Carters Creek Watershed Assessment Update Meeting

May 23, 2014 College Station Waste Water Treatment Facility Meeting Room 19 in attendance

10:05 am - Meeting opened (Lucas Gregory, TWRI)

Routine Water Quality Monitoring

- Monthly sampling at 4 sites over a 2 year period
- Data will be used for future waterbody assessments
- 14 sampling events completed to date
- Geomean of E. coli samples collected illustrated for each site

Storm Water Quality Monitoring

- Automated sample collection at 2 sites (Carters Creek at WD Fitch, Burton Creek at Hwy 6)
- Planned for 10 samples at each site
- Data will NOT be used for future waterbody assessments
- COCS is operating these instruments

Reconnaissance Monitoring

- Volunteer data collection using the Texas Stream Team protocol
- Monthly sampling at 10 locations over a 2 year period
- Data is for informational purposes only; will NOT be used in future waterbody assessments
- Geomean of E. coli samples collected illustrated for each site
- 14 sampling events completed to date
- 9 training events conducted
- 85 volunteers trained with 155 on the contact list
- 384.5 hours contributed during trainings
- 378 hours contributed through monitoring

Water Quality Data Overview

- Data from each site presented
- To date; 14 points collected at each site

- Data are presented in Box and Whisker Plots to show the distribution of the data as well as the mean; the geometric mean of the data points is shown in the Box and Whisker Plot title; the horizontal line in the graphic illustrates the water quality standard of 126 cfu/100 mL

Data Comparison: Volunteer vs. Routine at Burton Creek at Hwy 6 site

- Burton Creek at Hwy 6 is monitored under all three types of monitoring

- Data shows there is not a significant difference in means between the reconnaissance and routine monitoring both with and without storm influenced events

- This is exactly what we want to see as it justifies the direct comparison of the routine and volunteer data

Collective Data of All Sites

- Relative measures of bacteria were shown from upstream to downstream at all sites
- This provides an easy way to compare the distribution of bacteria levels across the watershed

Storm Event Sampling

- Automated storm samplers at two sites, Burton Creek at Hwy 6 and Carters Creek at WD Fitch
- 11 events sampled at Burton Creek site
- 5 events sampled at Carters Creek site
- Data displayed for each site for each storm event

Watershed Source Survey

- Developed watershed GIS using available info
- Conduct on the ground survey still to come
 - Observations will be incorporated into the GIS as they are made
- GIS integrated known infrastructure layers with developed data
- Estimates of OSSFs made using available information
- Infrastructure and stream crossings made using available information
- What else should be noted?
 - Railroad GIS data Natural Wetland layer MS4 Area layer
- GIS will be further evaluated at the end of the project to see if any problem areas can be identified

Initial Findings

- Data extremely variable
- Several significantly higher sites surfacing, may or may not be due to fecal loading
- No obvious sources of E. coli

Additional Items

- Annual I-Plan Update meeting will be hosted by TCEQ sometime in August
 - you will be contacted regarding dates later this summer