



# **Update on Waterbodies Not Meeting State Criteria and FY2019 Proposed Monitoring**

***Presented by  
Jenna Olson  
Environmental Programs Coordinator***





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Meeting State Criteria~~  
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## Impairments - Basin Overview

In the 2014 IR:

Out of a total of 205 waterbodies (336 Assessment units (AUs)) evaluated...

- 78 waterbodies (105 AUs) are listed as impaired on the draft 2014 303(d) List ( $\approx 38\%$ / $\approx 31\%$ )
- 66 waterbodies (78 AUs) are listed as impaired for elevated bacteria ( $\approx 32\%$ / $\approx 23\%$ )
- 8 waterbodies (9 AUs) are listed for dissolved oxygen Impairment ( $\approx 4\%$ / $\approx 3\%$ )
- 4 waterbodies (6 AUs) are listed as impaired for chloride, sulfate and/or TDS ( $\approx 2\%$ / $\approx 2\%$ )
- 99 waterbodies (193 AUs) are identified as having concerns based on screening levels for algal growth and/or elevated nutrients ( $\approx 48\%$ / $\approx 57\%$ )
- 4 waterbody AUs were added to the impaired list and 14 waterbody AUs were de-listed (as compared to the 2012 IR)





## **General Monitoring Strategy for FY 2019**

- **Maintain current routine monitoring effort throughout the Basin. BRA currently routinely monitors 105 stations.**
  - **There is potential to add additional stations if they can be incorporated into our current run schedule**
  - **In instances where stations are dropped, we will negotiate in the Coordinated Monitoring Meeting to pick up stations and maintain effort throughout the basin**
- **BRA will continue instream flow based biological monitoring in support of the BRA's Water Management Plan Environmental Studies and share data with CRP/SWQM as possible**
- **BRA will perform native and endangered mussel monitoring as negotiated with the USFWS.**





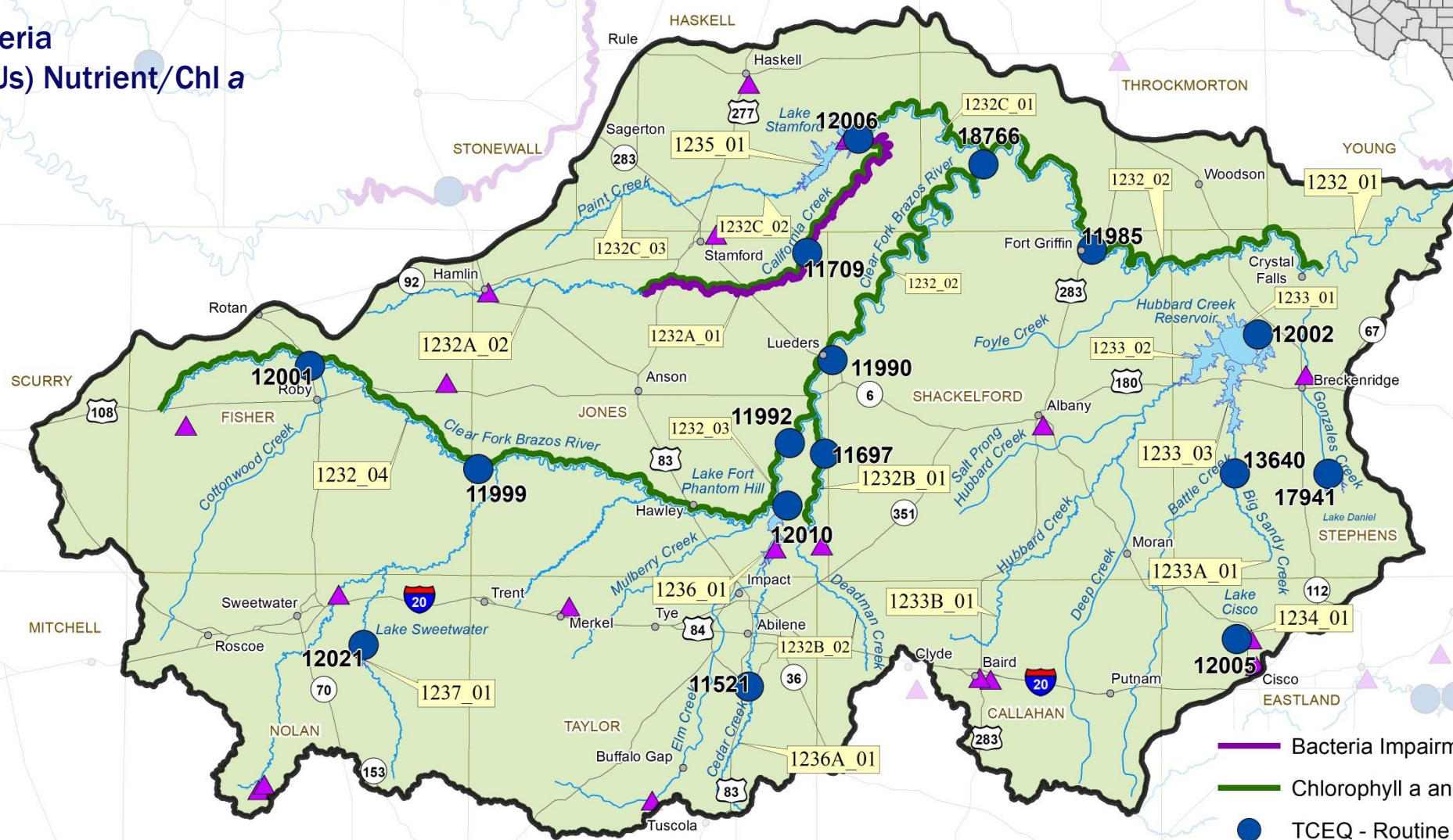
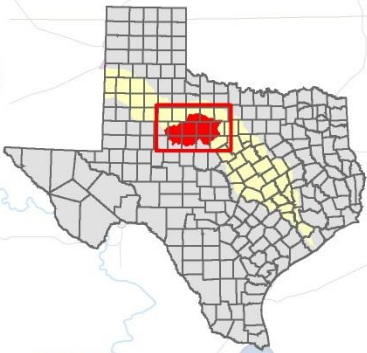




# Watershed of the Clear Fork of the Brazos River

## Proposed FY19 Water Quality Monitoring and 2014 IR Status

- 1 Bacteria
- 4 (6 AUs) Nutrient/Chl a

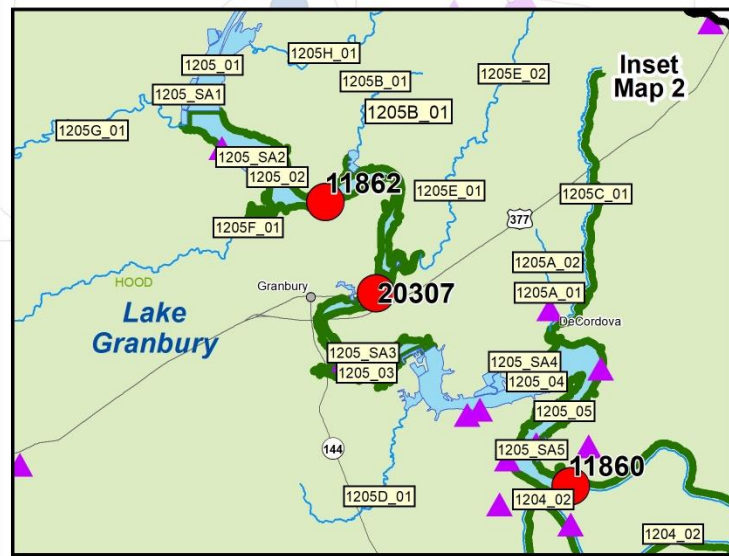
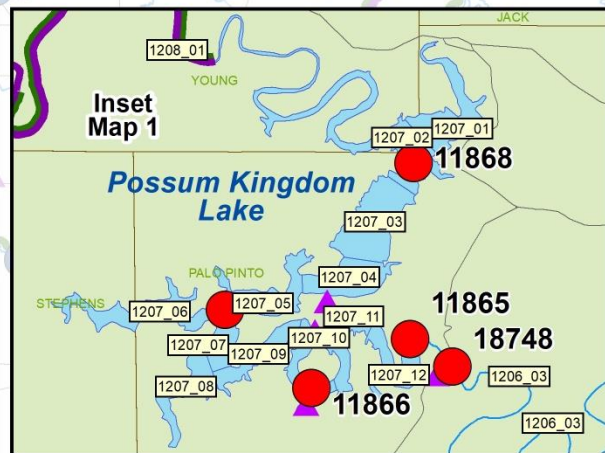


- Bacteria Impairment
- Chlorophyll a and/or Nutrient Concern
- TCEQ - Routine Monitoring Station
- Wastewater Outfall
- Watershed Boundary





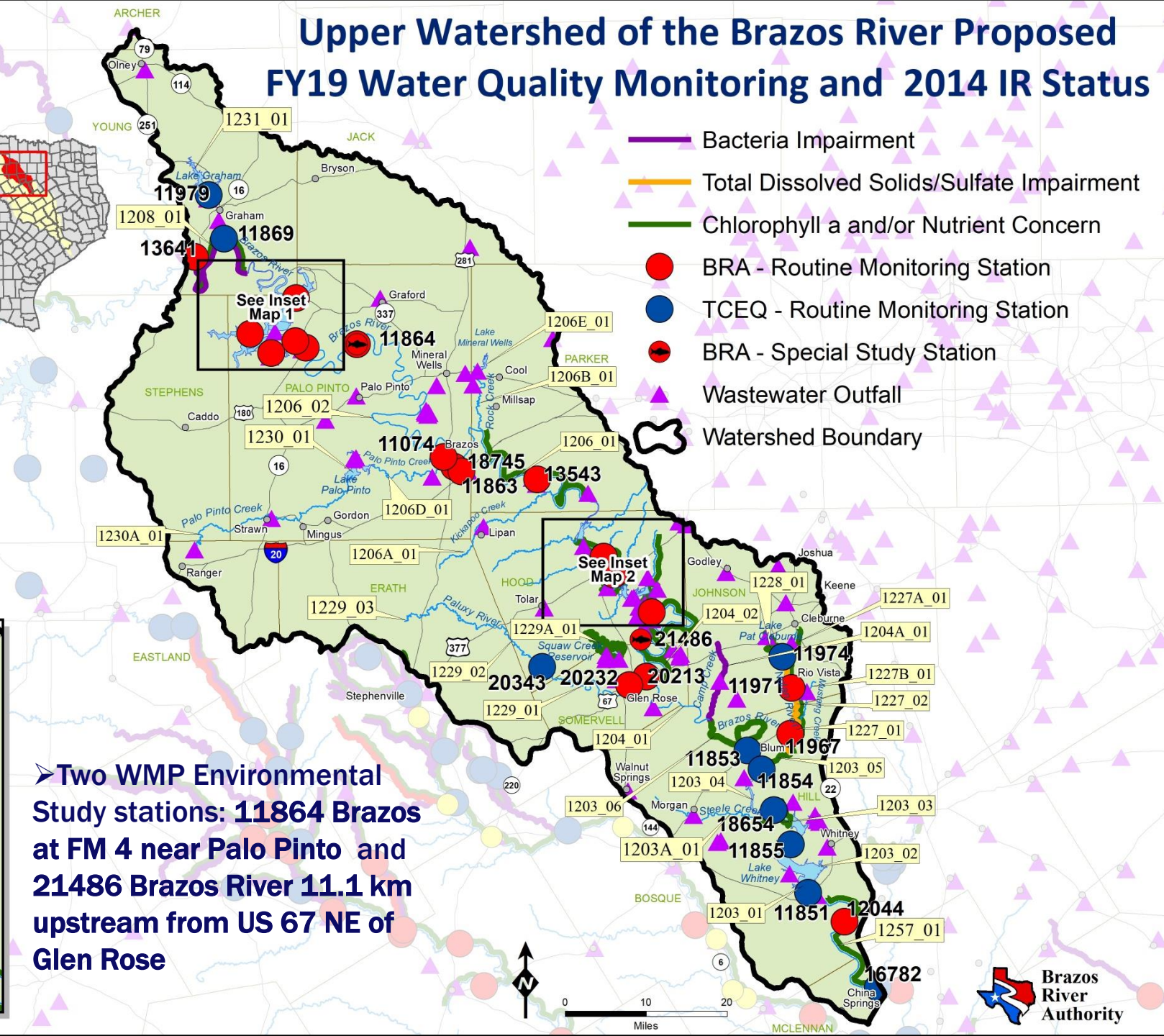
- 2 Bacteria
- 1 (2 AUs) TDS/Sulfate
- 11 (16 AUs) Nutrient/Chl a



## Upper Watershed of the Brazos River Proposed FY19 Water Quality Monitoring and 2014 IR Status

- Two WMP Environmental Study stations: 11864 Brazos at FM 4 near Palo Pinto and 21486 Brazos River 11.1 km upstream from US 67 NE of Glen Rose

- Bacteria Impairment
- Total Dissolved Solids/Sulfate Impairment
- Chlorophyll a and/or Nutrient Concern
- BRA - Routine Monitoring Station
- TCEQ - Routine Monitoring Station
- BRA - Special Study Station
- Wastewater Outfall
- Watershed Boundary

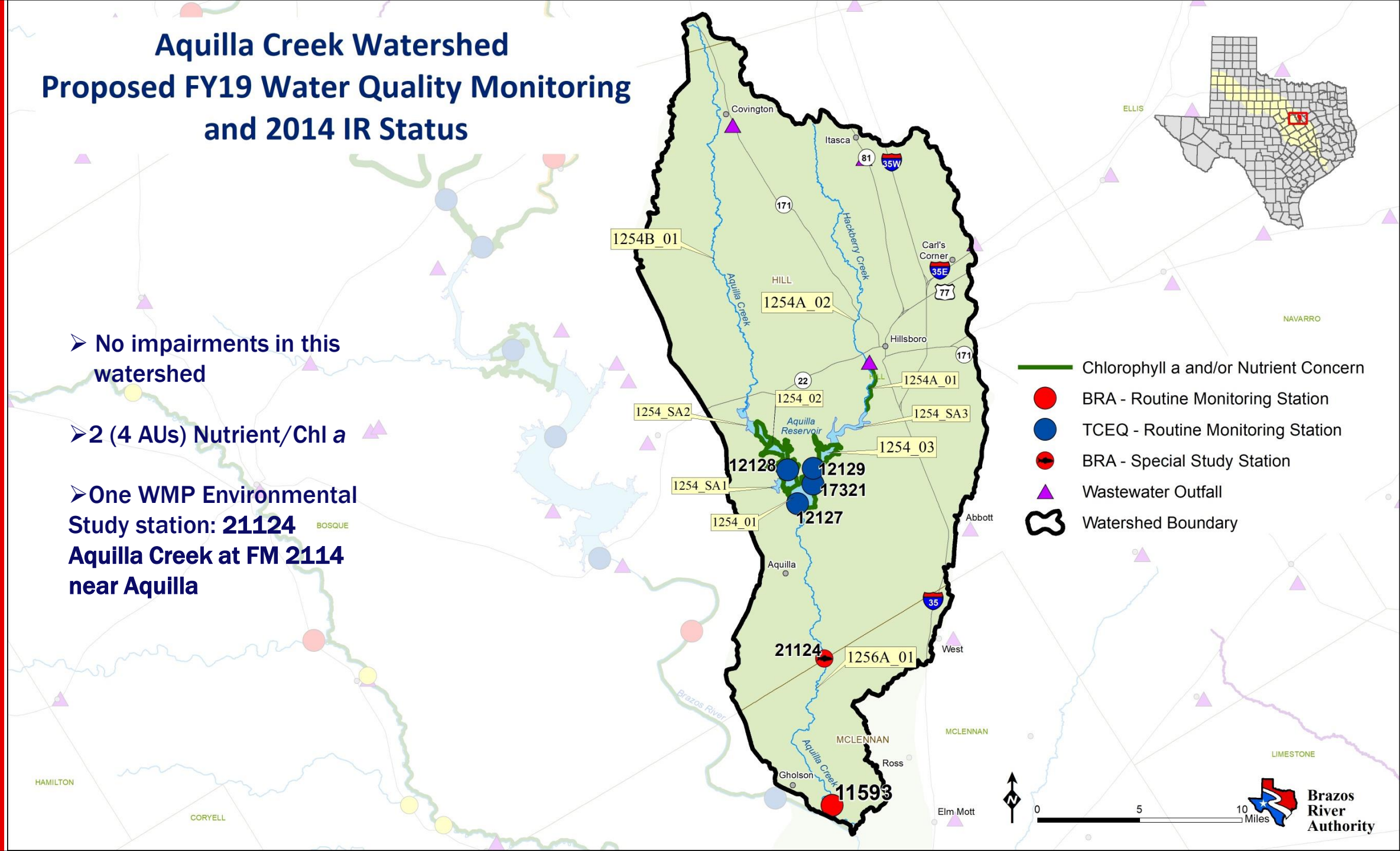






# Aquilla Creek Watershed Proposed FY19 Water Quality Monitoring and 2014 IR Status

- No impairments in this watershed
- 2 (4 AUs) Nutrient/Chl a
- One WMP Environmental Study station: **21124**  
**Aquilla Creek at FM 2114 near Aquilla**



- Chlorophyll a and/or Nutrient Concern
- BRA - Routine Monitoring Station
- TCEQ - Routine Monitoring Station
- BRA - Special Study Station
- Wastewater Outfall
- Watershed Boundary



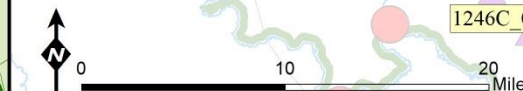
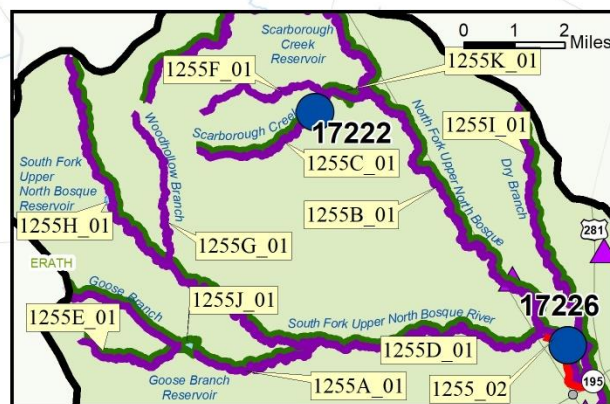


# Bosque River Watershed

## Proposed FY19 Water Quality Monitoring and 2014 IR Status

- 16 (17 AUs) Bacteria  
2 DO  
21 (25 AUs) Nutrient/Chl a
- 15 waterbodies have recommendations resulting from RUAAs  
none are officially changed in standards yet
- Potential for 8 waterbodies to be removed from the 303d list for bacteria

- Bacteria Impairment
- Dissolved Oxygen Impairment
- Chlorophyll a and/or Nutrient Concern
- BRA - Routine Monitoring Station
- TCEQ - Monitoring Station
- TIAER - Monitoring Station
- Wastewater Outfall
- Watershed Boundary







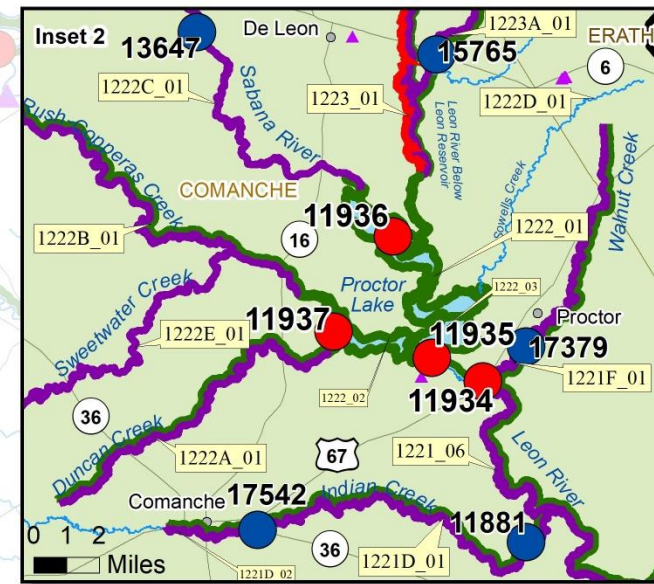
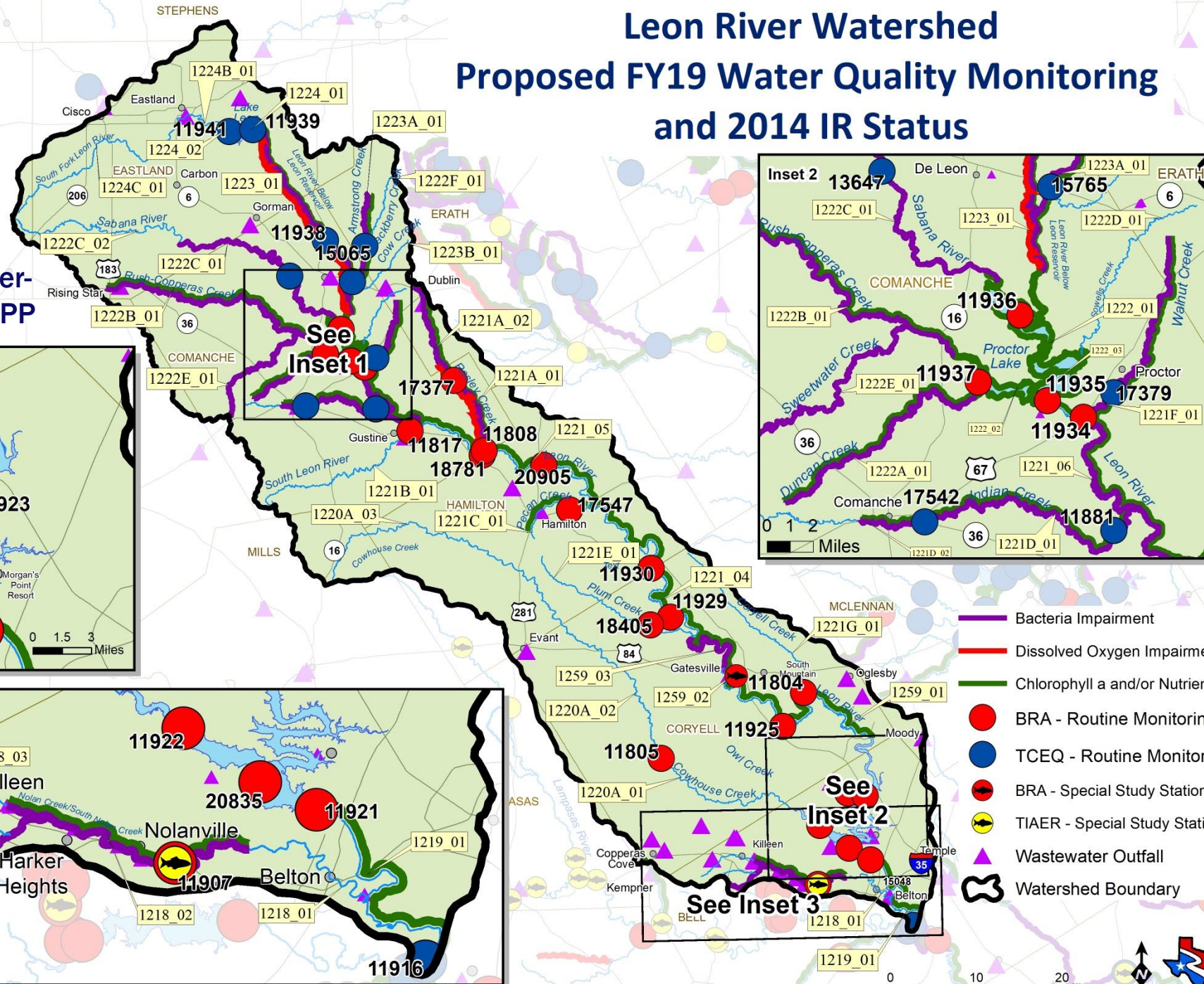
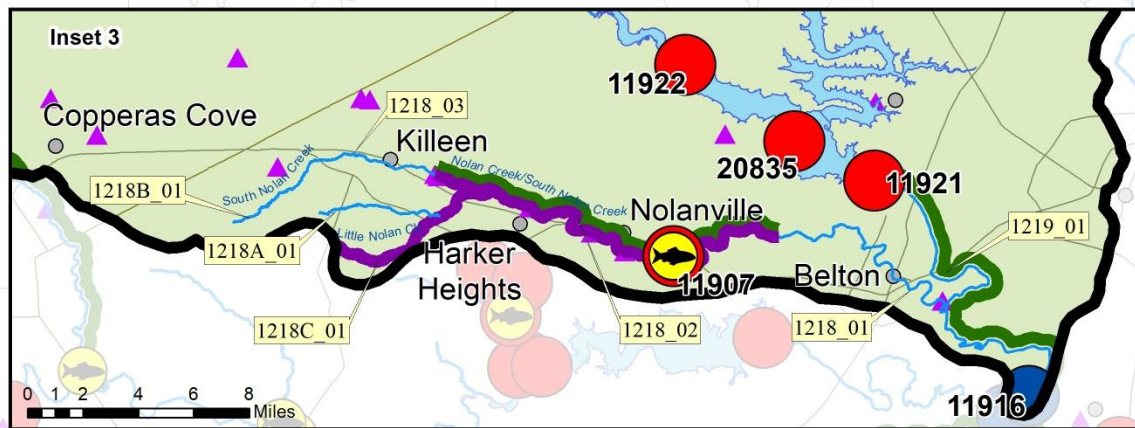
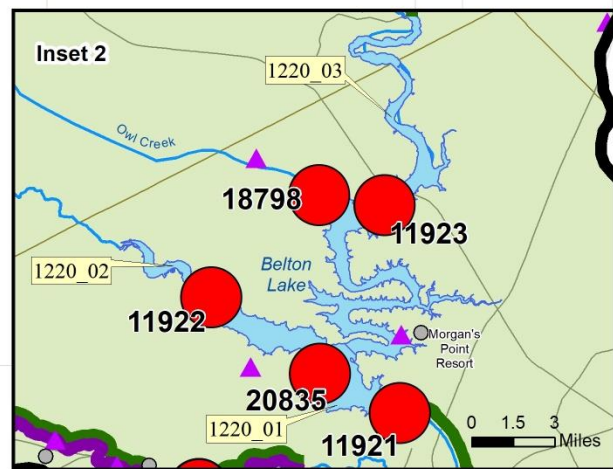
- 12 (15 AUs) Bacteria
- 2 DO
- 22 Nutrient/Chl a

➤ **1221 - Leon River WPP**

➤ **Priority Designation by USDA**

➤ **1218 - Nolan Creek Watershed Partnership and WPP**

## Leon River Watershed Proposed FY19 Water Quality Monitoring and 2014 IR Status

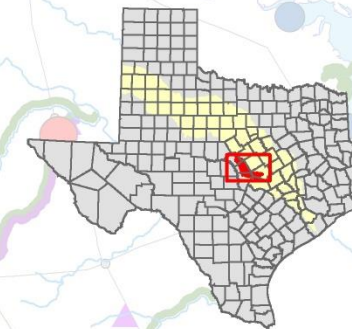


- Bacteria Impairment
- Dissolved Oxygen Impairment
- Chlorophyll a and/or Nutrient Concern
- BRA - Routine Monitoring Station
- TCEQ - Routine Monitoring Station
- BRA - Special Study Station
- TIAER - Special Study Station
- Wastewater Outfall
- Watershed Boundary



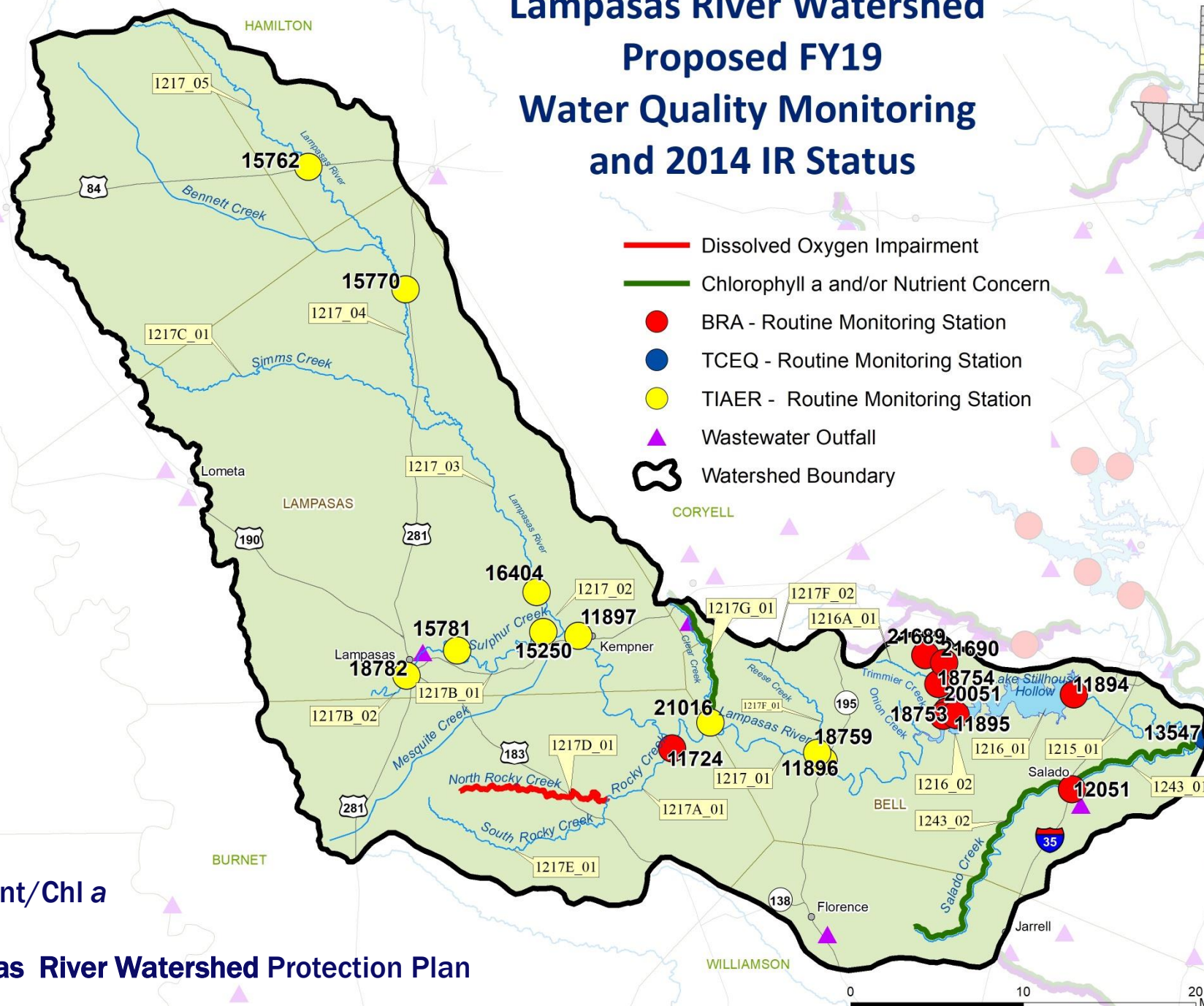


# Lampasas River Watershed Proposed FY19 Water Quality Monitoring and 2014 IR Status



- Dissolved Oxygen Impairment
- Chlorophyll a and/or Nutrient Concern
- BRA - Routine Monitoring Station
- TCEQ - Routine Monitoring Station
- TIAER - Routine Monitoring Station
- ▲ Wastewater Outfall
- ⬮ Watershed Boundary

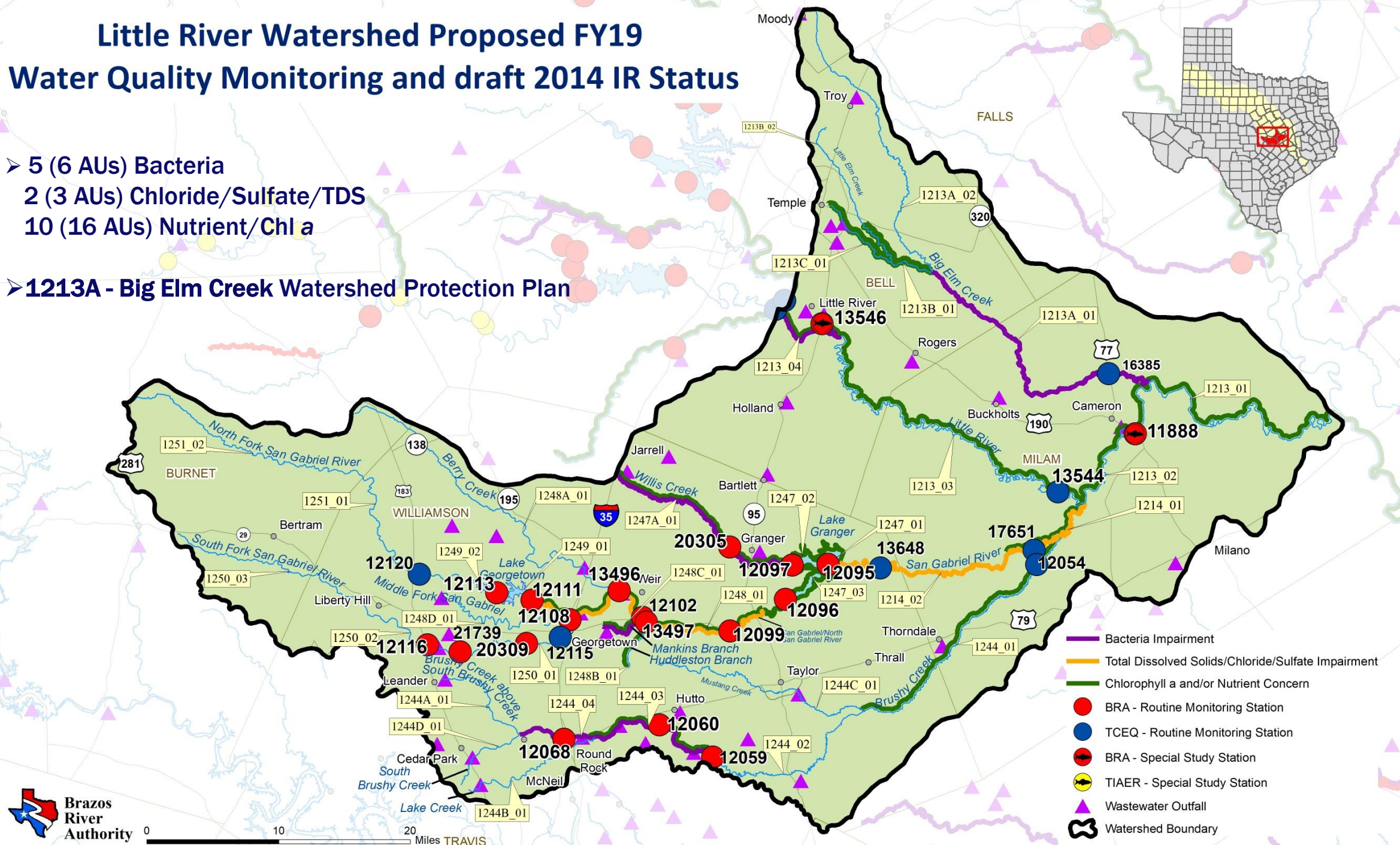
- 1 DO
- 2 (3 AUs) Nutrient/Chl a
- 1217 - Lampasas River Watershed Protection Plan





➤ **5 (6 AUs) Bacteria**  
**2 (3 AUs) Chloride/Sulfate/TDS**  
**10 (16 AUs) Nutrient/Chl a**

➤ **1213A - Big Elm Creek Watershed Protection Plan**



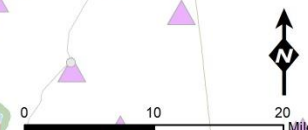
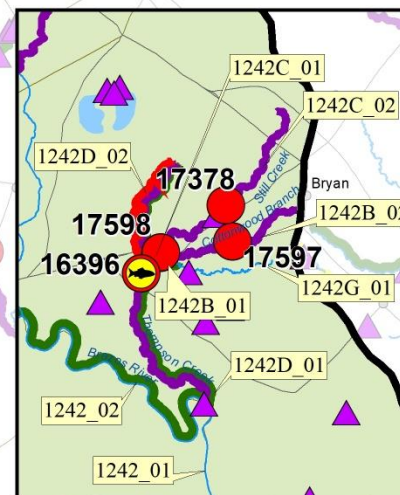




# Central Watershed of the Brazos River Proposed FY19 Water Quality Monitoring and 2014 IR Status

- 11 (14 AUs) Bacteria  
1 DO  
8 (12 AUs) Nutrient/Chl a
- 11 recommendations from completed RUAAs
- Potential 2 waterbodies removed from 303d list
- TIAER visual periphyton assessment

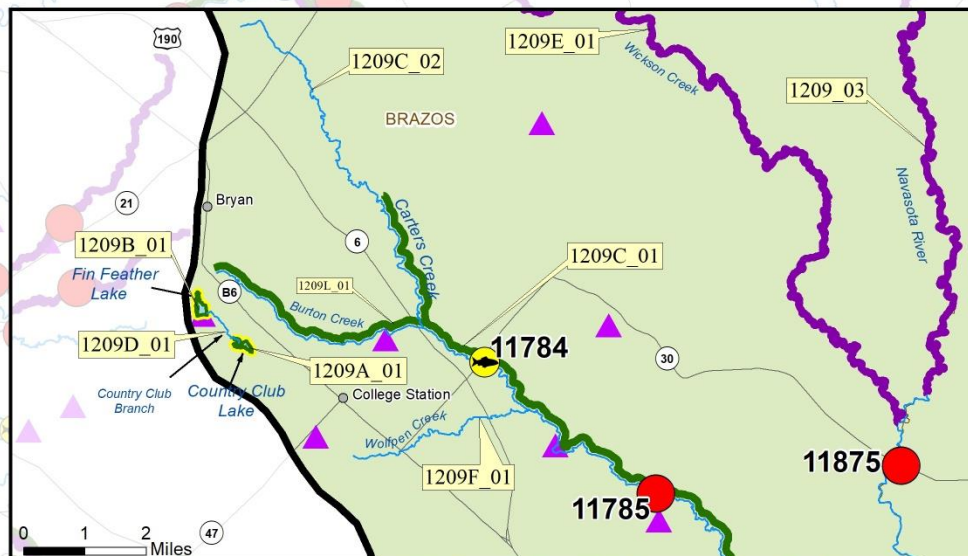
- Dissolved Oxygen Impairment
- Bacteria Impairment
- Chlorophyll a and/or Nutrient Concern
- BRA - Routine Monitoring Station
- TCEQ - Routine Monitoring Station
- TIAER - Special Study Station
- ▲ Wastewater Outfall







- 7 (9 AUs) Bacteria
- 1 (2 AUs) DO
- 9 (13 AUs) Nutrient/Chl a
- 7 recommendations from completed RUAAs
- Potential 6 waterbodies removed from 303d list
- Carter's and Burton Creek TMDL Implementation
- Navasota River WPP and TMDL
- TIAER visual periphyton assessment



## Navasota River Watershed Proposed FY19 Water Quality Monitoring and 2014 IR Status



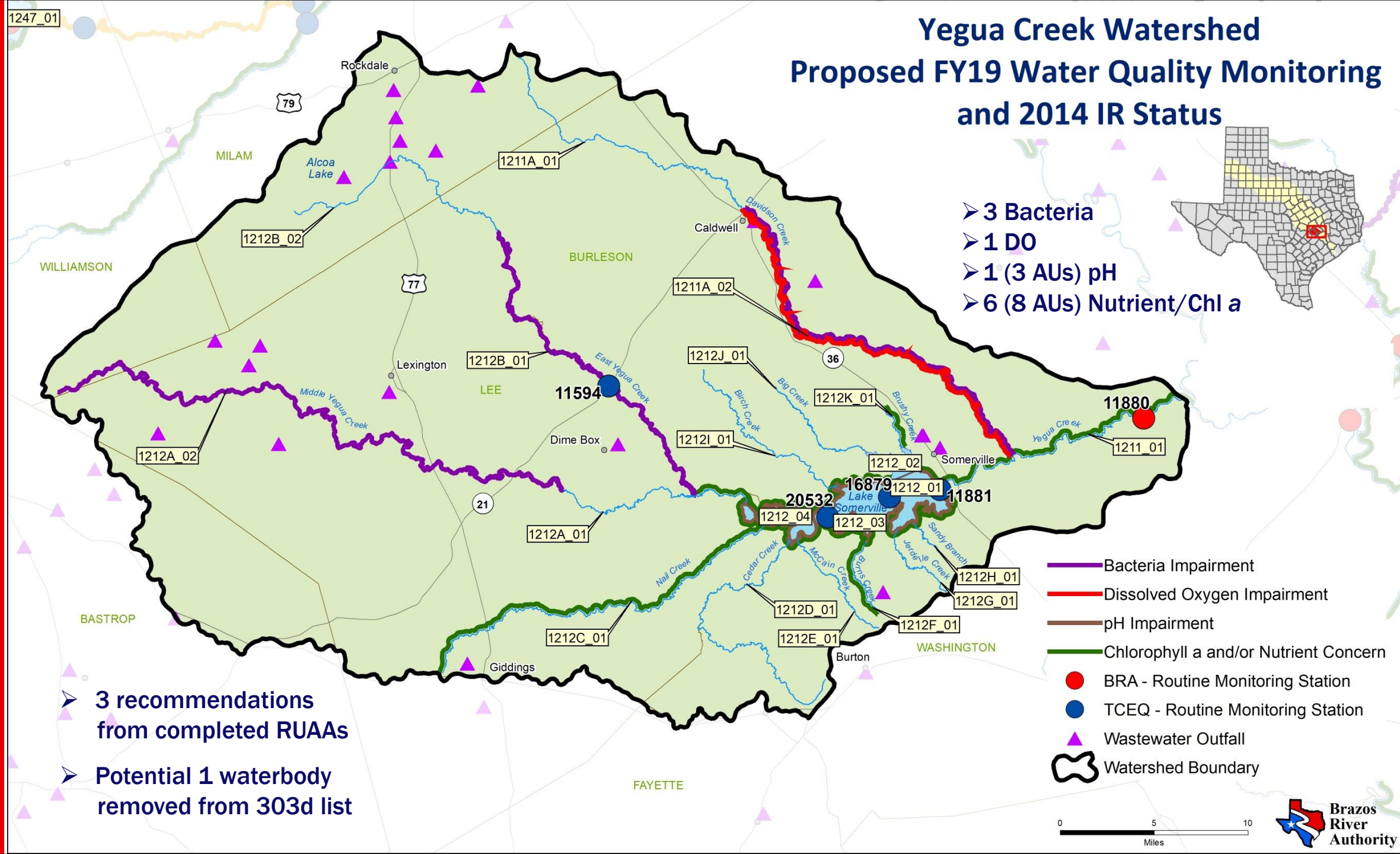
- WMP Environmental Study station: **18341 Navasota River at OSR NE of Bryan**

- Bacteria Impairment
- Dissolved Oxygen Impairment
- Toxicity in Sediment Impairment
- Chlorophyll a and/or Nutrient Concern
- BRA - Routine Monitoring Station
- TCEQ - Routine Monitoring Station
- BRA - Special Study Station
- TIAER - Special Study Station
- ▲ Wastewater Outfall
- ⬮ Watershed Boundary

0 10 20 Miles



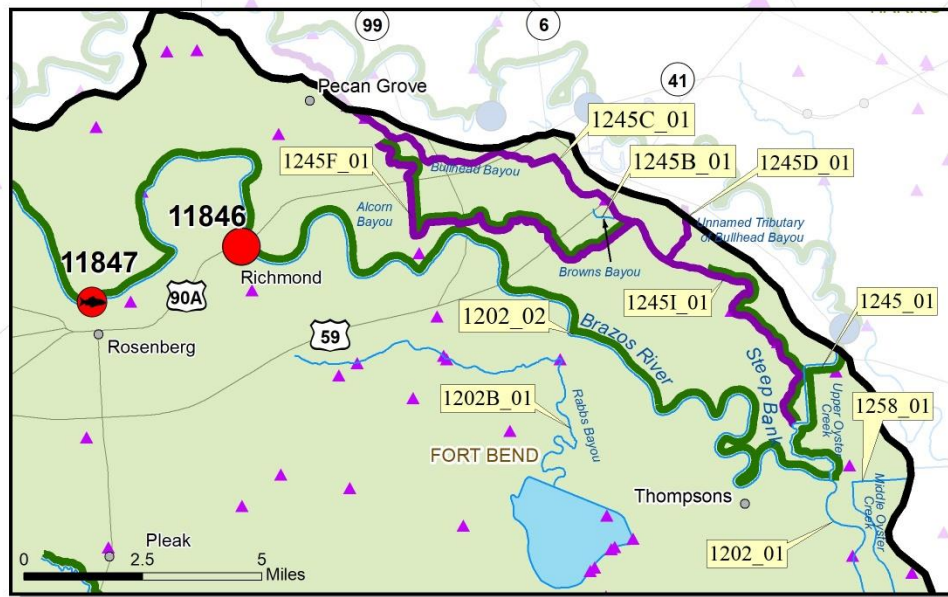
- **3 Bacteria**
- **1 DO**
- **1 (3 AUs) pH**
- **6 (8 AUs) Nutrient/Chl a**



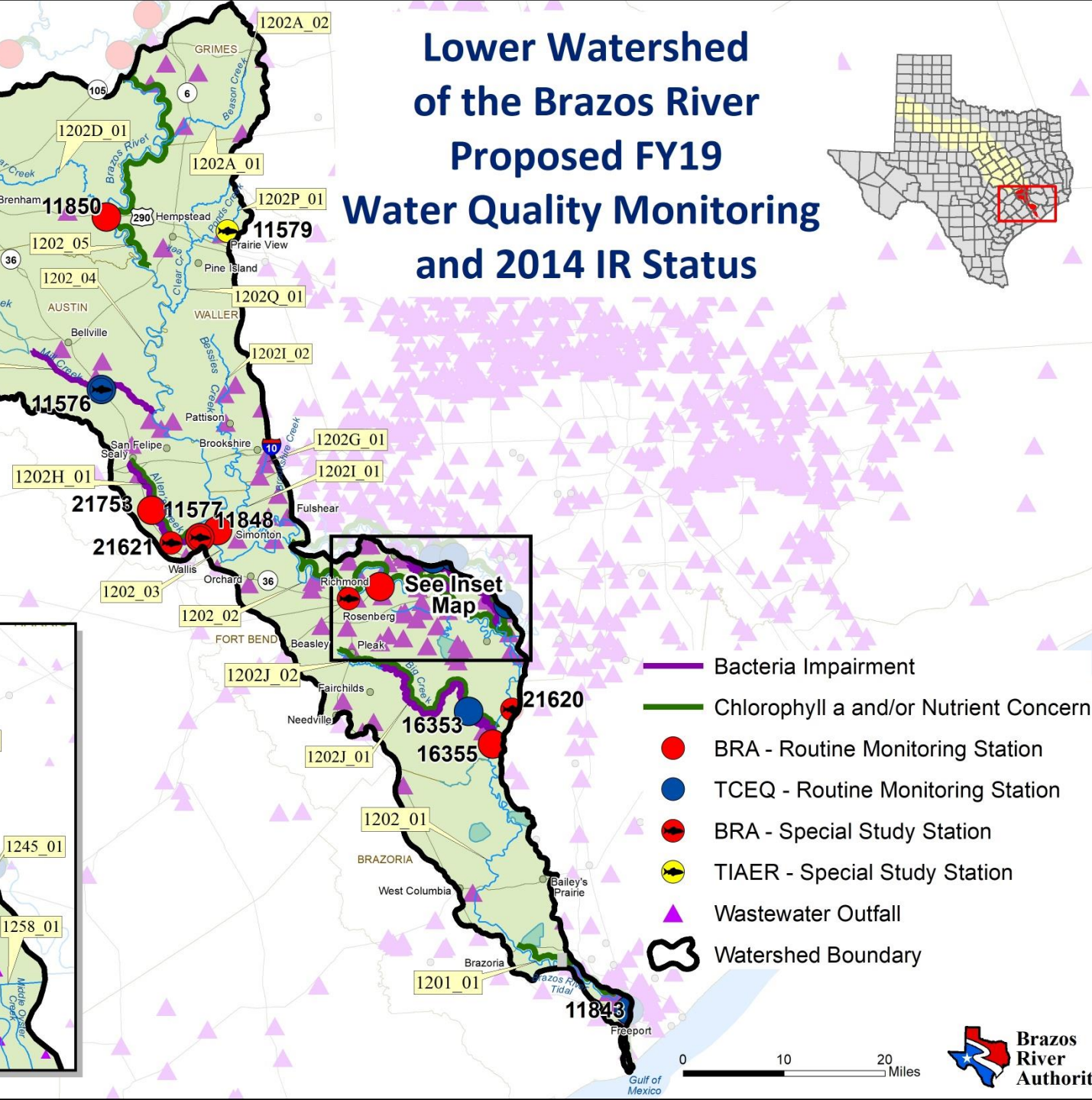
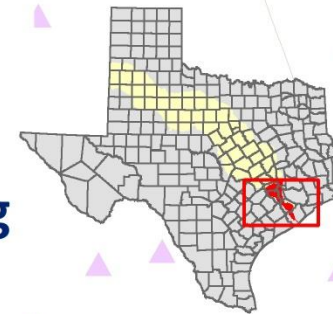




- 7 Bacteria  
8 Nutrient/Chl a
- Two WMP Environmental Study stations: 21620 - Brazos River upstream of FM 1462 W of Rosharon and 11847 - Brazos River at FM 723 N of Rosenberg
- Biological assessment on two stations on Allen's Creek 21621 and 11577

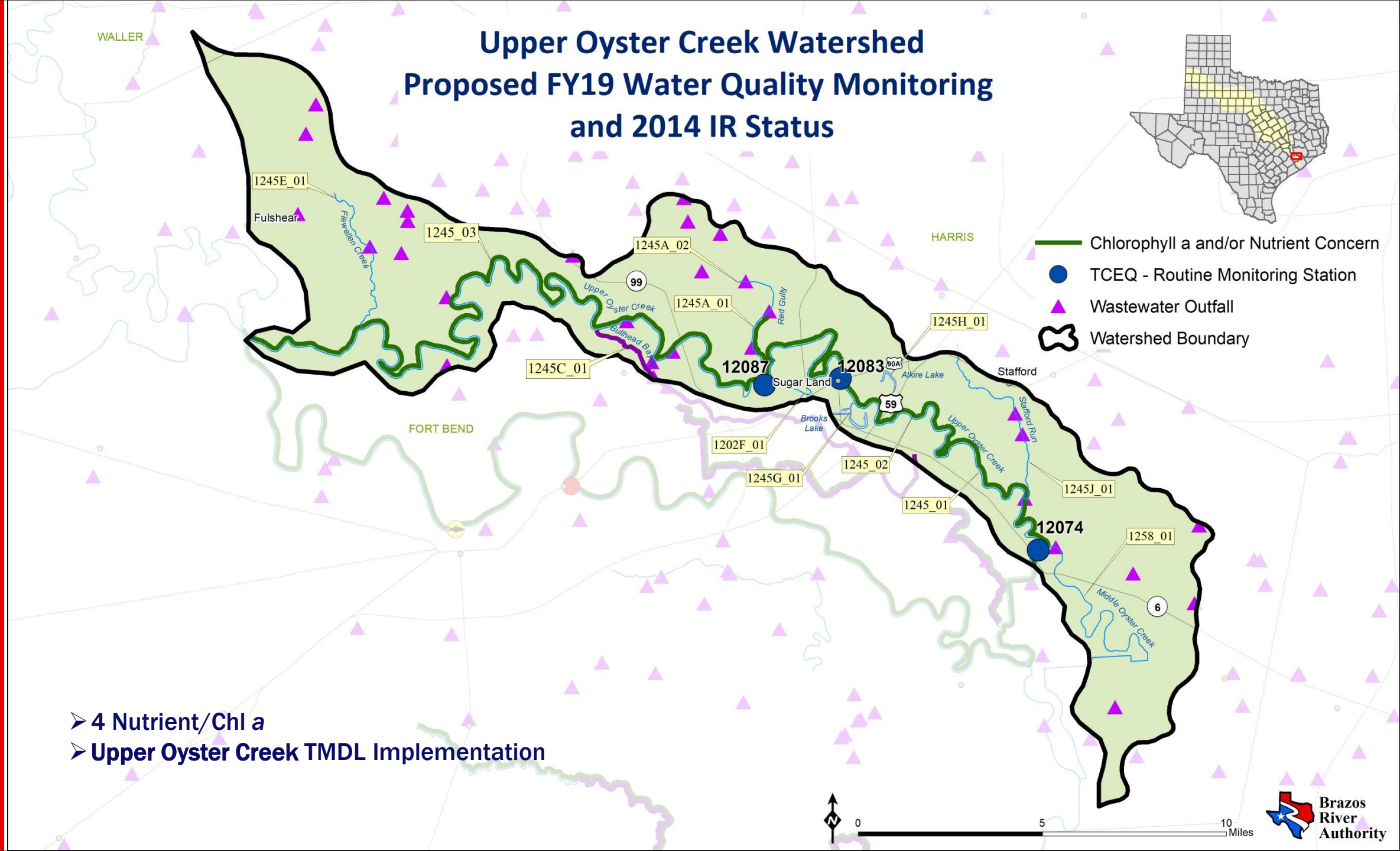
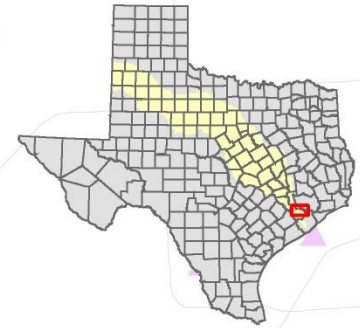


## Lower Watershed of the Brazos River Proposed FY19 Water Quality Monitoring and 2014 IR Status





# Upper Oyster Creek Watershed Proposed FY19 Water Quality Monitoring and 2014 IR Status



- 4 Nutrient/Chl a
- Upper Oyster Creek TMDL Implementation





Brazos River Authority



Brazos  
River  
Authority