

Summary of 2006 305(b)  
Assessment of Guadalupe River  
Basin and Lavaca-Guadalupe  
Coastal Basin

# TCEQ assesses water bodies in Texas every 2 years

-If meeting the designated uses or is of concern

## **-Aquatic life use**

-Depressed dissolved oxygen

## **-Contact recreation use**

-E. coli or fecal coliform

## **-Nutrient enrichment, excessive algal growth**

-Nitrate nitrogen, Ammonia nitrogen, Total Phosphorus

-Chlorophyll a

# 305b Inventory Definitions

CS – Concern at the Screening Level

CN – Concern for new non-attainment

NS – Not Supporting

PS – Point Source

NPS – Non-Point Source

Catagories – 5a – TMDL underway

5b – review of standards before TMDL

5c – More data needed before TMDL



# Segment 1801 Guadalupe River Tidal

Entire segment listed for:

depressed dissolved oxygen

nutrient enrichment (nitrate+nitrite nitrogen) (CS)

Sources: Unknown

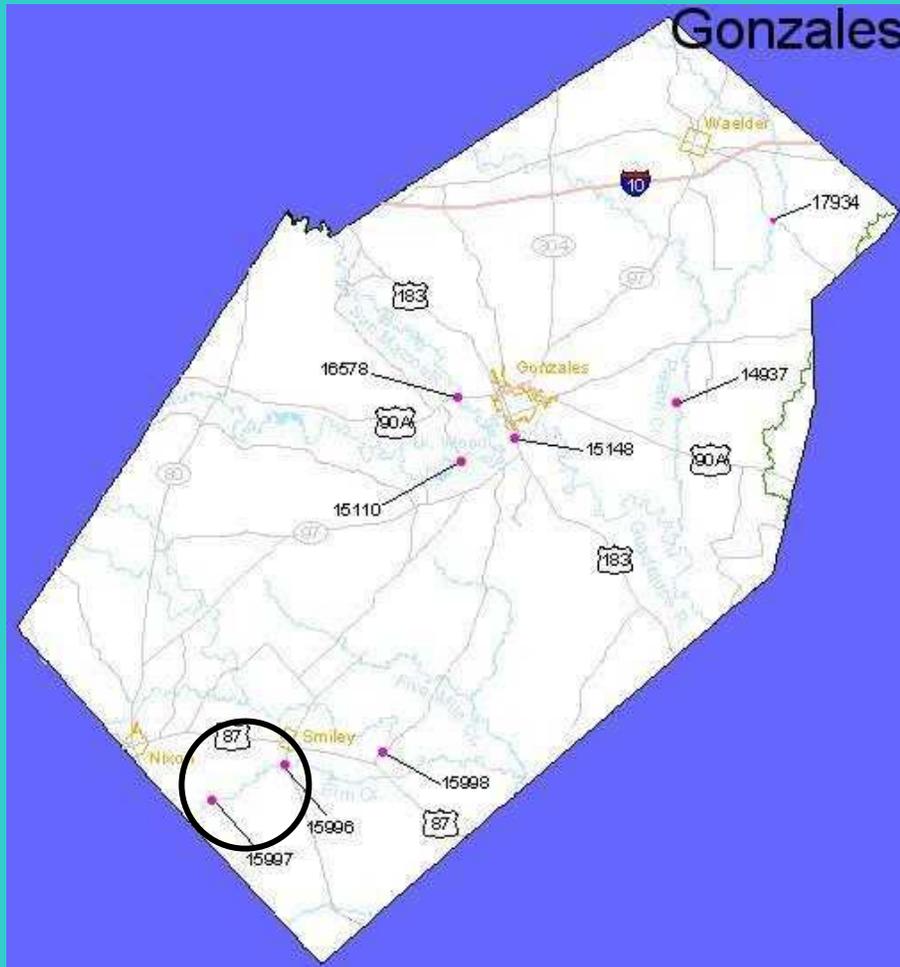


Guadalupe River Salt Water Barrier



San Antonio River

# Segment 1803A Elm Creek



Entire water body listed for:

- depressed dissolved oxygen average and 24 min (NS)
- bacteria (NS)

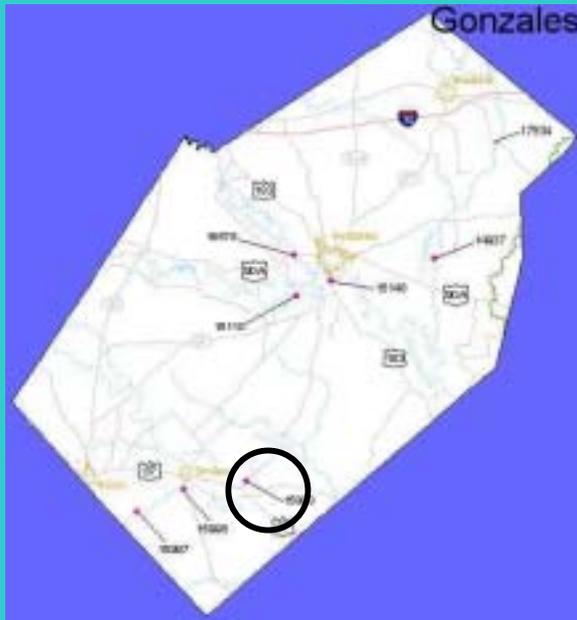
TMDL project underway

Sources:

DO - NPS; PS unknown

Bacteria – Source unknown

# Segment 1803B Sandies Creek



Water body listed for:

- depressed dissolved oxygen
- bacteria
- nutrient enrichment (ammonia)

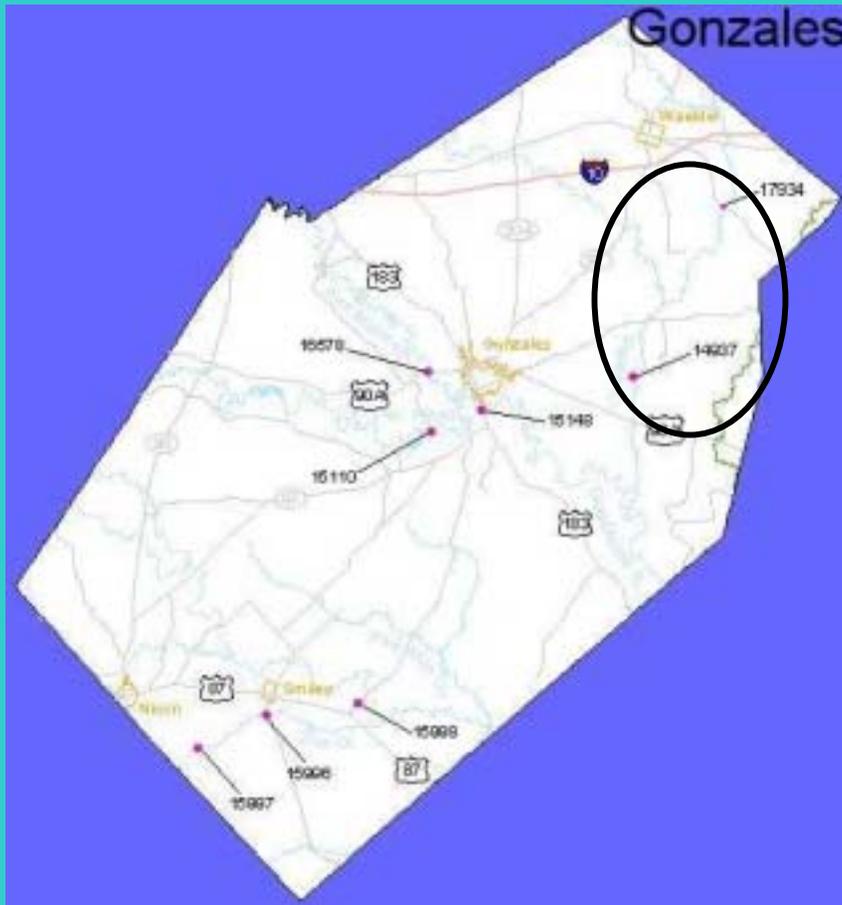
TMDL underway





Sandies Creek

# Segment 1803C Peach Creek



Peach Creek at CR 353

Water body listed for:

- bacteria
- depressed dissolved oxygen grab (CS and NS)
- nutrient enrichment (ammonia)

Sources: Unknown

TMDL underway



## Peach Creek at FM 1680

upstream

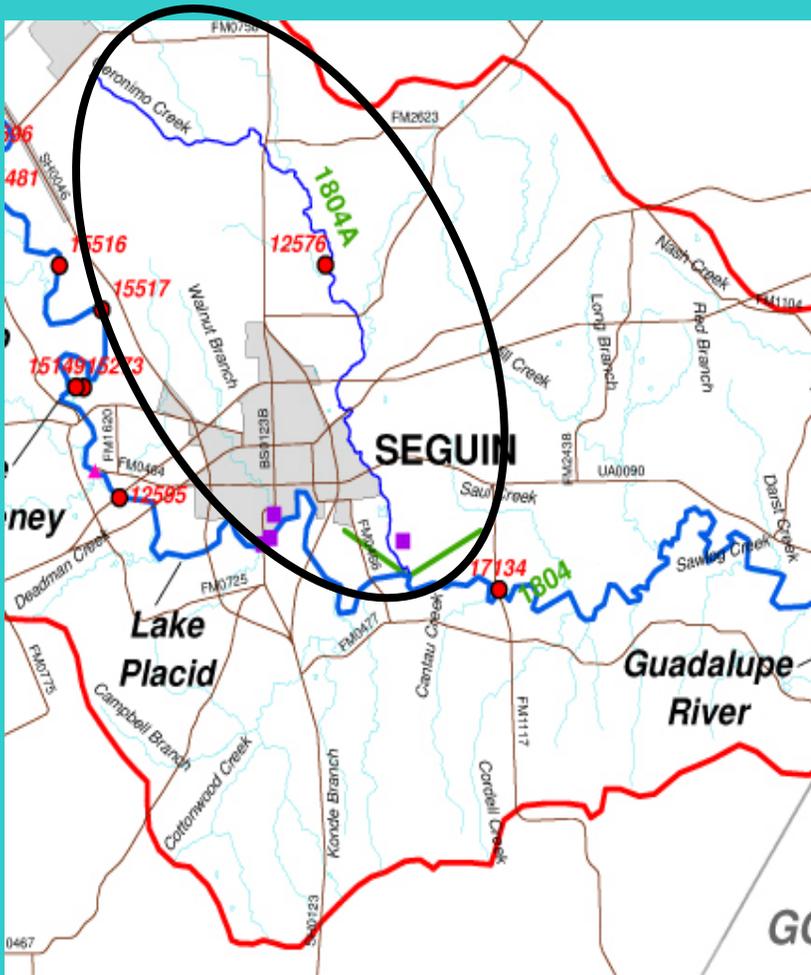
downstream



# Segment 1804A Geronimo Creek

Entire water body listed for:

- Nutrient enrichment (nitrate) (CS)
- **E. coli bacteria (geo mean) (NS)**



Source: Unknown



Geronimo Creek at SH 123

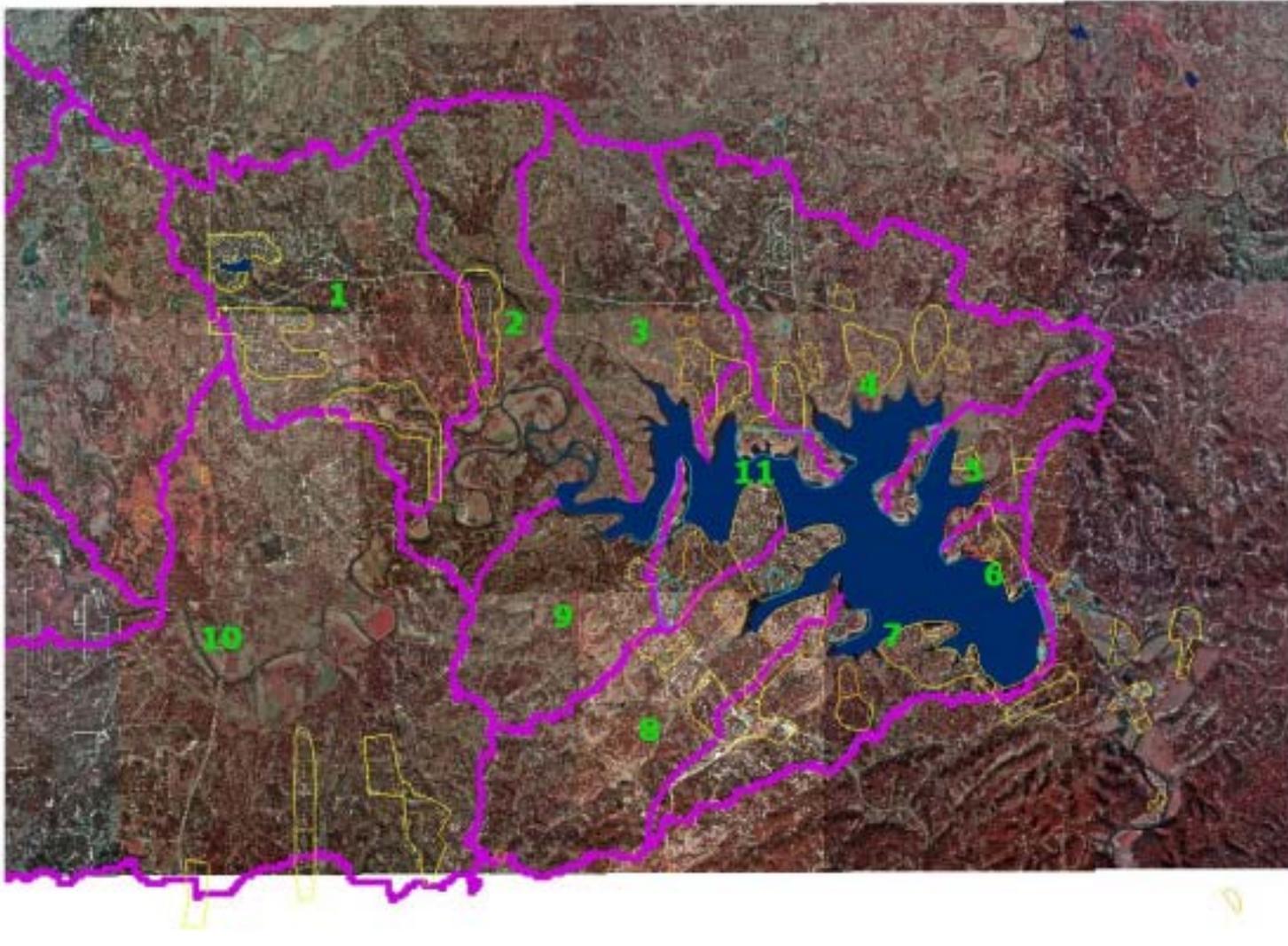


# Segment 1805 Canyon Lake

- Nitrate – Upper end of reservoir (CS); Source: Unknown
- Mercury in edible fish tissue (fish consumption advisory issued by SDHS)
  - Striped Bass and Long-nosed Gar
  - Source: Atmospheric deposition



# Canyon Reservoir



# Segment 1806 Guadalupe River above Canyon Lake



Water body listed for:

- bacteria (NS) and (CN –  
single grab)

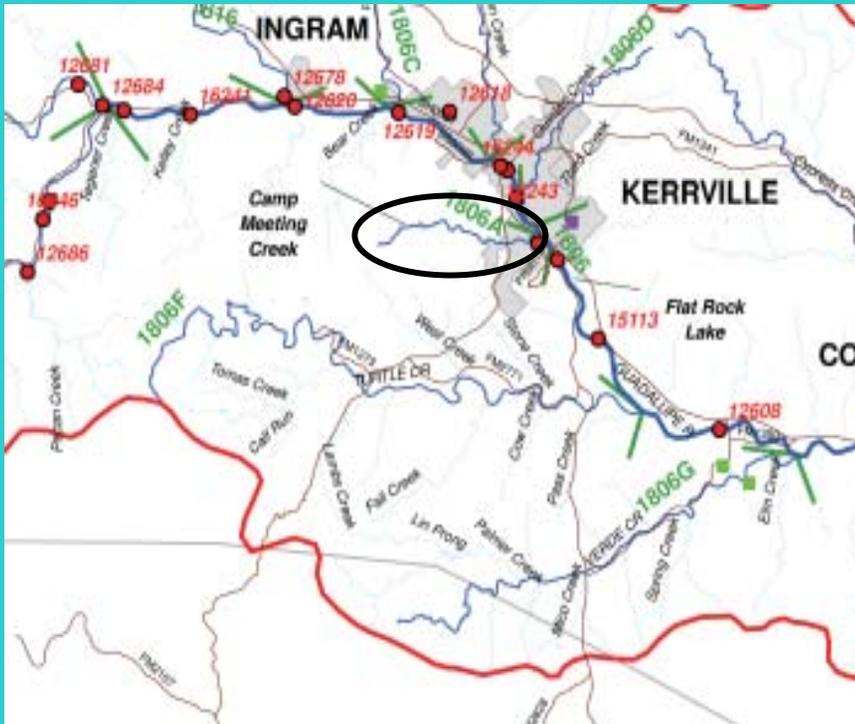
Source: Unknown

# Sources of Fecal & E. Coli Bacteria

## Louise Hays Park



# Segment 1806A Camp Meeting Creek

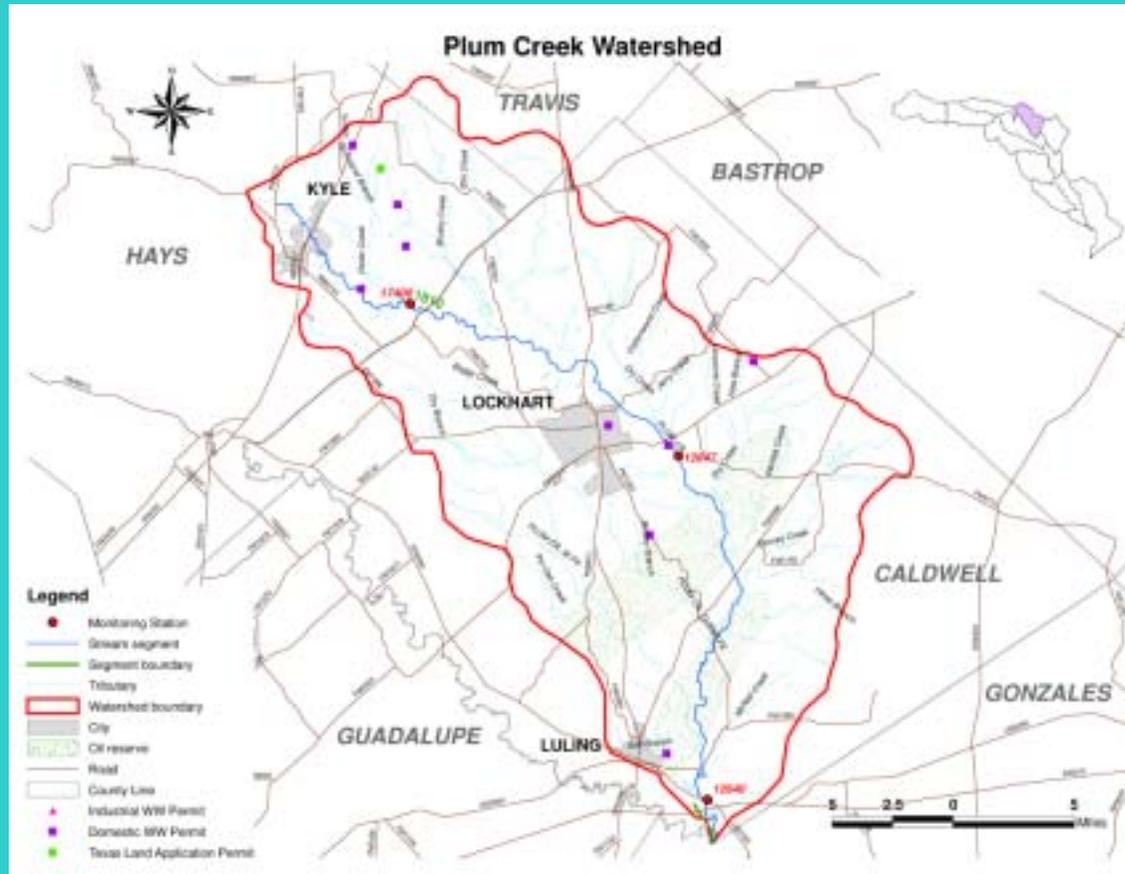


Water body listed for:

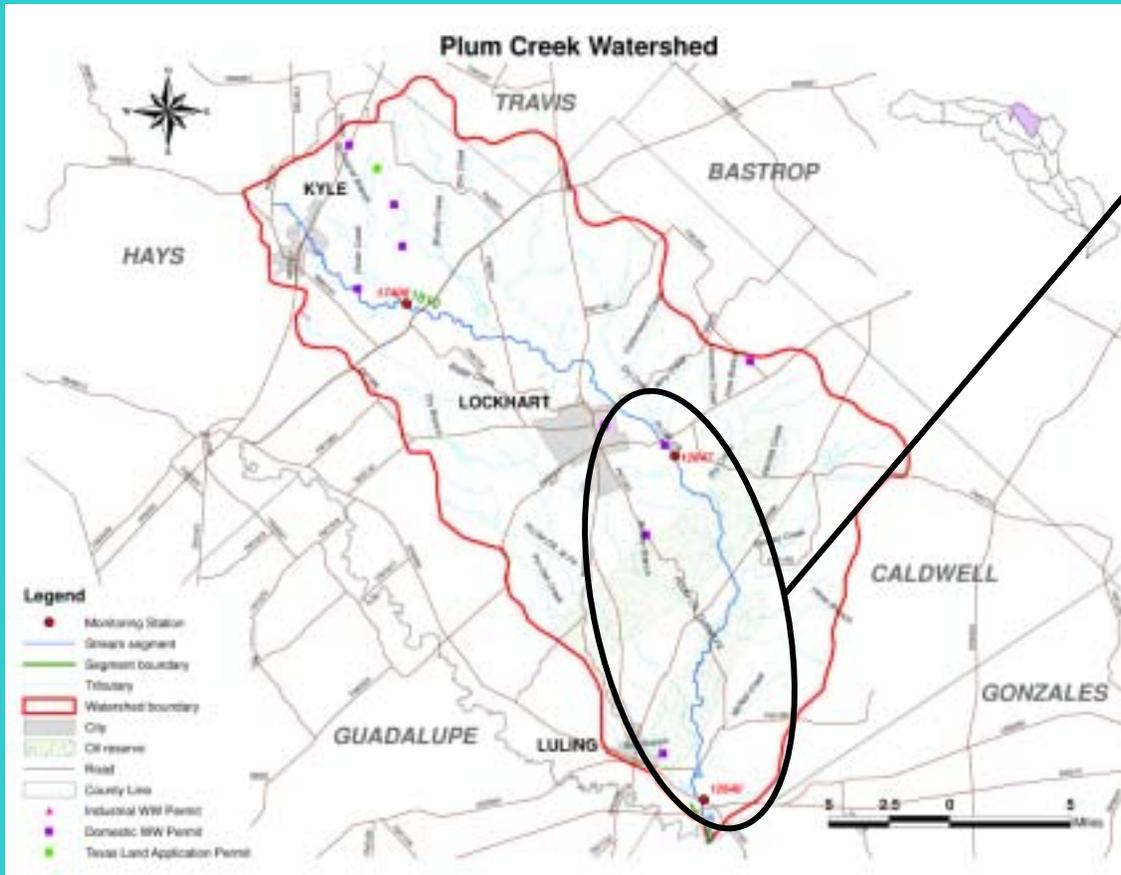
-depressed dissolved oxygen

Source: Unknown

# Segment 1810 Plum Creek

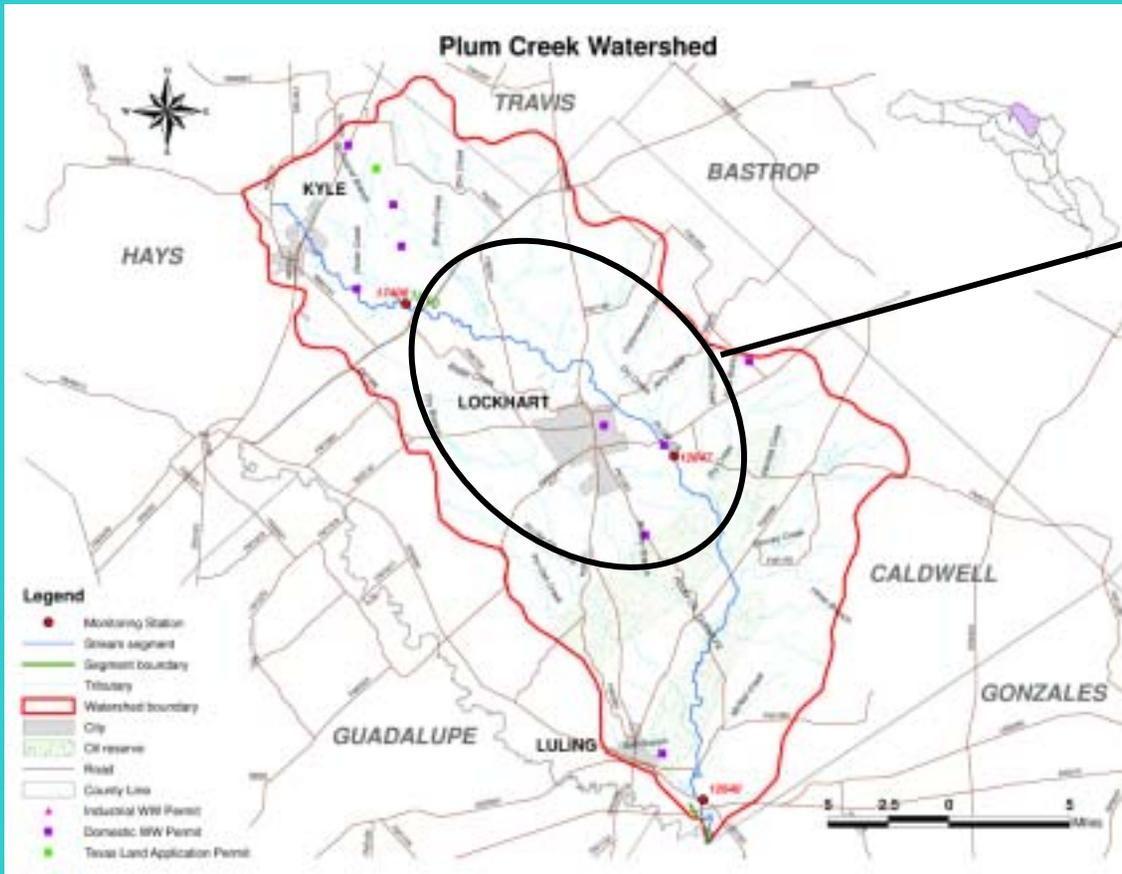


# Segment 1810 Plum Creek



Portion of segment that is listed for nutrient enrichment (nitrate nitrogen)

# Segment 1810 Plum Creek



Portion of segment listed for nutrients

Ammonia-nitrogen

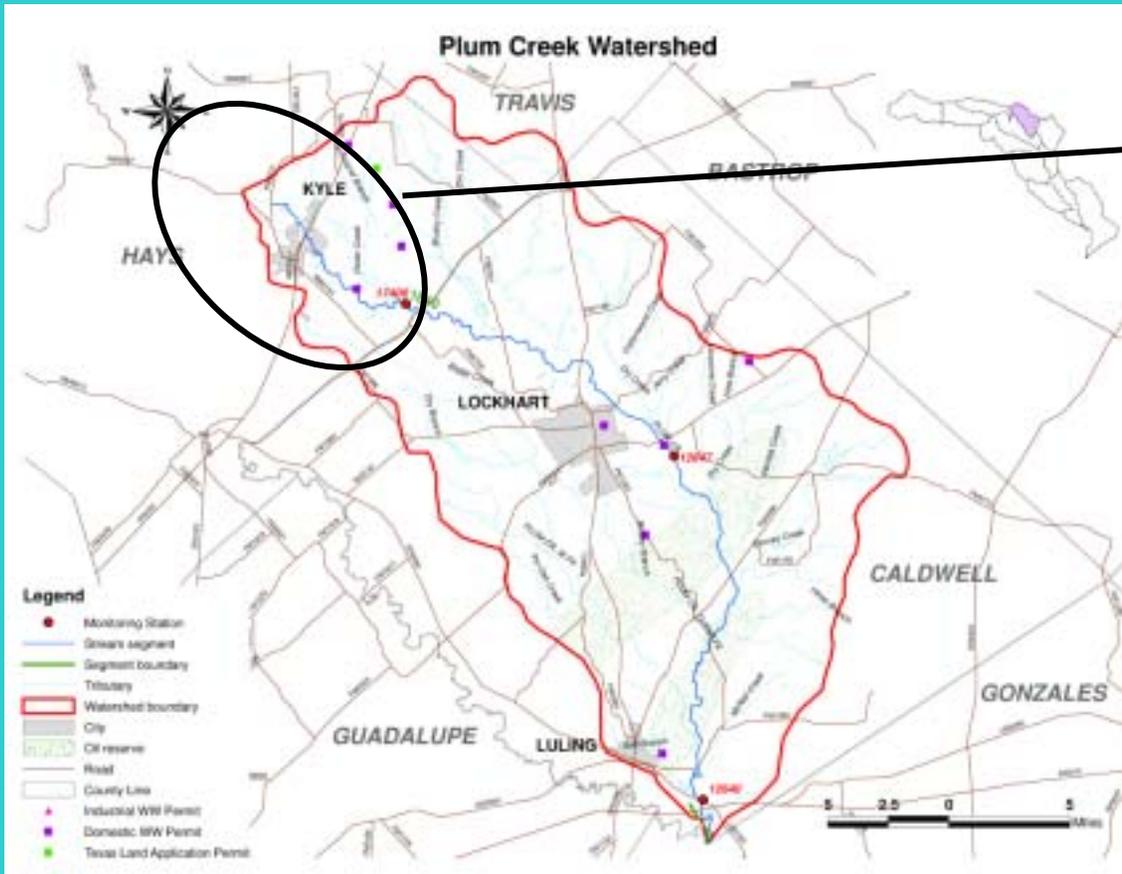
Nitrate-nitrogen

Total and ortho

Phosphorus

Sources: Unknown PS,  
NPS

# Segment 1810 Plum Creek



Portion of segment listed for:

E. coli

Nitrate-nitrogen

Sources: Unknown

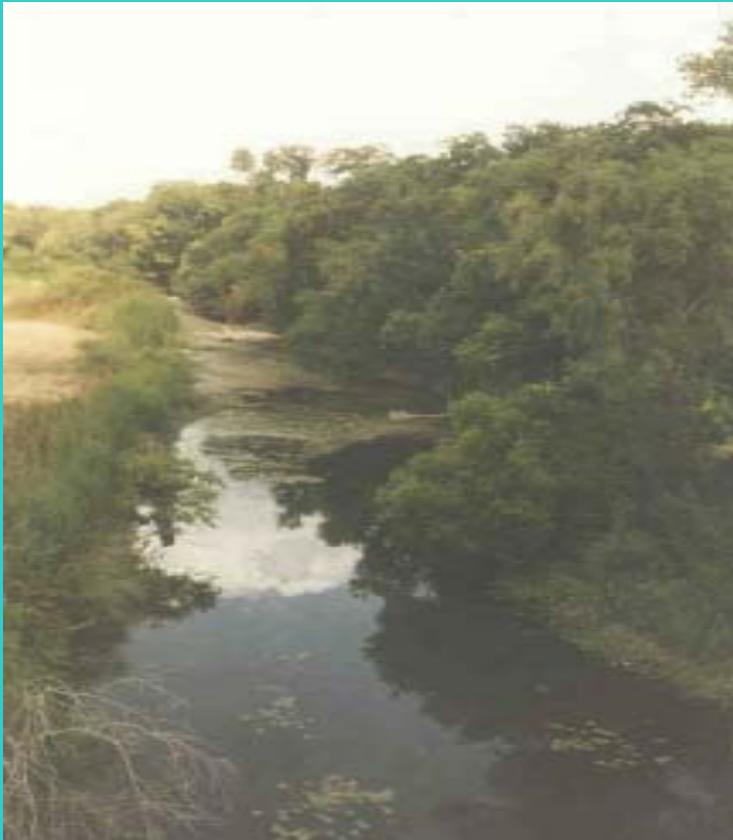


Plum Creek at Plum Creek Road

Plum Creek at CR 135



# New sites listed for Concern at for Screening Levels



Upper Blanco River in Kendall  
County

DO Grab sample at Screening level

Source: Unknown

# New sites listed for Concern at for Screening Levels



North Fork Guadalupe  
River

Entire Segment

DO grab at screening level

# Other changes to the 305b report

- Segment 1701 Barge Canal
  - removed DO concern
- Segment 1801 River Tidal
  - removed NS for DO
- Segment 1802 Lower Guadalupe
  - removed segment from list
- Segment 1803B Sandies
  - removed CS for NH<sub>3</sub>-N
- Segment 1804 Lake McQueeney
  - removed CS for nutrients

# Additions and deletions result from...

- Larger data sets used for assessment
  - ex. Peach Creek TMDL in assessment set

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  - ex. Barge canal DO monitoring by FO

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  - ex. Chl a screening level raised in Lake McQ
- Additional 24 Hr Dissolved Oxygen
  - ex. Barge canal DO monitoring by FO
- Assessment screening corrected
  - ex. Sgmt 1801 DO compared to correct criteria

Weblink for 305b and 303d draft reports:

<http://www.tceq.state.tx.us/compliance/monitoring/water/quality/data/06twqi/twqi06.html>

Weblink for 2006 Assessment Guidance:

[http://www.tceq.state.tx.us/assets/public/compliance/monops/water/06twqi/2006\\_guidance.pdf](http://www.tceq.state.tx.us/assets/public/compliance/monops/water/06twqi/2006_guidance.pdf)