# Status of Additions to Indicator Bacteria TMDLs in the Lake Houston Watershed

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June 4, 2019

## Acknowledgements

Agency Lead:

Texas Commission on Environmental Quality (TCEQ)

Support Funding:

U.S. Environmental Protection Agency (EPA)

### **Major Presentation Topics**

- Previously completed TMDLs
- Overview & status of two present TMDL projects

# Previously Completed Indicator Bacteria TMDLs for Watersheds Upstream of Lake Houston

Adopted by TCEQ: Apr. 6, 2011; Approved by EPA: Jun. 29, 2011

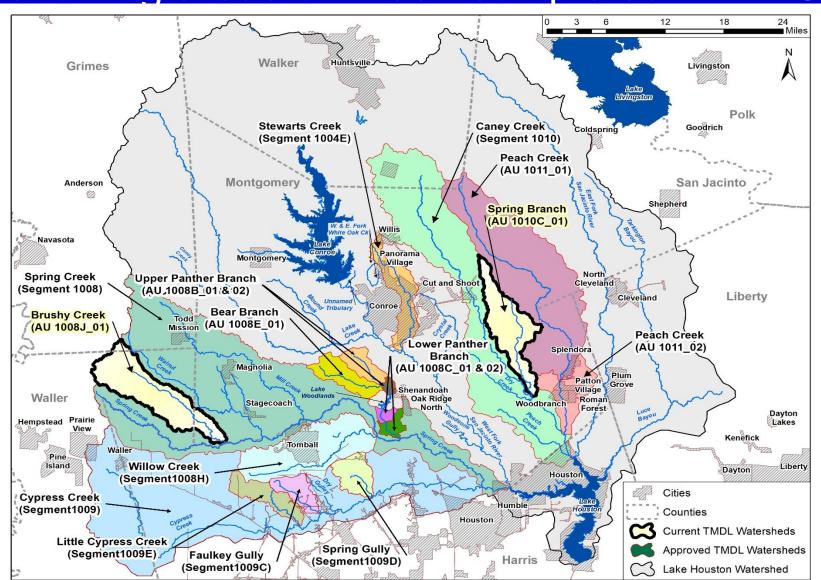
| Segment Name         | Segment<br>Number | Assessment Unit (AU)                  |
|----------------------|-------------------|---------------------------------------|
| Stewarts Creek       | 1004E             | 1004E_02                              |
| Spring Creek         | 1008              | 1008_02, 1008_03,<br>1008_04          |
| Willow Creek         | 1008H             | 1008H_01                              |
| Cypress Creek        | 1009              | 1009_01, 1009_02,<br>1009_03, 1009_04 |
| Faulkey gully        | 1009C             | 1009C_01                              |
| Spring Gully         | 1009D             | 1009D_01                              |
| Little Cypress Creek | 1009E             | 1009E_01                              |
| Caney Creek          | 1010              | 1010_02, 1010_04                      |
| Peach Creek          | 1011              | 1011_02                               |

## Previously Completed Addendum to Fifteen TMDLs Upstream of Lake Houston

Added by Addendum October 2013 by TCEQ; Approved by EPA: Feb. 14, 2014

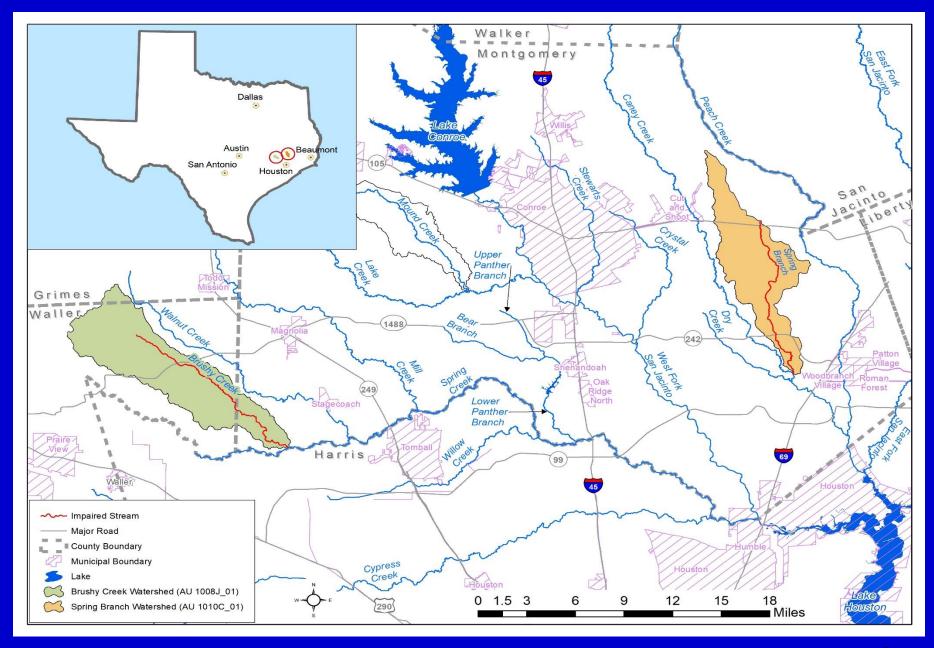
| Segment Name         | Segment<br>Number | Assessment Unit (AU) |
|----------------------|-------------------|----------------------|
| Upper Panther Branch | 1008B             | 1008B_01, 1008B_02   |
| Lower Panther Branch | 1008C             | 1008C_01, 1008C_02   |
| Bear Branch          | 1008E             | 1008E_01             |
| Peach Creek          | 1011              | 1011_01              |

## Lake Houston Upstream Watersheds showing areas of fifteen completed TMDLS



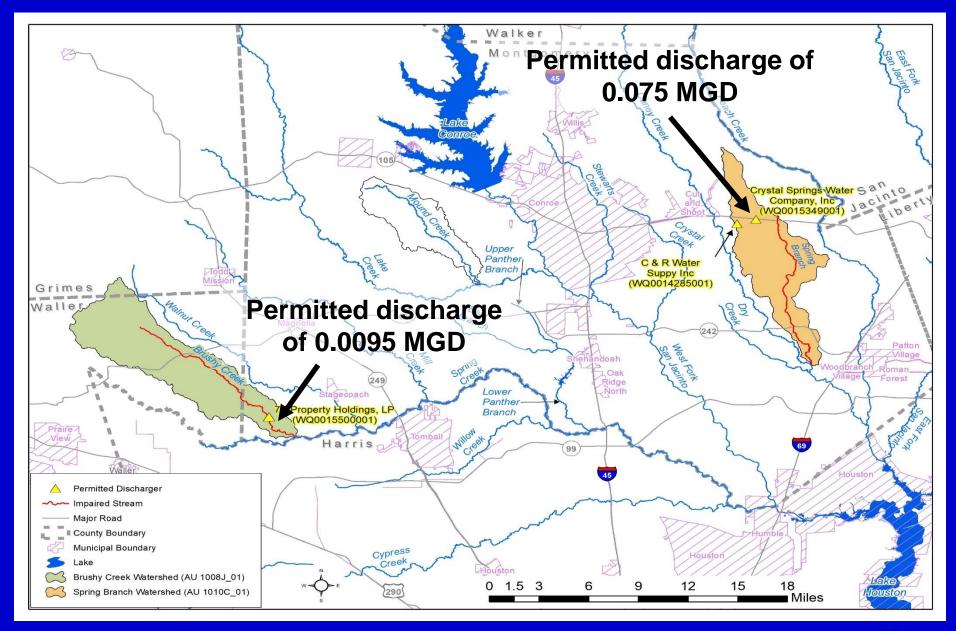
### Addendum to Fifteen TMDLs for Indicator Bacteria in Watersheds Upstream of Lake Houston

- Project water bodies
  - Brushy Creek (1008J\_01)
  - Spring Branch (1010C\_01)
- Approach for TMDL FDCs/LDCs



# Summary Integrated Report Findings for *E. coli* Assessment (criterion = 126 MPN/100 mL)

| Integrated<br>Report Year | Waterbody     | AU       | No. of Samples | Data Date<br>Range | Geometric Mean (MPN/100 mL) |
|---------------------------|---------------|----------|----------------|--------------------|-----------------------------|
| 2016 (draft)              | Brushy Creek  | 1008J_01 | 22             | 2007-2014          | 221                         |
| 2016 (draft)              | Spring Branch | 1010C_01 | 20             | 2007-2014          | 384                         |

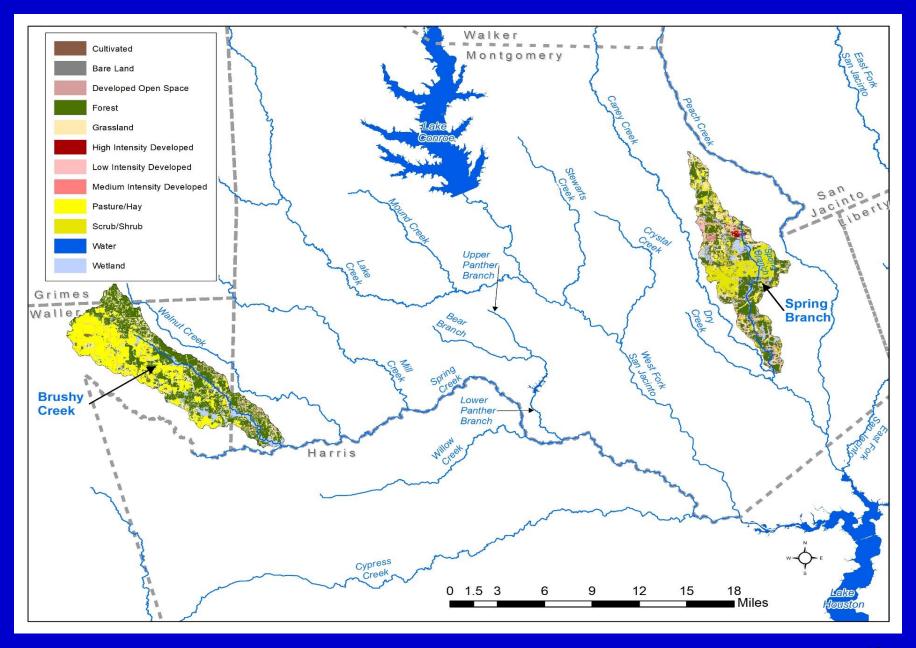


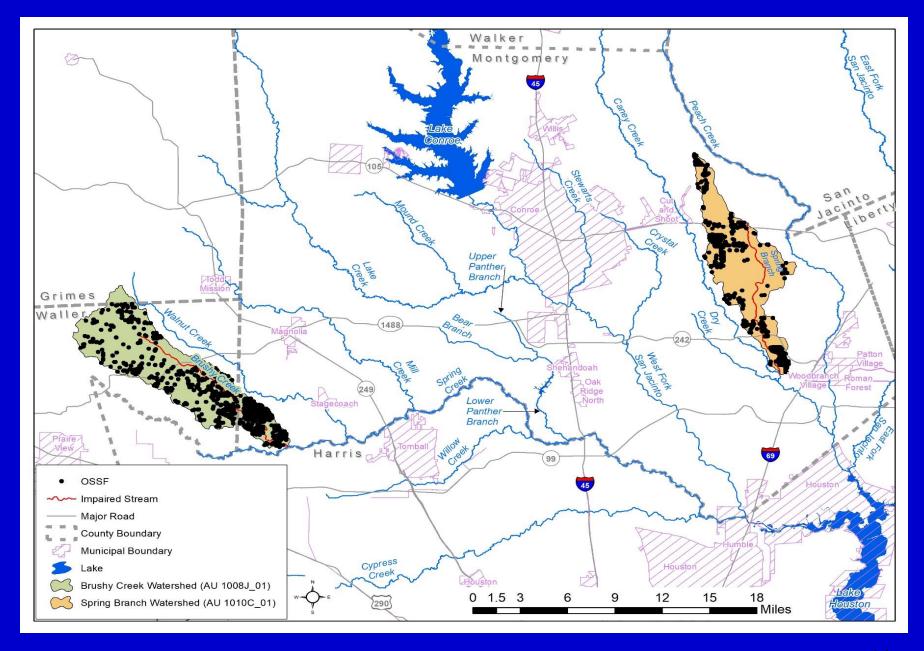
### Estimated Area under Stormwater Permit Regulations within the Brushy Creek Watershed

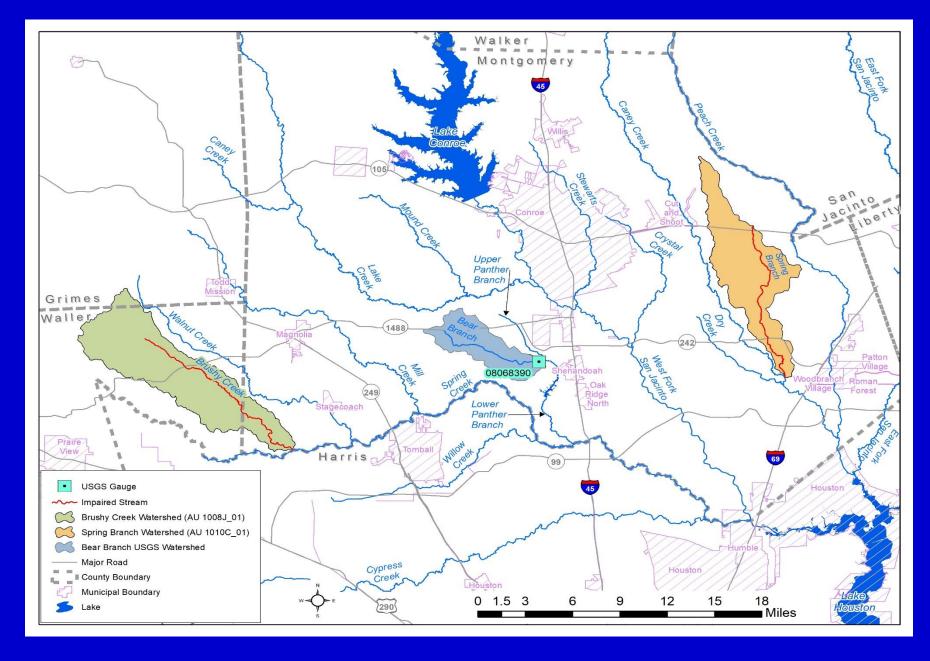
| AU Area within 2010<br>Urbanized Areas<br>(acres) | AU watershed area (acres) | Percentage of drainage area under stormwater regulation (%) |
|---|---------------------------|---|
| 1,332   | 31,508                    | 4.23  |

### Estimated Area under Stormwater Permit Regulations within the Spring Branch Watershed

| AU Area within<br>2010 Urbanized<br>Areas (acres) | AU Area under<br>construction<br>and industrial<br>stormwater<br>permits (acres) | AU watershed<br>area (acres) | Percentage of drainage area under stormwater regulation (%) |
|---|--|------------------------------|---|
| 0   | 411  | 22,969                       | 1.79  |







### Status of TMDL Development

- Technical Support Document (TSD) to be completed by the end of Aug. 2019
- TSD will be posted on TCEQ website (TCEQ will notify BIG when it is available for public review and comment)
- TCEQ will use TSD to develop an addendum to be included in Water Quality Management Plan update

#### Thank You

### Any Questions?

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