



TENTATIVE AGENDA

Tuesday, October 16, 2012
1:30 pm to 3:30 pm
H-GAC Conference Room A, Second Floor
3555 Timmons Lane

1. **Call to Order/Welcome/Introductions**

Welcome by H-GAC

Introductions of BIG members & staff

Review Agenda. Each agenda item shall provide time for discussion by the BIG followed by comments from the audience.

2. **Certification of Quorum**

3. **Approval of Proposed Alternates & Members**

HANDOUT 1: Bacteria Implementation Group Roster

4. **Approval of May 22, 2012, Meeting Summary**

HANDOUT 2: May Meeting Summary Draft

5. **Public Comment**

The public may sign up at the beginning of the meeting to make an informal comment of no more than three minutes.

6. **Presentation by TCEQ: I-Plan Review**

TCEQ shall provide an update on its review of the Implementation Plan, and shall request any changes to the plan.

HANDOUT 3: Summary of Changes to the I-Plan since the Annual Meeting

Action: The BIG will be asked to accept the current version of the I-Plan, which has not changed since the TCEQ public comment period.

7. Presentation by TCEQ: New TMDLs

TCEQ shall provide an overview of its efforts to develop TMDLs for additional waterways within the BIG project area and in areas adjacent to the BIG.

8. BIG Discussion: Implementation for New TMDLs

As the BIG I-Plan is written, the I-Plan applies to waterways and their watersheds within the BIG project area. Any segments in the BIG project area that have TMDLs adopted while implementation is underway may be incorporated into the I-Plan.

For other watersheds in the vicinity of the BIG project area that have TMDLs adopted by the TCEQ, stakeholders from those watersheds may petition the BIG to consider incorporating those watersheds into the I-Plan (I.A. 9.4.5).

The BIG shall discuss implementation planning for the new TMDLs outside of but adjacent to the BIG project area as described by TCEQ.

9. Review of Permit Limits for and Discharge Monitoring Reports from Wastewater Treatment Facilities (WWTFs)

Staff will provide a report on permit requirements pertaining to bacteria for WWTFs within the BIG project area. Staff will also provide an analysis of Discharge Monitoring Reports (DMRs) in the region in comparison to the limits.

HANDOUT 4: WWTF Analysis Results

10. Workgroup Assignments

The BIG shall assign charges to the workgroups in preparation for the annual meeting in the spring.

11. Annual Report & Meeting

H-GAC shall lead a discussion of revisions to the annual report template. The discussion shall include a review of Implementation Activity 9.4: Assess Monitoring Results and Modify I-Plan. As described in IA 9.4, H-GAC shall prepare a report and the BIG shall review the report to determine whether identified milestones and bacteria levels in waterways indicate that changes should be made to the I-Plan.

The BIG shall also discuss how the annual meeting can be structured so that the BIG is able to evaluate progress.

HANDOUT 6: Revised Report Template

ACTION: The BIG will be asked to provide input on the template.

12. Other Business/Roundtable

H-GAC, BIG members, and stakeholders shall discuss implementation activities and related projects.

13. Next Meeting Date

Late Spring 2013 (Potentially May 14)

H-GAC Conference Room A (2nd Floor)

14. Adjourn

In compliance with the Americans with Disabilities Act, H-GAC provides for reasonable accommodation for persons attending H-GAC functions. Requests should be received by H-GAC 24 hours prior to the function.



**Draft Meeting Summary
Tuesday, May 22, 2022**

Members Present:

Michael Bloom
Marilyn Christian
Catherine Elliott
Carol Haddock
Jason Iken

Tom Ivy
Helen Lane
Jack Murphy
Becky Olive
Raymond Pavlovich

Ceil Price
Kathy Richolson
Jim Robertson
Linda Shead
Brian Shmaefsky

John Blount was represented by Alisa Max
Mike Garver was represented by Linda Shead
Bruce Heiberg was represented by Steve Hupp

Members Absent:

Joe Clark
Robert Collins
Teague Harris
Shannon Hicks
Ron Kelling

Mike Lindsey
Craig Maske
Cathy McCoy
Michael Mooney
Linda Pechacek

Mitchell G. Page
Bob Stokes
Michael Turco

Guests Present

Anthony Arciadoro (Galveston County Health District), Susie Blake (City of League City), Daniel Bowen (Eastex Lab), Linda Broach (TCEQ), Richard Chapin (City of Houston), Lawrence Childress (City of Houston), Tom Douglas (Sierra Club), Bryan Eastham (TCEQ), Ilana Hairston (City of Houston), Denise Hall (Harris County), Ilana Hairston (City of Houston), Jonathan Holley (HCFCD), Anita Hunt (Hunt & Hunt Engineering Corp.), Diane Jones (Harris County), Brian Koch (TSSWCB), Karen Kottke (AECOM), Carol LaBreche (City of Houston), Kim Laird (TCEQ), Jason Leifester (TCEQ), Carl Masterson (Citizen), Chip Morris (TCEQ), Maria Modelska (UH), John Moss (Eco Services), Joe Myers (CDM Smith), Tina Peterson (CDM Smith), Mary Purzer (AECOM), Katie Sears (Galveston County Health District), Carol Serna (AEI Engineering), Robert Snoza (HCFCD), Ron Stein (TCEQ), Jennifer Wheeler (Harris County), Carolyn White (HCFCD), Guyneth Williams (City of Houston), Maggie Yancey (GHBA)

H-GAC Staff Present

Rachel Powers, Todd Running, Jeff Taebel, Justin Bower, Kristi Corse, Bill Hoffman, Hilde Leitenbacher, Will Merrell, Jeff Murray, Montryce King.

1. Call to Order and Introductions

Rachel Powers called the meeting to order at approximately 9:00. Rachel welcomed and thanked everyone for coming. She initiated self-introductions and reviewed the agenda.

2. Certification of Quorum

Seventeen members or alternates were present, forming a quorum.

3. Approval of Proposed Alternates and Members

After a moment of silence to remember Pat Buzbee, the following replacements were approved:

- Mike Lindsey was approved as a BIG member to replace Pat Buzbee.
- Patty Matthews was approved as an alternate for Becky Olive.
- Jennifer Wheeler and Denise Hall were approved as alternates for Marilyn Christian.
- Kathlee Bullock was approved as an alternate for Carol Haddock.

4. Approval of August 16, 2011, Meeting Summary

Meeting notes were approved as written.

5. Public Comment

No public comment was given.

6. Approval of Updated Ground Rules

Rachel introduced the proposed changes to the ground rules, which were considered at a meeting of the Coordination & Policy work group. Most changes are to address the shift in the BIG's role from planning to implementation and oversight. She highlighted three sections: Goals, Replacements and Additions, and Absences. Discussions included the following:

- After some discussion, the BIG agreed to modify the Absences section such that absences from two BIG stakeholder meetings, rather than work group meetings or annual meetings, in a row without designation of an alternate would constitute a resignation.
- Changes to alternates and BIG members can be done electronically.
- The footprint of the BIG project area has not changed since the I-Plan was approved.
- Membership provisions will remain the same, without term limits.
- The BIG agreed to change the Goals section so that the ultimate goal of the BIG is to support efforts to reduce bacteria levels in impaired waterways, in order that they may meet water quality standards....

The BIG approved the proposed changes to the Ground Rules, with the changes discussed as described above.

7. Review of Solicitation of Formal Support

Rachel briefly reviewed resolutions of support, which number 93 and counting.

8. Presentation by TCEQ: I-Plan Review &

9. Consideration of Proposed Changes to the Implementation Plan

Ron Stein explained that the effort and scope of the BIG I-Plan is respected and appreciated by TCEQ. It has been given a great deal of attention from multiple levels of management including the executive office, at least one commissioner, and legal review staff. Based on the thorough review, the executive office of TCEQ identified five items on which the TCEQ has prepared comments and would like to see language changed.

The BIG decided it would like to consider and identify changes for each comment separately.

Implementation Activity 2.1.1: Develop Utility Asset Management Programs for Sanitary Sewer Systems

Ron Stein indicated that the TCEQ is concerned about resources, and whether the staff would be able to adequately review UAMP plans.

In response to TCEQ comments, the BIG agreed to the following language change:

“All permits for new WWTFs ***discharging to a stream within the BIG project area*** shall include a UAMP plan. Starting five years from the approval of the I-Plan, all permit renewals ***for WWTFs discharging to a stream within the BIG project area*** shall include a UAMP plan. As allowable by law, the UAMP plan should apply to any subscriber systems that contribute to the WWTF.”

Discussion points included the following:

- Permit requirements within the region should be *predictable*.
- Adding UAMP requirements on a case-by-case basis would seem to require more resources and increased workloads.
- It would be acceptable to include language to indicate that UAMP plans would need to be available for review during an audit. It is not the intent of the BIG to require that TCEQ review every UAMP plan upon permit renewal or issuance. We anticipate only a handful of new facilities will be permitted each year.
- The local stakeholders are being asked to commit to and implement many activities, even though they feel they do not have adequate staff or resources. The TCEQ should be able to make an equivalent commitment.
- The BIG does not intend for this recommendation to apply outside of the BIG project area.
- The permitting role is unique to TCEQ.

Implementation Activity 2.5.2: Identify Subscriber Systems

Ron Stein indicated that TCEQ is concerned that it does not have the legal authority to require registration or permitting of subscriber systems.

In response to TCEQ comments, the BIG agreed to the following language change:

“Second, the BIG can petition the TCEQ for rulemaking to require registration of subscriber systems. As resources are available, H-GAC or another appropriate agency shall distribute information about subscriber systems. If stakeholder concerns regarding subscriber systems remain after five years, the BIG may consider **consulting with the TCEQ to address subscriber systems** or petitioning the TCEQ to require that subscriber systems have their own wastewater discharge permits.”

Discussion points included the following:

- The I-Plan does not require that the BIG petition TCEQ to undertake rulemaking. Rather, it is an optional activity if local stakeholders are unable to compile sufficient information.
- The BIG proposes petitioning TCEQ for rulemaking because there are no rules pertaining to the registration or permitting of subscriber systems.
- If the TCEQ does not have the statutory authority to require the subscriber systems to register with, or be permitted by, the TCEQ, then the TCEQ may deny the petition.
- It is likely that the BIG would consult with the TCEQ before petitioning for rulemaking.
- H-GAC has attempted to gather information from wastewater permittees in the past but has received lackluster response.
- Registration would facilitate identification of subscriber systems. Once identified, permit holders with subscriber systems could be contacted to try to address subscriber contracts that might not include terms that provide adequate controls and responsibility for operation, management, maintenance, and permit compliance.
- Subscriber Systems, also known as satellite systems, were considered by the EPA several years ago, but recommendations were not implemented. The EPA is considering this issue again during its listening sessions relating to sanitary sewer systems.

Implementation Activity 2.6: Restructure Penalties for Violations

Ron Stein indicated that TCEQ recently changed policies for penalties for violations and that they should be given an opportunity to work.

In response to TCEQ comments, the BIG agreed to the following language change:

The TCEQ recently revised its Penalty Policy #3 to address concerns raised during its most recent Sunset review. Furthermore, the legislature changed the rules for Supplemental Environmental Project (SEP) money to allow penalties to be spent on system repairs. The BIG requests that by March 1, 2017, the TCEQ shall analyze and provide a report on the effectiveness of the new policy and rules during the first five years of their implementation in the BIG project area. TCEQ shall review the report to determine whether the changes have caused the desired effects of deterring repeat violations and encouraging repairs to systems.

Upon evaluation of the report, the BIG shall determine whether to petition the TCEQ for further rulemaking if, in its opinion, the report does not indicate adequate progress.

~~The TCEQ should evaluate penalties and recommend changes for consideration. The TCEQ should consider making penalties for repeat violations a more effective deterrent than they currently are.~~

Discussion points include the following:

- The BIG agrees that it is not necessary to address this issue at this time because of the recent changes. However, it is appropriate to consider the issue again if the policy does not have the intended effect. A report would facilitate such consideration.
- A report examining the changes after five years would be valuable.
- If, through a SEP, the penalty for a violation is used by the violator to repair the problem, which they are required to do anyway, it is hardly supplemental.

Implementation Activity 3.3: Texas On-Site Wastewater Treatment Research Fee

Ron Stein explained that the TCEQ is unable to lobby for such a change.

The BIG chose to remove the recommendation from the plan entirely, based on the comments from the TCEQ and from the On-Site Sewage Facility work group. The BIG asked that the record show that it caved entirely to the TCEQ on this one.

4.3.1 Encourage Expansion of Storm Water Management Programs

Ron Stein indicated that it is difficult to determine bacteria loading, and TCEQ was concerned that it did not have the resources to manage the workloads that would be required to implement this.

In response to TCEQ comments, the BIG agreed to the following language change:

The BIG encourages the TCEQ to consider bacteria ~~loading~~ when evaluating and approving MS4 permits ~~renewals~~ **within the BIG project area.**

Discussion points include the following:

- The BIG does not intend for TCEQ to determine bacteria loading. Rather, the BIG's intent is that TCEQ determine whether bacteria is being addressed by the operator, or whether non-point source pollution is being addressed in a more general manner without consideration for the most widespread impairment within the BIG project area.
- The BIG intends this to apply to new permits as well as renewals.
- The BIG does not intend for this recommendation to apply outside of the BIG project area.
- In the May 22 Federal Register, the EPA withdrew five TMDLs in Arkansas because of inconsistencies with load duration curves.
- TCEQ and EPA have been having ongoing conversations about bacterial loading.

Implementation Activity 3.2.2: Encourage repair and pumpout logs be kept by homeowners and/or maintenance providers & Implementation Activity 2.2: Address Fats, Oils, and Grease

The TCEQ did not provide comments on this implementation activity. Instead, the Illicit Discharges and Dumping work group proposed changes to the I-Plan. Rachel explained that the IDD work group is concerned about liquid waste haulers and would like to make them more accountable. The group recommended changing the I-Plan to increase accountability through retention of manifest records by liquid waste generators.

In general, the BIG had no objections to the intent of the proposed additions to section 3.3.2. However, it felt that the language needed modification before it would be acceptable. Rachel will work with stakeholders to identify appropriate language, which it will send to the BIG for approval electronically.

The BIG approved the following addition to activity 2.2:

The model language shall include requirements to the retention of pumpout trip tickets (manifest records provided by liquid waste haulers) and the provision of such records to regulatory authorities upon request.

Discussion points included the following:

- The term “maintenance provider” has a specific definition by TCEQ. It is not the appropriate term in this instance.
- Maintenance Providers will sometimes facilitate pumpouts by liquid waste haulers, but maintenance providers are not typically able to provide pumpouts. Sometimes Maintenance Providers are not involved in pumpouts and therefore would not have trip tickets.
- If this proposal cannot be turned around quickly, it can be addressed during the public comment period.
- The City of Houston has an ordinance that requires that grease, grit, and lint traps be pumped out at least every 90 days and that the trip tickets must be maintained. This language may be included in the model language.

The BIG concluded the discussion by considering whether the BIG should make comments at the meeting on June 13. Discussion points included the following:

- It would be appropriate to meet with TCEQ to determine whether the BIG’s response adequately addressed the TCEQ concerns.
- It would not be inappropriate for Rachel to comment on behalf of the BIG at the meeting. Comments might address appreciation for the thoughtful review and for support of the BIG’s efforts.
- The presence of BIG members and stakeholders to support the plan would be valuable.
- The presence of supporters would be more important at the meeting when the TCEQ decides whether to approve the plan after the public comment period.

10. Review of Water Quality: Basin Highlights Report

Todd Running shared information about water quality from the 2012 H-GAC Basin Highlights Report (BHR), the Clean Rivers Program, and bacteria levels throughout the region.

The BHR includes the following information:

- Information about drought impacts on surface water quality
- Bacteria trends
- Monitoring stations in the region with the highest bacteria levels
- Monitoring stations in the region with bacteria levels that exceed state standards, but just barely

The Clean Rivers Program (CRP) is a statewide program of coordinating entities. H-GAC oversees the program and coordinates partner agencies for most of the H-GAC region, including the San Jacinto River basin. The CRP is now 20 years old. In addition to coordinating monitoring efforts, H-GAC coordinates the quality assurance program plan and makes sure that all labs used to analyze water quality samples are NELAC accredited. The Texas Stream Team volunteer network is also part of the CRP. The data collected by 63 volunteers at 61 sites adds value to the results of professional monitoring.

Water quality monitoring data indicates:

- 63% of streams in the CRP program area are impaired for bacteria
- 21% of streams have bacteria levels that are decreasing (getting better)
- 12% of streams have bacteria levels that are increasing (getting worse)
- 73% of streams had a lower bacteria level during the drought than during the previous seven years
- 15% of streams had a higher bacteria level during the drought than during the previous seven years
- 31% of streams are either impaired for low dissolved oxygen or have low enough dissolved oxygen levels to be a concern
- 42% of streams have high enough levels of nutrients to cause concern (NOTE: TCEQ does not have standards or criteria for nutrients, although sampling is being done to facilitate the development of standards)
- 36% of streams have increasing nutrient levels
- 26% of streams have decreasing nutrient levels

Todd showed a chart of the combined seven-year geometric means for bacteria for all stations in the BIG project area. While it is a generalization, the geometric mean has gone from about 8.5 times the standard in 2005 to about 5.5 times the standard in 2011.

Additional data is available in the H-GAC 2011 Basin Summary Report, the 2012 Basin Highlights Report, the online Water Resources Information Map, and a new iPhone application called “Where’s the water?”

The group discussed how the BIG I-Plan indicates that the BIG will review water quality data on an annual basis to help determine whether adequate progress is being made to improve water quality.

11. Review of Progress

Rachel introduced the exercise, explaining that, instead of presentations, H-GAC have set up stations in Conference Room C for each of the strategies in the I-Plan. She invited participants to Conference Room C to learn about progress for each strategy and ask questions. Progress is also documented in the draft annual plan.

At the stations, attendees were encouraged to ask questions and to comment on the following questions:

- What is the most important thing stakeholders can do in the next year related to this strategy?
- What do you or your organization plan to do in the next year?
- Would you change or add any recommendations to the plan?

H-GAC staff recorded the following comments:

- Wastewater Treatment Facilities & Sanitary Sewer Systems
 - We need to distinguish urban/non-urban sources
 - Duckweed and water hyacinth may have the potential to perform phytoremediation
 - How do vegetation levels correlate with bacteria levels?
- On-site Sewage Facilities
- Stormwater, Land Development, Illicit Discharges & Dumping, and Construction:
 - We are looking for residential-specific training
 - Is the delay to the MS4 General Permit related to the EPA/bacteria loading issue?
 - Do you have training videos for small MS4s?
- Agriculture & Animals
 - Additional agricultural practices might be appropriate
 - Pork Choppers probably aren't a good strategy in urban areas
- Residential
 - The "pet waste pollutes" activity is fun!
 - The Reliant Dog Show in mid-July might be a good place to have a booth with the activity.
- Research
 - ??
- Monitoring and I-Plan Revision, Geographic Priority Framework
 - ???

When the attendees returned to the room, they were given "clickers" so they could indicate, using a five-point Likert scale, how much progress stakeholders were making towards implementing each strategy.

The BIG indicated that it was not prepared to assess progress in the manner proposed. Discussion points included the following:

- In the report, each activity in the plan should be detailed and progress (or lack thereof) discussed.
- We don't have enough information.
- Aren't there measurable goals and milestones in the plan? Couldn't we format the report to match those milestones in a tabular format?
- How can we evaluate progress if the plan has not even been approved by the TCEQ?
- In general, feedback at work group meetings was that progress was, at a minimum, adequate, and sometimes good.
- A representative of each work group should give a formal update.
- We do not want to delay implementation solely because TCEQ has not approved the plan.
- Information identified this year can serve as a baseline.
- If the assessment indicates that stakeholders are not making adequate progress, could the information be used against individual stakeholders for compliance purposes?
- What gets measured, gets done.
- The assessment would help identify strategies with the greatest opportunity for improvement. Where can we focus efforts?
- Work groups should be able to identify a rigorous identification of progress that could stand up to scrutiny by the public.
- While this report may be the first one, and a "practice" report, it will influence how meaningful future reports are.

- Tabular data would be helpful.

Rachel will be reviewing the format and content of the report in order to make it better suit the needs and expectation of the BIG members. She asked for volunteers who wish to provide guidance on the report. [After the meeting, Michael Bloom, Steve Hupp, and Becky Olive volunteered to provide guidance.]

12. Presentation by TCEQ: New TMDLs

New TMDLs Being Developed

Dr. Hanadi Rifai, with the University of Houston, provided information about TMDLs that are being developed inside the BIG project area. The new TMDLs are being developed in the Clear Creek Watershed and in Houston Metro Watersheds. Dr. Rifai is developing the TMDLs.

In the **Clear Creek** watershed, TCEQ is developing TMDLs for four assessment units that were newly listed as impaired in the draft 2010 Integrated Report in Category 5 (also known as the 303(d) list):

- Magnolia Creek (1101A_01)
- Cow Bayou (1101C_01)
- Unnamed tributary of Clear Creek Tidal (1101E_01)
- Unnamed tributary of Mary's Creek (1102G_01)

For each of the assessment units, Dr. Rifai reviewed the following characteristics:

- locations
- soils
- land use
- indicator bacteria exceedances
- permitted MS4 areas
- sanitary sewer overflows
- permitted wastewater treatment facility locations and flow
- unsewered areas with on-site sewage facilities.

She reviewed the load duration curve calculations for Mary's Creek, the one non-tidal segment. She reviewed the tidal prism analysis for the three tidal assessment units.

In the **Houston Metro** watersheds, TCEQ is developing TMDLs for six assessment units that were newly listed as impaired in the draft 2010 Integrated Report in Category 5:

- Bintliff Ditch (1007T_01), a tributary of Brays Bayou
- Mimosa Ditch (1007U_01), a tributary of Brays Bayou
- Poor Farm Ditch (1007S_01), a tributary of Brays Bayou
- Unnamed tributary of Hunting Bayou (1007V_01)
- Vogel Creek (1017C_01), a tributary of White Oak Bayou
- Canal C147 (1007A_01), an otherwise unnamed tributary of Sims Bayou

For each of the assessment units, Dr. Rifai reviewed the same characteristics as she did for the Clear Creek assessment units. She concluded by reviewing the load duration curve calculations for each of the assessment units in the Houston Metro project. In general, the load duration curves are more consistent with urban developed areas than the Clear Creek assessment units.

Rachel pointed out that two of the Houston Metro segment (Mimosa Ditch and Bintliff Ditch) are among the ten assessment units with the highest bacteria levels.

New TMDLs Planned for the Lake Houston Watershed

Jason Leifester of TCEQ explained a new process that TCEQ will be using to adopt the TMDLs within areas already covered by an approved I-Plan. Instead of going through an entire TMDL process, the TMDLs will be included in the state's Water Quality Management Plan (WQMP), which is updated quarterly. The WQMP is already used to adjust existing TMDLs, for example, adding a newly permitted wastewater treatment facility to an existing TMDL. This will allow for a more streamlined process, since the public comment opportunity will be combined with the public comment opportunity for the WQMP. There will still be a 30-day public comment period, and TCEQ will make sure that BIG stakeholders are informed of the public comment period. TCEQ has successfully used this process for Drum Bay, as part of the Oyster Waters TMDL. Clear Creek will be done first, then the Houston Metro TMDLs, and finally, the Lake Houston TMDLs. Information about updates to the WQMP is posted at http://www.tceq.texas.gov/permitting/wqmp/WQmanagement_updates.html.

Jason then shared information about TMDLs that are planned for development in the Lake Houston watershed. TCEQ plans to work with the Texas Institute for Applied Environmental Research (TIAER), which is located at Tarleton State University, to develop the TMDLs. The work will begin in fiscal year 2013, which begins in September of 2012.

Some of the assessment units are within the existing TMDL project area. These will be adopted via the WQMP process. The TMDLs would be developed using existing data.

- Upper Panther Branch (unclassified water body) – 1008B_01, 1008B_02
- Lower Panther Branch (unclassified water body) – 1008C_01, 1008C_02
- Bear Branch (unclassified water body)- 1008E_01
- Peach Creek – 1011_01

Other assessment units are outside of the current BIG project area. These TMDLs will be adopted through the regular TMDL review and comment process, as they are outside the BIG project area and not automatically covered by the I-Plan. These TMDLs will also be developed using existing data.

- Lake Houston – 1002_06
- East Fork San Jacinto River – 1003_01, 1003_02, 1003_03
- West Fork San Jacinto River – 1004_01, 1004_02
- Crystal Creek (unclassified water body) – 1004D_01

Rachel added that these waterbodies were, at one point, considered part of the BIG project area. She anticipates that once the TMDLs are adopted, the BIG project area will expand to include these watersheds. The BIG allows stakeholders to petition the BIG to allow new TMDL areas to be covered by the I-Plan. Rachel also noted that some of these waterways are in the “Most Likely to Succeed” category.

13. Next Steps

The Watershed Outreach work group will meet this summer to discuss the geographic priority framework and the lists of stations with the highest bacteria levels and bacteria levels just barely exceeding the standard.

The Illicit Discharges & Dumping work group asked that the BIG petition TCEQ to require generators of liquid waste (such as grease or grit traps or OSSF) to keep trip tickets for three years. BIG members indicated that they thought it would be appropriate for an individual stakeholder to make such a petition. However, it seems premature to make such a request before the I-Plan has been approved by the TCEQ. Rachel will work with the work group to identify specific language for future consideration by the BIG.

Rachel asked that stakeholders provide comments on the draft progress/baseline report by Monday, June 18. Rachel will incorporate comments and send it back to the BIG so that objections may be voiced. The final copy will be posted on the website and distributed.

The attendees expressed concerns about the structure of the draft report. The structure of the draft report was developed in coordination with the Monitoring & Plan Revision work group. The structure of the report was discussed at each of the work group meetings. The draft report includes highlights rather than a complete survey of progress. H-GAC is developing the capacity to contact appropriate stakeholders to try to identify activities that have been undertaken. The attendees reiterated the desire to see tabular data based on the nine-elements table in the I-Plan. H-GAC may end up developing a report to meet contract requirements and a separate report to meet the needs of stakeholders.

The next BIG meeting is planned for the second half of October 2012. It will be a shorter meeting than the annual meeting in the spring. Work groups will meet over the winter in preparation for the annual meeting in the spring.

14. Other Business/Roundtable

EPA Region 6 is hosting its annual MS4 conference in Fort Worth June 24-29.
(<http://www.scieca.org/events.htm>)

TCEQ is considering changes to Chapter 217, which applies to wastewater treatment facilities. Stakeholders are encouraged to participate in the process. One particular concern has to do with reference to Chapter 317, which was replaced by Chapter 217.

The renewal of the general permit for MS4 Phase II will be delayed so that TCEQ and EPA can resolve issues relating to how to integrate TMDLs into the MS4 general permit.

Draft implementation plans have been submitted for Upper Oyster Creek and the Oyster Waters TMDLs and are being considered by TCEQ. H-GAC has submitted the watershed protection plan for the San Bernard River. Progress continues to be made on the WPP for Westfield Estates, the WPP for Bastrop Bayou, and the TMDLs for Dioxin and PCBs in the Houston Ship Channel and Galveston Bay.

Members of the audience introduced themselves.

15. Next Meeting Date

The next BIG Stakeholder meeting will be in late October 2012.

12. Adjourn

The meeting concluded at about 2:00 PM.

BACTERIA IMPLEMENTATION GROUP

Roster

Name	Representing	Affiliation	Alternate 1	Alternate 2
Michael Bloom	Ag/Business	Atkins, Greater Houston Partnership	Jason Maldonado	
John Blount	County	Harris County	Alisa Max	Nick Russo
Marilyn Christian	County	Harris County Public Health & Environmental Svcs.	Jennifer Wheeler	Denise Hall
Joe Clark	Municipal	City of Conroe	Greg Hall	
Robert W. Collins	County	Montgomery County	Mike Lindsey	
Catherine Elliott	County	Harris County Flood Control District	Carolyn White	Robert Snoza
Mike Garver	Buffalo/Whiteoak TMDL	Buffalo Bayou Partnership	Jessalyn Giacona	Linda Shead
Carol Ellinger Haddock	Municipal	City of Houston	Richard Chapin	Kathlee Bullock
Teague Harris	Municipal	Pate Engineers, Inc.		
Bruce Heiberg	Conservation	Bayou Preservation Association	Steve Hupp	
Shannon Hicks	Municipal	City of Webster	Jesse Espinoza	Pam Guillory
Jason Iken	Metro TMDL	City of Houston	Carol LaBreche	Richard Chapin
Tom Ivy	Public	Texas Stream Team	Jim Williams	
Ron Kelling	Ag/Business	San Jacinto River Authority	Michael Mooney	
Helen Lane	Conservation	Houston Audubon	* Bethany Foshee	
Mike Lindsey	County	Montgomery County Environmental Health	Frank Green	* Scott Nichols
Craig Maske	Metro TMDL	Dodson & Associates, Inc./HCEC	Scott Saenger	
Cathy McCoy	Ag/Business	Harris County Soil & Water Conservation Dist. #442		
Michael Mooney	Lake Houston TMDL	The Woodlands Joint Powers Agency	Ron Kelling	
Jack Murphy	Municipal	City of League City	Susie Blake	Brian Craig
Becky Olive	Ag/Business	AECOM	Mary Purzer	Patty Matthews
Mitchell G. Page	Lake Houston TMDL	Schwartz, Page & Harding, LLP	Michael Page	
Raymond Pavlovich	Wildcard	Nottingham Country Municipal Utility District	Michael Thornhill	* Matt Carpenter
Linda Pechacek	Public	Citizen, Civil Engineer	Fred Lazare	Steve Archer
Ceil Price	Buffalo/Whiteoak TMDL	City of Houston	Michael Schaffer	Guyneth Williams
Kathy Richolson	Clear Creek TMDL	Gulf Coast Waste Disposal Authority	Phyllis Frank	
Jim Robertson	Conservation	Cypress Creek Flood Control Coalition	Richard "Dick" Smith	
Linda Shead	Conservation	Texas Coastal Partners	Mary Ellen Whitworth	Carolyn White
Brian Shmaefsky	Public	Lone Star College, Kingwood	Dr. John Connolly	
Robert Stokes	Clear Creek TMDL	Galveston Bay Foundation	Scott Jones	
Michael Turco	Resource Agency	US Geological Society	Michael Lee	Jeannette Oden


* not yet approved

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Commissioners Date: June 8, 2012

Thru: Bridget C. Bohac, Chief Clerk
Zak Covar, Executive Director

From:  L'Oreal W. Stepney, P.E., Deputy Director
Office of Water

Subject: Docket No. 2011-1865-TML
Project No. 2012-009-TML-NR
Changes since back-up for the Implementation Plan for 72 TMDLs for Indicator
Bacteria in the Houston-Galveston Region

The attached documents contain revisions identified in highlight/strikeout which have been made since back-up was filed. Back-up material was submitted on May 25, 2012, for the June 13, 2012, Agenda.

The proposed changes in the following Implementation Activities in the BIG Implementation Plan are noted below:

- Page 56 — **2.1.1 Require a UAMP Plan as part of Wastewater permits.**
This change limits requested plans to wastewater permits within the BIG project area.
- Page 60 — **2.5.1 Identify Subscriber Systems.**
This change allows the BIG the additional option of consulting with the TCEQ on subscriber systems following a five-year period after the approval of the I-Plan.
- Page 61 — **2.6 Penalties for Violations.**
This change acknowledges that the TCEQ changed its penalty policy in response to the Sunset Legislation and will regularly review the policy.
- Page 66 — **3.3.1 Texas Onsite Wastewater Treatment Research Council Fee.**
This change deletes this subsection.
- Page 66 — **3.3.2 Model Order, Ordinance, or Resolution.**
This change reflects renumbering the item to 3.3.1 due to the deletion of 3.3.1.

- Page 67 – **3.3.3 Biennial Review.**

This change reflects renumbering the item to 3.2.2 due to the deletion of 3.3.1.

- Page 71 – **4.3.1 Encourage Expansion of Storm Water Management Programs.**

This change limits the activity to permits within the BIG project area.

Attachments

cc: Chief Clerk, 2 copies
Executive Director's Office
Susana M. Hildebrand, P.E.
Ann Idsel
Curtis Seaton
Office of General Counsel
Chip Morris
Monica Harris
Charlotte Horn

Proposed Changes to the BIG I-Plan

Implementation Activity 2.1.1: *Require a UAMP Plan as part of Wastewater permits*

The BIG requests that all permits for new WWTFs discharging into a stream within the BIG project area shall include a UAMP plan for any sanitary system owned and operated by the new WWTF. The BIG also requests that, starting five years from the approval of the I-Plan, all permit renewals for WWTFs discharging to a stream within the BIG project area shall include a UAMP plan for any sanitary system owned and operated by the WWTF. As allowable by law, the UAMP plan should apply to any subscriber systems that contribute to the WWTF.

The intent of the BIG is that all permits for WWTFs with authority over the collection system discharging to a stream within the BIG project area include requirements for UAMP plans. The BIG recognizes that valid constraints may prevent the TCEQ from including such requirements in all plans and that, in such situations, TCEQ may encourage those facilities to voluntarily develop such plans.

H-GAC or other appropriate entities shall, as resources are available, track the inclusion of UAMP plan requirements in WWTF permits and the voluntary development of UAMP plans by permitted facilities not subject to permit requirements for UAMP plans. The BIG shall evaluate the adoption of UAMP plans and whether additional actions should be recommended.

These recommendations are intended to reduce bacteria loading by reducing the possibility of malfunctions such as blockages, line breaks, inflow and infiltration of storm water and groundwater, lapses in operation, inadequate design and construction, power failures, and vandalism. By reducing the probability of malfunction, the BIG intends that UAMP plans will reduce the possibility of discharges of untreated or partially treated sewage from a sanitary sewer system, at the same time they improve the services provided to customers.

Implementation Activity 2.5.1: *Identify subscriber systems*

Second, the BIG can petition the TCEQ for rulemaking to require registration of subscriber systems. As resources are available, H-GAC or another appropriate agency shall distribute information about subscriber systems. If stakeholder concerns regarding subscriber systems remain after five years, the BIG may consider consulting with TCEQ to address subscriber systems or petitioning the TCEQ to require that subscriber systems have their own wastewater discharge permits.

Implementation Activity 2.6: *Restructure Penalties for Violations*

~~The TCEQ's existing penalties do not always deter poor maintenance or operation of sanitary sewer systems. Instead, some may consider penalties for sanitary sewer violations to be a cost of doing business that is less expensive than fixing the problem. The TCEQ should evaluate penalties and recommend changes for consideration. The TCEQ should consider making penalties for repeat violations a more effective deterrent than the currently are.~~

The TCEQ recently revised its Penalty Policy #3 to address concerns raised during its most recent Sunset review. The legislature added Texas Water Code Section 7.067 to allow the TCEQ discretion to approve a Supplemental Environmental Project (SEP) that would assist local governments that are respondents in enforcement actions to come into compliance with environmental laws or to remediate the harm caused by those violations. The Statute requires the TCEQ to review the penalty policy regularly.

~~Implementation Activity 3.3.1 *Texas Onsite Wastewater Treatment Research Council Fee*~~

~~As of 2010, new permit applications include a fee of \$10 to be directed to this council. This fee should be changed to \$20 for each OSSF by changing the Tex. Health and Safety Code Ann 367.010 and its implementing regulation 30 Tex. Admin. Code 285.21.~~

Implementation Activity 3.2.21: *Model Order, Ordinance, or Resolution*

Implementation Activity 3.3.32: *Biennial Review*

Implementation Activity 4.3.1: *Encourage Expansion of Storm Water Management Programs*

The BIG encourages the TCEQ to consider bacteria loading when evaluating and approving MS4 permits renewals within the BIG project area.

Changes Included in the I-Plan Approved by TCEQ for Public Comment

Implementation Activity 2.1.1: Develop Utility Asset Management Programs for Sanitary Sewer Systems

Original text:

All permits for new WWTFs shall include a UAMP plan. Starting five years from the approval of the I-Plan, all permit renewals shall include a UAMP plan. As allowable by law, the UAMP plan should apply to any subscriber systems that contribute to the WWTF.

UAMPs provide....

Text approved at meeting on May 22, 2012:

All permits for new WWTFs discharging to a stream within the BIG project area shall include a UAMP plan. Starting five years from the approval of the I-Plan, all permit renewals for WWTFs discharging to a stream within the BIG project area shall include a UAMP plan. As allowable by law, the UAMP plan should apply to any subscriber systems that contribute to the WWTF

UAMPs provide....

“Compromise” text submitted to BIG Members for consideration on June 4, 2012, in response to additional TCEQ comments:

The BIG requests that all permits for new WWTFs discharging to a stream within the BIG project area include a UAMP plan. The BIG also requests that, starting five years from the approval of the I-Plan, all permit renewals for WWTFs discharging to a stream within the BIG project area include a UAMP plan. As allowable by law, the UAMP plan should apply to any subscriber systems that contribute to the WWTF.

The intent of the BIG is that all permits for WWTFs discharging to a stream within the BIG project area include requirements for UAMP plans. The BIG recognizes that valid constraints may prevent the TCEQ from including such requirements in all plans and that, in such situations, TCEQ may encourage those facilities to voluntarily develop such plans.

H-GAC or other appropriate entities shall, as resources are available, track the inclusion of UAMP plan requirements in WWTF permit and the voluntary development of UAMP plans by permitted facilities not subject to permit requirements for UAMP plans. The BIG shall evaluate the adoption of UAMP plans and whether additional actions should be recommended.

These recommendations are intended to reduce bacteria loading by reducing the possibility of malfunctions such as blockages, line breaks, inflow and infiltration of storm water and groundwater, lapses in operation, inadequate design and construction, power failures, and vandalism. By reducing the probability of malfunction, the BIG intends that UAMP plans will

reduce the possibility of discharges of untreated or partially treated sewage from a sanitary sewer system, at the same time they improve the services provided to customers.

UAMPs provide....

Two comments were received from the BIG in addition to general approval:

- "...the response is good and holds lots of explanation and emphasis while still allowing the TCEQ to not observe the mandatory language of the initial language. As I and others stated in the BIG Annual Meeting, the TCEQ is in the unique regulatory position of issuing permits and should take this responsibility very seriously and assist the BIG Project Area by making a concerted effort to include UAMP plans in all permits and any subscriber systems. I would prefer to keep the original mandatory language. Please do what you can to keep the TCEQ at or as close as possible to our original mandatory language on this activity."
- "The BIG requests that all permits for new WWTFs discharging to a stream within the BIG project area include a UAMP plan for any sanitary system owned and operated by the new WWTF. The BIG also requests that, starting five years from the approval of the I-Plan, all new permit renewals for new WWTFs discharging to a stream within the BIG project area include a UAMP plan for any sanitary system owned and operated by the new WWTF. As allowable by law, the UAMP plan should apply to any subscriber systems that contribute to the new WWTF.

"The intent of the BIG is that all permits for WWTFs with authority over the collection system discharging to a stream within the BIG project area include requirements for UAMP plans. The BIG recognizes that valid constraints may prevent the TCEQ from including such requirements in all plans and that, in such situations, TCEQ may encourage those facilities to voluntarily develop such plans."

Text consistent with 'Changes since Backup for the Implementation Plan for 72 TMDLs for Indicator Bacteria in the Houston-Galveston Region' for Docket No. 2011-1865-TML:

The BIG requests that all permits for new WWTFs discharging into a stream within the BIG project area include a UAMP plan for any sanitary system owned and operated by the new WWTF. The BIG also requests that, starting five years from the approval of the I-Plan, all permit renewals for WWTFs discharging to a stream within the BIG project area include a UAMP plan for any sanitary system owned and operated by the WWTF. As allowable by law, the UAMP plan should apply to any subscriber systems that contribute to the WWTF.

The intent of the BIG is that all permits for WWTFs with authority over the collection system discharging to a stream within the BIG project area include requirements for UAMP plans. The BIG recognizes that valid constraints may prevent the TCEQ from including such requirements in

all plans and that, in such situations, TCEQ may encourage those facilities to voluntarily develop such plans.

H-GAC or other appropriate entities shall, as resources are available, track the inclusion of UAMP plan requirements in WWTF permits and the voluntary development of UAMP plans by permitted facilities not subject to permit requirements for UAMP plans. The BIG shall evaluate the adoption of UAMP plans and whether additional actions should be recommended.

These recommendations are intended to reduce bacteria loading by reducing the possibility of malfunctions such as blockages, line breaks, inflow and infiltration of storm water and groundwater, lapses in operation, inadequate design and construction, power failures, and vandalism. By reducing the probability of malfunction, the BIG intends that UAMP plans will reduce the possibility of discharges of untreated or partially treated sewage from a sanitary sewer system, at the same time they improve the services provided to customers.

UAMPs provide....

Implementation Activity 2.5.1: Identify subscriber systems

Original Text

Two approaches shall be taken to identify subscriber systems. First, as resources are available, H-GAC shall contact WWTF permittees and ask them to provide information regarding subscriber systems. Second, the BIG can petition the TCEQ for rulemaking to require registration of subscriber systems. As resources are available, H-GAC or another appropriate agency shall distribute information about subscriber systems. If stakeholder concerns regarding subscriber systems remain after five years, the BIG may consider petitioning the TCEQ to require that subscriber systems have their own wastewater discharge permits.

Text approved at meeting on May 22, 2012:

Two approaches shall be taken to identify subscriber systems. First, as resources are available, H-GAC shall contact WWTF permittees and ask them to provide information regarding subscriber systems. Second, the BIG can petition the TCEQ for rulemaking to require registration of subscriber systems. As resources are available, H-GAC or another appropriate agency shall distribute information about subscriber systems. If stakeholder concerns regarding subscriber systems remain after five years, the BIG may consider consulting with the TCEQ to address subscriber systems or petitioning the TCEQ to require that subscriber systems have their own wastewater discharge permits.

Text consistent with ‘Changes since Backup for the Implementation Plan for 72 TMDLs for Indicator Bacteria in the Houston-Galveston Region’ for Docket No. 2011-1865-TML:

Same as May 22, 2012, approved text.

Implementation Activity 2.6: Restructure Penalties for Violations

Original text:

The TCEQ's existing penalties do not always deter poor maintenance or operation of sanitary sewer systems. Instead, some may consider penalties for sanitary sewer violations to be a cost of doing business that is less expensive than fixing the problem. The TCEQ should evaluate penalties and recommend changes for consideration. The TCEQ should consider making penalties for repeat violations a more effective deterrent than they currently are.

Text approved at meeting on May 22, 2012:

The TCEQ recently revised its Penalty Policy #3 to address concerns raised during its most recent Sunset review. Furthermore, the legislature changed the rules for Supplemental Environmental Project (SEP) money to allow penalties to be spent on system repairs. The BIG requests that by March 1, 2017, the TCEQ shall analyze and provide a report on the effectiveness of the new policy and rules during the first five years of their implementation in the BIG project area. TCEQ shall review the report to determine whether the changes have caused the desired effects of deterring repeat violations and encouraging repairs to systems.

Upon evaluation of the report, the BIG shall determine whether to petition the TCEQ for further rulemaking if, in its opinion, the report does not indicate adequate progress.

“Compromise” text submitted to BIG Members for consideration on June 4, 2012, in response to additional TCEQ comments:

The TCEQ recently revised its Penalty Policy #3 to address concerns raised during its most recent Sunset review. Furthermore, the legislature changed the rules for Supplemental Environmental Project (SEP) money to allow penalties to be spent on system repairs.

The BIG requests that by March 1, 2017, the TCEQ prepare a report on the effectiveness of the new policy and rules during the first five years of their implementation in the BIG project area. The BIG requests that, when preparing the report, the TCEQ consider whether the policy changes have deterred repeat violations and encouraged repairs to systems.

The BIG shall review the report to determine whether the changes have caused the desired effects of deterring repeat violations and encouraging repairs to systems. Upon evaluation of the report, the BIG shall determine whether to petition the TCEQ for further rulemaking if, in its opinion, the report does not indicate adequate progress.

One comment was received from the BIG in addition to general approval

- “I prefer the refined language that is labeled ‘Possible Compromise Proposal’. This places the performance review more squarely on the BIG”

Text consistent with ‘Changes since Backup for the Implementation Plan for 72 TMDLs for Indicator Bacteria in the Houston-Galveston Region’ for Docket No. 2011-1865-TML:

[Title Change: “Implementation Activity 2.6: Penalties for Violations”]

The TCEQ recently revised its Penalty Policy #3 to address concerns raised during its most recent Sunset review. The legislature added Texas Water Code Section 7.067 to allow the TCEQ discretion to approve a Supplemental Environmental Project (SEP) that would assist local governments that are respondents in enforcement actions to come into compliance with

environmental laws or to remediate the harm caused by those violations. The Statute requires the TCEQ to review the penalty policy regularly.

Implementation Activity 3.3.1: Texas On-site Wastewater Treatment Research Council Fee

This recommendation was removed from the plan.

Sections 3.3.2 and 3.3.3 were renumbered to reflect the removal of the original section in Implementation Activity 3.3.

No further changes were made subsequent to BIG revisions on May 22, 2012.

Implementation Activity 4.3.1: Encourage Expansion of Storm Water Management Programs

Original text:

Local governments are encouraged to focus their existing programs on activities that are specific to bacteria reduction. The BIG encourages the TCEQ to consider bacteria loading when evaluating and approving MS4 permit renewals.

Text approved at meeting on May 22, 2012:

Local governments are encouraged to focus their existing programs on activities that are specific to bacteria reduction. The BIG encourages the TCEQ to consider bacteria when evaluating and approving MS4 permits within the BIG project area.

No further changes were made subsequent to BIG revisions on May 22, 2012.







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Implementation Strategy 4.0: Storm Water & Land Development

#	Activity	Target/ Objective/ Milestone	Status
4.1	Continue Existing Programs	80 programs will continue	In progress, On schedule
4.2	Model Best Practices	Each year: -Four to six networking meetings -Five local programs highlighted	In progress, On schedule
4.3	Encourage Expansion of Stormwater Management Programs	Within five years: -All permit holders shall expand or focus their existing programs -30 previously unpermitted entities shall develop new programs	Not started, On schedule
4.4	Promote Recognition Programs for Developments that Voluntarily Incorporate Bacteria Reduction Measures	-Within five years, develop a recognition program and subsequently recognize communities and participants -Each year, two communities analyze regulations and programs to accommodate participation in existing programs	Not started, On schedule
4.5	Provide a Circuit Rider Program	-Each year, contact 50 stakeholders and provide five in-depth community consultations	Not started, On schedule
4.6	Petition TCEQ to Facilitate Reimbursement of Bacteria Reduction Measures	-Within three years, letter of commitment or similar from TCEQ	Not started, On schedule

Work Group Recommendations

Meeting January 30, 2012. 17 attendees, including 4 BIG members and 4 alternates.

 <p>Progress</p>	Progress has been adequate. MS4 Phase II permit renewal is in progress. Annual reports are on H-GAC website. Additional MS4 operators are expected based on 2010 Census data. Educational and networking meeting series has been established.
 <p>Achievements</p>	MS4 annual reports are being used to identify speakers for the Clean Waters Initiative storm water workshop series. "Learning more with each workshop," wrote one participant.
 <p>Focus</p>	Focus in the coming year will be on tracking implementation by stakeholders and on involving new MS4 permittees.
 <p>Revisions</p>	The work group does not recommend changes to the I-Plan.

What is the BIG I-Plan? And who developed it?

The I-Plan is a common-sense approach for reducing bacteria levels in our waterways and providing better services to citizens. The I-Plan provides a menu of water protection strategies and activities. The Bacteria Implementation Group, or the BIG, developed the plan. The BIG is a group of government, business, and community leaders who worked together with the common goal of developing a plan for reducing bacteria in area waterways.

Who implements the plan?

We all implement the plan. In addition to individuals who live, work, and play in the project area, key stakeholders include local governments, industries, land owners, and residents.

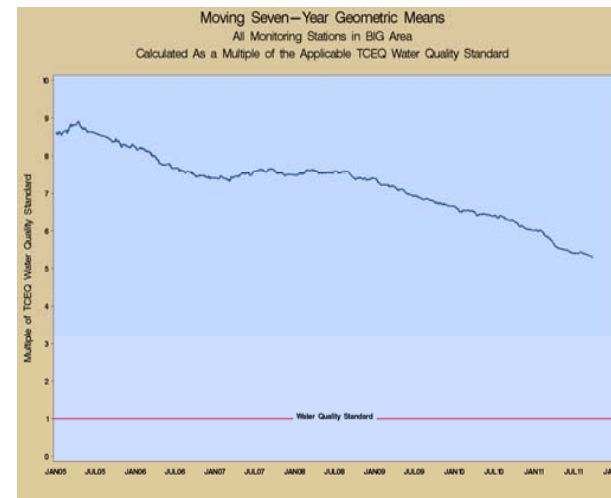
The information contained in the report is based on analysis of existing reports and information identified by stakeholders during workgroup meetings leading up to the BIG annual meeting in May 2012.

Next year, this report will include a list of entities who provided information for this report about the activities they undertook to reduce the amount of bacteria entering our waterways. H-GAC will request existing reports and

information from stakeholders, including the Texas Commission on Environmental Quality (TCEQ), the Environmental Protection Agency, counties, cities, wastewater permit holders, and municipal stormwater permit holders.

Get involved!

Simple activities you can do to help reduce the amount of bacteria entering our waterways include picking up after your pet and putting the waste in the trash, and putting cooking grease in the garbage instead of down the drain. You can also become a Texas Stream Team volunteer water quality monitor. If you want to do more, you can participate in BIG meetings and on workgroups.



Since 2005, bacterial levels in waterways in the project area have decreased from almost nine times the state standard to just over five times the standard.

The preparation of this report was financed in part through grants from the U.S. Environmental Protection Agency through the Texas Commission on Environmental Quality.

More information about the project, including a the full report, can be found at

www.h-gac.com/BIG

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BIG Implementation Report At-A-Glance 2011



A summary of activities undertaken by stakeholders of the Bacteria Implementation Group in 2011.
This document is a companion to the full BIG report.

#	Activity	Target/ Objective/ Milestone	Status
1.1	Impose More Rigorous Bacteria Monitoring Requirements	Within five years, all of the permits should have had renewals initiated to include more rigorous monitoring requirements	Not started, On schedule
1.2	Impose Stricter Bacteria Limits for WWTF Effluent	Within five years, all of the permits should have had renewals initiated to include more stringent limits for bacteria in effluent	In progress, On schedule
1.3	Increase Compliance and Enforcement by the TCEQ	-The ability to conduct focused sampling investigations -The number of unannounced inspections -The number of focused sampling investigations -The percent of plans and specifications reviewed -The percent of DMRs reviewed -The number of other investigations conducted	Not started, On schedule
1.4	Improved Design and Operation Criteria for New Plants	Every five years, 20% of local governments will have considered whether to adopt stricter requirements	In progress, Ahead of schedule
1.5	Upgrade Facilities	The number of non-compliant WWTFs that have been upgraded	No information
1.6	Consider Regionalization of WWTFs	-Criteria developed for identifying chronically non-compliant WWTFs -The number of non-compliant WWTFs identified using criteria -The number of chronically non-compliant WWTFs that have considered regionalization	Not started, On schedule
1.7	Use Treated Effluent for Facility Irrigation	Every five years, one WWTF shall install and use a new irrigation system, utilizing treated effluent	No information
2.1	Develop Utility Asset Management Programs (UAMPs) for Sanitary Sewer Systems	-After five years, eight workshops held -After ten years, all WWTF have UAMP plans	In progress, On schedule
2.2	Address Fats, Oils, and Grease	Within five years: -Compile and share all existing regulations within project area -Each community shall examine their regulations and policies -One community shall adopt new regulation -Fliers or other collateral material distributed -Website created and distributed	In progress, On schedule
2.3	Encourage Appropriate Mechanisms to Maintain Function at Lift Stations	Every five years, 10% of SSS shall be compliant with recommendations	No information
2.4	Improve Reporting Requirements for SSOs	Within five years, EPA/TCEQ will have developed appropriate database and technology for collecting and sharing information regarding SSOs	In progress, On schedule
2.5	Strengthen Controls on Subscriber Systems	-By year three, develop model contract language -Within five years, develop list of subscriber systems -As funds are available, initiate circuit rider program	Not started, On schedule
2.6	Penalties for Violations	-Within five years, have appropriate penalty policy in place	Completed, Ahead of schedule
3.1	Identify and Address Failing Systems	-Year 1: Initial map created -Year 2: Target areas identified	In progress, On schedule
3.2	Address Inadequate Maintenance of OSSF	-Ongoing: Data collected from Authorized Agents -500 OSSFs repaired/replaced every five years	In progress, On schedule
3.3	Legislation and Other Regulatory Actions	Within five years: -Each community examine their regulations and policies -Existing regulations compiled and shared -Fliers or collateral material distributed -Annual local meeting of Authorized Agents -TCEQ to host biennial meetings to review OSSF regulations -Within five years: ---One community shall revise or adopt new regulations every five years ---Changes to TOWTRC rules	In progress, On schedule
4.1	Continue Existing Programs	80 programs will continue	In progress, On schedule
4.2	Model Best Practices	Each year: -Four to six networking meetings -Five local programs highlighted	In progress, On schedule
4.3	Encourage Expansion of Stormwater Management Programs	Within five years: -All permit holders shall expand or focus their existing programs -30 previously unpermitted entities shall develop new programs	Not started, On schedule
4.4	Promote Recognition Programs for Developments that Voluntarily Incorporate Bacteria Reduction Measures	-Within five years, develop a recognition program and subsequently recognize communities and participants -Each year, two communities analyze regulations and programs to accommodate participation in existing programs	Not started, On schedule
4.5	Provide a Circuit Rider Program	-Each year, contact 50 stakeholders and provide five in-depth community consultations	Not started, On schedule
4.6	Petition TCEQ to Facilitate Reimbursement of Bacteria Reduction Measures	-Within three years, letter of commitment or similar from TCEQ	Not started, On schedule
5.1	Increase Compliance With and Enforcement of Stormwater Management Permits	-Year 1: MSAs evaluate need or requirement for staffing an appropriate construction inspection program -Year 2: Develop and begin offering educational materials and training	In progress, On schedule
6.1	Detect and Eliminate Illicit Discharges	-Within ten years, initial surveys and maps completed. -Number of illicit discharges identified and resolved each year.	In progress, On schedule
6.2	Improve Regulation and Enforcement of Illicit Discharges	-Within five years, compile and share all existing regulations in project area -All communities shall examine their regulations, and one shall adopt new or revised regulations.	Not started, On schedule
6.3	Monitor & Control Waste Hauler Activities	Within five years, one waste hauler fleet tracking pilot program shall be started	Not started, On schedule
7.1	Promote Increased Participation in Existing Programs for Erosion Control Nutrient Reduction, and Livestock Management	Each year, 5% increase in participation	No information
7.2	Promote the Management of Feral Hog Populations	Two workshops each year for five years	Not started, On schedule
8.1	Expand Homeowner Education Efforts Throughout the BIG Project Area	-2% annual increase in number of communities participating -Every five years, one pilot study in the BIG project area	In progress, On schedule

A more detailed explanation of status is available in the full report.

Note: Because the plan does not officially begin until TCEQ approval, any activity already started is ahead of schedule.