WIMBERLEY VALLEY WATERSHED ASSOCIATION: CLEAN RIVERS PROGRAM OVERVIEW

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Guadalupe-Blanco River Basin Steering Committee Meeting
August 20, 2020
OUTLINE

Routine Water Quality Monitoring:
• Upper Blanco River monthly monitoring (Segment 1813)
• Upper Blanco River quarterly monitoring (Segment 1813)
• Cypress Creek quarterly monitoring (Segment 1815)
Upper Blanco River Monthly Monitoring

Purpose: To monitor water quality concerns resulting from wastewater treatment plant discharge.

Two locations:
- 12669 – Blanco River @ PR23
- 12668 – Blanco River @ FM165

Parameters:
- Field
- Flow
- Conventionals
- E. coli Bacteria
Upper Blanco River
Monthly Monitoring Results
(Sep 2019 – Jun 2020)

Dissolved Oxygen (mg/L)
• WQS met for all events/sites
• Unusually high DO values at FM 165
• More variability at FM 165

pH (s.u.)
• WQS met for all events/sites
• More variability at FM 165
Upper Blanco River  
Monthly Monitoring Results  
(Sep 2019 – Jun 2020)

TKN (mg/L)  
• WQS met for all events/sites  
• More variability at FM 165

Total Phosphorus (mg/L)  
• WQS met for all events/sites  
• More variability at FM 165
**Upper Blanco River**

**Monthly Monitoring Results**

TKN (mg/L) vs. Time (Date)
- Decreasing trend in TKN concentration at both sites
- Steeper slope at FM 165

Total Phosphorus (mg/L) vs. Time (Date)
- Decreasing trend at FM 165
- Slight increasing trend at PR 23
- Steep slope at FM 165
Upper Blanco River
(@FM165)

8 Jan 2020

26 Jun 2020
Upper Blanco River Quarterly Monitoring

Purpose: To collect water quality data for assessment in the Texas Integrated Report.

Five locations:
- 12665 – Blanco River @ Fischer Store Rd.
- 12663 – Blanco River @ Pioneer Town
- 12661 – Blanco River @ RR12
- 21804 – Blanco River @ Deer Creek
- 12660 – Blanco River @ CR174

Parameters:
- Field
- Flow
- Conventionals
- Bacteria
Upper Blanco River
Quarterly Monitoring Results
(Mar 2010 – Jun 2020)

- Dissolved Oxygen (mg/L)
  - All means met the water quality standard

- Specific Conductance (µS/cm)
  - All means met the water quality standard
  - Decreasing mean values from upstream to downstream
E. coli bacteria
• Mean values below WQS (126 MPN/100 mL)
• All stations had single sample values greater than the WQS
• Higher colony counts in urbanized areas
Upper Blanco River
Quarterly Monitoring Results
(Mar 2010 – Jun 2020)

• Total Nitrate-Nitrogen (mg/L)
  • All values below WQS (1.95 mg/L)

• Total Phosphorus (mg/L)
  • All values below WQS (0.69 mg/L)
Cypress Creek Quarterly Monitoring

Purpose: To collect water quality data in support of the WPP.

Six locations:
- 12677 – CC @ Jacob's Well
- 22109 – CC @ Camp Young Judea
- 22110 – CC @ Woodcreek Dr.
- 12676 – CC @ RR12
- 12675 – CC @ Blue Hole*
- 12674 – CC @ FM12 in Wimberley
- 12673 – CC @ Blanco Riv. Confluence*

Parameters:
- Field
- Conventionals
- 24-hour DO (*)
- Flow
- E. coli Bacteria
- Groundwater wells
Cypress Creek Quarterly Monitoring Results (Sep. 2016-Dec 2019)

- Dissolved Oxygen (mg/L)
  - Grab – two events below WQ
    - RR12 Cottages
    - Blue Hole
  - 24-hour (2 events – Apr, Sep 2019)
    - Blue Hole – Sep event exceeded both criteria
    - Blanco Confluence – Both events met criteria

- E. coli (MPN/100 mL)
  - Geometric means below WQS at all sites except two
    - RR12 Wimberley
    - Blanco River Confluence
**Cypress Creek**

**Quarterly Monitoring Results**
(Sep. 2016-Dec 2019)

- Conductivity
  - WQS exceeded at all sites except RR12 Wimberley

- Total Suspended Solids (mg/L)
  - All means below WQS
  - Two events above WQS at RR12 Wimberley
Cypress Creek
Monthly Texas Stream Team Monitoring
Conclusions

Upper Blanco River – Monthly Monitoring
• Aesthetically unpleasant

Upper Blanco River – Quarterly Monitoring
• E. coli bacteria values high may be of concern

Cypress Creek
• E. coli bacteria values high at two stations
• Dissolved oxygen values low (grab and 24-hour)
• 2020 Integrated Report – 303d List impairments
  • Dissolved Oxygen
  • Fish and Macrobenthic Communities
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