



**Coordination & Policy Work Group
Meeting Agenda
Wednesday, October 2, 2019
1:00 PM to 3:00 PM
H-GAC Conference Rm. D**

Call to Order/Welcome/Introductions

Item 1: Review: July 23, 2019 Meeting Summary

Item 2: BIG Fall Meeting Agenda

Review and discuss the October 29, 2019 meeting.

Item 3: 2019 Annual Report

Review draft 2019 Annual Report.

Item 4: Implementation Plan Update

Review and discuss the latest updates to the I-Plan.

Other Topics/Announcements/Adjourn

10/7-8/2019 IECA Texas Stormwater Conference
10/8-10/2019 TCEQ Autumn Environmental Conference
10/22/2019 Waters of the U.S. Workshop
10/30/2019 Bayou Preservation Association Symposium
1/22-23/2019 11th State of the Bay Symposium

Upcoming Meeting Schedule

10/29/2019 BIG Fall Meeting

Instructions to call into BIG meetings:

To call in, dial 713-481-0090 (or 800-240-3895). You will be asked to enter your pass code, followed by the # sign. The pass code is 1084242. If you dial in before H-GAC, you will hear "music on hold". Once H-GAC dials in, the music will cease and the conference call will begin. During the conference, you may hear beeps. A single beep indicates someone has joined the conference call. A double beep indicates someone has left the conference call. Remember--if you do press hold, everyone will hear your hold music.



**Coordination & Policy Work Group
Meeting Agenda
Tuesday, July 23, 2019
1:00 PM to 3:00 PM
H-GAC Conference Rm. D**

Call to Order/Welcome/Introductions

Camila Biaggi (HC), Danielle Cioce (HC), Denise Ehrlich (GCA), Claire Iseton (TPWD), Mack Martin (TAMU Forest), Hannah Meeks (Harris Co.), Jack Murphy (League City), Scott Nichols (Montgomery Co), Linda Pechacek (Public), Sarah Robinson (GBF), Aaron Schindewolf (SJRA), Linda Shead (TX Coastal Partners), Monica Singhanian (TAMU Forest), Robert Snoza (HCFCD)

Item 1: Review May 6, 2019 Summary

Work group reviewed the meeting summary and made not changes.

Item 2: Bacteria Source Tracking Discussion

The group discussed whether there should be any follow up to the TAMU presentation on bacteria source tracking (BST). There was a question about whether the BST data gathered early in the TMDL process (mid 2000s) could be reviewed under the lens of current bacteria libraries to lessen the large uncertainty with the data set. Mr. Steven Johnston, H-GAC stated that he would reach out to TAMU to see if the data was ever reviewed by the researchers and if there would be any benefit to developing a project to have it reviewed.

Item 3: Implementation Plan Update

H-GAC staff presented the update. Mr. Johnston noted that not much had been accomplished since the previous meeting or the BIG Spring meeting. He noted that he did receive updated information from TCEQ. That information was recent and could not be assessed in time for the meeting. However, it did provide for new SSO, WWTF inspection, and SSOI data. H-GAC would go through the information for completeness and use ability and update the group at the next meeting. Of note was the discussion on Strategy 6. The group discussed the merits of folding the strategy into Stormwater, Strategy 4. They agreed to combine both strategies. It was also suggested to highlight illicit discharge detection and elimination as a best practice with encouragement to adopt the practice. Mr. Johnston reviewed the timeline and hoped to get the group back together by the end of August.

Item 4: 2019 Annual Report Survey

The work group was handed copies of the 2018 Annual Report and portions of the I-Plan covering Strategies 4, 5 on Stormwater and Construction, respectively. The group reviewed each action and discussed potential implementation.

Other Topics/Announcements/Adjourn

Upcoming Meeting Schedule

7/24/2019 East and West Fork San Jacinto River Work Group – (HARC, The Woodlands)



FALL MEETING Agenda

**Tuesday, October 29, 2019
1:00 pm to 3:00 pm
H-GAC Conference Room B, Second Floor
3555 Timmons Lane**

(Instructions to attend the meeting via conference call can be found at the bottom of the Agenda)

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.

Certification of Quorum

Approval of the Proposed Members & Alternates

BIG members will review the Bacteria Implementation Group Roster and approve as appropriate.

Approval of the June 4, 2019 Meeting Summary

BIG members will review, comment and approve as appropriate.

Public Comment

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

Item One: 2019 Annual Report

H-GAC staff will provide the draft 2019 Annual Report for the BIG to review and discuss. The report covers implementation activities carried out in the 2019 calendar year.

Item Two: I-Plan Revision Update

H-GAC staff will provide an update on revising the BIG Implementation Plan.

Item Three: TMDL Program Updates

TCEQ TMDL Program will provide updates as needed.

Item Four: Monitoring for Success

BIG will consider monitoring and research needs for meeting I-Plan action goals. H-GAC will review the CRP and current monitoring projects to assist the discussion.

Item Five: Other Business/Roundtable

As time permits, H-GAC, BIG members, and stakeholders are encouraged to discuss implementation activities, related projects, and announcements.

Next Meeting Date

Tuesday, June 2, 2020

Adjourn**BIG Meeting Call-in instructions:**

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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.



SPRING MEETING Summary

**Tuesday, June 4, 2019
1:00 pm to 3:00 pm
H-GAC Conference Room B, Second Floor
3555 Timmons Lane**

Members Present

Sarah Bernhardt, Richard Chapin, Ralph Calvino*, Jerry Caraviotis, Danielle Cioce, Denise Ehrlich, Catherine Elliot, Cynthia Cooper, Carol La Breche, Andrew Isbell, Sarah Gossett, Jack Murphy, Linda Pechacek, Rachel Powers*, Jim Robertson, Linda Shead, Monica Singhanian (Phone)

Mike Lindsey was represented by Reuben Martinez
Becky Olive was represented by Karen Kottke
Anne Olson was represented by Linda Shead
Rod Pinheiro was represented by Patrick Rightmyer*

*Did not count toward quorum

Members Absent

Ernest Bailes IV, David Brown, Teague Harris, Tom Ivy, Helen Lane, Craig Maske, Cathy McCoy, Mitchell Page, Aaron Schindewolf, Brian Schmaefsky, Leah Tarrant, Michael Thornhill, Scott Tuma

Guests Present

Rosa Acheson, Allen Berthold, Camila Biaggi, Darla Branch, Tom Douglas, Bryan Eastham, Terry Gentry, Brian Koch, Earlene Lambeth, Jimmy Millican, Wonju Rielly, Elain Savage, Kristen Schlemmer, Robert Snoza, Jennifer Thayer

H-GAC Staff

Justin Bower, Kendall Guidroz, Bill Hoffman, Kathy Janhsen, Steven Johnston, Todd Running

Call to Order/Welcome/Introductions

Mr. Steven Johnston, H-GAC welcomed those in attendance. Members of the BIG were asked to introduce themselves. The agenda was reviewed and the BIG was provided with an opportunity to discuss.

Certification of Quorum

A quorum was certified during the meeting.

Approval of the Proposed Members & Alternates

The BIG approved the following changes to the roster:

- Ralph Calvino will replace Michael Bloom to represent Business/Industry
- Rachel Powers will replace Anne Olson to represent Conservation Interests
- Anne Olson will become the alternate for Rachel Powers
- Dr. Clint Miller will become Ralph Calvino's alternate
- Patrick Rightmyer will become the alternate for Rod Pinheiro

Approval of the October 23, 2018 Meeting Summary

BIG members approved the October 23, 2018 meeting summary.

Public Comment

No public comments were made.

Item One: I-Plan Revision Update

Mr. Johnston reviewed progress on the I-Plan Update. Mr. Johnston noted that the update will include revised or adjusted maps and data through out, including data not available at the time the document was drafted, i.e. WWTFs DMR data or the larger project area. In addition, the update will include new photos; consider revised milestones and goals; and take a look at changes to actions (slow or non-moving, or completed).

Mr. Johnston reviewed the steps taken so far, including holding workgroup meetings to discuss the topic: Coordination and Policy (05/06/19), OSSF and Illicit Discharge (05/06/19) and Animals and Agriculture (05/23/19).

BIG members discussed how to address implementation measures where the lead is TCEQ. Mr. Johnston noted that TCEQ was still working on the set of implementation questions submitted to TCEQ. General agreement was to look at each activity and determine if the action should be adjusted, removed or documented while leaving it in the plan.

Mr. Johnston concluded by reviewing the timeline. The goal is to have a good draft by the end of August for the Coordination and Policy to begin to review for meeting in September. Then to present the working draft to the BIG in October. A target completion date for the final document would be the end of 2019.

Item Two: 2019 Annual Report Update

Mr. Johnston provided the 2019 Annual Report update to the BIG. Mr. Johnston reviewed the progress in getting 2018 implementation data through work group meetings. He stated that rather than having the WWTF/SSS workgroup and Stormwater workgroups meet, the groups are part of the Coordination and Policy discussions. The thinking is that the group would assist with identifying speakers for a two issue specific workshops in the fall.

Mr. Johnston reviewed the bacteria trends for the BIG project area. This included trend lines for the BIG, BIG in 2013, East and West Fork of the San Jacinto River, Armand Bayou and Jarbo Bayou. Jarbo Bayou differed from the other waterbodies by including a significant spike between 2014 and 2016. It was observed that only 2 stations are monitored quarterly so the geometric mean is based on few data points. The BIG discussed the Jarbo Bayou geometric trend line. Mr. Johnston noted that the trend and data behind it needs some additional investigation.

The next topic was a review of individual AUs and their water quality trends. Mr. Johnston asked how the group wanted to measure success as two AUs were removed from the impaired list and many more were trending positive. One concern is determining if this improvement is going to be sustained or there is the possibility the AU might reverse course in the next year or so. Consensus was to highlight the improvement and report success while noting that there is still work remaining.

Mr. Johnston reviewed WWTF DMR data and compliance. The BIG discussed small WWTFs vs. larger ones and the challenge each presents. Sanitary sewer overflows were discussed. It was stated that there was a gap in reporting permittee data in 2018. Staff are working with TCEQ to get missing data.

Finally, Mr. Johnston reviewed the success stories that had been identified to this point. He asked the BIG for their input on additional topics. One thought was to highlight Harris County for its efforts to get onsite wastewater research funding back after 7 or 8 years.

Item Three: TMDL Program Updates

Mr. Jimmy Millican, Texas Institute for Applied Environmental Research (TIAER), presented on "Status of Additions to Indicator Bacteria TMDLs in the Lake Houston Watershed." Mr. Millican reviewed previously completed TMDLs within the Lake Houston watershed. There have been nine impaired segments covering 15 AUs addressed by a previous TMDL that was approved by the EPA in June 2011. Six additional impaired AUs were added to the project area by addendum and approved by the EPA in February 2014.

TIAER is working on two additional impaired AUs, Brushy Creek (1008J) and Spring Branch (1010C_01). Mr. Millican reviewed data from the 2016 draft Integrated Report that demonstrated the elevated fecal bacteria geometric means. He then proceeded to characterize the waterbodies'

permitted WWTFs, stormwater permits, land cover, OSSFs, and the location of monitoring and flow gauge stations.

Mr. Millican concluded his presentation reviewing the next steps for the technical support document, public review and eventual inclusion within the TCEQ's Water Quality Management Plan update.

Item Four: Presentation

Dr. Terry J. Gentry, Texas Water Resources Institute, gave his presentation on "Use of Bacteria Source Tracking to Characterize Texas Watersheds." Dr. Gentry began with a review of fecal bacteria sources and the history of bacteria source tracking (BST). During this part of his presentation, Dr. Gentry covered the different types of indicator bacteria and possible viruses that could be used to track fecal matter back to the host sources.

Dr. Gentry reviewed the development of a BST library. The BST library is important to successfully fingerprinting a source DNA through the comparison of the records held within the library. The type of investigation can have ramification on how accurate and to what level of source identification can be differentiated.

Dr. Gentry review the Plum Creek BST project with the BIG. The effort looking at *E. coli* using a 3-way split (i.e. Human, Livestock and Wildlife) found the watershed to hold fecal wastes at 4%, 32% and 53%, respectively. There was another 11% of samples that were unidentified.

Dr. Gentry stated that there were 23 BST studies using *E. coli* completed to date. Dr. Gentry then reviewed the use of Bacteroidales that can be found in human and animal feces. The bacteria are more host specific, though not 100%. One study was done following hurricane Harvey near Clear Lake near Houston for approximately 2 months.

A review of this data found a spike in fecal marker soon after the event, decreasing within a week. A low concentration of fecal bacteria indicator for human was found in the first sampling, suggesting a strong stormwater related contribution of non-human fecal matter. A delay spike of human fecal bacteria was found after one week. The human fraction increased over time suggesting a prevalence under normal conditions.

Item Five: H-GAC Staff Presentations

- a. Mr. Justin Bower presented on watershed protection planning (WPP) efforts within the BIG Project Area. Mr. Bower specifically reviewed the development of WPP in the Lake Houston watershed. This effort includes working with stakeholders within the West Fork of the San Jacinto River, Spring Creek and Cypress Creek watershed. Mr. Bower noted that the San Jacinto River Authority completed a Lake Conroe WPP a few years ago. The West Fork and Lake Creek WPP was completed and approved in late 2018. H-GAC is currently working on the Cypress Creek WPP with stakeholders. A proposal was submitted to the TCEQ 319 program for the Spring watershed.
- b. Ms. Kathy Janhsen presented on the results of the first annual Water Innovation Strategies of Excellence Awards. The mission of the awards is to recognize innovative strategies and projects that serve as models for improving water quality. There are four categories: Planning and Policy, Education and Awareness, Built

Projects greater than \$500k and Build Projects less than \$500k. The winners of the first annual award were: the Galveston Bay Foundation's Galveston Bay Action Network under Education and Public Awareness; the City of Houston Parks and Recreation Department's Houston Parks Riparian Restoration Plan under Planning and Policy; Harris County Precinct 4's Precinct 4 Service Center under the Built greater than \$500k; and Harris County Flood Control District's Bioswale Demonstration Project under the Built less than \$500k.

Item Six: Other Business/Roundtable

As time permits, H-GAC, BIG members, and stakeholders are encouraged to discuss implementation activities, related projects, and announcements.

Next Meeting Date

October 29, 2019

Adjourn

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BACTERIA IMPLEMENTATION GROUP ROSTER (10/2019)

Last	First	Representing	Organization	Alternate1	Alternate 2
Bailes IV	Rep. Ernest	Agriculture (County)	San Jacinto County	Dale Everitt	
Bernhardt	Sarah	Conservation	Bayou Preservation Association	James "Ty" Kelly	
Brown	David	Resource Agency / Academia	US Geological Survey	Michael Lee	
Calvino	Ralph	Business / Industry	Terracon	Clint Miller	Jason Maldonado
Caraviotis	Jerry	Urban County	Harris County Public Health & Environmental Services		
Chapin	Richard	Large City	City of Houston	Zafar Ahmed	
Cioce	Danielle	Urban County	Harris County	Camila Biaggi	Nick Russo
Cooper	Christine	Small City	City of Conroe	Greg Hall	
Douglas**	Tom	Conservation	Houston Sierra Club	Jim Williams	
Ehrlich	Denise	Business / Industry	Gulf Coast Authority	Shaun Austin	
Elliott	Catherine	Urban County	Harris County Flood Control District	Robert Snoza	Roberto Vega
Gossett	Sarah	Conservation	Galveston Bay Foundation	Scott Jones	
Harris	Teague	Utility District	IDS Engineering		
Isbell	Andrew	Rural County	Walker County		
La Breche	Carol	Large City	City of Houston	Richard Chapin	
Lane	Helen	Conservation	Houston Audubon Society		
Lindsey	Mike	Rural County	Montgomery County	Frank Green	Scott Nichols Reuben Martinez
McCoy	Cathy	Agriculture	Harris County SWCDistrict #442		
Murphy	Jack	Small City	City of League City	Susie Blake	Jody Hooks
Olive	Becky	Business / Industry	AECOM	Karen Kottke	
Page	Mitchell	Utility District	Schwartz, Page, & Harding, LLP		
Pechacek	Linda	Public	Citizen, Civil Engineer	Rachel Powers	
Pinheiro	Rod	Large City	City of Houston	Patrick Rightmyer	
Powers	Rachel	Conservation	Citizen's Environmental Coalition	Anne Olson	Linda Shead
Robertson	Jim	Conservation	Cypress Creek Flood Control Coalition	Richard Smith	
Saenger**	Scott	Business / Industry	Jones and Carter		
Schindewolf	Aaron	Business / Industry	San Jacinto River Authority		
Shead	Linda	Conservation	Texas Coastal Partners	Mary Ellen Whitworth	
Shmaefsky	Brian	Resource Agency / Academia	Lone Star College, Kingwood	Jon Connolly	
Singhania	Monica	Agriculture	Texas Forest Service	Hughes Simpson	
Tarrant	Mayor Leah	Rural Small City	City of Patton Village		
Thornhill	Michael	Utility District	SI Environmental	Matt Carpenter	
Tuma	Scott	Business / Industry (Boating)	Boater	Sarah Gossett	

**Approval of BIG Required

Waters of the U.S. Workshop

Hosted by:

**Society of American Military Engineers
Houston/Galveston Post**

Tuesday, October 22, 2019

Workshop Schedule:

8:30 AM to 9:00 AM – Registration (Continental Breakfast Included)

9:00 AM to 2:00 PM – Workshop (Lunch Buffet Included)

Multiple regulatory and public agency representatives will present current Waters of the United States regulations and policies, and applicability of such regulations/policies on local projects.

The HESS Club

5430 Westheimer Road, Houston, Texas 77056

Workshop Prices:

Non-Public Agency: \$125 (thru October 14)

Public Agency Members: \$60

Certificates for 5 PDHs will be given for Workshop Attendance

Register at www.same.org/houston

Contact Karen Coopersmith by email to Karen.Coopersmith@jacobs.com for event sponsorship opportunities.



SPONSORSHIP OPPORTUNITIES

\$1,000 - FULL TABLE: Premier seating for 8, recognition on the flyer, power point, and table header.

\$500 - HALF TABLE: Preferred seating for 4, recognition on the flyer and power point

Contact Karen for details. Table registration available online.

