Texas Water Development Board Findings

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Task

- Review groundwater/surface water interactions in Parker and Hood Counties
- Evaluate potential of oil and gas field brine injection wells to impact groundwater and surface water

Findings

- No significant interaction between groundwater and surface water
- Unlikely that brine injection wells will contaminate groundwater or surface water
  - Majority injecting back into zones that are currently producing oil and gas
  - Injection zones are considerably deeper than the aquifers and land surface

Trinity Aquifer

- Most water wells in the Travis Peak/Twin Mountain formation or the Paluxy formation
- Water depths range from 200 to 800 feet
  - Base of Travis Peak/Twin Mountain formation is 1,000 feet

Injection Wells

- All but one well in Parker and Hood County inject between 3,000 to 7,000 feet
- One well is permitted to inject between 1,560 to 1,640 feet
  - Required to be separated from Travis Peak/Twin Mountain formations by no less than 250 feet of impermeable strata (clay or shale)
- Injection wells are injecting into formations 500 to 4,500 feet below formations with fresh water