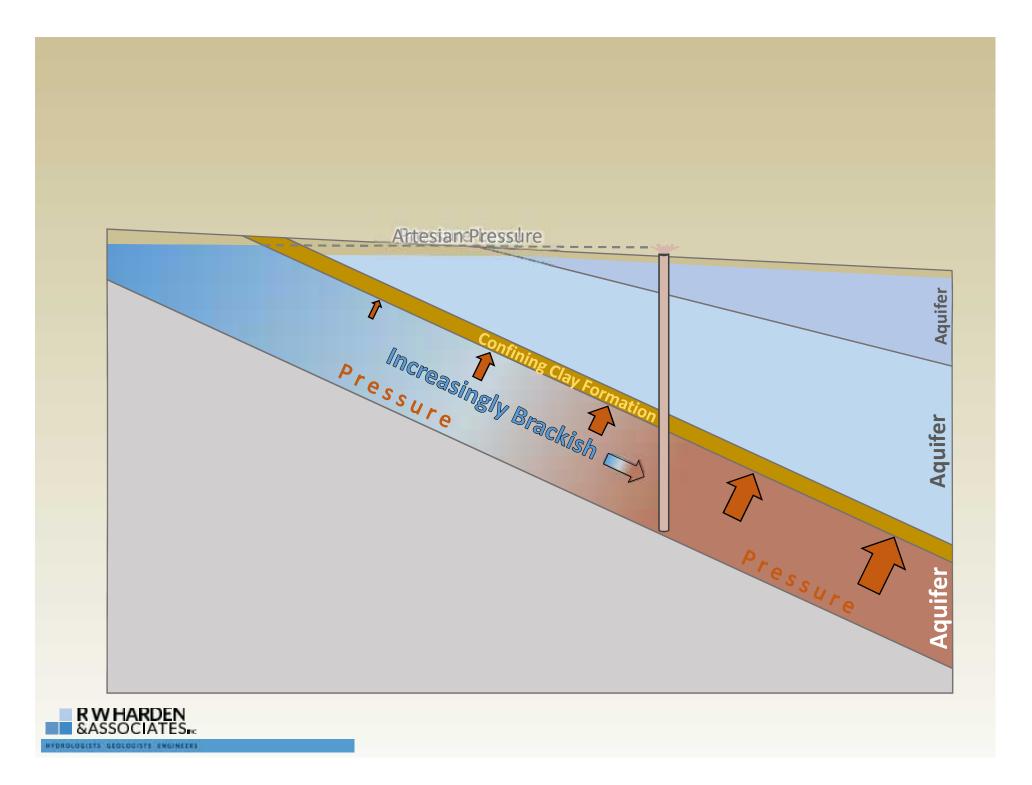
 "As with oil and gas, one purpose of groundwater regulation is to afford each owner of water in a common, subsurface reservoir a fair share"

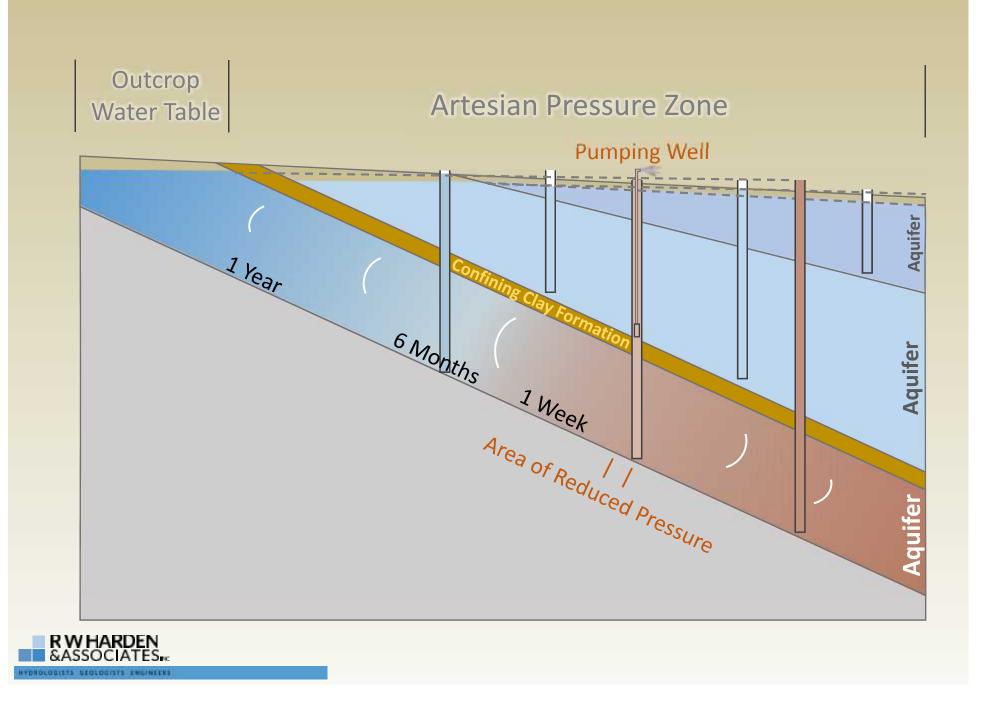


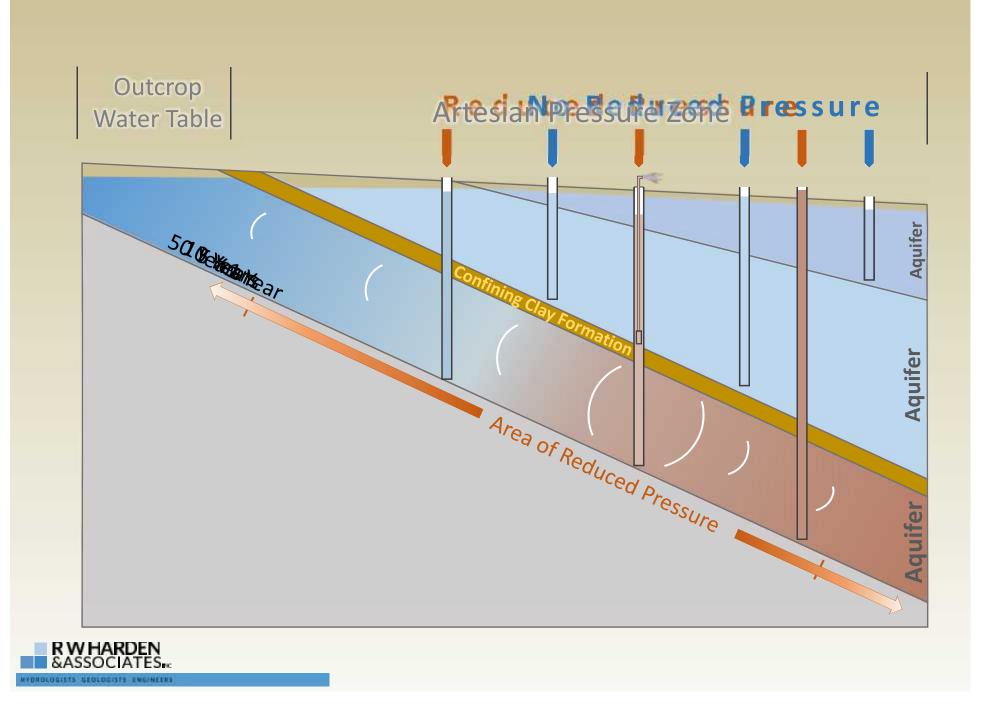
# Groundwater Brackish or Fresh?

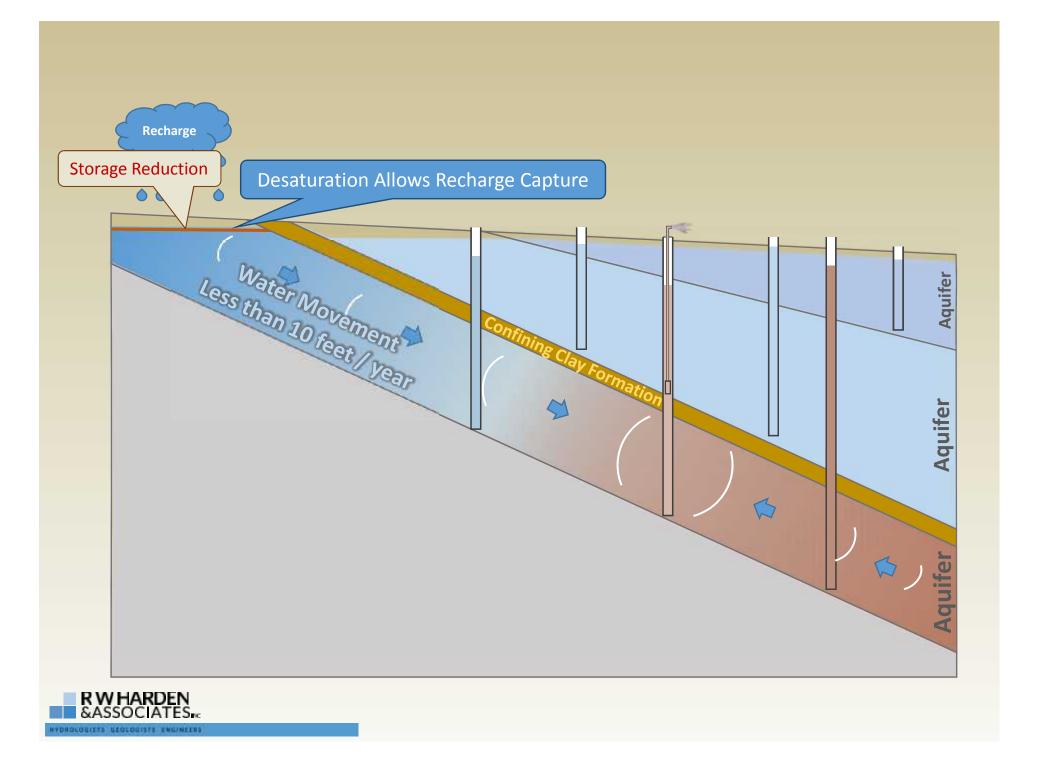
Or Both?







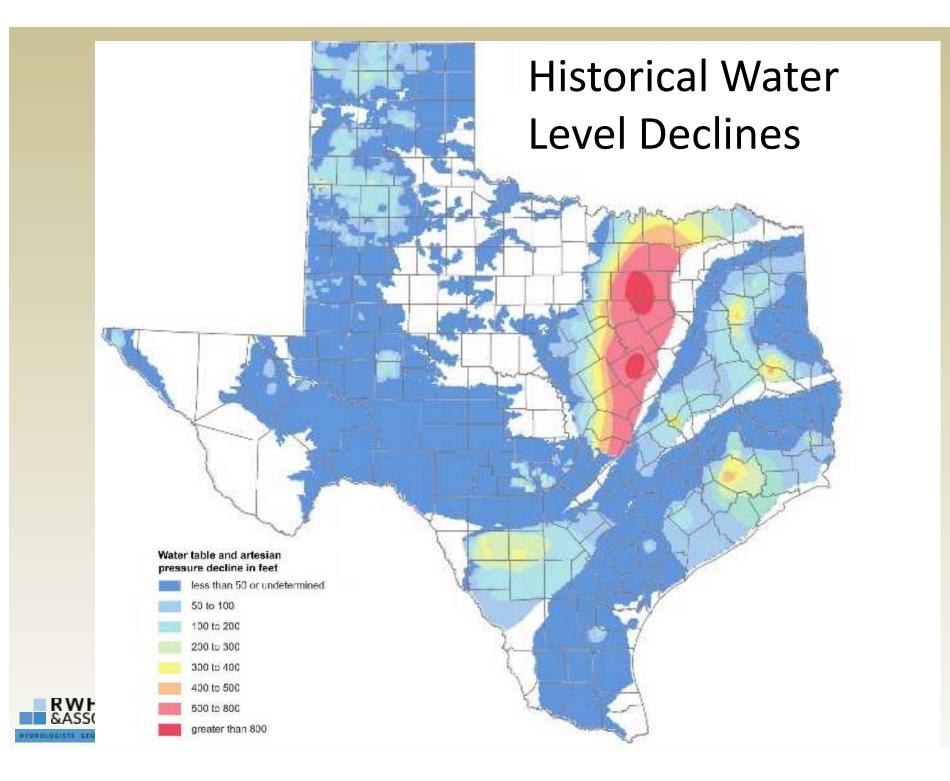


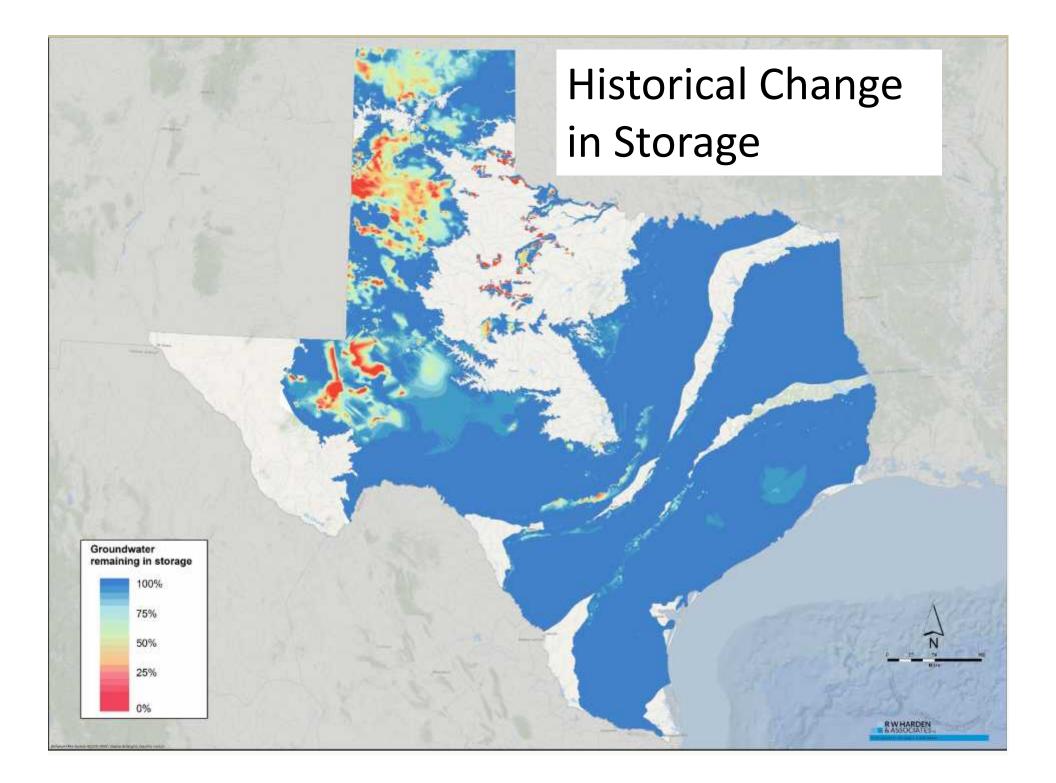


## **Brackish Groundwater Regulation**

- Brackish only groundwater reservoir
- Brackish and fresh groundwater reservoir







### Summary

- Brackish groundwater owners have the same rights/obligations as fresh groundwater owners
- The important difference between pressure and storage

