

Meeting Summary
Clean River Program Steering Committee
02/12/09

Stakeholders Present

Laurie Shelton – TWDB, Brian Koch – TSSWCB, Marilyn Christian – HCPHES, Steve Hup – HCPHES, Jeannette Oden – USGS, Winston Denton – TPWD, Cathy Lord – Bayou Preservation Association, Trent Martin – Harris County, Mary Ellen Whitworth – CAC/GOMP, David Hubenak – Austin County, Ceil Price – City of Houston, Kathy Richolson – GCWDA, Darrell Gertson – Colorado County, Catherine Elliott – HCFCD, Patricia Wise – TCEQ, Tom Kessler – City of Texas City, Snehal Patel – Harris County Attorney’s Office, Steven Johnson – GBEP

H-GAC Staff Present

Todd Running, Jean Wright, Bruce Ridpath, Kathy Ramsey, Ayo Jibowu, Kristi Tompkins

Others Present

Jeff Mabe – USGS, Daniel Bowen – Eastex Lab, Lisa Groves – City of Houston, Kirsten Nichols – City of Houston, Michael Bloom – PBS&J, Guyneth Williams – City of Houston, David Cowan – LCRA, Ralph Calvino – AECOM.

Welcome and Introductions

Todd running welcomed those present at about 10:00 AM. Introductions were made by all members in attendance.

Review of Agenda

Running made sure those in attendance received all the meeting materials and reviewed what was to be covered during the meeting.

Agenda Items

Public Comment

There was no public comment.

Sources and Causes of Pollution in Area Water Bodies

Running discussed item indicating that the Final Sources and Concerns document is due on May 15, 2009. He explained each of the columns in the table and directed everyone to the legend that explained the parameters listed in the comments section. Running stated that it was important for local stakeholders to review the document and give comments to H-GAC staff to more accurately update the table. He also explained that the table will be used by water quality assessors at the TCEQ to improve the accuracy of future assessments.

Preview of H-GAC’s FY2020-2011 Clean Rivers Program Budget

Running reviewed the proposed CRP project list for FY 2010 – 2011 and discussed associated costs for each project. The proposed work plan is due May 1, 2009. The final work plan is due June 15, 2009.

1) Cotton/West Fork Double Bayou Project

Repeat the USGS “Cotton and West Fork Double Bayous Project” to evaluate changes in water quality and aquatic communities. Compare pre- and post-IKE affects to the waterways. Conduct 24-hour dissolved oxygen measurements, surface water quality monitoring (including bacteria), habitat and biological communities. Funding will be provided by EPA and CRP would support using staff time for QAPP development and QA. Running indicated that this is a unique opportunity.

2) 24 hour DO Monitoring

TCEQ has identified 5 b /c segments (sub-segments) listed for dissolved oxygen (DO) impairment in our region. To make changes in the status of these segments, the collection of 24-hour DO data are required. Six of these priority sub-segments still need to be addressed in a special study/project. Proposed project includes:

Deploy data sondes (with logging capabilities) at monitoring locations where DO grab samples have indicated an impairment. Collect DO readings every 15 minutes for a 24-hour period of time.

Sondes will be deployed at least 6 times over a 2 year period. Two (2) times in the critical period, 3 times in the index period, and 1 time in the non-index period.

Twenty-four (24) data will be submitted to H-GAC along with the calculated Min, Max, and Mean for each deployment. Pre- and post-calibration worksheets will accompany all data submissions.

Estimated cost:	FY 2010	\$ 12,000
	<u>FY 2011</u>	<u>\$ 12, 000</u>
	Total	\$ 24, 000

There is approximately \$140,000 available for special studies.

3) BMP Effectiveness Monitoring (HCFCD Pond Monitoring Program)

Background

In 2002 HCFCD developed a Pond Monitoring Protocol based on monitoring guidance published by the Urban Water Resources Research Council of the American Society of Civil Engineers (ASCE). The guidance was prepared by a team of experts developing and managing the National Best Management Practices (BMP) Effectiveness Database. In 2004 HCFCD began monitoring the pollutant levels in stormwater flowing into and out of various detention facilities operated by HCFCD. As of January 2009 monitoring is underway at four facilities throughout the county. Additional facilities will be added to the program in the coming months.

Purpose

By monitoring pollutant concentrations and flow HCFCD will assist stakeholders to better understand the effectiveness of HCFCD facilities with water quality features. The monitoring of both flow and concentrations will allow loads to be determined which will also aid in assessing implementation activities to achieve load reductions required by total maximum daily loads (TMDLs). Monitoring results will be shared via the BMP Effectiveness Database and the Clean Rivers Program.

Monitoring Program

Monitoring includes the collection of both grab samples and flow proportioned composite samples using automatic sampling equipment. In some locations multi-parameter instruments continuously record dissolved oxygen, conductivity, temperature, pH, and turbidity. All samples are collected following rigorous quality control and quality assurance procedures. Samples are preserved and analyzed by accredited laboratories. Samples are typically analyzed for the following constituents: solids, nutrients, metals, indicator bacteria, oil and grease, total petroleum hydrocarbons, and polycyclic aromatic hydrocarbons.

Program Costs

Program costs include planning, design, installation, and maintenance of permanent monitoring installations; equipment purchases; consumables; weather tracking, mobilization, and sampling labor; laboratory analysis; data review and evaluation; data management and reporting; and program management. Estimated annual program costs, including a prorated share of start up costs, is estimated to be approximately \$300,000. The \$300,000 in costs for this project are fully supported by Harris County Flood Control. The Clean Rivers Program will pay for staff support of this project in regard to QAPP development, auditing of field staff and data QA.

4) Dog Waste Study

The question of how much dog or pet waste impacts water quality has been going on for several years. There are many differing opinions on the subject. Some feel that in comparison to sanitary sewer issues pet waste is of minimal concern. Others feel that pet waste is a significant contribution to the bacteria load found in urban streams. This issue is an important one for the Bacteria Implementation Group (BIG) which is charged with putting together an Implementation Plan for reducing bacteria loadings in urban bayous all across Houston.

A thorough study involving a literature review and field data collection at multiple locations for a substantial period using auto samplers would be beyond the available CRP budget. However, the CRP may be able to support the development of a literature review and detailed study plan that would provide quantitative information on the reductions in bacteria load that might be achieved at various locations such as lawns and public walkways, and for a range of runoff event sizes. This study plan might then be implemented by other local interests.

A literature review and study plan development for the issue of pet waste control could be done for an estimated cost of \$25,000. This could be accomplished within a 6 month period.

Ceil Price brought up funding ideas. She suggested contacting the AKC and dog food companies to assist with funding and getting the word out about responsible pet care.

Items that could be looked at for the study include kennels, dog parks, and home yards.

5) Watershed Protection Plan Development

The development of watershed protection plans is becoming more important throughout the state and our region. We have found that the majority of local matching funds that are available for 319 grants are available for implementation but seldom for planning. The CRP would set aside \$30,000 to help in the development of data needed to support WPPs and to assess what data is currently available and what further data needs to be collected to address the nine elements of WPPs. Funds would also be used to develop outreach materials and new ways to reach stakeholders in rural areas. Watersheds under consideration are the San Bernard River and West Fork Double Bayou.

6) Aquatic Life Inventory

Aquatic Life Inventory at selected CRP sites (6 – 10) using TCEQ methodology. Focus would be on wadeable streams that have not been previously evaluated. Monitoring would occur during the critical and index periods. Discussion was initiated by Jeff Mabe regarding fresh water mussels, especially on West Bernard near Wharton and Oyster Creek. There was a significant discussion about the fresh water mussels.

Estimated cost of \$50,000

7) Bayou Aquatic Life Enhancement

During dry periods the water in Houston bayous is largely treated effluent. The water is treated to support aquatic life uses and substantial investments have been made over the years to produce high quality discharges that is intended, in part, to support healthy aquatic life. Today, we have high quality water flowing into low quality aquatic habitat. The basic idea for this project would be to add various habitat features to selected barren concrete channels and monitor the response of aquatic life use. Comparisons would be made before and after project implementation and among study sites and control sites (sites void of habitat). The project would involve working with the HCFCD to identify locations where there would be no significant impact on flooding from placing low-profile habitat features in the pilot channel. The types of features employed would largely be driven by what the HCFCD would allow. Examples of habitat features might include rip-rap, horizontal coarse woody debris, emergent native plants contained in planting boxes, or artificial substrates. The habitat improvements would be designed so that the services or benefits of the different habitat features could be quantified. Once a locations and habitats were identified, fish community surveys, water quality sampling, water depth and velocity measurements would be conducted at the test and control stations at intervals during the study period including one survey before the placement of aquatic enhancement features. All surveys will be conducted during dry-weather conditions. A report would be produced that included results and an assessment of the benefits of each of the features. The information gleaned from this study would help demonstrate the potential of the channelized drainages for supporting aquatic life and could be used for future planning efforts.

Comment was made about a preference for natural channels over concrete for enhancement projects.

If one concrete-lined bayou were studied, the budget would be \$60,000. A second bayou study area could be added to the study if the budget were increased to \$85,000.

Update on Bacteria Implementation Group (BIG)

Carl Masterson provided an update on the BIG. The Bacteria Implementation Group is a thirty-member committee that is preparing an implementation plan, or I-Plan, to remedy high levels of bacteria in waterways identified in four Total Maximum Daily Load projects in the Houston Region. The BIG is responsible for receiving input, establishing workgroups, facilitating communications, developing recommendations, and providing oversight in the development of the I-Plan. He indicated that many in the room were already involved. He kept his comments brief.

Project Updates

This portion of the agenda was skipped to allow more time for the USGS presentation.

Project Results

Jeff Mabe and Lee Bodkin of USGS presented results of the Cotton/ West Fork Double Bayou and Highland/ Marchand Bayou studies which looked at Dissolved Oxygen levels as well as habitat, fish and benthics. A copy of the report can be found on the H-GAC website, www.h-gac.com.

Adjourn

Running adjourned the meeting at approximately 12:00 PM.

