CRP Activities in Kerr County

Tara Bushnoe
Upper Guadalupe River Authority
Natural Resources Coordinator
CRP Water Quality Monitoring

Quarterly monitoring at 12 sites
Monthly monitoring at 6 sites
WQ Monitoring Summary 2020

- CRP
  - 16 sampling events
  - 17 sites
  - 1,112 parameters tested

- UGRA Water Quality Programs
  - 36 sampling events
  - 40 sites
  - 1,278 parameters tested
  - 9 water quality investigations
2020 Integrated Report Findings
12/11 – 11/18

Quinlan Creek
Geomean = 319
DO concern

Town Creek
Geomean = 347
DO concern

Camp Meeting Creek
Geomean = 263
DO concern
Bacteria Reduction Plan

- Mainstem Impairments - 2002
- TMDL - 2007
- Implementation Plan – 2011
- Town and Quinlan Impairments – 2011

- Technical Support Document – 2017
- Implementation Plan Revision – 2018
- Camp Meeting Impairment – 2018
- Technical Support Document – 2021
Bacteria Reduction Plan Implementation Status

- Reduce Bacteria Contributions
  - Wildlife
  - Humans
  - Pet Waste
  - Urban Runoff
- Preserve Riparian Areas
- Promote Green Infrastructure
Water Quality Across Kerr County
Guadalupe River at Riverview (15111)
Guadalupe River at Splitrock (15113)
## Water Quality Comparison

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Riverview Mean</th>
<th>Splitrock Mean</th>
<th>Screening Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature (° C)</td>
<td>20.3</td>
<td>21.6</td>
<td>30.00</td>
</tr>
<tr>
<td>Flow</td>
<td>68</td>
<td>73</td>
<td>NA</td>
</tr>
<tr>
<td>pH</td>
<td>8.1</td>
<td>8.2</td>
<td>6.5 – 9.0</td>
</tr>
<tr>
<td>Chloride (mg/L)</td>
<td>17.2</td>
<td>27.4</td>
<td>50.00</td>
</tr>
<tr>
<td>Sulfate (mg/L)</td>
<td>10.1</td>
<td>16.5</td>
<td>50.00</td>
</tr>
<tr>
<td>Total Dissolved Solids (mg/L)</td>
<td>289</td>
<td>315</td>
<td>400.00</td>
</tr>
<tr>
<td>NH3-N (mg/L)</td>
<td>NA</td>
<td>0.11</td>
<td>0.33</td>
</tr>
<tr>
<td>Total Phosphorus (mg/L)</td>
<td>&lt;0.04</td>
<td>0.05</td>
<td>0.69</td>
</tr>
<tr>
<td>Chlorophyll-a (µg/L)</td>
<td>1.1</td>
<td>2.0</td>
<td>14.1</td>
</tr>
<tr>
<td>Nitrate Nitrogen (mg/L)</td>
<td>0.24</td>
<td>0.56</td>
<td>1.95</td>
</tr>
<tr>
<td>TKN (mg/L)</td>
<td>0.27</td>
<td>0.39</td>
<td>NA</td>
</tr>
</tbody>
</table>

### General Use

- **E. coli (MPN/100 mL)**
  - Geomean: 40
  - Geomean: 27
  - Geomean: 126

### Recreational Use

- **Dissolved Oxygen (mg/L)**
  - Mean: 8.6
  - Mean: 9.8
  - Average: ≥4.0 Minimum & ≥6.0 Average
Public Outreach Activities - 2020

- Workshop
- Radio PSAs
- Newspaper articles and ads
- Volunteer Summer Study
- River Clean Up
- Virtual seminars, presentations
- Virtual EduScape tours
- Virtual 2nd Grade Science Day
Streamside Landowner Workshop – Part III

Agenda

- Welcome
  - Tara Bushnoe, Upper Guadalupe River Authority
- Summary of Streamside Landowner Workshop series
  - Daniel Oppenheimer, Hill County Alliance
- YMCA Roberts Ranch Video Update and Photo Points
  - Ryan McGillicuddy, Texas Parks and Wildlife Department
  - Steve Nello, NRCS Retired
- Your Questions
  - Finding the Right Balance: Targeted Access and Grow Zones
    - Shane Kiefer, Plateau Land & Wildlife Management
- Next Steps
- More of Your Questions

UGRA’s 2020
River Clean Up - Reimagined
July - October 2020
UGRA SCIENCE DAY AT RIVERSIDE NATURE CENTER

The Upper Gualup River Authority and Riverside Nature Center are long-standing educational partners. Since 2016, the UGRA Board has approved funding to offer the 3rd-5th Grade Science Day at Riverside Nature Center field trip to 150 3rd-grade students. We look forward to resuming our annual field trip with area students and educators very soon. Until then, we offer you the following videos prepared by educators from UGRA, Riverside Nature Center, the Hill Country Master Gardeners. Regardless of your age, we encourage you to explore the videos and enjoy learning more about the Gualup River and the natural world.

FOR 2ND GRADE TEACHERS

If you are a 2nd-grade teacher, be sure to watch the intro video below to find out how to receive activity packets to complement each of the four lessons. Contact Tana Beshore with questions (tbeshore@ugra.org).

Once you complete the video and activities with your students, please complete this SURVEY.

2nd Grade Teacher Intro Video

UGRA 2nd Grade Science Day at Riverside

River of Life

LIFE CYCLES

DECOMPOSERS

ADAPTATIONS