



BIG ANNUAL MEETING

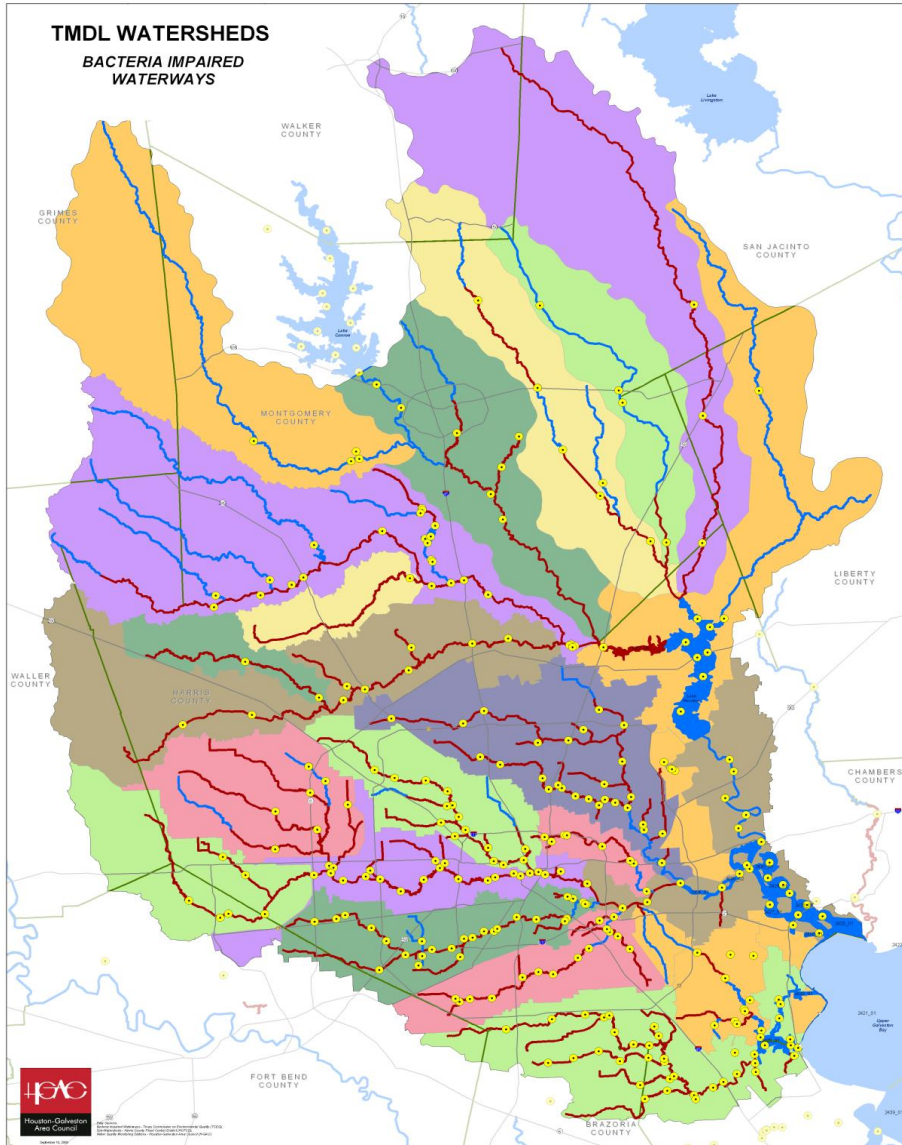


Steven Johnston, Houston-Galveston Area Council
6/22/15





**TMDL WATERSHEDS
BACTERIA IMPAIRED
WATERWAYS**



Agenda

1. **Call to Order/Introductions**
2. **Review Agenda**
3. **Review and Approval BIG Roster**
4. Review and Approval of Minutes
5. Public Comment
6. UHCL Presentation
7. Discuss Draft Annual Report
8. TCEQ TMDL Program Update
9. Implementation Plan Updates
10. Discuss Recommendations of the East and West Fork and Jarbo Bayou Stakeholder Process
11. Consider East and West Fork San Jacinto Watershed Addition
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13. Review 2016 Annual Report Process
14. Other Business/Announcements
15. Fall Meeting – October 20, 2015?
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ROSTER DISCUSSION

BIG Members

- David Parkhill - SJRA
- Greg Hall – City of Conroe
- Phyllis Frank – GCWA

BIG Alternates

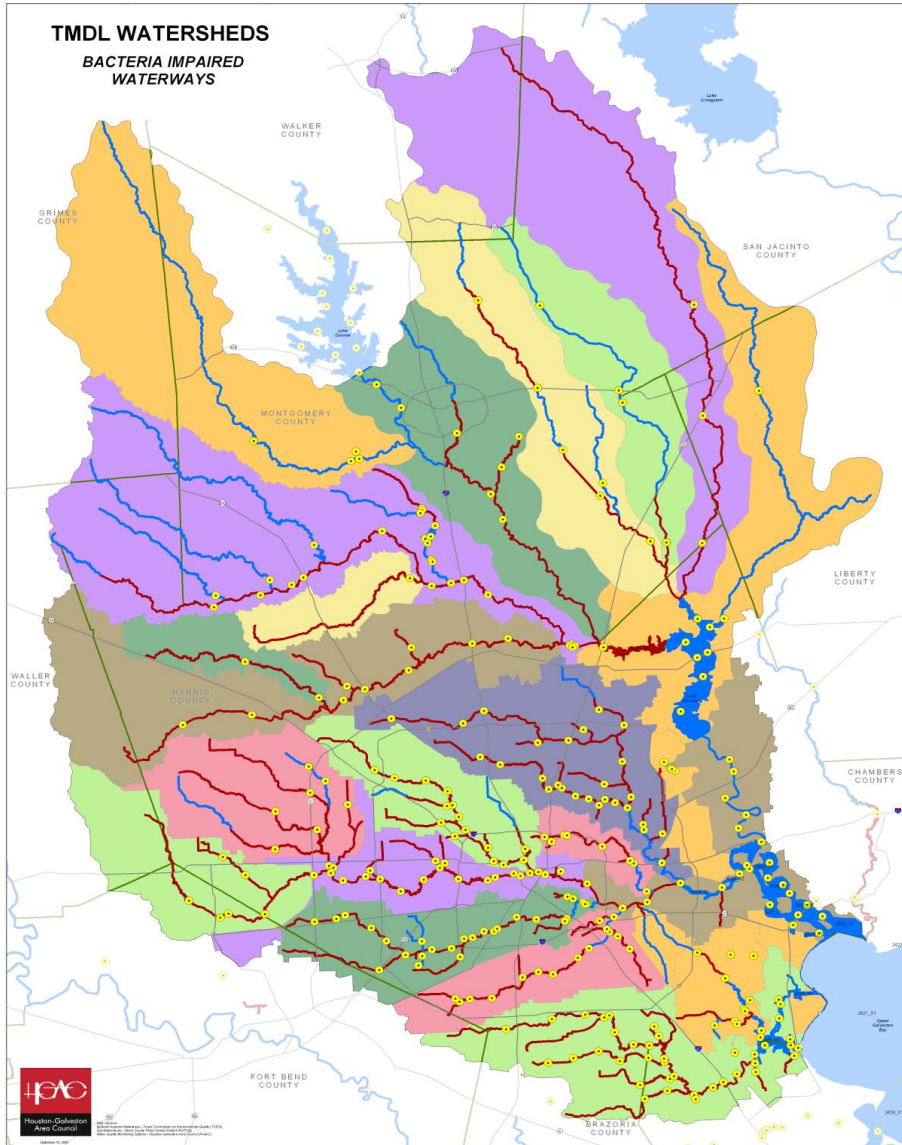
- Jody Hooks

- Consideration of Agriculture / Business Representative Category



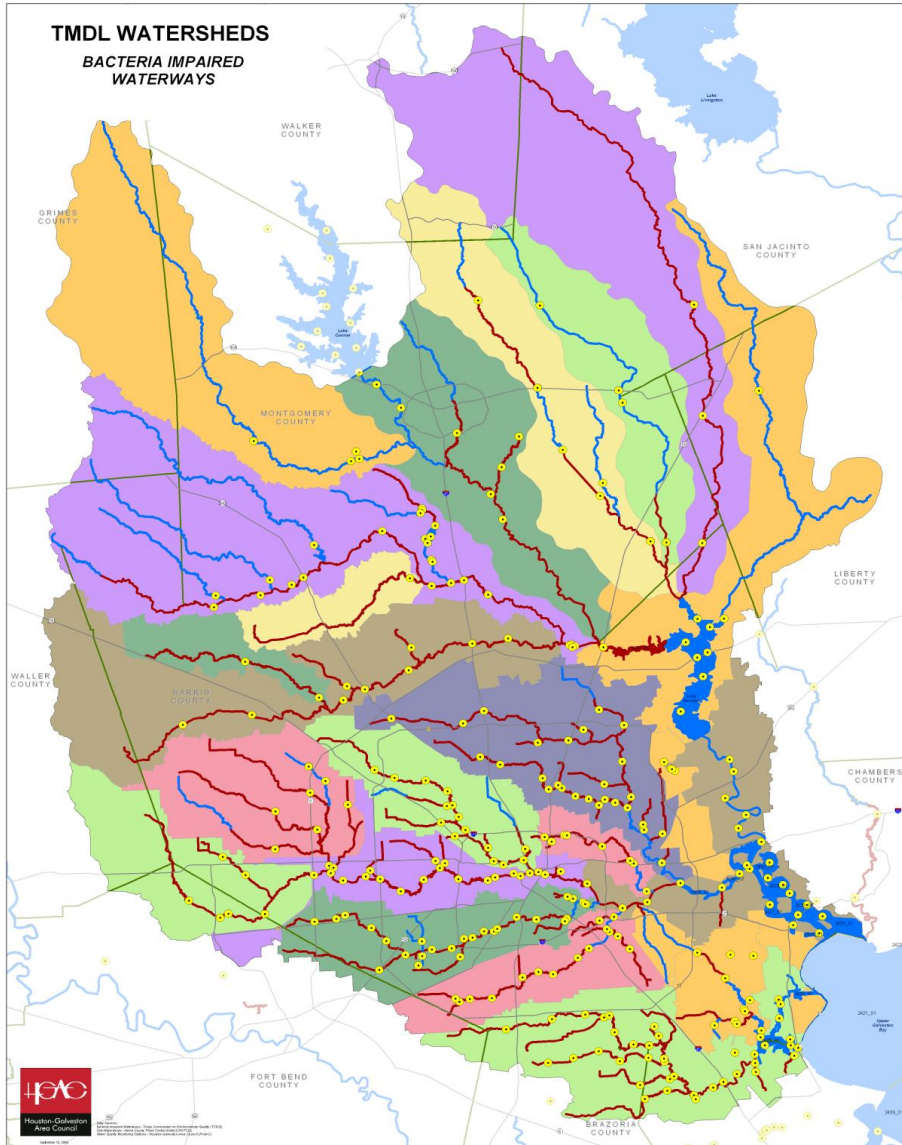


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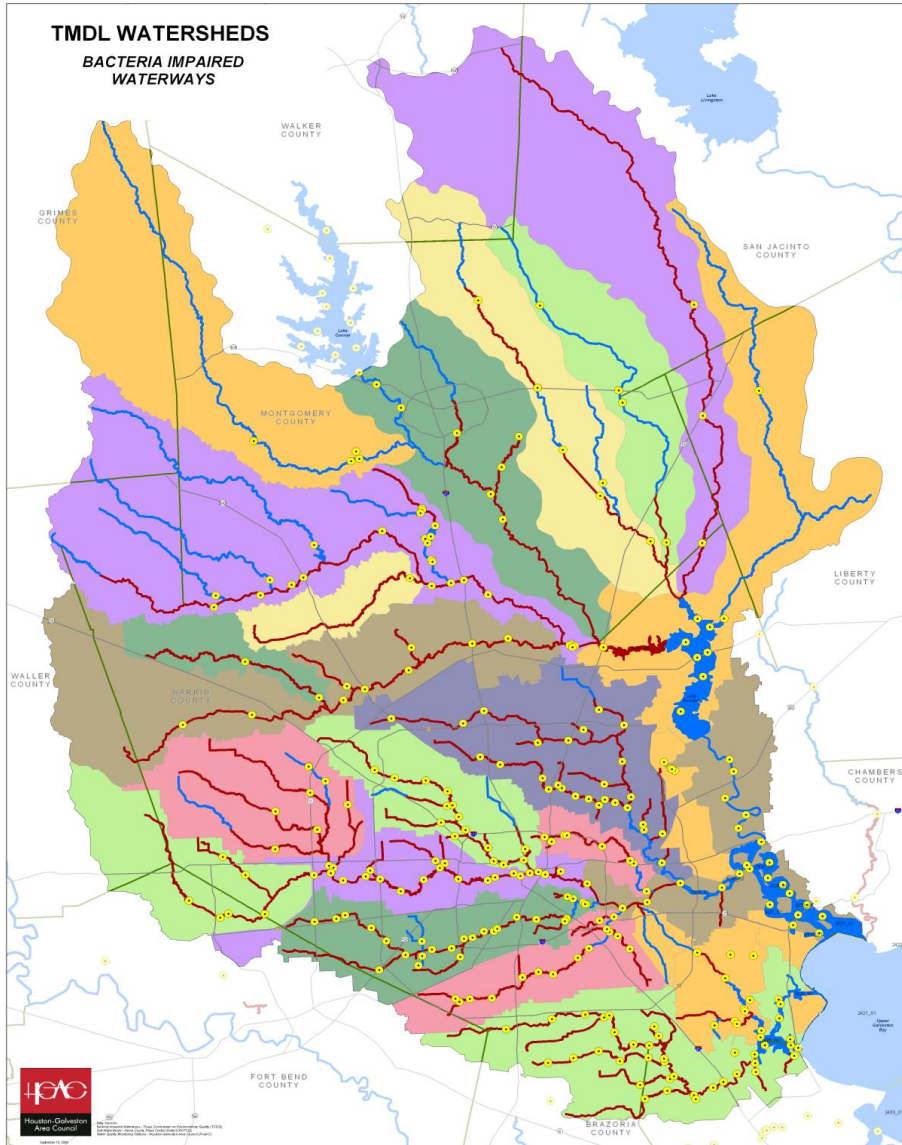


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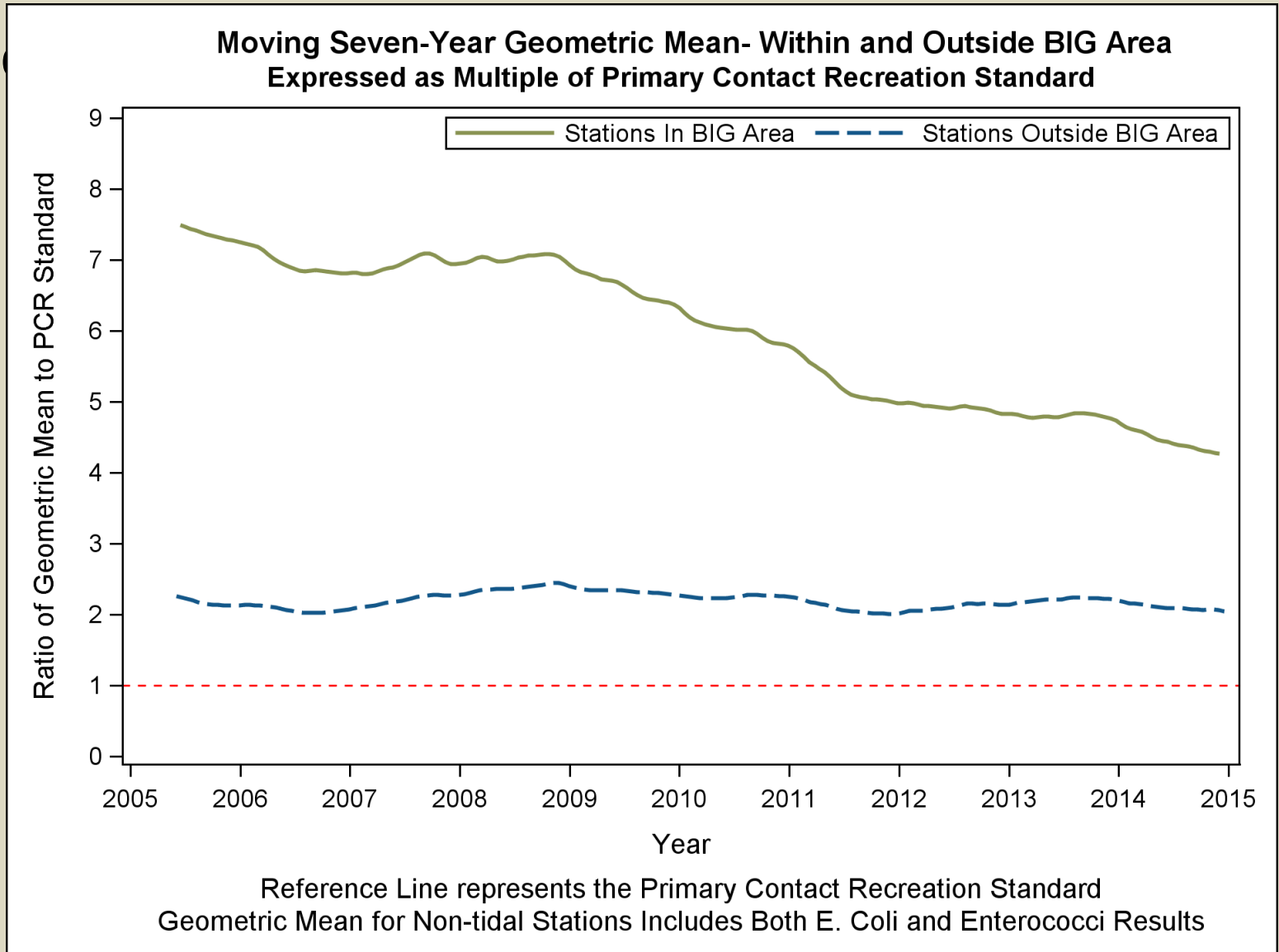
2015 Draft Annual Report

- What is Left To Do:
 - Challenge with WWTF DRM data
 - Suggestions for Success Stories
 - Photos?
 - BIG and stakeholder review
 - Finalizing the Document



ANNUAL REPORT HIGHLIGHTS

• C



ANNUAL REPORT SPOTLIGHT ON SUCCESS

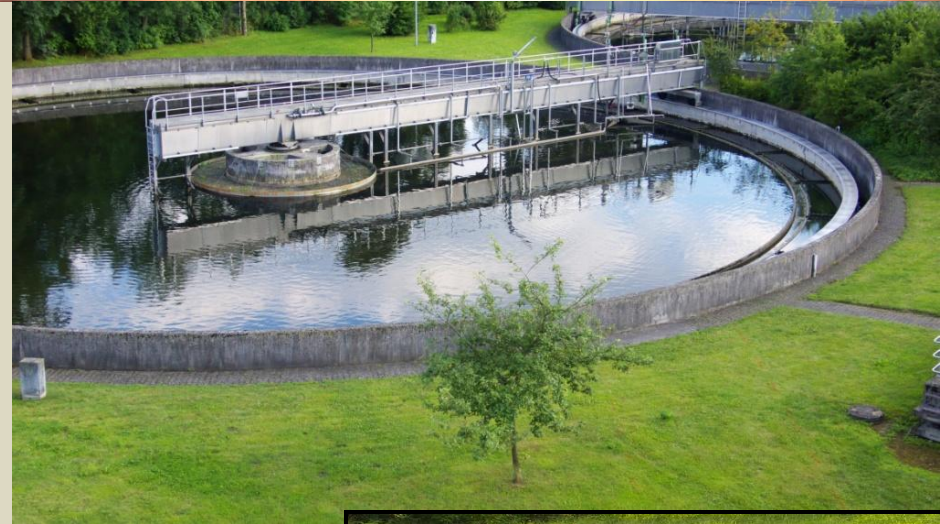
- Walker County – OSSF
- Low Impact Development Website
- White Oak Bayou in Focus
- TCEQ WWTF Study
- Others?



ANNUAL REPORT HIGHLIGHTS

1.0 Waste Water Treatment Facilities:

1. DMR Data (**See Tables and Figures Handout**)
2. Harris County provided compliance data
3. New TCEQ Enforcement Data
4. New Plant Upgrade Data



2.0 Sanitary Sewer Systems:

1. New SSO Data
2. Stakeholder are tracking TCEQ 217 Permit/Design Processes
3. Ongoing Education – Asset management, FOG



ENFORCEMENT, VIOLATIONS AND WWTF PLANS APPLICATIONS

Enforcement Cases for the BIG Project Area 2009-2014				
Year	Number of Enforcement Cases	Original Fine	Final Payable Fine	SEP Offset
2009	9	\$81,770	\$64,219	\$10,000
2010	32	\$267,177	\$218,789	\$20,282
2011	30	\$491,027	\$357,561	\$80,821
2012	24	\$238,672	\$211,074	\$0
2013	24	\$385,413	\$315,678	\$31,389
2014	5	\$50,155	\$29,299	\$10,000

Table 3. TCEQ enforceable cases, including original assessed fine, final payable fine and any SEP offset for in the BIG Project Area from 2009-2014. Data provided by TCEQ. There can be multiple violations per case.

Violations in the BIG Project Area		
Violation Type	2013	2014
Exceeded Effluent Limits	19	4
No Permit or Permit Expired	4	1
Other	1	.
Unauthorized Discharge	3	.

Table X. Violation type and number from TCEQ enforceable cases from 2009-2014. Enforcement cases can be made up of multiple violations. Data provided by the TCEQ.

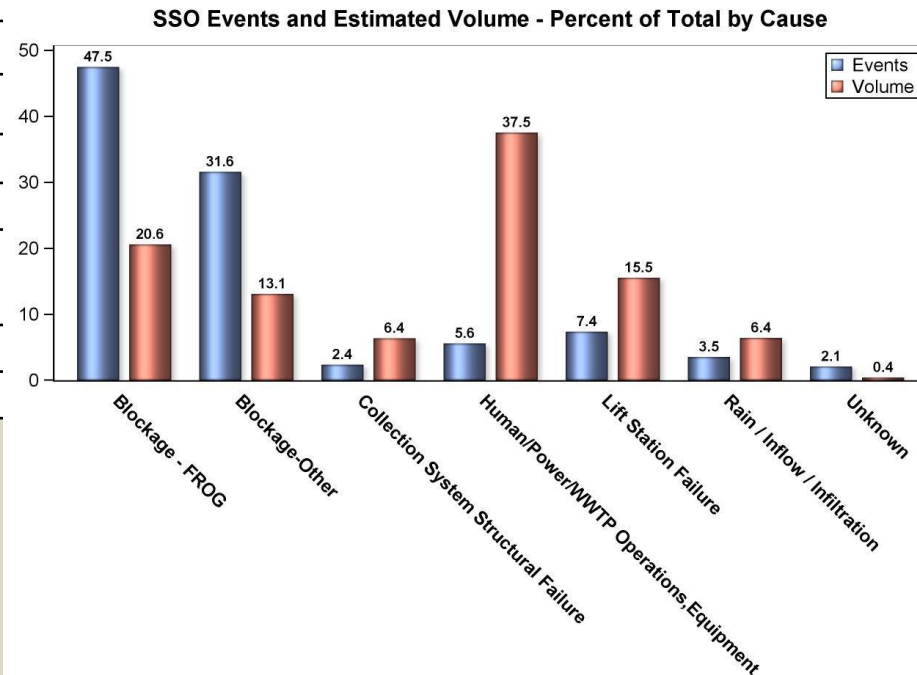
Track Approval of Wastewater System Plans and Specifications Applications											
Jan 1, 2013 to Jan 1, 2015											
Application Type	Harris		Galveston		Brazoria		Fort Bend		Montgomery		Total
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	
Improvements	12	14	0	1	1	0	1	0	1	3	33
Rehabilitation	13	13	1	0	0	0	0	0	0	5	32
Reuse/Reclaim	2	1	0	0	0	0	0	1	2	1	7
Expansions	6	6	0	0	0	0	0	1	0	1	14
Modifications	2	4	0	0	0	0	0	1	0	0	7
Upgrade	1	2	0	0	0	0	2	0	0	1	6
Generator	1	2	0	0	0	0	0	0	0	1	4
Total	37	42	1	1	1	0	3	3	3	12	103

Table 6. Wastewater system plans and specification applications submitted to the TCEQ per year by county. Application approvals can be reviewed at: <http://www4.tceq.state.tx.us/wwdp/>.

SSOs in BIG Area, Events and Estimated Volume - 2014

Cause	Number of Events	Estimated Overflow, 1000 Gallons
Blockage Due To Roots/Rags/Debris	13	7.063
Blockage in Collection System Due To Fats/Grease	310	329.539
Blockage in Collection System-Other Cause	215	214.118
Collection System Structural Failure	16	104.251
Human Error	2	1.05
Lift Station Failure	50	253.653
Power Failure	7	210.85
Rain / Inflow / Infiltration	24	104.695
Unknown Cause	14	6.506
WWTP Operation or Equipment Malfunction	29	400.68
Total	680	1632.405

Table 8. The number and volume of SSOs reported to the TCEQ in 2014

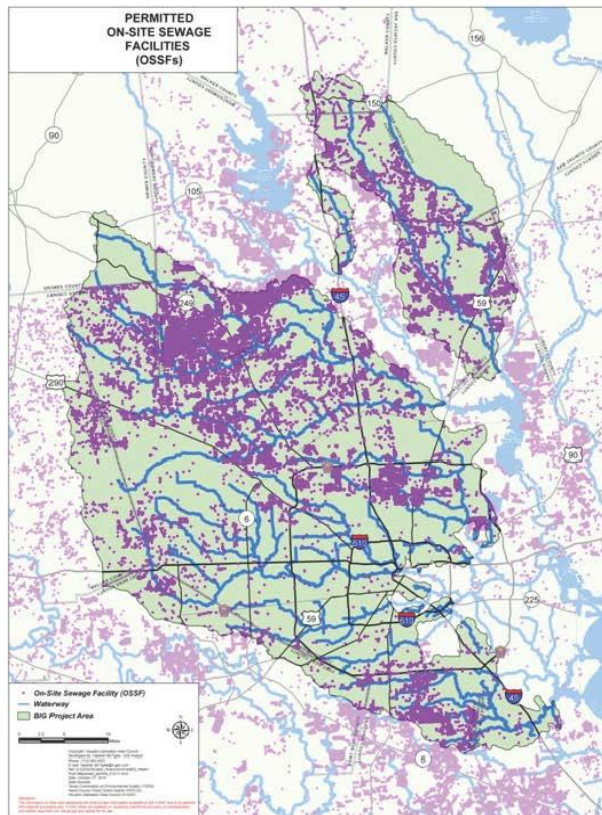


ANNUAL REPORT HIGHLIGHTS

DRAFT

APPENDIX E

OSSF INFORMATION SYSTEM



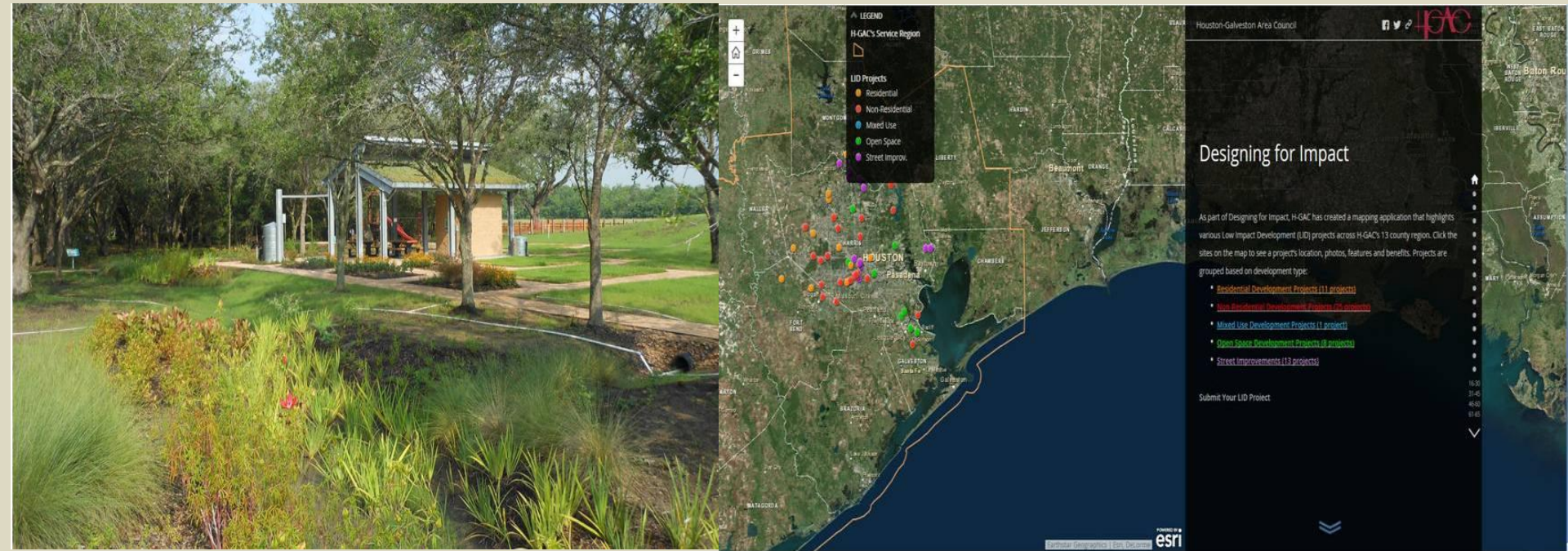
3.0 OSSF:

1. Updated OSSF Locations
2. Establishing Target Areas
3. Approved SEP for OSSF Repair or Replacement – No Funding!
4. Education and Training – Homeowners, Real Estate Agents, Waste Professionals

4.0 Stormwater Systems:

1. MS4 Operator Questionnaire – 121 small MS4 Operators – 17 responses (so far!)
2. LID Project – Gulf of Mexico Program
3. Education and Training
4. Recognition Program – Report Wall of Fame
5. Reimbursement for BMPs

LID Website



- LID Resource Website
 - <http://www.h-gac.com/community/low-impact-development/default.aspx>

ANNUAL REPORT HIGHLIGHTS

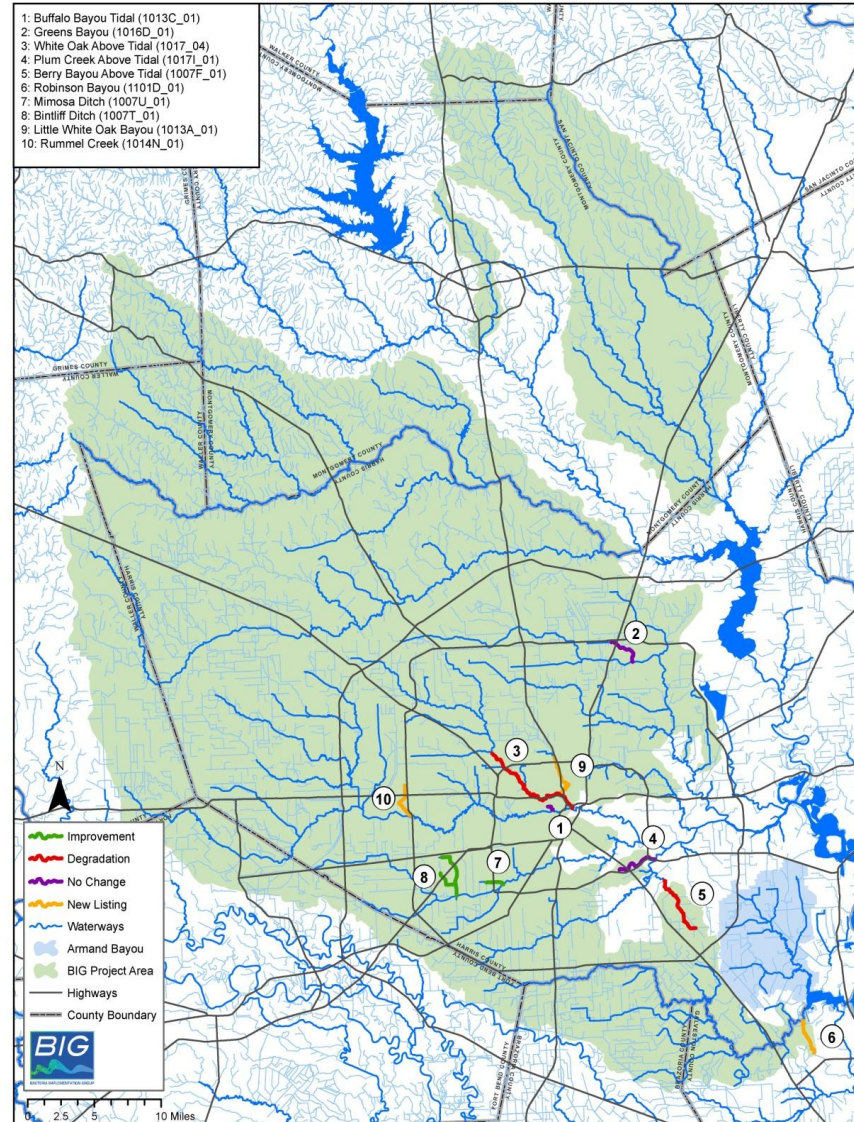
5.0 Construction:

1. MS4 report conducting inspections
2. Harris County and City of Houston Compliance Reporting
3. Improved Compliance through Training during Inspections
4. Education

6.0 Illicit Discharges and Dumping:

1. Illicit Discharge Implementation – BPA, City of Houston
2. Many MS4 have regulatory mechanisms and detection programs
3. Public Reporting – www.CleanBayous.org and www.galvbay.org/gban
4. Education

TEN STREAMS "MOST WANTED"



ONLINE REPORTING



Galveston Bay Action Network

Report pollution in Galveston Bay from your mobile device or computer:
www.galvbay.org/gban

A screenshot of the online reporting form on a desktop browser. The form is titled "Report Pollution" and includes a "Log out" button in the top right corner. The form contains a list of instructions and several input fields:

- 1. Click on map at a desired location or click on menu to search for an address
- 2. Fill out form as accurately as possible
- 3. Press SUBMIT when finished

The form fields are:

- Location: "You have to select a location."
- Incident Title: A text input field.
- Pollution Type: A dropdown menu with "Select" as the current option.
- Municipality: A dropdown menu with "Select" as the current option.

A screenshot of the Galveston Bay Action Network desktop website. The page features a map of Galveston Bay with various pollution markers. On the left side, there is a "Filter" menu with the following categories and options:

- Select all
- Boat Sewage
- Septic Systems
- Sanitary Sewers
- Fish Kill
- Trash and Debris
- Abandoned Vessel
- Pet Waste
- Storm Drains
- Oil or Sheen
- Chemicals
- Discolored Water
- Algal Bloom
- Unknown

At the top of the page, there is a navigation bar with "About this project" and "Writing a report" tabs, and a "Log in to report" button. The footer includes "Map data ©2015 Google Imagery ©2015 TerraMetrics | 10 km | Terms of Use | Report a map error".

ANNUAL REPORT HIGHLIGHTS

7.0 Animals and Agriculture:

1. Outreach and Education
2. Feral Hog Removal – Harris County
3. AgriLife Extension – Online Hog Resource Website

8.0 Residential:

1. Pet Waste and FOG Education
2. Online Resources:
 - Cease the Grease - <http://galvbay.org/ceasethegrease/>;
 - Back the Bay – <http://www.backthebay.org/>;
 - Pet Waste - <http://www.h-gac.com/pet-waste/default.aspx>
 - Clean Water Clear Choice - <http://www.cleanwaterways.org/>
3. Training:
 - MS4s
 - OSSFs
 - EARs
 - Rain Barrel Workshops
 - Texas Stream Team

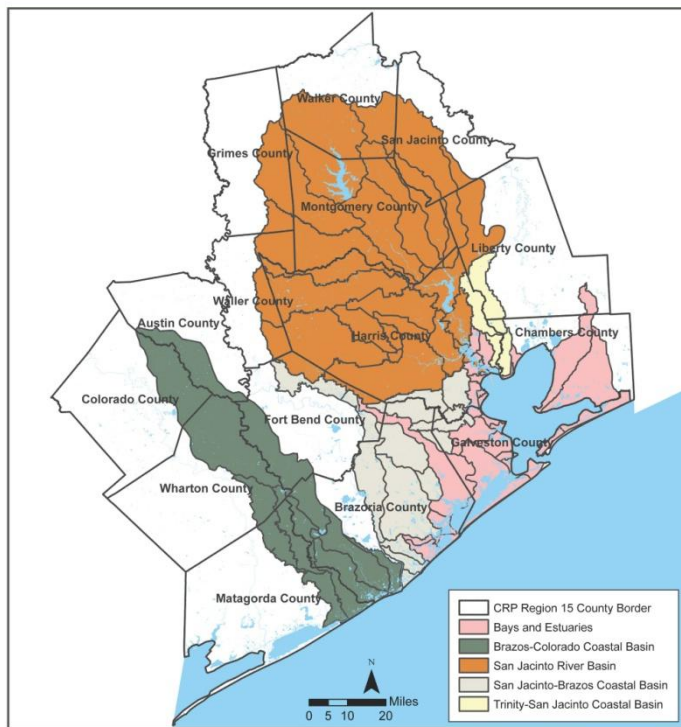


ANNUAL REPORT HIGHLIGHTS

DRAFT

APPENDIX D

H-GAC CRP REGION



9.0 Monitoring:

1. CRP Continues – Basin Highlights Report
2. Regional BMP Database
3. BIG Demonstration Database
4. BMP Effectiveness Monitoring
5. Annual Report and Assessment

10.0 Research:

1. BMP Effectiveness Monitoring
2. City of Houston Special Studies

CRP Monitoring

CRP Monitoring in the BIG Project Area

<i>Organizations</i>	<i>Number of Stations in Initial BIG Project Area</i>	Number of Stations in Armand Watershed
TCEQ	10	
Environmental Institute of Houston	10	4
Harris County Pollution Control	1	1
Houston Health and Human Services	111	6
Houston Water Quality Control	7	
San Jacinto River Authority	9	
Houston - Galveston Area Council	14	
Total	162	11

CRP Stations Where Contact Recreation was Observed or Inferred 2012-2014		
Year	CRP Sites Recording Observed or Inferred Contact Recreation	Observed Recreators
2012	16	17
2013	25	87
2014	17	24

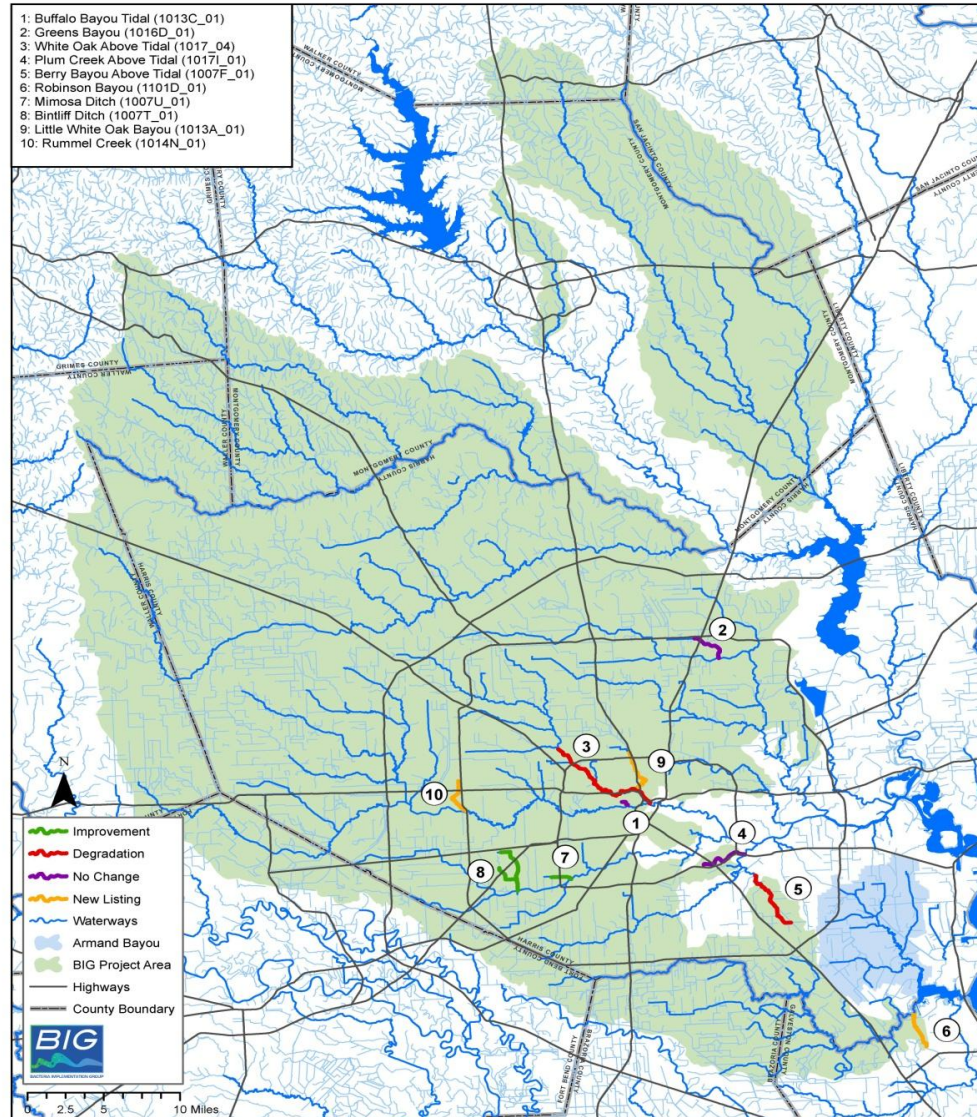
Table X. For the years 2012-2014, CRP partners have recorded evidence of contact recreation, either directly observed or inferred from the evidence. If observed, CRP monitors document the number of individuals recreating at the time.

ANNUAL REPORT HIGHLIGHTS

11.0 Geographic Focus:

1. Support Geographic Implementation Focus – BPA and City of Houston
2. Updated “Most Wanted” and “Most Likely to Succeed”
3. H-GAC sought funding to implement illicit bacteria sources using “Most Wanted” and “Most Likely to Succeed” lists.

TEN STREAMS “MOST WANTED”



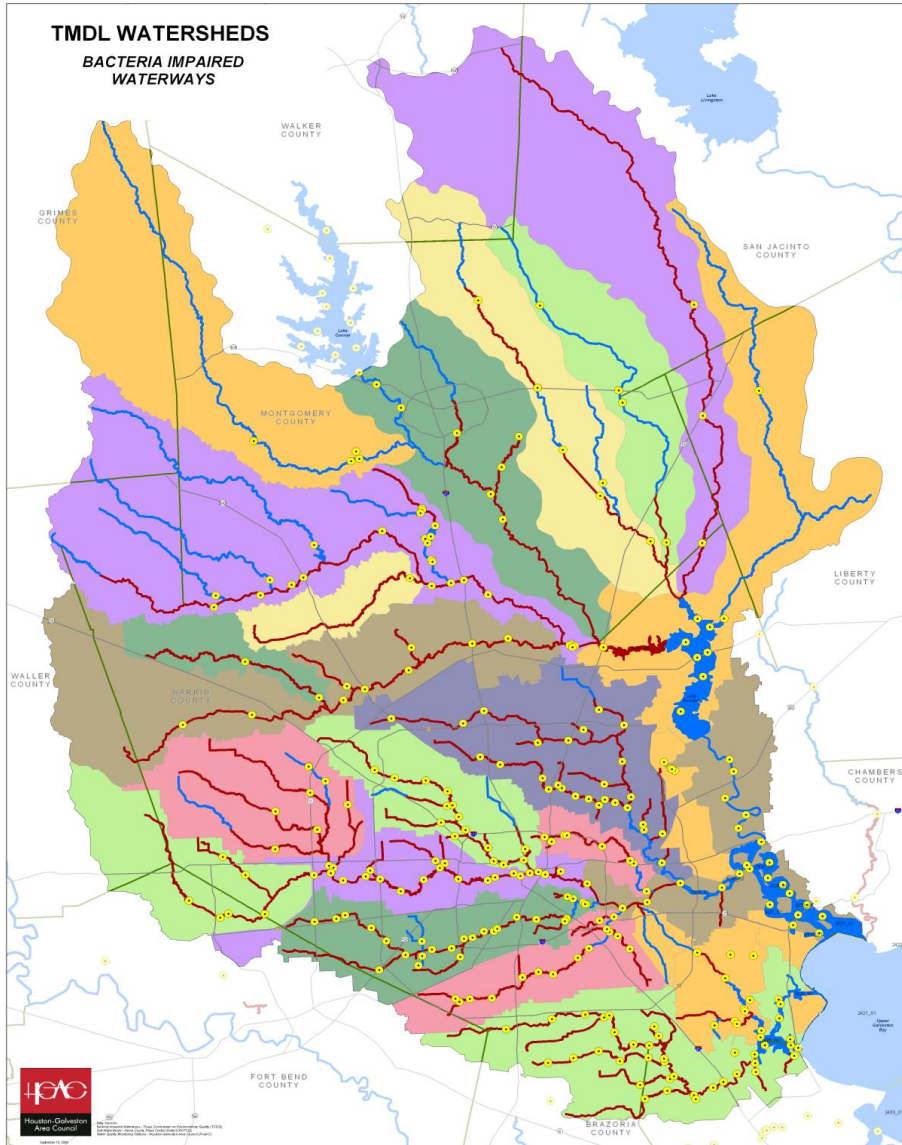
COMMENTS AND QUESTIONS

- Next Steps:
 - BIG Review
 - Comments in by July 15, 2015.
 - Coordination and Policy Meeting:
 - Set Date
 - Review Final Report
 - Formats - Alternatives
 - Funding – Alternatives
 - Review H-GAC TMDL Budget





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TMDL Updates

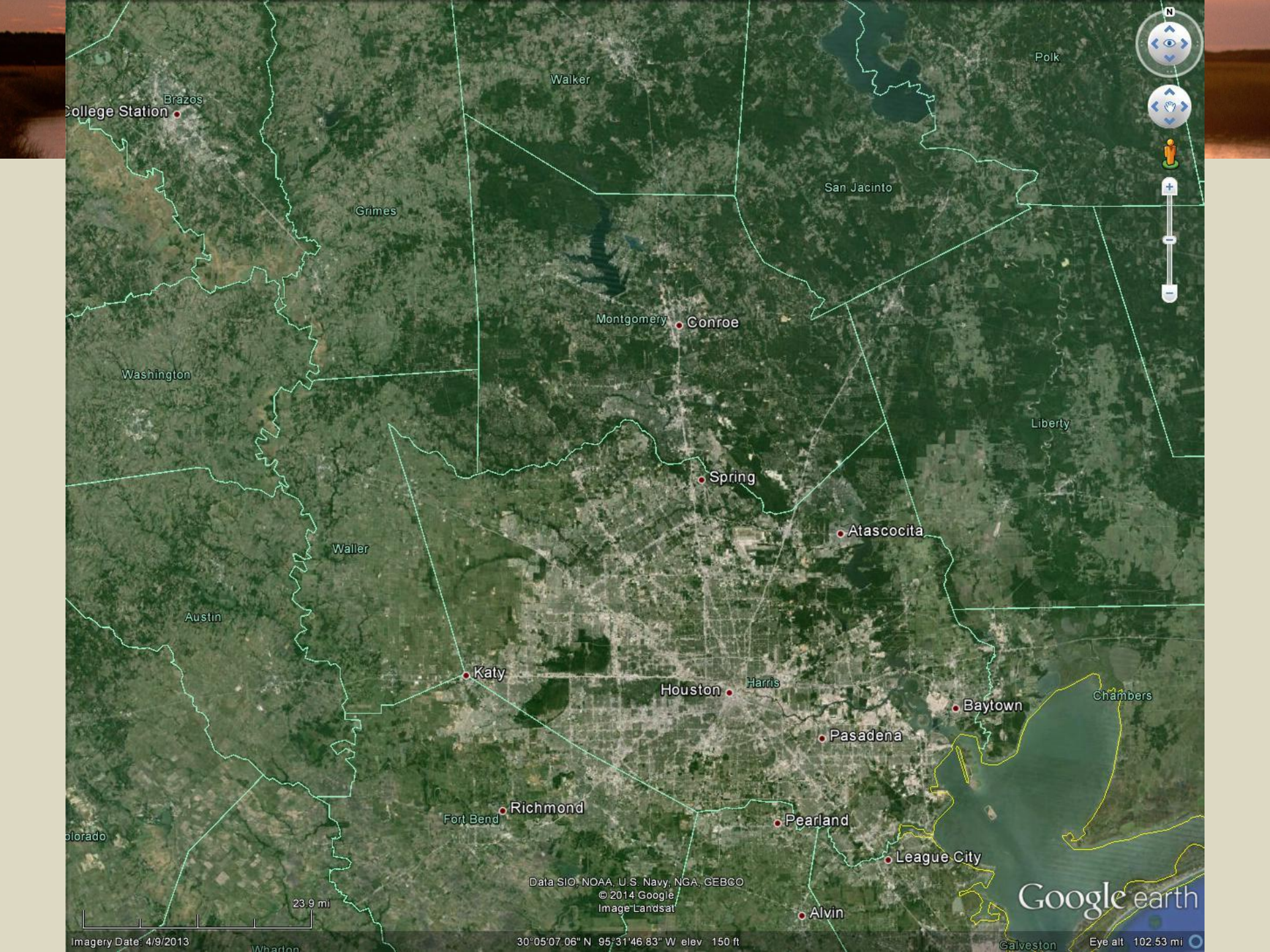
Ron Stein

TCEQ

TMDL Program

June 22, 2015





College Station

Brazos

Walker

Polk

Grimes

San Jacinto

Montgomery Conroe

Washington

Liberty

Spring

Atascocita

Waller

Austin

Katy

Houston

Harris

Baytown

Chambers

Pasadena

Fort Bend Richmond

Pearland

League City

Alvin

Data SIO, NOAA, U.S. Navy, NGA, GEBCO © 2014 Google Image Landsat

Google earth

Imagery Date: 4/9/2013

23.9 mi

30°05'07.06" N 95°31'46.83" W elev 150 ft

Eye alt 102.53 mi



Imagery Date: 4/9/2013

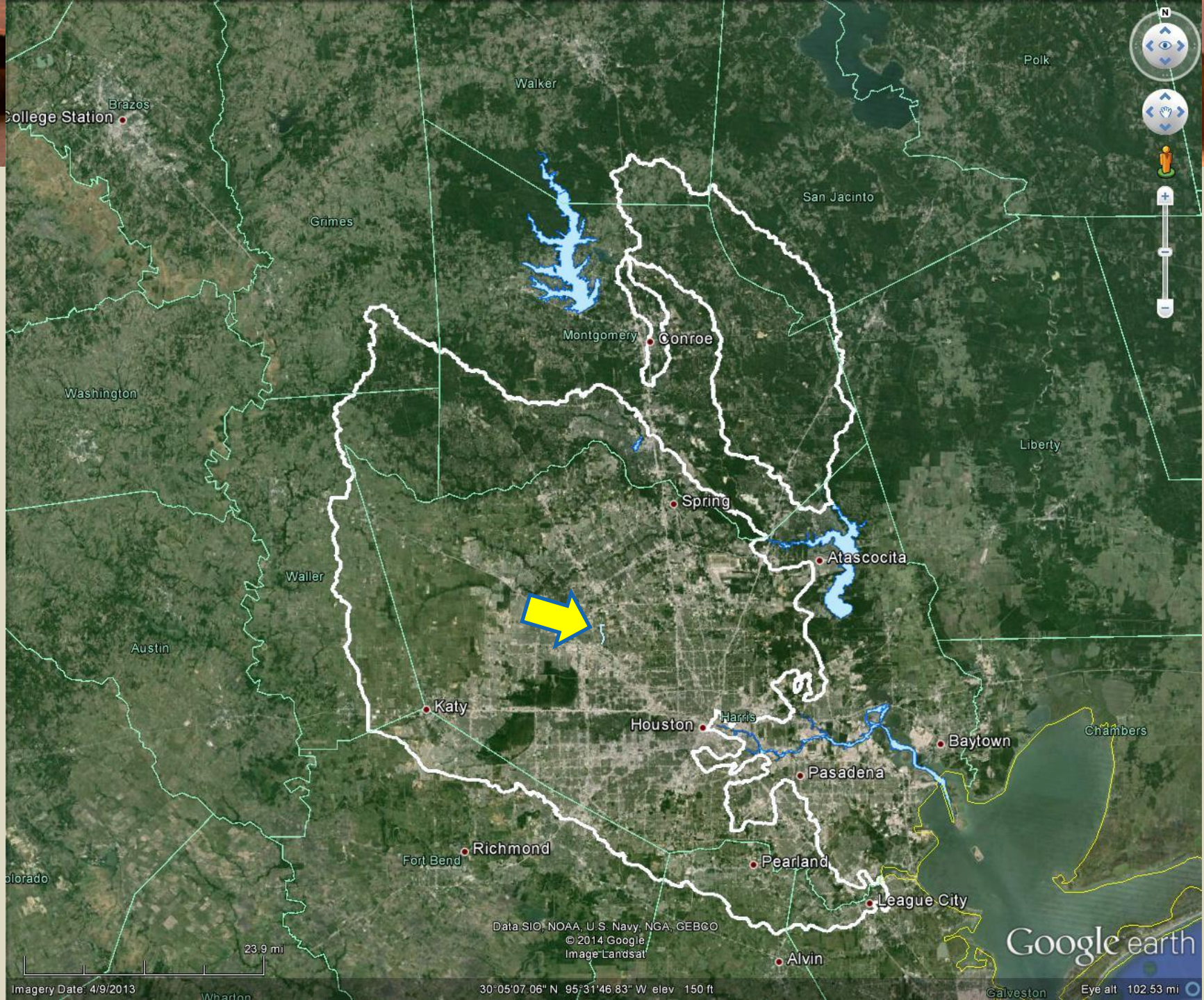
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© 2014 Google
Image Landsat

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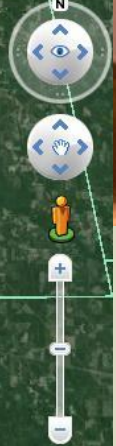
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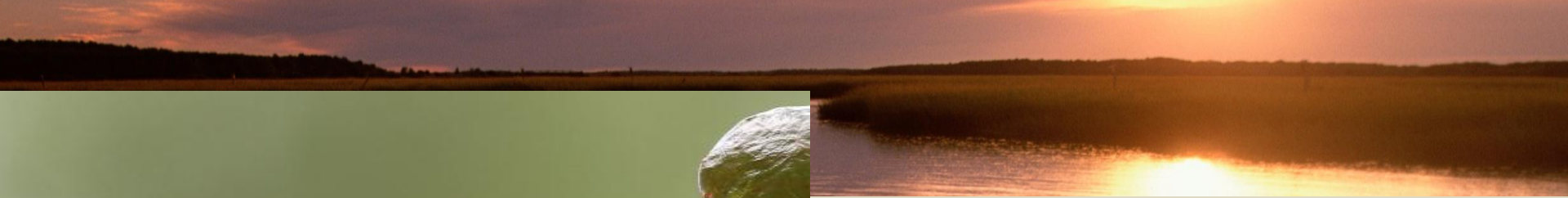
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
© 2014 Google
Image Landsat

Google earth

Eye alt 102.53 mi

An aerial, wide-angle photograph of a river winding through a wooded area. The water is a murky, brownish-green color. Several kayakers in various colored kayaks (red, black, white, yellow) are scattered throughout the river. Some are in the foreground, while others are further down the river. The banks are lined with trees, some of which are bare and some with fresh green leaves, suggesting a spring or early summer setting. In the background, a large, light-colored building is partially visible through the trees. The sky is overcast and grey. A large, white, sans-serif text overlay is centered on the image, reading "Thank you and Good Bye".

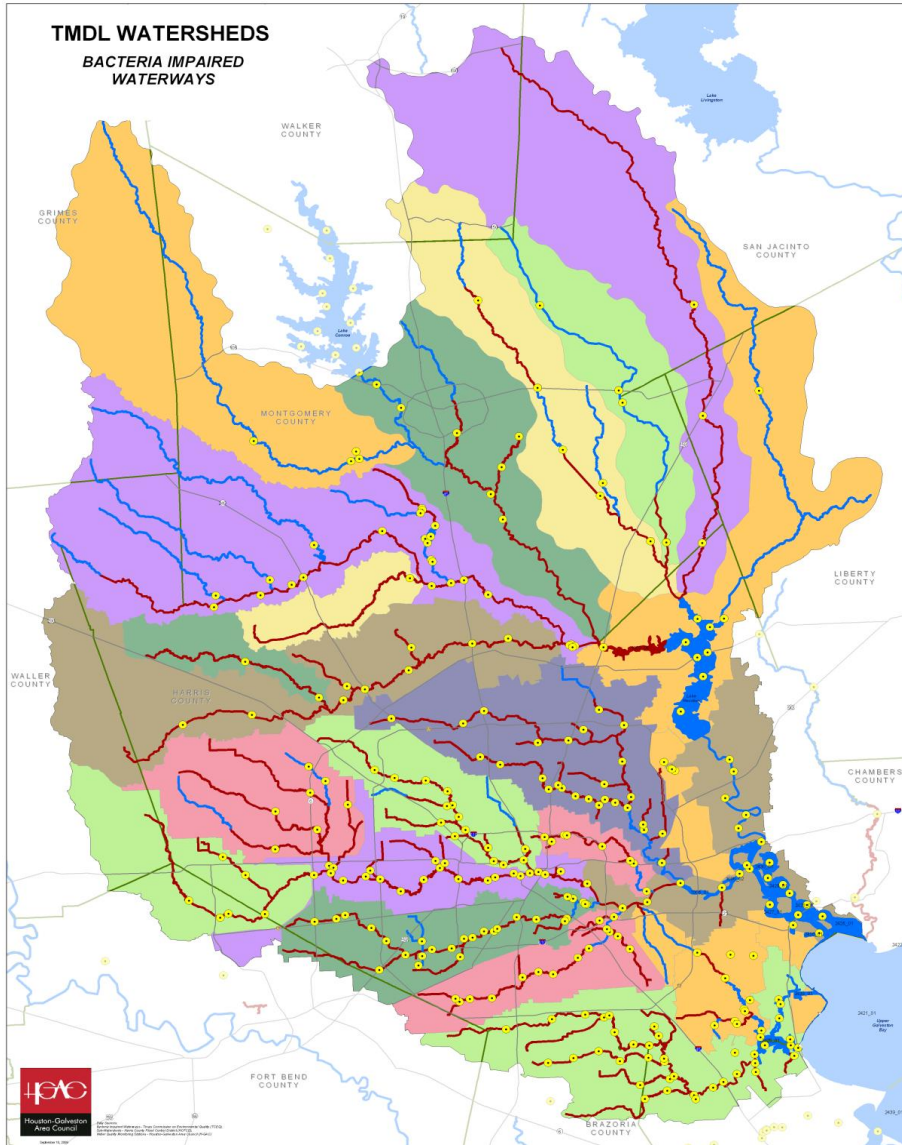
Thank you and
Good Bye



Questions?

ron.stein@tceq.texas.gov





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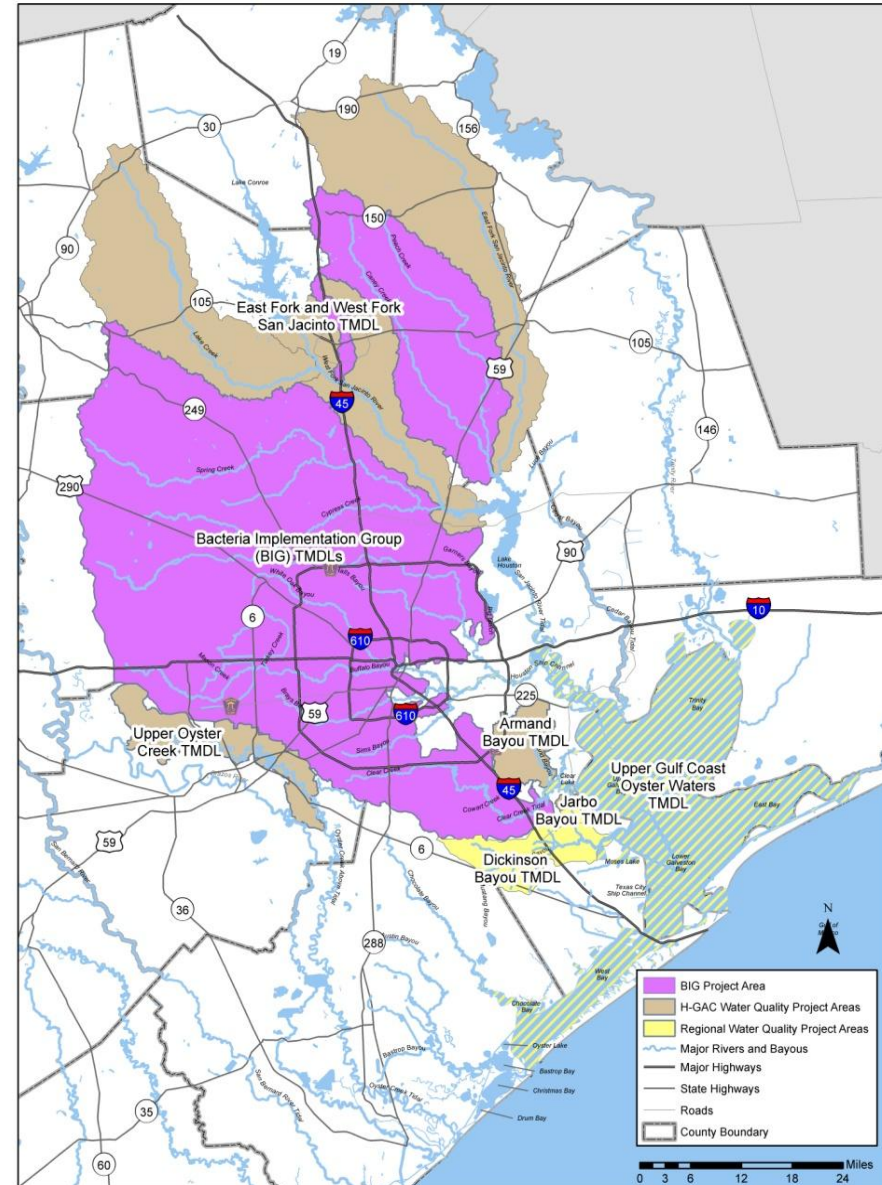
I-Plan Updates – 1st Addendum

Addition of Watershed within BIG Project Area and outside BIG Project Area

I-Pan: 9.4.5, pg. 98

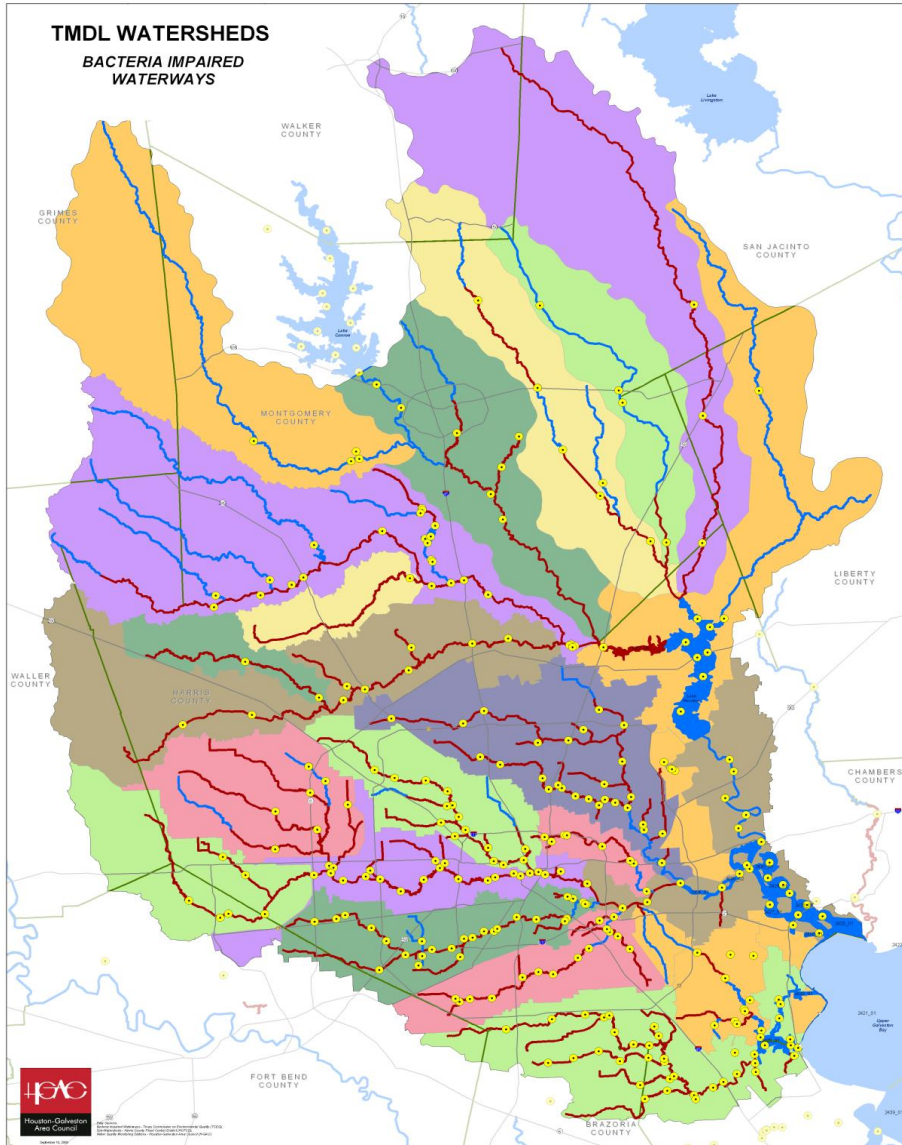
•Draft Addendum # 2 changes since May 27, 2014:

- Add 1 Segment within the BIG project area –
 - Rolling Fork Creek (1017F_01) Buffalo and White Oak Bayous.
 - www.tceq.texas.gov/assets/public/permitting/assess/WQMP/april_15_draft.pdf
- Add 6 Segments Armand Bayou TMDL
 - 1113 - Armand Bayou Tidal, AU 1113_02
 - 1113A - Armand Bayou Above Tidal, AU 1113A_01
 - 1113B - Horsepen Bayou Tidal, AU 1113B_01
 - 1113C - Unnamed Tributary to Horsepen Bayou, AU 1113C_01
 - 1113D - Willow Springs Bayou, AU 1113D_01
 - 1113E - Big Island Slough, AU 1113E_01



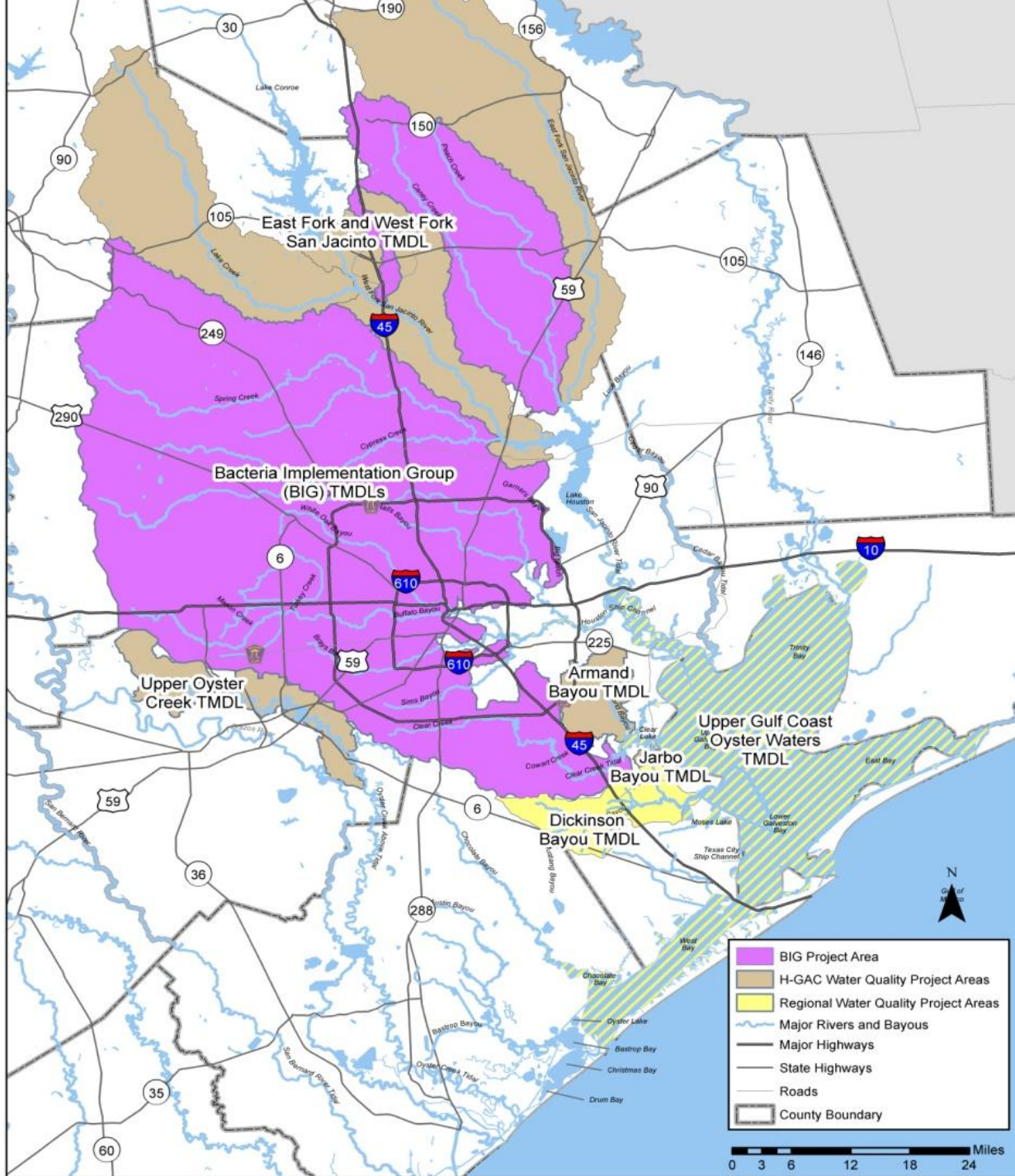


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Roster Discussion - BIG Seats: (3 Vacancies)

- E&W – (4)
 - Counties (1)
 - Ag/Silviculture (2)
 - Small-Med. Rural Cities (1)
 - Conservation/Recreation (1) – Not necessarily from E&W.
- Jarbo – (1)
 - Boaters and Marinas
 - Coastal Watershed Rep.



Other Recommendations:

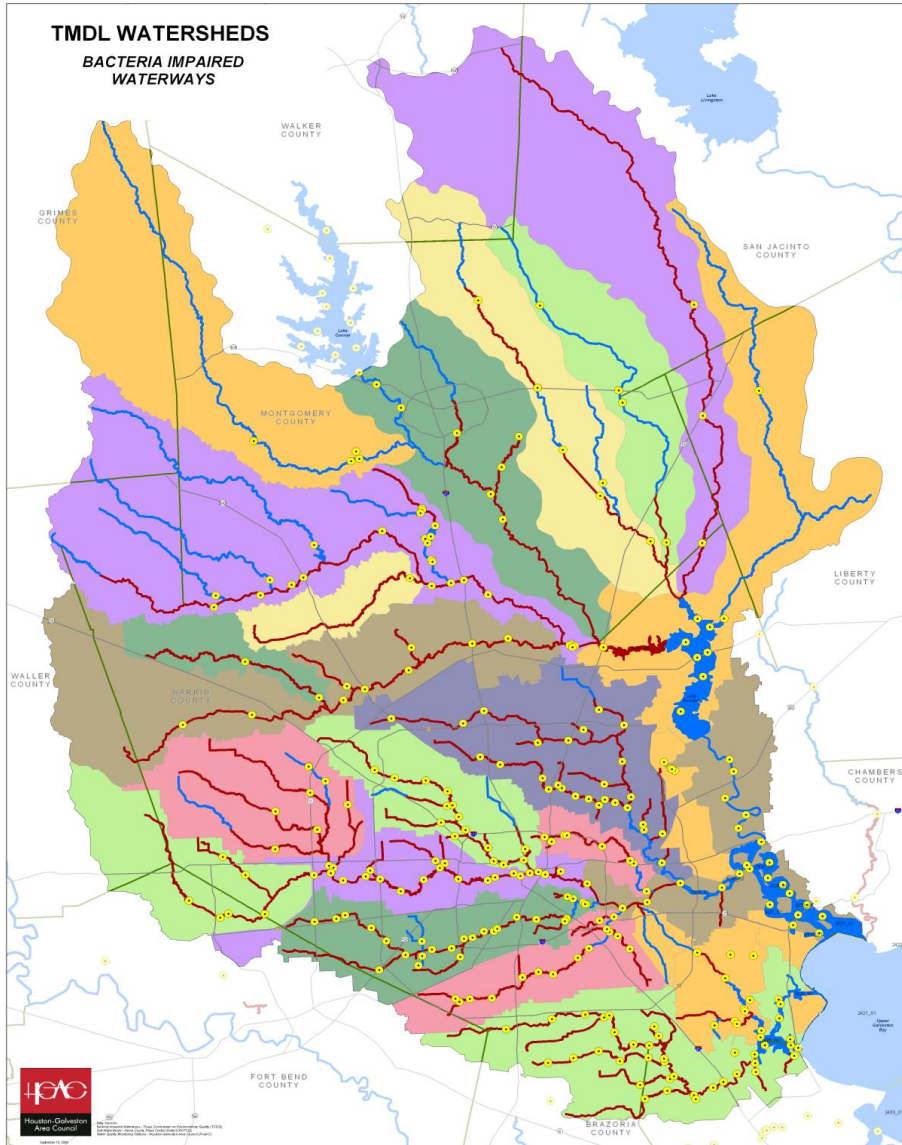
- E&W:
 - Encourage the collection of monitoring data from large undeveloped regions
 - Encourage a broad regional education campaign concerning bacteria sources and BIG
 - Encourage implementation practices that consider current impairment and prevents future impairments
 - Encourage increased enforcement of local environmental laws
 - Maintain Coordination Committee

- Jarbo:
 - Address geographic differences Urban Core, Suburban, and Coastal Workgroups
 - Address Boaters and Marinas in Plan
 - Encourage Broad Regional Education Campaign
 - Maintain Coordination Committee





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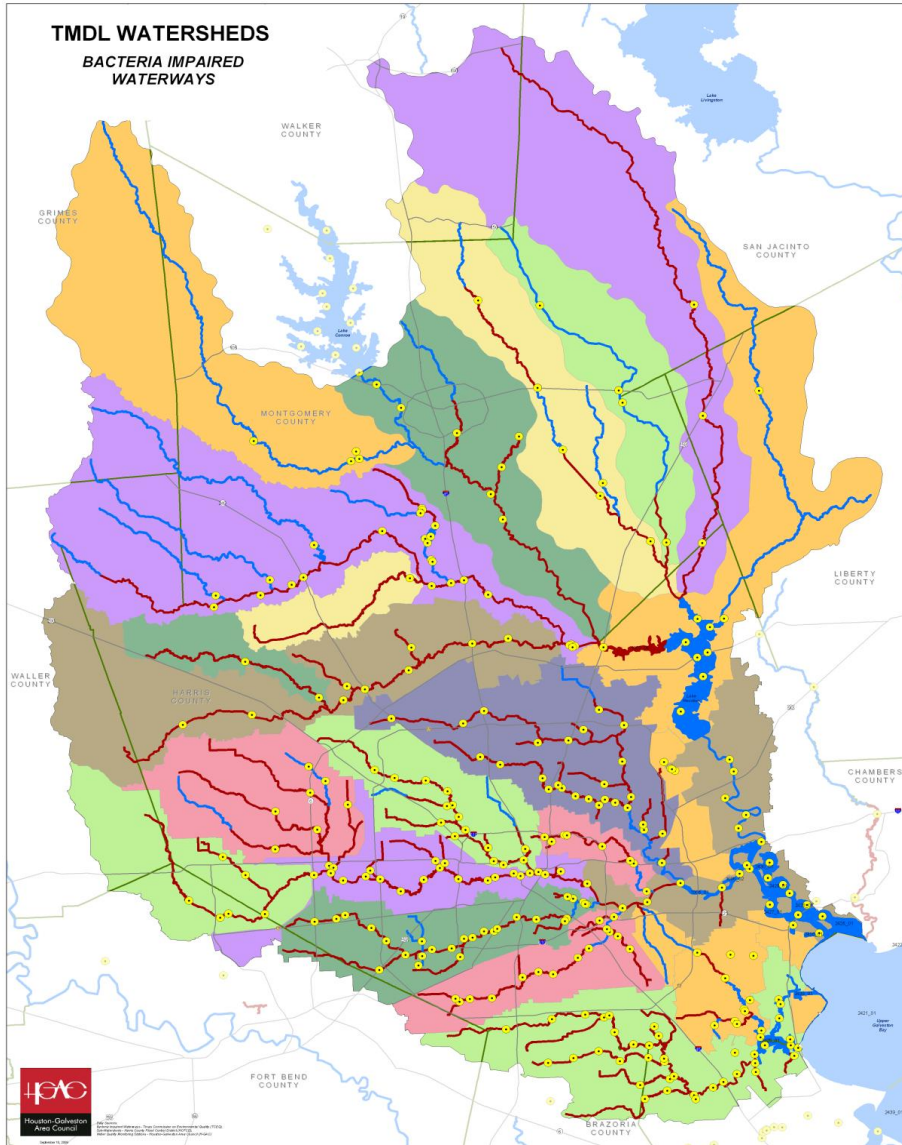


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2016 Annual Reporting Process

- Create Subject Questionnaires (Summer 2015)
- Workgroup Meetings – Oct.-Dec. 2015
- BIG Fall Meeting – Oct. 2015
- Draft 2015 Annual Report – Jan. – March 2016.
-



2016 Annual Reporting Process

2016 Focus

- TCEQ Implementation Letter
- Working Implementation Database
- WWTF Operator Questionnaire
- Follow-up MS4 Questionnaire
- CWI Workshops on I-Plan Subjects
- Others?



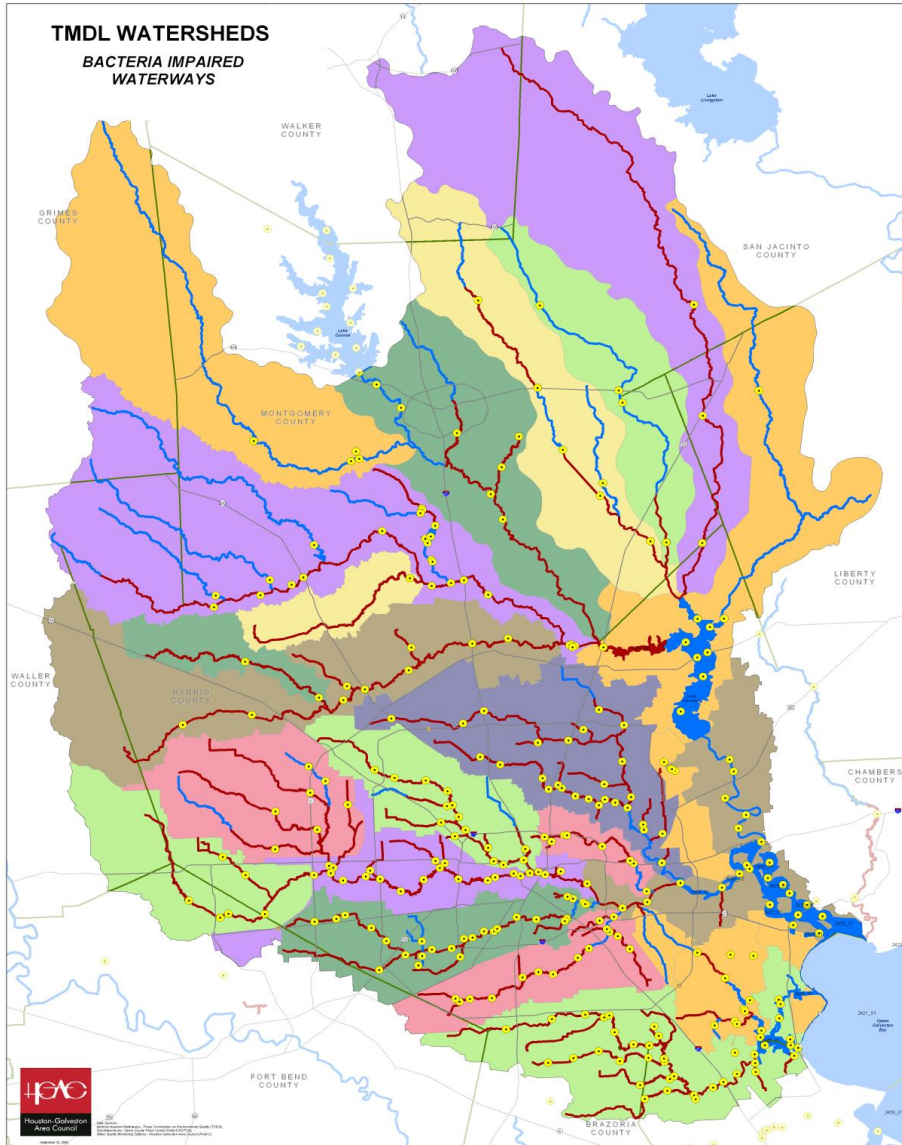
2016 Annual Reporting Process

- Implementation Database
 - Track Plan Implementation
 - Based on I-Plan
 - Geographic Data
 - Location of Implementation Activities
 - Reporting via Website
 - I-Plan Reporting of Activities
 - Summary Information and Analysis
 - Generate Reports – Watershed-Based
- Database Example





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Other Business/Announcements

- Opportunity for discussion on other items related to the BIG, BIG implementation and announcements:
 - 6/24/2015 - Clean Waters Initiative Workshop – Agriculture Programs and Invasive Species: <http://www.h-gac.com/community/water/cwi/>
 - Trust For Public Lands - West Fork San Jacinto River Greenprint.



NEXT STEPS

- BIG Review
- Comments in by July 15, 2015
- Coordination and Policy Meeting:
 - Set Date
 - Review Final Report
 - Formats - Alternatives
 - Funding – Alternatives
 - Review H-GAC TMDL Budget
- Next BIG Meeting Oct. 20, 2015





ADJOURN!



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