Carters Creek Watershed Assessment Update Meeting

June 1, 2015
College Station Utilities Meeting and Training Facility
23 in attendance

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

Water Quality Monitoring Results
- Monthly sampling at 14 sites over a 2 year period
- Sampling was completed in February 2015
- Box plots of all data collected by site and geometric mean of E. coli samples collected illustrated for each site
- Upstream sites have statistically lower median E. coli levels than sites farther downstream in the watershed
- A general increasing trend in E. coli levels as you move downstream, but a decreasing trend starts to appear at the last two sampling sites
- Along Carters Creek only, the similar trends appear
    - a number of sites have statistically differing median values (see table below)

	Station ID					
	80909 (A)	11782 (B)	80916 (C)	80913 (D)	11785 (E)	21259 (F)
Geomean	168.85	151.69	422.29	494.94	480.90	373.10
Median	185.85	118	472.05	866	625	470
Minimum	15.8	16	179	82	253	100
Maximum	1986.3	7400	2420	2420	2300	1900
Statistically Different Stations	C, D, E	C, D, E, F	A, B, D	A, B, C, E, F	A, B, C, F	B, D, E

- Load Duration Curves for Burton Creek @ Hwy 6; Carters Creek at Bird Pond Rd and Carters Creek at Wm D Fitch Pkwy were presented
    - In all cases, the estimated loads are above the maximum loadings that would meet the primary contact recreation standard
    - LDCs do not point toward point or non-point sources of pollution as primary contributors, but instead suggest both

Watershed Survey Findings Thus Far
- Nothing surprising noted: debris/trash in creeks is common, feral hogs damage occurs near creeks, animal waste is common (dog parks, birds, neighborhoods, etc.)
- Surveying will continue this summer and will be described in the final report

Storm Water Quality Monitoring

- Automated sample collection at 2 sites (Carters Creek at WD Fitch, Burton Creek at Hwy 6)
- Storm sampling completed with more events captured than initially planned
- Data is not surprising as all E. coli counts are high
- Storm flows have drastically altered the stream beds and banks with significant erosion occurring in several locations

Project Timeline

- Original end date for project was Aug. 31, 2015
    - Cost savings realized through course of project
    - Presents an opportunity to apply more refined sampling to attempt identify areas of the watershed contributing E. coli throughout the watershed
- Project extended to Feb. 28, 2015
- Project report will be delayed until Fall 2015 and will incorporate new data collection

- Data displayed for each site for each storm event

Intensive Sampling Approach Overview (Lucas Gregory, TWRI)

- One time tributary monitoring at 67 sites over a several day period
- Sites on each creek will be sampled on the same day from downstream to upstream
- Data collected will include temperature, pH, DO, specific conductance, E. coli
- Results from initial sampling will be used to ID areas with E. coli increases
- Watershed survey results will be cross referenced to see if potential sources exist in the area
- These areas will be sampled more intensively during a second sampling event

- Sampling should start in June and be completed by mid-July
- Findings will be described in project report

Navasota River Water Quality Project Overview (Lucas Gregory, TWRI)

- Background, goals, tasks and timelines for a project on the Navasota River were discussed
    - Similar to Carters and Burton Creeks, the Navasota and its tributaries are not meeting their primary contact recreation standard
    - State needs to do something to address these issues due to the amount of time that the river has been considered impaired
    - Recreational Use Attainability Analysis was completed to see if a standard change is appropriate
        - Very upper end of river is recommended for a change to Secondary contact standards: being considered by EPA now
        - The river below Lake Limestone will remain under primary contact use status
        - A recommendation for tributaries of the river below the lake has not been made
            - Essentially this means that next steps to improve water quality need to be taken…hence the purpose of this effort
- Sister projects funded by TCEQ and TSSWCB are supporting this work on the Navasota
    - Goals of projects are to:

        - Evaluate existing water quality data and determine needed load reductions to meet the primary contact recreation standard
        - Collect additional water quality data to better understand loadings
        - Identify sources of bacteria contributions through bacterial source tracking
        - Deliver general education and outreach on water resources and their quality
        - Engage watershed stakeholders through volunteer monitoring efforts
        - Identify key stakeholders in the watershed
        - Coordinate a stakeholder process to develop a WPP for the river below Lake Limestone

Carters and Burton Creek TMDL I-Plan Annual Updates (Lauren Oertel, TCEQ)

- Stakeholders were walked through the Implementation Activities Table from the TMDL I-Plan and asked to provide updates on activities occurring over the last year
    - TWRI provided updates on efforts to expand water quality monitoring in the watershed through the current project
    - No further action on tax valuation modifications…Appraisal District was not receptive
    - TWRI continues to seek funding to implement various aspects of the TMDL IPlan
        - OSSF education proposal in the works
        - Still no luck finding funds to explore water quality impacts of taxing strategies
    - Brazos Co. Health Dept. is hiring additional staff to increase capabilities in managing OSSFs within the watershed and county
    - City of Bryan and College Station provided updates on their SSO Initiative and Capital Improvement Projects respectively
    - Voluntary Ag BMP implementation level is not known in the watershed; unlikely as watershed continues to urbanize
    - Ordinance development and improvements continue across jurisdiction; especially as they relate to stormwater management
    - MS4 permits for all entities have been renewed or are in process of being renewed and effectively implemented
    - TCEQ's check on permit compliance is underway
- TCEQ will add all information to table and distribute to the group