

Summary of Meeting 2 (4-29-2025)

- Overview of WQ Management in Tx
 - Explanation of watersheds
 - Davidson creek impairment for elevated bacteria (primary recreation use); low dissolved oxygen (aquatic life use)
 - State establishes standards, monitors, identifies impaired/threatened waterbodies, develop WPP, addresses sources of pollutants.
- Water Data Availability
 - Assessment unit 1211A_02 data graph indicates bacteria geomean exceeds 126 CFU/ 100 mL of water threshold for impairment
 - DO data also supports aquatic life impairment
- Watershed Protection Plans
 - stakeholder driven
 - voluntary strategies
 - focused on 10-year goals
 - Need guidance and input on watershed characterization, goals & objectives, reasonable strategies, and community needs.
 - For the Davidson Creek WPP process, stakeholders chose an organizational framework of Informal decision-making process with no formal voting or committee representation

Meeting 3

Potential Pollution Sources

Point Sources

- Permitted WWTP on CR 120 was never built. Likely it won't be built because the railroad project it was to support did not happen.
- 1 sanitary sewer overflow in the past 5 years.
- Caldwell reported only 2 daily violations – E. coli and ammonia
- Permitted stormwater – 8 active, 1 concrete production permit
- Check on discharge location of Somerville WWTP

Nonpoint Sources

- OSSFs
 - most of lower watershed contains very limited soil for OSSF
 - highest densities of OSSFs occur in southeastern portion of watershed and middle/western portion of watershed. Subdivisions represented by dense areas are older, likely built in mid-1970's. Most newer subdivisions planned or being built are > 5 acre lots.
 - OSSFs estimated using FEMA US Structures data and subtracting water service area of Caldwell.

- Cattle Population (hay/pasture, grassland/rangeland, deciduous-mixed forest)
 - Method 1 based on NASS, downscaled to watershed percentage.
 - stakeholders think this may be a little high
 - Method 2 based on stocking rate (method selected by stakeholders)
 - This method was chosen by stakeholders with one change; adjusting for 6 ac/cattle on improved and 10 ac/head for unimproved.
- Other livestock
 - NASS method, downscaling to watershed percentages
 - Total Horse numbers are too low. Stakeholders suggest checking with Texas Animal Health department. If no information, may increase total watershed to 150.
- Wildlife (using suitable habitat such as cropland, deciduous/mixed forest, evergreen forest, pasture/hay, grassland/rangeland, wetland)
 - TPWD Survey estimates – average for last 5 years = 4,352 total Deer
 - Stakeholders agree with this method
- Feral hogs (using suitable habitat such as cropland, deciduous/mixed forest, evergreen forest, pasture/hay, grassland/rangeland, wetland)
 - Method 1 = 39 ac/hog
 - Method 2 = 32 ac/hog
 - Method 3 = 33.3 ac/hog
 - Stakeholders think all methods are extremely low.
 - Suggest 20-25 ac/hog or whatever the highest density ever used in a WPP before if denser.
- Dogs
 - Based on 2020 Census block population
 - 45% of households own dogs; Avg # of dogs per household = 1.5
 - Population focused in Caldwell and 2 major subdivisions
 - Stakeholders believe Census is probably 20% off – too low. Also means # of households are also too low.
 - Research population using 911 addresses for residences only. TWRI send a watershed shapefile to 911 address coordinator so county can provide estimate of households.

Watershed Characterization

- Impairments have been determined based on data below/downstream of Caldwell.
- No historical data on upper AU but TWRI is working on monitoring plan at two stations
- 2023 LULC indicates most of watershed is pasture and hay (63.7%); Developed LULC is approximately 1%
- Precipitation data indicates ~ 4 inches more rain in the eastern watershed than western (30yr avg)
- Climate data pulled from Somerville dam weather station. Lowest precip in July, highest temps in July and August.

Davidson Creek WPP
Stakeholder Meeting
July 1, 2025

- Hydrologic soil groups with highest infiltration (Group A) in top of watershed, lowest infiltration (Group D) in lowest part of watershed.
- Ecoregions Southern Post Oak Savanna comprises most of watershed, with a band of San Antonio Prairie across middle of the watershed.
- Carrizo-Wilcox is only major aquifer in watershed, primarily subcrop with very small extent of outcrop in uppermost watershed.
- Three minor aquifers occur in the watershed. Shallow groundwater contributes a small amount of water to streams, springs, and seeps.

Next Stakeholder meeting

- Noon is good for next time.

Additional monitoring to start soon.

Additional stakeholder conversations: Before mid-1980's creek flowed more than it does now and artesian wells were common. Davidson creek never used to go dry. *How can flows be restored?*

Keep Burleson County Beautiful –

- Focusing on what the Community and groups are already doing.
- Five new Committees on litter prevention and recycling, food security, water, beautification, volunteer engagement.
- Water committee is a great way to stay involved in the Davidson WPP
- Next meeting Oct 7th in Snook