Minutes
Public Meeting
Grace Creek Bacteria Data Collection
Longview Public Library
222 W. Cotton Street, Longview, Texas
Thursday, September 20, 2012, 1:30 PM – 2:45 PM

Signed in Attendees	**Representing (As Stated on Meeting Sign-In Sheet)**
Selina Tabor	City of Longview
Sal Pisano	City of Longview
Howard Kent Chipman	City of Longview
Marvin Brautigam	City of Longview
Scott Baggett	City of Longview
Mike Brown	City of Longview
Keith Bonds	City of Longview
Rollin McPhee	City of Longview
Rick Evans	City of Longview
Bill Stuckey	LeTourneau Technologies
Thomas C. Rosborough	Rosborough Ranch
Conrad King	Sabine River Authority (SRA)
Terry Wilson	SRA
Jack W. Tatum	SRA
Richard LeTourneau	Texas Conservation Alliance
Mike Prater	Texas Commission on Environmental Quality (TCEQ)
David Hamblin	Longview Public Library

Support Staff
Dania Grundmann- TCEQ, Project Manager
Larry Hauck- Texas Institute for Applied Environmental Research (TIAER)

Administrative Issues

A public meeting on the Grace Creek Bacteria Data Collection project was conducted on Thursday, September 20, 2012 from 1:30 PM – 2:45 PM at the Longview Public Library, Longview, Texas. The meeting was conducted to inform the public about the upcoming monitoring of Grace Creek and in selected portions of the Sabine River, as well as background materials pertaining to the need for the monitoring. Hard copies of the PowerPoint presentations were provided along with a map of the Grace Creek area.

Welcome

Dania Grundmann welcomed everyone and all attendees were asked to introduce themselves.

Presentation: *Targeted Bacteria Monitoring on Grace Creek and Sabine River*

Ms. Grundmann explained that TCEQ, through a contract with TIAER, would be collecting bacteria and streamflow data on Grace Creek and the Sabine River because of the elevated bacteria levels. As background to the monitoring effort, Ms. Grundmann provided information on several TCEQ water programs including Standards Group, Water Quality Permits, Surface Water Quality Monitoring (SWQM), Clean Rivers Program, and TMDL Program. She indicated that the Texas Surface Water Quality Standards are rules that designate the uses of the state's water bodies, establish standards for water quality throughout the state, and provide a basis for TCEQ regulatory programs. Relevant to this monitoring project, Ms. Grundmann explained that the standard for Grace Creek and the Sabine River for the primary contact recreation use was 126 most probable number (MPN)/100 mL of *E. coli* and that other standards existed for the other uses of the streams.

Ms. Grundmann next provided an overview of the TCEQ Permit Program mentioning that this program controls domestic and industrial wastewater permits for discharging facilities, which for Grace Creek include City of Longview Grace Creek wastewater treatment facility (WWTF), National Coil Company WWTF, and LeTourneau Technologies. She indicated that this program also administers the Phase II municipal separate storm sewer system (MS4) permits, which for the study area include Longview and the Texas Department of Transportation as well as general construction and industrial storm water permits.

The TCEQ SWQM Program was described by Ms. Grundmann as performing the Section 305(b) and 303(d) assessment and listing; now referred to as the Texas Integrated Report. She provided a slide showing both an example of the 2010 Integrated Report 303(d) listing for Grace Creek, stating that this water body was first listed in 2000 for bacteria, and the assessment for Sabine Creek below Grace Creek.

Next Ms. Grundmann described the TMDL Program explaining how the TMDL process is required by the federal Clean Water Act and that TMDLs are a document dealing with the broad sources such as regulated storm water, WWTFs, and non-regulated storm water. She indicated that TMDLs provide the goals for a water body, while Implementation Plans are a stakeholder driven process that provides the approach to achieve water quality goals for a watershed.

Ms. Grundmann provided an overview of the process for maintaining water quality standards which includes the steps of setting water quality standards, monitoring conditions in the water, and assessing conditions against the standard. She indicated that if the water body does not meet its assigned standards the options are to collect more data and information, review the standards,

or develop a TMDL. The present project represents the first of these options; collect more data and information.

Ms. Grundmann next discussed that Grace Creek (0505B) was first indicated to be impaired for bacteria in 2000 and the Sabine River (0505_04) below Grace Creek in 2002. She presented a map of the study showing the geometric mean *E. coli* concentration from measured data on Grace Creek and for the Sabine River below and above it confluence with Grace Creek. She used the same map to show the study areas for the present project and also provided a slide with information on the definitions used by TCEQ for Grace Creek, Sabine River below Grace Creek, and Sabine River above Grace Creek.

Mr. Grundmann next provided an update on the Recreational Use-Attainability Analysis performed by Texas AgriLife on Grace Creek in July 2011. She indicated that the report would be released for public review in the near future.

Ms. Grundmann concluded by providing her contact information.

The questions, answers, and comments that occurred during Ms. Grundmann's presentation follow:

Q: Where will the sampling occur for this project? The SRA presently samples at several stations along the Sabine River, both upstream and downstream of Grace Creek.

A. Ms. Grundmann responded that the present project will involve sampling on the Sabine River nearer to Grace Creek than occurs under some of the present SRA sampling. This focus is dictated by the fact that the Sabine River supports primary contact recreation (PCR) upstream of the Grace Creek (and Rabbit Creek) confluence but does not support PCR below.

Q. When did *E. coli* become the standard instead of fecal coliform? And why was *E. coli* selected.

A. Ms. Grundmann answered that under the 2000 Texas Surface Water Quality Standards revision *E. coli* became the indicator bacteria instead of fecal coliform. Dr. Hauck further elaborated that *E. coli* was selected because it was more strongly correlated with illnesses from contact recreation occurring in waters.

Q. How does the classification of PCR occur and who makes this decision?

A. Ms. Grundmann responded that PCR is the presumed use for all state water bodies except such water bodies as the Houston Ship Channel and that this assumption is made by TCEQ. Ms. Grundmann also stated that there are presently different categories of recreational use that can be assigned to water bodies: primary contact recreation and two levels of secondary use. This question lead to discussion of the recreational use-attainability study (RUAA) performed on Grace Creek by Texas AgriLife with points made by both Ms. Grundmann and Dr. Hauck

regarding how data gathering and field work are conducted for these studies in order to obtain data to inform the decision on the proper recreation use category for Grace Creek.

Q. In Grace Creek, how much of the flow comes from municipal and industrial effluent?

A. Dr. Hauck responded that at this point in the study, he did not know.

Q. As both a question and a comment, it was stated that Grace Creek for most of it length is not perennial which conflicts with the TCEQ description of the creek.

A. Ms. Grundmann acknowledged that what she has heard is that much of the creek is not perennial in flow and that there is a disconnect in information between what locals know and what is known in Austin. One purpose of this study is to provide more information on this matter.

Q. How many monitoring stations are on Grace Creek and how long have they been monitored?

A. Ms. Grundmann responded that there is one sampling station on Grace Creek that has been sampled periodically in the past (Dec. 2005 – Dec. 2008), and that under the present study the number of stations would increase. Dr. Hauck added that the sampling would occur most likely for 20 months.

Q. Why is monitoring not occurring on Grace Creek given that it is in a highly urbanized area?

A. Ms. Grundmann responded that there is a coordinated monitoring effort of agencies and entities that monitor, and they set priorities on where to sample. Limitations in resources restrict where sampling occurs and how often. Special sampling can, however, be specified for water bodies. Long term monitoring is often restricted to the major rivers in Texas, such as the Sabine.

Presentation: ***Overview of Bacteria Data Collection for the Sabine River Watershed (Sabine River and Grace Creek)***

Dr. Hauck presented an overview of the bacteria data collection project, starting first by acknowledging the TCEQ as the lead agency, the U.S. Environmental Protection Agency as providing finding support, and thanking LeTourneau Industries for agreeing to allow access on their property to the lower portion of Grace Creek. Dr. Hauck next described the study area in a similar manner to what Ms. Grundmann had provided in her presentation and he provided historical *E. coli* data on a station-by-station basis for the study area.

Dr. Hauck explained that the project objectives were to collect water samples for *E. coli* analysis, obtain streamflow measurements at the same sites sampled for bacteria, and to provide public awareness of the project, which was being accomplished through the present meeting. Next he briefly discussed the four project tasks of project administration, public participation, quality assurance, and data collection/data management. He discussed that before monitoring occurred that a monitoring plan and quality assurance project plan (QAPP) had to be approved by TCEQ.

The draft QAPP is due to TCEQ October 15, 2012 with a goal of an approved QAPP in a November-December timeframe. He stated that monitoring should start in roughly a January time frame.

Dr. Hauck indicated that the present monitoring is to include 3 stations on Grace Creek and 2 on the Sabine River with 16 monitoring events, including 8 routine events that will be part of the data used for TCEQ assessment purposes, and 8 biased sampling events that will occur so as to collect data at streamflow regimes being missed by the routine sampling. Monitoring at each site will include a water sample for *E. coli* analysis, field parameter measurements, and streamflow measurement. He explained that the biased sampling, while being submitted to TCEQ, will not be used in their assessment process. He also indicated that TCEQ is planning to continue with 12 more months of sampling from September 2013 – August 2014, though the present project only goes through August 2013.

Dr. Hauck concluded his presentation with a slide showing the existing TCEQ sampling stations in the project area. He indicated that the proposed sampling sites are at TCEQ stations 10424 and 10426 on the Sabine River and stations 16689 and 14499 on Grace Creek. The third station on Grace Creek will be on LeTourneau Technologies property and will likely be station 15012. Dr. Hauck solicited comments on the selected stations from the meeting attendees to get local input and to have the project benefit from their expertise in the project area.

Following are the comments and questions/answers that ensued after Dr. Hauck solicited comments.

Comment: It is good that the project is including the biased sampling to catch as many flow conditions as possible.

Comment: Ms. Grundmann re-iterated that the biased sampling, while submitted into the TCEQ database, would not be used in the state-wide 305b assessment.

Comment: SRA staff indicated where they routinely monitoring on the Sabine River and commented that they do not take flow when sampling, but rely on nearest USGS streamflow gage information. SRA further commented that the SH 31 bridge crossing of the Sabine (TCEQ station 10426) was high above the water making flow measurement difficult.

Comment: Several comments were made on perennial nature of Grace Creek and the likely importance of Rabbit Creek on the increase of concentrations, with its large watershed drainage area.

Q: It was asked what is the bacteria permit limit on the City of Longview WWTF discharge into Grace Creek?

A: City of Longview staff indicated that their permit limit was the same as the standard for Grace Creek, 126 MPN/100 mL. They further stated that their effluent is typically well below the 126 standard and that the facility uses ultra-violet light for disinfection.

Comment: Dr. Hauck indicated that a properly operating WWTF will typically discharge E., coli generally at less than 20, to which the City staff indicated that value was representative of the numbers they measured.

Q: Why is the biased sampling occurring if only the routine data will be used in TCEQ's assessment?

A. Ms. Grundmann responded that the biased sampling provides the opportunity to collect data over a wider range of streamflows than may occur with routine monitoring, especially regarding high flow conditions. The wide range of streamflow conditions for bacteria data collection is important should the project need to progress to development of load duration curves in the event of TMDL development.

Q: Dr. Hauck made a final solicitation for recommendations for sampling sites that might be better than those proposed.

A: The response was that the sampling locations being proposed were appropriate for the study. There was some discussion about whether there was a site location on the Sabine River upstream of Grace Creek and downstream of Rabbit Creek where flow could be measured, and the consensus was that such a location did not exist.

Ms. Grundmann closed the meeting at 2:45 P.M.