



**Joint Work Group Meeting:  
Research, Monitoring, and Watershed Outreach  
DRAFT Meeting Notes  
Thursday, March 7, 2013  
10:00 AM to noon  
H-GAC Conference Room C, Second Floor**

## **Attendees**

Linda Broach (TCEQ), Danielle Cioce (Harris County POD), Jonathan Holly (Harris County FCD), Tom Ivy (Texas Stream Team), Marty Kelly (TCEQ), Kim Laird (TCEQ), Linda Pechacek (LDP Consultants), Rachel Powers (H-GAC), Jean Wright (H-GAC)

## **Call to Order/Welcome/Introductions**

Rachel called the meeting to order and initiated self-introductions.

## **Review Notes from Last Year**

Rachel provided the notes from last year in case they were needed for reference.

## **Update on I-Plan Approval Process**

The TCEQ unanimously approved the BIG I-Plan on January 30, 2013. The approved version included the changes to the I-Plan that had been discussed at previous BIG meetings. None of the changes were in the references sections.

## **Review Annual Report format**

Rachel explained that the conceptual format for the annual report was developed in collaboration by the BIG and agreed to at the BIG mid-year meeting in October 2012. The report will consist of three main components:

- 1) At-a-Glance: The At-a-Glance section will be one 11x17 paper that includes cover page with a photo; a table of implementation activities, proposed milestones, and an evaluation of progress; and a sheet with background information, a map, and high-level review of progress overall.
- 2) A printed report: In addition to a narrative overview, the printed report will include information about progress and goals for each of the strategies in the plan. Each strategy will be described by a narrative description preceded by a tabular summary sheet, which will include recommendations from the workgroup to the BIG regarding progress, achievements, focus for the coming year, and revisions to the I-Plan.
- 3) Web-based support documents: If additional information, such as lengthy tables, are necessary, these will be provided in an on-line format.

**Review Implementation Progress--** The workgroup reviewed progress for each of the implementation activities, as follows.

#### Implementation Strategy 9.0: Monitoring and I-Plan Revision

- 9.1: Continue to Utilize Ambient Water Quality Monitoring and Data Analysis

Jean Wright reported that H-GAC's Clean Rivers Program, including partners, has continued monitoring in the BIG project area. The Basin Highlights Report will be available for the BIG annual meeting on May 14, 2013, and will include information about water quality impairments and trends.

Enterococci were added as an additional parameter in September 2011, in part as a result of recommendations from the BIG. In non-tidal areas, about 1/3 of enterococci results exceed E. coli results, defying expectations. These discordant results do not appear to be random; a breakdown by segment shows that some segments have a greater frequency of discordant results than would be attributable to chance alone. The TCEQ indicated that their results were discordant, too, but that sometimes dilution seemed to correct the problem. Meeting participants asked that H-GAC look into the relationship to nutrients.

In September 2012, CRP monitors began recording evidence of contact recreation when they were sampling. There is not yet enough information to analyze, but by next year, more information should be available.

The Basin Steering Committee for H-GAC's Clean Rivers Program will hold its annual meeting on April 18, 2013, from 1:30 to 4:30 in H-GAC's Conference Room A, second floor. The committee serves as the primary forum for discussion of various water quality issues raised through the assessment process and it advises staff on all administrative matters related to the Clean Rivers Program, including work plan and budget development, monitoring of progress toward project milestones, and review of the draft and final basin reports and other work items. The committee helps set area-wide priorities based on its deliberations of water quality issues.

The regional monitoring workgroup continues to meet quarterly. At the spring meeting, scheduled for April 22, 2013, individual CRP monitoring partners meet one-on-one with H-GAC and TCEQ to review the partner monitoring plan for the coming year.

- 9.2: Conduct and Coordinate Non-Ambient Water Quality Monitoring

H-GAC submitted a draft non-ambient water quality monitoring QAPP to the TCEQ in 2011 and has been awaiting comments since then. In the meantime, H-GAC is continuing to try to identify alternatives to monitoring under a TCEQ-approved QAPP that would adequately validate the data.

The Harris County Flood Control District has developed a Regional BMP database, modeled on the International Stormwater BMP database. Currently, the database includes monitoring information for stormwater BMP projects developed by the HCFCD for its facilities. It has

been designed to accommodate information about other BMP projects in the region. More information is available at <http://www.bmpbase.org/LandingPage.aspx/>.

- 9.3: Create and Maintain a Regional Implementation Activity Database

Rachel reported that H-GAC has developed a preliminary Regional Implementation Activity Database. The preliminary version has been tested using information from MS4 annual reports. Many bugs have been identified, and the database will be improved for next year.

- 9.4: Assess Monitoring Results and Modify I-Plan

This activity will be discussed in-depth at the Coordination & Policy workgroup meeting on March 28, 2013.

- Highlights for annual report:

With only minor typographical changes, the participants agreed with the description of progress, achievements in the past year, focus for the coming year, and revisions recommended by H-GAC for the I-Plan Strategy Cover Sheet for the annual report.

#### Implementation Strategy 10.0: Research

- 10.1: Evaluate the Effectiveness of Stormwater Implementation Activities
- 10.2: Further Evaluate Bacteria Persistence and Regrowth
- 10.3: Determine Appropriate Indicators
- 10.4: Additional Research Topics

Bill Hoffman of H-GAC prepared a list of 29 articles with abstracts relating to BIG issues. The list included articles about predicting bacteria levels from other water quality parameters, bacteria in stormwater, microbial source tracking and alternative indicators, and naturalized fecal indicator bacteria.

Meeting participants indicated interest in the relationship between bacteria and biofilms, colloidal particles, TSS, and turbidity. The group discussed wet sieve analysis, sample dilution, and the use of filters smaller than .45.

The group also referenced research by Terry Gentry and work done by TCB/AECOM relating to testing sludge blankets from wastewater treatment facilities. Rachel will try to identify these articles.

- Highlights for annual report:

With only minor typographical changes, the participants agreed with the description of progress, achievements in the past year, and revisions recommended by H-GAC for the I-Plan Strategy Cover Sheet for the annual report. It did recommend changes to the description of focus for the coming year, adding that ***the relationship between bacteria and the supernatant and colloidal sediment that pass through a .45 micron filter should be a research focus in the coming year.***

## Implementation Strategy 11.0: Geographic Priority Framework

- 11.1: Consider Recommended Criteria When Selecting Geographic Locations for Projects

Rachel provided a table showing both 2012 and 2011 lists of the “Most wanted” and “Most Likely to Succeed” assessment units. These lists are based on the seven-year geometric mean for the monitoring stations with the ten highest bacteria levels—for the most wanted list—and the lowest bacteria levels that are still considered impaired.

*Most Wanted:* The good news is that all but one of the assessment units on last year’s top 10 lists showed decreased bacteria levels, sometime substantial. For example:

- Schramm Gully (1007R\_01) at station 15869 went from a geomean of 35 times the standard to 20 times the standard, and dropped from 4th on the list to 9<sup>th</sup>. (It once had the highest bacteria level.)
- Little White Oak Bayou (1013A\_01) at station 11148 went from a geomean of 28 times the standard to 19 times the standard, and dropped off the top-ten list from 7<sup>th</sup> place.

While these changes cannot be directly attributed to stakeholder efforts, anecdotal information suggests that identification of problems and actions to address those problems resulted in improvements.

Participants asked that H-GAC look into to new additions to the top ten list. Berry Bayou (station 16661 on 1007F\_01) and Plum Creek (station 16658 on 1007I\_01) are both in the vicinity of Pine Gully, and the area has been subject to attention for problems for many years. They indicated that there might be 15 years of data that might be of interest.

*Most Likely to Succeed:* Unfortunately, news from the “Most Likely to Succeed List” is not as good. While four of the assessment units on last year’s most wanted list showed almost no change, the other six saw increases, albeit relatively minimal increases ranging from 0.1 to 0.8 times the standard (up to 2.2 times the standard).

*Harris County* provided a brief report on their project to prioritize waterways in the unincorporated portion of the county. They are moving forward with their analysis that addresses more of the prioritization criteria identified in the I-Plan. They indicated that they had not figured out a way to include recreational use in their analysis. Jean Wright indicated that CRP monitoring partners had started to record information about recreational use at monitoring sites, and HC might be able to include that information in their analysis. H-GAC said they would look into it.

- Highlights for annual report:

With only minor typographical changes, the participants agreed with the description of progress, achievements in the past year, and revisions recommended by H-GAC for the I-Plan Strategy Cover Sheet for the annual report. Participants recommended changes to the description of focus for the coming year, adding that ***Harris County will continue***

***developing analytical capabilities to geographically prioritize waterways based in part of BIG recommendations for geographic priorities.***

### **Confirm Recommendations to the BIG for Annual Report**

The work group reviewed the draft Implementation Strategy Cover Sheets for the three strategies: Monitoring & Plan Revision, Research, and Geographic Priorities. There were 9 attendees including 2 BIG members and 2 alternates.

Changes to the draft coversheets are as follows:

- Research—area of focus—add the following: *“the relationship between bacteria and the supernatant and colloidal sediment that pass through a .45 micron filter should be a research focus in the coming year.”*
- Geographic Priorities—area of focus—add the following: *“Harris County will continue developing analytical capabilities to geographically prioritize waterways based in part of BIG recommendations for geographic priorities.”*

No changes to the I-Plan were recommended.

Rachel will send meeting notes and a draft section for the annual report as soon as they are available, and workgroup members will be able to provide comments. Workgroup recommendations will be reviewed by the Coordination and Policy and Plan Revision Workgroups at the meeting on March 28, 2013.

### **Adjourn**

**BIG Annual Meeting: Tuesday, May 14, 2013**

**Coordination & Policy work group meeting: March 28, 2013, 10:00 AM**

**[Tentative next meeting date: December 10, 2013, 1:00 PM to 3:00 PM, to coincide with the quarterly meeting of H-GAC’s regional monitoring workgroup, which is held that morning.]**