

Davidson stakeholder meeting notes

T. Hendon

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Welcome and Overview

- Lower AU has elevated bacteria and low DO. Upper AU doesn't have enough data yet to assess. New monitoring project has begun - should have enough data in 2 years.
- Majority of LULC is pasture and hay, with more forested area in upper watershed.
- Six subwatersheds have been identified.

Summary of July 1 meeting

- Two pollutant categories - point sources are generally regulated and from a discreet source, nonpoint sources are diffuse and not regulated.
 - Burleson Co WWTF will not be used in analysis, per input from County that it does and will not be put back in operation.
 - City of Caldwell WTP had 3 quarters with permit violations - not too bad
 - 8 active construction permits
 - 1 active concrete production permit
 - 1 SSO in the last 5 years

Updated animal and populations

- Stakeholders noted there's a large beaver dam that has changed the flow of the creek. TWRI noted that beavers can be an ecological benefit to base flow, especially in ephemeral or headwater streams.
- Nonpoint Sources
 - OSSFs
 - Estimated from 911 addresses - estimated 3,610
 - Concentrated in a couple of large subdivisions
 - Post Oak group may have additional data on OSSFs
 - Livestock
 - Cattle populations revised from input during last meeting - stocking rates changed to yield approximately 17,638 cattle in watershed.
 - Stakeholders have no objections to the new numbers.
 - Stakeholders suggest calling the local sale barn for help in estimates.
 - Other Livestock
 - Stakeholders noted there is a large new poultry operation going in just north of Chriesman.
 - TSSWCB will check to see if there's a permit
 - Horse numbers were determined to be too low last meeting. TWRI mistakenly had the wrong numbers and has been corrected.
 - Stakeholders have no objections to the new numbers
 - Deer & Feral Hogs
 - Deer estimated at 4,352 in watershed.

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- Stakeholders have no objections, but noted that it doesn't include the deer farming operations
- Stakeholders noted that there is a 2,000-acre whitetail operation that is in the process of doubling their operation. Near CRs 308 and 313. This is the only one they know of in the watershed.
 - TPWD regulates some operations. TSSWCB will investigate to see what they can find on any permits.
- Feral Hogs
 - Used Method 4 at 25 acres/hog to estimate 5,119.
 - Stakeholders believe this may still be a little low.
 - TWRI will check with Ag Services and other sources to see if there are other estimates of number in watershed. If there's a holding facility (Animal Health Commission), they may also have estimates of current populations.
- Dogs
 - Based on feedback at last meeting, the number of households was increased from 5,106 to 5,761, resulting in a new estimate of 3,932 dogs in the watershed
 - Stakeholders noted there may be some local organizations with data on dog populations. Haven Animal Rescue of Texas houses rescues, fosters, and re-homes dogs.
 - TWRI will look into updating the data
 - TWRI will look into SNIP program

Water quality

- New monitoring project has just started in upper watershed and includes existing monitoring sites in the lower watershed.
- Bacteria
 - In lower AU, concentrations are approximately 3 times higher than the 126 MPN/100mL criteria
- Dissolved Oxygen
 - Grab samples (instantaneous measurements) show most data is above criteria, but many points fall below 4 or 3 mg/L
 - 24-hour Sampling
 - Tractor Supply station (11729) has a few Minimum points that fall below the 3mg/L screening level criteria
 - Other stations sampled (20388) only shows 1 point below the 4mg/L screening level criteria
- Chlorophyll-a
 - Most data, and all recent data fall below the 14.10 ug/L screening level indicating no problem with chlorophyll-a

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- TWRI explained significance of chlorophyll and nutrient measurements in identifying whether a nutrient problem may exist.
- Ammonia
 - Long timespan (1990 - 2020) but few data points. Recent data points fall below 0.33 mg/L screening levels indicating no current issues.
- Nitrate
 - Recent data points fall below screening level indicated no issues.
- Total Phosphorus
 - Long timespan (1990 - 2020). Recent data points fall below 0.69 mg/L screening level. This likely indicates no issues.
- Flow
 - USGS gage in lower watershed used to estimate flow conditions. Active since 1962.
 - Data show lowest flows in July through November/December.
- Load Duration Curves (LDC)
 - Tractor Supply station (11729) - shows elevated loads at all flows. Load reductions needed range from about 78% at low flows to 95% at high flows.
 - TWRI noted that management strategies in the WPP will be voluntary and that widespread education will be necessary to meet load reduction goals
 - Ended meeting without getting to the LDC for station 21420 and 18349

Q&A

Next meeting in October - will have a panel to talk on management strategies and opportunities.