

BACTERIA IMPLEMENTATION GROUP

Roster

Name	Representing	Affiliation	Alternate 1	Alternate 2
Michael Bloom	Ag/Business	PBS&J, Greater Houston Partnership	Jason Maldonado	
John Blount	County	Harris County Planning & Operations Division	Alisa Max	Nick Russo
Pat Buzbee	County	Montgomery County Environmental Health	Mike Lindsey	
Marilyn Christian	County	Harris County Public Health & Environmental Svcs.	Snehal Patel	
Robert W. Collins	County	Montgomery County	Mike Lindsey	
Catherine Elliott	County	Harris County Flood Control District	Joe Myers	Carolyn White
Joe Ferro	Municipal	City of Webster	Jesse Espinoza	Pam Guillory
Mike Garver	Buffalo/Whiteoak TMDL	Buffalo Bayou Partnership	Scott Barnes	Jessalyn Ballard
Carol Ellinger Haddock	Municipal	City of Houston	Sarah Metzger	Richard Chapin
Teague Harris	Municipal	Pate Engineers, Inc.		
Jason Iken	Metro TMDL	City of Houston	Walid Samarneh	Richard Chapin
Tom Ivy	Public	Texas Stream Team	Jim Williams	
Ron Kelling	Ag/Business	San Jacinto River Authority	Michael Mooney	
James Tynan Kelly	Conservation	Bayou Preservation Association	Bruce Heiberg	
Helen Lane	Conservation	Houston Audubon	Gina Donovan	
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	Nancy Sullins, Tony Bennet, Mary Purzer	
Mitchell G. Page	Lake Houston TMDL	Schwartz, Page & Harding, LLP	Michael Page	
Raymond Pavlovich	Wildcard	Nottingham Country Municipal Utility District	Michael Thornhill	Mark Stendahl
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	The Trust for Public Land	Mary Ellen Whitworth	Carolyn White
Brian Shmaefsky	Public	Lone Star College, Kingwood	Dr. John Connolly	
Melvin Solomon	Municipal	City of Conroe	Joe Clark	
Robert Stokes	Clear Creek TMDL	Galveston Bay Foundation	Lisa Miller-Marshall	Scott Jones
Michael Turco	Resource Agency	US Geological Society	Michael Lee	Jeannette Oden

*not yet approved



Meeting Summary
Tuesday, January 19, 2010

Members Present:

Michael Bloom
Pat Buzbee (phone)
Marilyn Christian
Catherine Elliott
Teague Harris
Jason Iken
Tom Ivy
Ron Kelling

Craig Maske
Cathy McCoy (phone)
Michael Mooney
Jack Murphy
Becky Olive
Mitchell Page
Raymond Pavlovich
Linda Pechacek

Ceil Price
Kathy Richolson
Jim Robertson
Brian Shmaefsky
Melvin Solomon
Michael Turco

John Blount was represented by Alisa Max.

Joe Ferro was represented by Jesse Espinoza.

Carol Ellinger Haddock was represented by Sam Metzger.

James Tynan Kelly was represented by Bruce Heiberg.

Robert Stokes was represented by Lisa Miller-Marshall.

Members Absent:

Robert Collins
Mike Garver

Helen Lane
Linda Shead

Guests Present:

Steve Archer (AEC), Mike Bagstad (CH2M Hill), Tom Beck (TxDOT), Tony Bennett (AECOM), Daniel Bowen on phone (Eastex Environmental), Linda Broach (TCEQ), Richard Chapin (City of Houston), Catarina Cron (Harris County), Winston Denton (TPWD-Dickinson), Bryan Eastham (TCEQ), Jedediah Greenfield (City of Houston), Angie Hallimore (RG Miller/Dowdell), Nicole Hausler (PHA), Bob Higgins (AECOM), Margret Himes-Dorman (Citizen), Jonathan Holley (HCFCD), Steven Johnston (GBEP), Brian Koch (TSSWCB), Ken Kramer on phone (Sierra Club), Carol LaBreche (City of Houston), Carole Lamont (Harris County Pct. 3), Ed Matuszak (URS), Maria Modelska (University of Houston), Chip Morris (TCEQ), Mary Purzer on phone (AECOM), Brad Raffle (Conservation Capital), Nick Russo (Harris County), Scott Saenger (Jones & Carter), Carol Serna (AEI Engineering), Robert Snoza (HCFCD), Nancy Sullins (AECOM), Laurie Thanheiser on phone (Environmental Infrastructure Planning), Troy Toland on phone (City of Conroe), Mel

Vargas on phone (Parsons), Guyneth Williams (City of Houston), Jim Wolfe (Severn Trent Services)

H-GAC Staff Present:

Justin Bower, Kristi Corse, Erin Livingston, Carl Masterson, Rachel Powers, Todd Running, Jeff Taebel

1. Welcome & Introductions

Rachel Powers welcomed and thanked everyone for coming. She initiated self-introductions of BIG members, those on the phone, and H-GAC staff. Rachel then reviewed the agenda.

2. Certification of Quorum

Twenty-seven members and alternates were present, achieving a quorum.

3. Approval of Proposed Alternates

Michael Lee and Jeannette Oden were approved as alternates for Michael Turco.

4. Approval of December 15, 2009, Meeting Summary

Meeting notes were approved with the following changes:

- Clarify that the Houston Metro TMDL was not split for public comment as a result of errors, it was split regardless
- Add Michael Turco to the list of members present
- Spell out Capacity, Management, Operations, and Maintenance (CMOM)

5. Workgroup Report

Combined Coordination & Policy and Watershed Outreach

The workgroups met on January 6, 2010, and covered two main topics of discussion: a method for watershed prioritization and a proposal for formal support.

Watershed Prioritization

Some Implementation Activities (IAs) are universal and will be implemented throughout the BIG region. Other IAs are targeted, and it is for these that geographical prioritization is needed.

After exploring various watershed prioritization methods, the group agreed to recommend the use of a set of criteria which communities should consider when deciding where to implement the activities prescribed in the I-Plan. The level of impairment and the perceived level of

contact recreation are the top criteria for a community to consider. Other criteria include structural characteristics of the waterway, aesthetics, and political support. Waterways with the highest bacteria levels and the most use would be priorities, as they present the highest risk.

BIG members generally supported the proposal from the workgroup and agreed that it is appropriate for the I-Plan to provide a framework for considering various factors when prioritizing watersheds for implementation activities. Discomfort was expressed regarding the elevation of the two criteria, impairment and recreation, above the others.

H-GAC staff will draft the watershed prioritization framework for inclusion in the I-Plan and submit it to the workgroup and BIG for comments.

Formal support

Included in the handout was a *Proposal for Formal Support* the workgroups were submitting to the BIG for discussion/approval. Obtaining formal support from the various stakeholder groups for the I-Plan sends a message to TCEQ that there is widespread knowledge of the plan and political support for it. TCEQ staff has indicated that proposed goals seem appropriate. The proposal listed goals concerning the desired percent of various stakeholder groups to profess support for the I-Plan.

Concern was expressed by BIG members that the goal for support from 5% of Utility Districts was too low. The group agreed that the goal should be for support from 10% of Utility Districts.

H-GAC is going to ask all stakeholders for support. If the goals set by the BIG and H-GAC are not met, the I-Plan will still be sent to TCEQ for approval. If a community does not express support for the I-Plan, that community is not excluded from implementing activities included in the I-Plan.

Combined Stormwater and Land Development

The first goal of the meeting was to determine whether the five Stormwater and Land Development Implementation Activities (IAs) selected at the March BIG meeting were appropriate. It quickly became apparent that those present generally did not fully support the IAs. The group decided that an additional meeting was needed. IAs will need to address existing infrastructure in addition to new infrastructure. New IA ideas to be explored at the next workgroup meeting include:

- TCEQ to allow reimbursement for over-excavation and stormwater quality BMPs currently viewed by TCEQ as amenities

- Creation of a certification program to encourage developers to design developments to reduce bacteria loading from development
- Expansion of the MS4 permit areas (there is precedence for this in other portions of the country and is being considered by the EPA in the Chesapeake Bay area)
- Replication of a model program (Phase I MS4 communities may have appropriate activities as models)
- Conservation opportunities

6. Staff Presentation

Rachel gave a brief update on the progress of each section of the I-Plan related to source workgroups. The Wastewater Treatment Facility workgroup section was the furthest along and would be ready for distribution to the workgroup and BIG members by the end of the week. The next workgroup sections will include Construction, Sanitary Sewer Systems, and Onsite Sewage Facilities.

H-GAC is also working on a database that will allow the tracking of implementation activities by assessment unit (AU), including estimated load reductions and costs. Essentially, it will include the nine elements of a Watershed Protection Plan.

7. Other Business/Roundtable

Chip Morris, from TCEQ, provided an update on the Houston Metro and Lake Houston TMDLs. The Greens Bayou TMDL was approved for public comment. A public meeting was scheduled for Thursday, January 21, 2010, at 6:30 PM, at the Lone Star College Greenspoint Center. The four other TMDLs included in the Houston Metro project will go out for public comment next, followed by the Lake Houston TMDL. The plan is to have all adopted by the TCEQ commission by August 31, 2010.

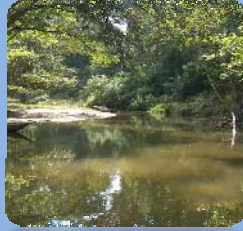
TCEQ commissioners considered the new water quality standards for waterways and new definitions of contact recreation at their last meeting and all was approved for public comment. Rachel will send out a summary with her next email.

8. Next Meeting Date

The next regularly scheduled meeting will be on February 16, 2010.

9. Adjourn

The meeting was adjourned at approximately 2:48 PM.

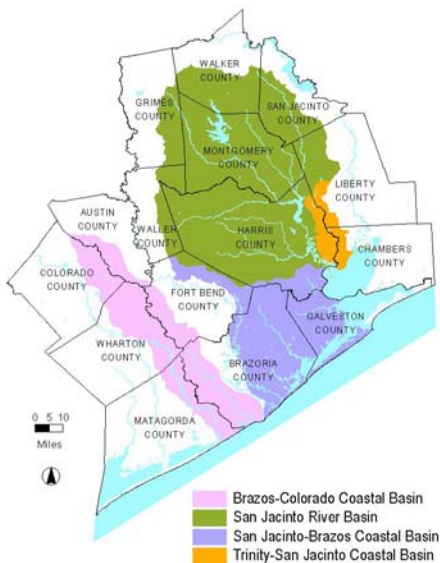


Summary of Preliminary 2010 Impaired Waters List

Todd Running
Clean Rivers Program Manager

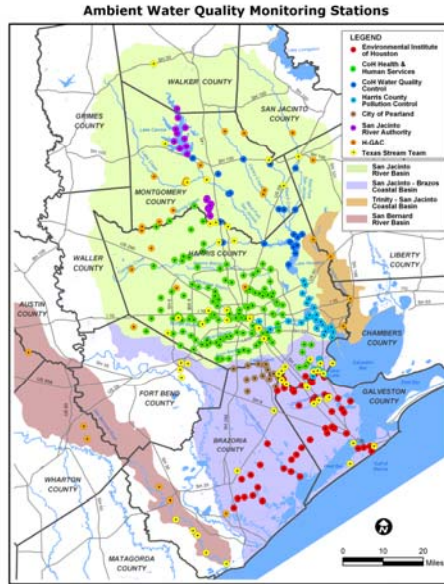


H-GAC's Clean Rivers Program



- One River and Three Coastal Basins
- Basin Highlights Report Coming up
- Reviewing the Preliminary 303(d) List

Coordinated Monitoring



Summary of New Impairments

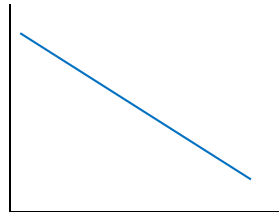
	In H-GAC CRP Area	Basin 9	Basin 10	Basin 11	Basin 13	Bays and Estuaries
Number of New Listings by Assessment Unit	189	0	50	58	3	78
New listings for Bacteria	62	0	29	22	3	8
New listings for Bacteria (Oyster Waters)	0	0	0	0	0	0
New listings for DO	18	0	6	10	0	2
New listings for Mercury	1	0	1	0	0	0
New listings for PCBs	54	0	3	17	0	34
New listings for Dioxin	44	0	2	8	0	34
New listings for Herbicides and Pesticides	6	0	6	0	0	0
New listings for Copper	1	0	1	0	0	0
New Listing for Impaired Biological Community	3	0	2	1	0	0
New listings for TDS	0	0	0	0	0	0

Streams Coming Off The List



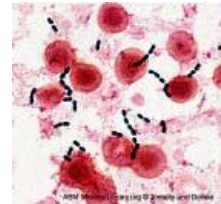
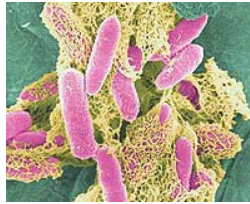
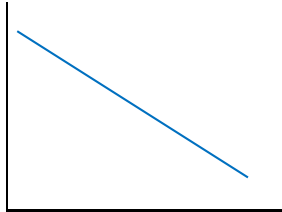
- Five Assessment Units in Clear Creek Above Tidal - TDS

16 Areas Showing Significant Improvement For Bacteria



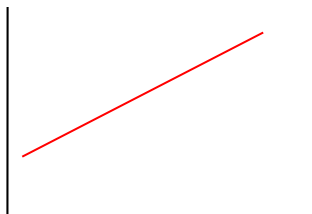
- HSC San Jacinto River Tidal - 1 AU
- Houston Ship Channel - 3 Aus
- HSC Buffalo Bayou Tidal - 3 Aus
- Buffalo Bayou Above Tidal - 2 AUs
- Greens Bayou Above Tidal - 1 AU
- White Oak Bayou - 4 AUs
- Clear Creek Tidal- 1 AU
- Bastrop Bayou - 1 AU

■ ■ ■ Range of Improvement



- HSC San Jacinto River Tidal – Geomeans from > 30 to < 11
- Houston Ship Channel – Geomeans from > 3000 to < 1000
- HSC Buffalo Bayou Tidal - Geomeans from > 3000 to < 1000
- Buffalo Bayou Above Tidal - Geomeans from > 1600 to < 400
- Greens Bayou Above Tidal – Geomeans from > 500 to < 110
- White Oak Bayou – Geomeans from > 4000 to < 1000
- Clear Creek Tidal – Geomeans from > 900 to < 400
- Bastrop Bayou – Geomeans from > 300 to < 100

■ ■ ■ 11 Areas Showing Significant Increases In Bacteria Levels



- Lake Conroe – 4 AUs
- Clear Creek Above Tidal – 1 AU
- Dickinson Bayou Tidal -5 AUs
- Chocolate Bayou Tidal – 1 AU



Range of Increase in Bacteria



- Lake Conroe – Geomeans from <3 to >9
- Clear Creek Above Tidal – Geomeans from <60 to >600
- Dickinson Bayou Tidal - Geomeans from <40 to >400
- Chocolate Bayou Tidal – Geomeans from <30 to >120

Most Improved and Degraded Segments for Bacteria



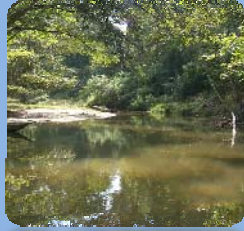
Significant Projects in Any of These Watersheds?

Classified Stream Name	AU_ID	Stream Name
HSC San Jacinto River	1005_02	San Jacinto River
Houston Ship Channel	1006_05	Goodyear Creek
Houston Ship Channel	1006D_02	Halls Bayou
Houston Ship Channel	1006F_01	Big Gulch
HSC Buffalo Bayou Tidal	1007B_01	Brays Bayou
HSC Buffalo Bayou Tidal	1007D_03	Sims Bayou
HSC Buffalo Bayou Tidal	1007H_01	Pine Gully
Buffalo Bayou Above Tidal	1014K_01	Turkey Creek
Buffalo Bayou Above Tidal	1014L_01	Mason Creek
Greens Bayou Above Tidal	1016A_02	Garners Bayou
White Oak Bayou	1017_01	Little Whiteoak to Brickhouse
White Oak Bayou	1017_03	
White Oak Bayou	1017_04	Vogel Creek to Huffsmith
White Oak Bayou	1017E_01	Unnamed Trib
Clear Creek Tidal	1101A_01	Magnolia Creek

What is Causing This Decrease in Bacteria Levels?



- Better Performance of WWTFs?
- Fewer SSOs?
- Fewer Illicit Discharges?
- Installation of Water Quality Features in Stormwater Detention Structures?
- Less Rainfall?



■ ■ ■ **Questions?**

Todd Running
Todd.running@h-gac.com
713-993-4549



TCEQ Public Comment Opportunities

Comments due March 17, 2010

TCEQ has requested comments on two items that might be of interest to the BIG. First, TCEQ has proposed changes to its surface water quality standards. Second, TCEQ is proposing revisions to its "Procedures to Implement the Texas Surface Water Quality Standards." More information, including the 286 page document, can be found on the TCEQ webpage:

http://www.tceq.state.tx.us/permitting/water_quality/stakeholders/2010standards.html

The following provides summaries of and excerpts regarding the items that may be specific to the BIG, followed by some information regarding changes to non-bacteria standards that may be of interest. Please note that the underlined and bracketed text indicates text that is proposed for addition or deletion, respectively.

Proposed changes to the Texas Surface Water Quality Standards related to Bacteria and Recreation

Definitions of four types of contact recreation

The definition for "contact recreation" is proposed to be deleted and replaced with the new definitions for primary, secondary, and non contact recreation. The definitions are as follows:

Primary contact recreation - Activities that are presumed to involve a significant risk of ingestion of water (e.g. wading by children, swimming, water skiing, diving, tubing, surfing, and whitewater kayaking, canoeing, and rafting).

Secondary contact recreation 1 - Activities that commonly occur but have limited body contact incidental to shoreline activity (e.g. fishing and boating). These activities are presumed to pose a less significant risk of water ingestion than primary contact recreation but more than secondary contact recreation 2.

Secondary contact recreation 2 - Activities with limited body contact incidental to shoreline activity (e.g. fishing and boating) that are presumed to pose a less significant risk of water ingestion than secondary contact recreation 1. These activities occur less frequently than secondary contact recreation 1 due to physical characteristics of the water body or limited public access.

Noncontact recreation - Activities that do not involve a significant risk of water ingestion and where primary and secondary contact recreation should not occur because of unsafe conditions, such as ship and barge traffic. Activities would include those with limited body contact incidental to shoreline activity, such as birding, hiking, and biking. [Aquatic recreational pursuits not involving a significant risk of water ingestion; including fishing, commercial and recreational boating, and limited body contact incidental to shoreline activity.]

Additional guidance is as follows:

(A) **Primary contact recreation.** Primary contact recreation is presumed for lakes, reservoirs, and tidal water bodies. Primary contact recreation is presumed to apply to intermittent streams, intermittent streams with perennial pools, nontidal wetlands, and perennial freshwater streams and rivers, except where site-specific information indicates that recreational activities that involve a significant risk of ingestion have little to no likelihood of occurring, in accordance with subparagraph (B) of this paragraph.

(B) **Secondary contact recreation 1.** Secondary contact recreation 1 applies to water bodies where water recreation can occur, but the nature of the recreation does not involve a significant risk of ingestion. Secondary contact recreation 1 applies to intermittent and perennial freshwaters where site-specific information demonstrates that primary contact recreation has little to no likelihood of occurring. At a minimum, the following characteristics must be demonstrated for a presumed use of secondary contact recreation 1 to apply:

- (i) during base flow conditions, the average depth at the thalweg (midchannel) is less than 0.5 meters and there are not substantial pools with a depth of 1 meter; and
- (ii) there are not existing recreational activities that create a significant risk of ingestion or a use for primary contact recreation.

(C) **Secondary contact recreation 2.** Secondary contact recreation 2 applies to water bodies where water recreation activities do not involve a significant risk of water ingestion and where activities occur less frequently than for secondary contact recreation 1 due to physical characteristics of the water body or limited public access. No water body is presumed to have a use of secondary contact recreation 2. This use is applicable when designated for an individual water body as listed in Appendix A or G in §307.10 of this title.

(D) **Noncontact recreation.** Noncontact recreation applies to water bodies where recreation activities do not involve a significant risk of water ingestion and where primary and secondary contact recreation uses should not occur because of unsafe conditions. No water body is presumed to have a use of noncontact recreation. This use is applicable when designated for an individual water body as listed in Appendix A or G in §307.10 of this title.

Bacteria criteria for the four types of contact recreation

Bacteria criterion would be as follows:

	Freshwater Geomean*	Saltwater Geomean	Saltwater Single Sample
Primary Contact	206 <i>E.coli</i> /100 ml	35 Enterococci/100ml	104 Enterococci/100 ml
Secondary Contact 1	630 <i>E.coli</i> /100ml	175 Enterococci/100ml	Not proposed
Secondary Contact 2	1030 <i>E.coli</i> /100ml	Not proposed	Not proposed
Noncontact	2060 <i>E.coli</i> /100ml	350 Enterococci/100ml	Not proposed

*The proposal removes single sample criterion from the freshwater sample. There are additional criteria for inland saline waters that do not apply in our region.

Removal of Waterbodies from the 2008 list of impaired water bodies

If these standards are adopted, 62 waterbodies will be removed from the list of impaired water bodies. I do not have a list of these streams, but several will be in the BIG area, including some in the Lake Houston and Clear Creek watersheds.

One of the proposed revisions in recreational criteria is to change criterion for primary contact recreation from 126 to 206 *E. coli* bacteria per 100 ml for freshwaters. If this proposed change is adopted, then 62 water bodies are projected to be removed from the *2008 List of Impaired Water Bodies*, and these water bodies would no longer require a UAA to define recreational uses. A UAA is an evaluation or survey used to assess the appropriate water quality standard. A reduction in the number of required UAAs is expected to result in cost savings for the commission. If each of the 62 UAAs for recreational uses is eliminated, cost savings at a minimum are estimated to be \$1 million divided equally over a three-year period.

Assignment of the four types of contact recreation

These definitions and criteria would be applied to streams based on standard stream characteristics or on a Use Attainability Analysis (UAA). Classified streams would be assigned a designation as Primary Contact unless a UAA is conducted. Unclassified streams could be assumed to have a "presumed use" of Secondary Contact 1 if there is no recreational use and certain depth characteristics are met.

Recreational uses and associated numerical criteria are assigned to an unclassified water body in accordance with the presumed uses and guidelines established in paragraph (2) of this subsection. To assign uses other than primary contact recreation, a reasonable level of inquiry is conducted to determine if a different presumed use is appropriate for a particular water body. A reasonable level of inquiry includes review of available relevant information or completed site surveys....

Recreational use consists of four [two] categories - primary contact recreation, secondary contact recreation 1, secondary contact recreation 2, [waters] and noncontact recreation waters.

Classified segments are designated for primary contact recreation unless sufficient site-specific information demonstrates that elevated concentrations of indicator bacteria frequently occur due to sources of pollution that [which] cannot be reasonably controlled by existing regulations, wildlife sources of bacteria are unavoidably high and there is limited aquatic recreational potential, or primary or secondary [or] contact recreation is considered unsafe for other reasons such as ship or barge traffic. In a classified segment where contact recreation is considered unsafe for reasons unrelated to water quality, a designated use of noncontact recreation may be assigned either noncontact recreation criteria or criteria normally associated with primary contact recreation. A designation of primary or secondary contact recreation is not a guarantee that the water so designated is completely free of disease-causing organisms. Indicator bacteria, although not generally pathogenic, are indicative of potential contamination by feces of warm blooded animals. Recreational [The] criteria [for contact recreation] are based on these indicator bacteria[,] rather than direct measurements of pathogens. Criteria are expressed as the number of ["colony forming units" of] bacteria per 100 milliliters (ml) of water (in terms of colony forming units, most probable number, or other applicable reporting measures). Even where the concentration of indicator bacteria is less than the criteria for primary or secondary contact recreation, there is still some risk of contracting waterborne

diseases. Additional guidelines on minimum data requirements and procedures for evaluating standards attainment are specified in the *TCEQ Guidance for Assessing and Reporting Surface Water Quality in Texas, as amended* [latest approved version of the *TNRCC Guidance for Screening and Assessing Texas Surface and Finished Drinking Water Quality Data*].

High-Flow Exemption

An exemption is now specified for high flow events. Bacteria samples collected during high flow events would not be included in the calculation of the geometric mean.

A high-flow exemption for bacteria would be added to this section so that samples taken during extreme hydrologic conditions immediately after heavy rains would not be used for assessment purposes. The time period and the hydrologic conditions that the high-flow exemption would apply to are also added to this section....

Samples must not include extreme hydrologic conditions such as very high-flows and flooding immediately after heavy rains. The high-flow exemption applies for a 24-hour period following the last measured or estimated determination that extreme hydrologic conditions exist. A high-flow exemption applies during either of the following hydrologic conditions:

(A) stream flow that exceeds the 90th percentile flow using historical records for the nearest United States Geological Survey (USGS) or International Boundary and Water Commission (IBWC) gage, as found on the USGS or IBWC websites for many Texas gages, or by calculating the percentile flow for small streams without gages using statistical corrections to account for relative watershed size; or,

(B) estimated flow severity index indicates that swimming is not practical or safe.

Site-specific criteria for aquatic recreation (geometric mean), total dissolved solids, chloride, and sulfate as established in Appendix A of §307.10 of this title, and human health criteria as established in Table 2 of §307.6(d)(1) of this title do not apply in the following stream types and flow conditions:

(A) perennial streams when flows are below 0.1 cubic feet per second;

(B) intermittent streams when less than 20% of the stream bed of a 500 meter sampling reach is covered by pools; or when extremely dry conditions are indicated by comparable observations of flow severity.

Generic Stream Lists

The 1995 stream standards identified specific streams within the BIG area, although, apparently, “a generic listing to cover these types of streams [in Harris County] was inadvertently excluded.” The proposed changes include the addition of generic stream listings in a table in the final appendix in the document.

Channelized streams in Harris County that drain to the San Jacinto Basin (Basin 1000), the San Jacinto-Brazos Coastal Basin (Basin 1100), and Bays and Estuaries (Basin 2400), were described in a UAA sent to the EPA for the 1995 standards. Specific streams were listed in the 1995

standards; however, a generic listing to cover these types of streams in the county was inadvertently excluded. A generic list with uses, criteria, and descriptions would be added for channelized water bodies in Harris County that drain to these basins. The uses and criteria are based on the morphology of the water body and degree of maintenance by the Harris County Flood Control District as described in the Harris County UAA report.

Other items of note

PCB & Dioxin

The standards for PCBs and Dioxins are being modified to reflect World Health Organization updates, and will be a tissue-based criteria. Additional congeners for dioxin are being added to the list.

Nutrients

Standards are being proposed for nutrients in certain reservoirs in the state. Numeric criteria will be expressed as concentrations of chlorophyll *a* in water, supplemental screening for total phosphorous, and transparency (depth of Secchi disk visibility).

Oyster Waters

The standard for Oyster Waters will remain 14 colonies per 100 ml. Fecal coliform will remain the indicator for Oyster Waters only.

Thalweg

For those of who had never heard of the word, TCEQ has defined Thalweg for us:

Thalweg - The deepest portion of a stream or river channel cross-section.