

Water Quality Monitoring Quality Assurance Project Plan (QAPP)

San Bernard WPP Stakeholder Meeting

Wharton Civic Center

May 20, 2010



Purpose of the Monitoring Plan

- To clearly delineate the quality assurance policies to be used with this project
- To confirm the people who will be involved in the project and responsible for implementation and data submission
- To verify and validate data generated by modeling
- To ensure data is scientifically valid and legally defensible

Objectives of Monitoring Plan

- To evaluate the effectiveness of three different BMPs on three different land uses found throughout the watershed
- Land uses to be monitored are: row cropping, cattle grazing, and areas with septic systems that are 10-15+ years old
- Monitoring over the course of a year approximately 4-6 times to take into account variability of temperature and rainfall throughout the seasons

Collection of Data

- Monitoring will be done at the inlet and the outlet of the BMP, and a baseline sample will be taken prior to installation
- Data will be assessed according to TCEQ SWQM protocols
- Data will be evaluated against comparable, historical stream data to determine if there is an improvement in water quality
- Ambient monitoring will still be done under the Clean Rivers Program

Site Selection Criteria

- Sites that are located so that samples can be collected from the centroid of flow
- Sites that maximize basin coverage such as at a major tributary
- Sites that are adjacent to or near ambient monitoring sites
- Sites that are readily and safely accessible

BMPs to be Applied

- **Septic Systems/OSSFs:**
 - Voluntary repairs and upgrades
- **Cattle Grazing Lands:**
 - Provision of an alternate water source
 - Fencing to prevent cattle access to the stream
 - Grassed waterways and buffer strips
- **Row Crop Lands:**
 - Riparian filter strips along waterways
 - Control of soil erosion
 - Crop residue management

Possible BMP Sites

- Row Cropping
 - Site near Damon in Brazoria County
- Cattle Grazing
 - Site near 1301 and 1459 in Brazoria County
- OSSFs
 - Site in Wharton County
 - CR 659 in Brazoria County
 - CR 306a in Brazoria County

Texas Stream Team Training

May 1, 2010



Recent Training at FOR Community Center

- Seven new people trained
 - Phase I – hands on classroom training
 - Phase II – hands on field training
- Four plan to monitor on San Bernard River or tributaries
- Two others were from Pearland and Seabrook
- Participants will complete a Phase III Training – a one-on-one session with a trainer at their selected monitoring site



What do the volunteer monitors do?

- Collect data about local waterways to be available to the public
- Collect quality-assured information that is used to make environmentally sound decisions
- There are currently over 400 volunteers involved
- Volunteers use a test kit to measure physical and chemical parameters of water
- Volunteers make a two year commitment to monitor their sites monthly, which takes one to two hours



