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# CLEAN RIVERS PROGRAM GUADALUPE RIVER BASIN

GUADALUPE-BLANCO RIVER AUTHORITY UPDATE

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AUGUST 20, 2020



## CLEAN RIVERS PROGRAM UPDATES

Elizabeth Edgerton, Clean Rivers Program Supervisor

- Budget changes
- New CRP Partner
- New Site Impairments

# GBRA CLEAN RIVERS PROGRAM OPERATING BUDGET

	<b>FY 2020</b> <b>9/1/19-8/31/20</b>	<b>FY 2021</b> <b>9/1/20-8/31/21</b>	<b>FY20 – FY21</b> <b>Total</b>
Total CRP Budget	\$186,493.00	\$169,263.00	\$355,756.00
Supplies	\$5,559.00	\$5,559.00	\$11,118.00
Equipment	\$12,500.00	\$12,500.00	\$25,000.00
Contractual	\$31,780.00	\$14,550.00	\$46,330.00
Travel	\$8,316.00	\$8,316.00	\$16,632.00

- Only change: Contractual category, UGRA equipment purchase

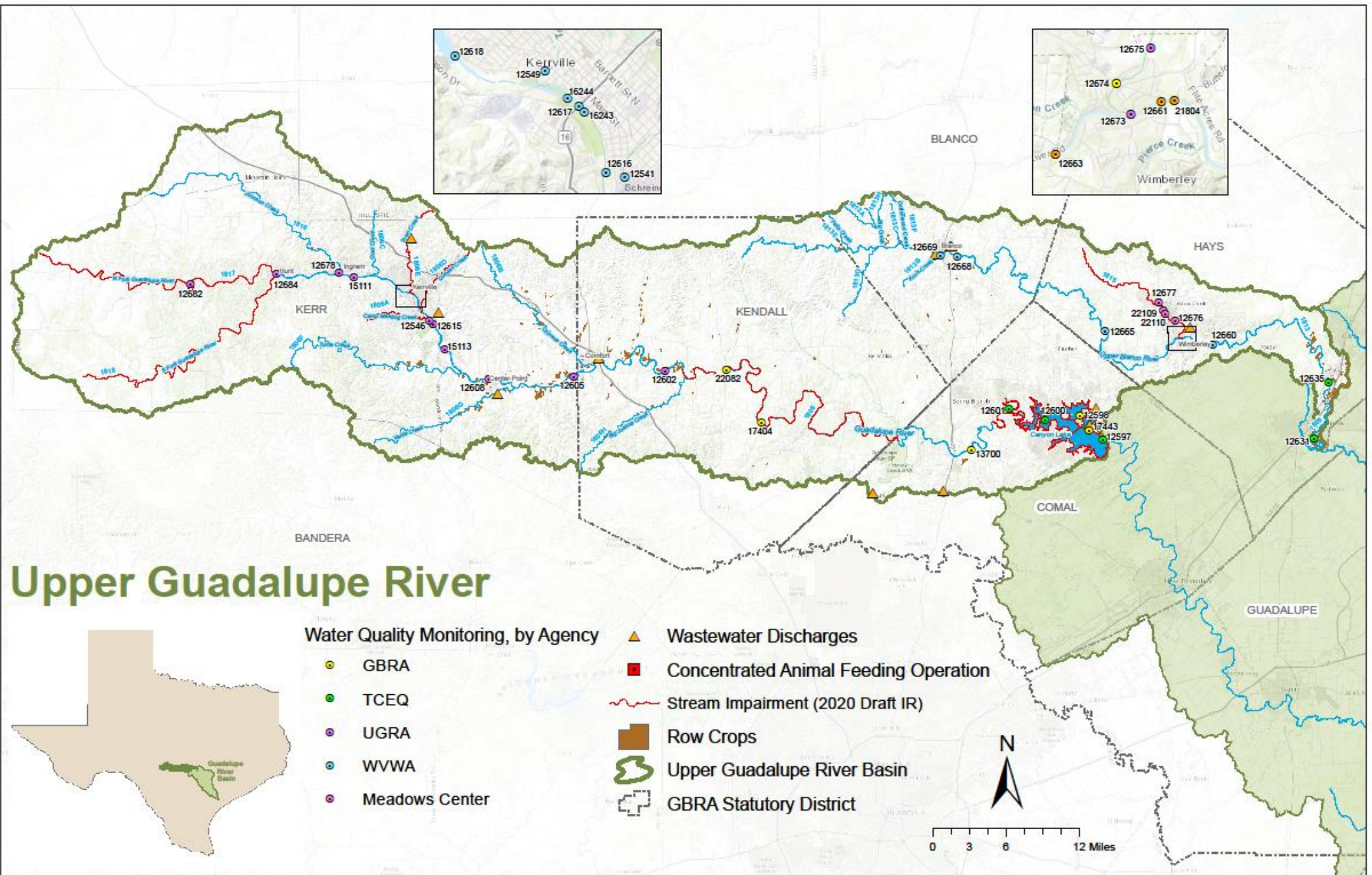
# NEW CLEAN RIVERS PROGRAM PARTNER



THE MEADOWS CENTER  
FOR WATER AND THE ENVIRONMENT  
TEXAS STATE UNIVERSITY

- Previously held a contract with TCEQ to monitor sites within NPS program
- Contract ended
- We brought them on as a CRP partner
- 6 new sites along Cypress Creek
  - The Meadows Center continues to monitors these sites





## IMPAIRED SITES – NEW IMPAIRMENTS FOR FY20

- 1806: Guadalupe above Canyon Reservoir
  - Bacteria
- 1815: Cypress Creek
  - Depressed DO levels, 24 hour average
  - Impaired fish and macrobenthic communities
- 1817: N Fork Guadalupe River
  - Impaired fish and macrobenthic communities
- 1818: S Fork Guadalupe River
  - Impaired fish and macrobenthic communities
- 1807: Coleta Creek
  - New site of concern, Chlorophyll-a
  - Algae has drastically increased
  - Possibly due to reduction in vegetation following flooding events

# GUADALUPE-BLANCO RIVER AUTHORITY AQUATIC LIFE MONITORING

JANA GRAY – WATER QUALITY TECHNICIAN



# GUADALUPE-BLANCO RIVER AUTHORITY 2019 AQUATIC LIFE USE ASSESSMENTS

- Aquatic life use assessments (ALM's), or bioassessments, describe the integrity of an aquatic system by comparing habitat, water quality, and biological factors with defined reference points





# GUADALUPE-BLANCO RIVER AUTHORITY 2019 AQUATIC LIFE USE ASSESSMENTS

- Sites assessed in 2019:
  - TCEQ Station 13657  
Sandies Creek at Cheapside Road (Westhoff, TX)
  - TCEQ Station 17894  
Elm Creek at US 87 (Smiley, TX)
  - TCEQ Station 12602  
Guadalupe River at FM 1621 (Waring, TX)



# GUADALUPE-BLANCO RIVER AUTHORITY 2019 AQUATIC LIFE USE ASSESSMENTS

## I 3657 – Sandies at Cheapside Road

- Aquatic life use deemed was deemed **intermediate** in the 2018 Water Quality Standards
- The 2019 ALM supported this designation
- GBRA found:
  - 10 unique species of fish
  - 28 species of macroinvertebrates
  - 4 species of native freshwater mussels
  - Low Dissolved Oxygen concentrations (1.7mg/L in the summer)



White Crappie



Common Stonefly



Southern Mapleaf



# GUADALUPE-BLANCO RIVER AUTHORITY 2019 AQUATIC LIFE USE ASSESSMENTS



## 17894 – Elm Creek at US 87

- Aquatic life use deemed was deemed **intermediate** in the 2018 Water Quality Standards
- The 2019 ALM supported this designation
- GBRA found:
  - 19 unique fish species
  - 35 Unique species of macroinvertebrates
  - 3 species of freshwater mussels
  - First Discovery of Fragile Papershell in Guadalupe Basin!





# GUADALUPE-BLANCO RIVER AUTHORITY 2019 AQUATIC LIFE USE ASSESSMENTS

## 12602 – Guadalupe River at FMI621

- Has a historically exceptional ALU designation
- Previous ALM's have identified concerns for impaired fish community and aquatic habitat
- GBRA found
  - 16 unique species of fish
  - 30 unique macroinvertebrate species
  - 1 freshwater mussel species



Orangethroat Darter



Guadalupe Bass



Guadalupe Orb



# AQUATIC LIFE MONITORING RESULTS SUMMARY

- Confirmed previous concerns for Fish Community & Habitat Upstream of Canyon Lake (Segment 1806)
- Confirmed Established Freshwater Mussel Communities
- Confirmed that an Intermediate ALU Standard is appropriate for Sandies (1803B) & Elm Creeks (1803A)
  - The 2018 TCEQ Water Quality Standards changed the standard from High to Intermediate and is currently being reviewed by EPA.
- Broadened Knowledge of Unique Species in Guadalupe River Basin
  - Guadalupe Roundnose Minnow (*Dionda nigrotaeniata*)
  - Guadalupe Orb (*Cyclonaias necki*)
- Extended range knowledge of common species in the Basin
  - Fragile Papershell (*Leptodea fragilis*)



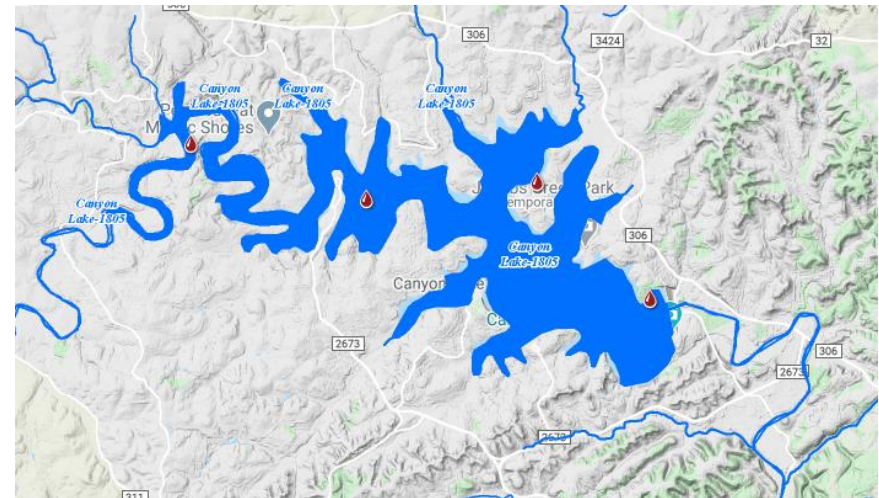
# 2020 AQUATIC LIFE MONITORING SITES

- 15113 - Guadalupe River at Split Rock
- 14937 - Peach Creek at 353
- 12556 - Clear Fork at Salt Flat Road



# FY2020 SUMMARY OF SAMPLING CHANGES

- Added site at Peach Creek and I 680 and Sandies Creek at I 116
- These sites are getting 24hr DO monitoring and bacteria sampling
- Dropped site at Jacobs Creek Park at Canyon Lake due to redundancy
- Added site at Honey Creek in Guadalupe State park



# GUADALUPE-BLANCO RIVER AUTHORITY CLEAN RIVERS PROGRAM



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