# CRP Guadalupe Basin Steering Committee Meeting

**Meeting Minutes** 

April 23, 2025

#### Opening

The annual Basin Steering Committee Meeting was called to order at 1:01 PM April 23, 2025.

#### 1:00- Welcome and Introduction

## -FY26-27 CRP Budget review

-Had about a 50,000 budget increase

-Majority of expenses are lab costs- processing lab samples as costs rise

-Also includes conferences, Basin Highlights Report generation, etc.

-Drought update

-Most of our basin is in some sort of drought

-Board meeting discussion: Canyon Lake at 46% full- historic low

-Inflow to Canyon Lake, 138 straight days had zero flow

-Haven't had annual average in flow to Canyon Lake since 2019

# 1:07- Clean Rivers Program Updates

1:07- Guadalupe Blanco River Authority CRP Update

A snapshot view of Impaired CRP Stream

-Description on how CRP data are used

-303d list of 2024 IR: majority of sites are impaired for bacteria- important to consider when looking at recreation in streams

-Comal River and Dry Comal Tributary has been impaired for bacteria since

#### 2016

-Located in New Braunfels and is heavily used for recreation

-Went in and looked for possible causes

-64% of E.coli input is coming from wildlife (deer, ducks, pets,

# livestock)

-Watershed Protection Plan implemented to deal with some of these issues

-Includes best management practices to reduce effects of the impairment

-Are we seeing a difference in E.coli levels over time?

-E. Coli values have remained relatively the same throughout time, with natural fluctuations based on flow

-A reason for this could be land use changes over time. Less forested areas, more urbanization and development around the stream

## 1:20- Upper Guadalupe River Authority CRP Update:

-CRP WQ monitoring

-Monitor quarterly at 12 sites

-Monthly monitoring at 7 sites

-ALM at 1 site 2x/year

-In house WQ monitoring

-County wide sampling built off CRP format

-Swimability program: bacteria sampling from Memorial-Labor Day at popular recreation sites

#### -WQ Summary for 2024

-21 sampling events at 17 different sites for CRP

-All programs: 58 events, 43 sites sampled

-E.coli values over 10 years

-Headwaters Geo mean 45, but little pollution and runoff in those Headwater areas

-Central Kerrville Geomean 111, higher but still within limits; makes sense for more urban areas

-Downstream Kerrville Geomean 57

-2024 Rainfall and Flow

-2022 had lowest rainfall in over 90 years

-2024 closer to average but flows did not bounce back to normal levels

-Drought monitor

-Drought was less severe a year ago, but it has gotten worse since

-Bacteria reduction plan Implementation status

-Implemented in 2011

-Impairment has improved

-Watershed Stewardship

-Rainwater harvesting, Scholarships, Brush management, etc.

-Water Resources Preservation Grant Program

-Population increase and development—they are rewarding companies for using best management practices for runoff

-Board has granted the grant to 3 different projects

-Hoping to fund and assist these projects so that more landowners and developers can become aware of BMPs and potentially take interest in them themselves

-Public outreach Activities 2024

-Community presentations, info booths, news paper and radio, summer volunteers, river cleanups, seminars, etc.

<u>1:37- Watershed Association/Meadows Center for Water and the Environment CRP</u> <u>Updates:</u>

-Welcome Hays County

-New staff Jonas Rosenthal as Watershed Coordinator for Cypress Creek watershed and will be taking on lead sampling role after completion of training

-Low flows

-Two impaired sites: Cypress creek at Jacobs Well and Blanco River at FM1165

-Sites are becoming more turbid with low flow due to potential sediment

buildup

-Jacob's well: Flow has drastically dropped and nitrates have spiked , E. Coli has also spiked above 126 (for grab samples), something to keep an eye on when routinely sampling

-New CRP project to target algae

-Increased algae at a location downstream of a wastewater plant; trying to observe how that affects water quality and how it impacts algae

-Started incorporating a Total Algae sensor in their YSI Sondes, which allows for quicker detection and a faster respond time for Chlorophyll

-Water quality samples still assessed, btu this gives them a better idea for how algae is responding to discharge in a more immediate sense

## -Bacteria

-Looking into incorporating a new bacteria method to field sampling

-Poly scan easy gel; used for volunteer Stream Team sampling

-R-CARD: new method for bacteria monitoring; more cost effective and easier to read E.coli values in the field

-Still collecting IDEX lab samples, then in house test these other two methods to see how they compare for accuracy

-Remaining questions:

-How do these bacteria methods compare?

-When are dilutions and filtrations necessary?

# **1:56 Comprehensive Nutrient Data Collection on the Guadalupe River** - Guadalupe-Blanco River Authority

Why Focus on Nutrients

- Excess nutrients in streams can lead to excess algal blooms and eutrophication
- Most of P data is below detection limits
- Lack of data is an issue
- GBRA approved:
  - 1 year program
  - o additional technician

#### Data Collection

- Began in 1980s
- Joined CRP at inception

**Basin Wide Sampling Efforts** 

- Concentrated efforts in Geronimo & Plum Creek where WPPs exist
- Identify locations that data did not exist in addition to sites that currently exist

Project Development

- Priorities
  - Upstream & downstream of Point Source discharge
  - Sample springs where able
  - Septic & other NPS
- Hill Country sampling
  - Kerr Co UGRA
  - San Marcos River
- SOP
  - Follow similar methods to QAPP
  - Project Partners
    - UGRA
      - o GBRA
      - Back up lab SARA
- TCEQ discussions
  - Highly encouraged to include periphyton methods

Special Considerations: Total Phosphorus

- GBRA lab is 0.02 mg/L detection limit
  - Not many labs can detect limits this low
  - Not able to reliably reduce detection limit
    - Invested in an additional nutrient analyzer equipment intended to get detection to 0.01 mg/L
  - Can read lower levels but not in line with LOQ

Upper Guad. River Sampling

- 8 CRP sites
- 23 new river sites
- 3 springs

San Marcos River Sampling

- 3 CRP sites
- 6 new sites

**Final Thoughts** 

- Collaborating with TCEQ and other labs for lower detection limits

2:15 Qualitative Periphyton Study in the Texas Hill Country

- Periphyton can paint an overall picture of water quality as they grow quickly and are sensitive
- Sampling Macroalgae, microalgae, and moss
  - o Microalgae quicker to see water quality impacts

# Study Design

- USU protocol using a 3 diagonal transects per stream sight
  - 6 uniform points per transect
  - Looks at big toe and picks up rock

#### Initial Process

- Sept. 2024 trial run
- Detailed field notes and scouting for sampling sites
  - Canopy cover
  - o Prone to flood

#### Field Procedure

- Diagonal transects covers more area
- Observer uses "big-toe" method
- Calculated
  - o Densitometer

#### Measurement & Scoring

- Measuring covering for macro and moss and slimy algae thickness
- Using rulers and standard measuring tools for consistency

#### Adjustments

- Modified approach for terrain and needs such as recreational river use
- Find area of best representation
- Clarity and consistency has been a priority

#### What we've gained

- Overall sense of stream and dynamics of health
- Benefit of diversifying the health of the water
- Able to graph and map trends
- Trend with total phosphorus and periphyton length

#### -2:30- Dry Comal Creek and Comal River Watershed

-Water quality concerns

-Dry Comal Creek, Comal River

-Bacteria source tracking sessions in 2013 and 2016; 60-70% of bacteria identified were wildlife related

-WPP for these was created which includes wildlife management measures to address impairments

-Previous efforts

-Do not feed wildlife ordinance for the city, outreach and education events, summer education program presentations, animal waste cleanup

## Missing some here ask sierra for notes

-WPP advertising campaign

-Sponsored ads

-Google ads

-WPP video

-Printed advertisements

-All ads focused on feeding of wildlife ordinance

-BMPS Addressing Storm Water

- Stormwater structural BMP
  - Pilot study of in pipe filtration system (Fabco Industries High Flow Helix Stormwater Filter System)
  - Upstream and downstream data collected to determine the effectiveness of the system

-Next steps:

- Begin stormwater monitoring program to determine effectiveness
- o Min of 6 rain events will ensure enough water to sample per grant requirements
- Will perform monitoring upstream and downstream (before and after filtration)

**3:00 Plum Creek Watershed:** Sierra Murray, Watershed Coordinator – Guadalupe-Blanco River Authority

- New Plum Creek Watershed coordinator has become a full-time position opposed to contractor as it was previously
- -PC is impaired for bacteria, with some other WQ concerns as well
- -25 TPDES permits issues within the watershed
- -42 water quality monitoring sites within Plum Creek

-Education, engagement and events

- Updated PC Watershed Partnership website, which is updated frequently with resources, WQ data, events and more
- Around 1400 subscribers to the newsletter
- Traditional press and digital media

-Education

- Signage (Caldwell County justice center rain garden, city of Lockhart parks), social media

-Engagement

- Caldwell county 4-H kickoff event, negly elementary STREAMS night, PC coffee hour, Aqua water supply corporation membership meeting, Lockhart state park field trips

Cleanups-

4 different cleanups to keep Lockhart beautiful.

Upcoming plans with Keep Lockhart beautiful spring and fall cleanups

PC stewards' revitalization

Pc page turners book club return- reading environmental books and talk about it

Story stream partnership- partner with libraries to present story with youth and interactive activity

Programs:

Feral hog trap program-

- Caldwell county landowners,
- 3-month pig brig trap system loan
- Start July 2025?

• Hope to reduce amount of non-target species caught

Caldwell county justice center rain garden

Site selected 2015 for low impact development grant

- Plan to clean out and plant native plants that are drought resistant
- Some watering needs- rainwater harvesting system already in place

# Questions/comments:

- Carly: local master naturalist chapter sample Lockhart state park. Possible resource (lost pines chapter?)—PC coordinator in communication with chapters
- Jonas- who is responsible for pig trapping- landowners responsible after pigs are conditioned to set trap, check them, and properly dispose of them. Planned demonstration of how to dispose of carcasses. Must report to TCEQ if more than a certain number of carcasses.
- What are disposal practices?- will need to remove from trap. Can drag carcasses away from trap into appropriate location and leave them.
- How much do traps cost?—traps with sewn in trap cap are 2500-3000. We are purchasing 5, so potentially 20 landowners a year. Will look at how many traps out, numbers of hogs caught, weather pattern influence
- Are there holding facilities for processing for the hungry- would need certification. Difficult to follow necessary procedures for that to load onto trailer. Will need to dispatch on site. After that, landowner decides what to do with it.

15:19 Mark Enders- Upper San Marcos River WPP Updates

Background:

- SM watershed initiative in 2012 to develop WPP
- Address TDS impairment
- WPP accepted in 2018
- City of SM took over implementation

Sessom Creek stream restoration and sewer line rehab project:

- Phase 1 completed may 2023
- 400 acres approximately, but developed before stormwater mitigation requirements
- Highly degraded channel and incision.
- Plant restoration in banks, removal sanitary sewer overlines, removal nonnative plants
- Phase 2 will use natural channel design to restructure channel

Downtown Alley reconstruction project

--reconstruct kissing alley and jacks alley in downtown SM

-- includes replacement of about 1700 ft2 existing pavement with permeable paver surface and underdrain system as pilot study

-- finalizing design, estimated construction start date Sept 2025

Edward Aquifer Habitat Conservation Plan (EAHCP) Implementation

- Continuing to implement endangered species habitat measures in upper SM river as part of EAHCP
- Management for recreation, plant restoration, fish management, litter removal, riparian restoration, etc.

# Questions

Are there maintenance concerns for permeable pavers- don't want to use them under heavy loading. Intend to sweep regularly to upkeep them

15:30 Jonas Rosenthal- Blanco Cypress Watershed Hays county watershed coordinator

- Position funded interlocal agreement May 2024?
- 3 year pilot program- hope that it will grow into a county wide program.
- Watershed coordinator duties list: lead WPP implementation plan, monitoring/data analysis, education, stakeholder development, etc
- New watershed coordinator went to a large number of trainings and partnership development events
- Being trained on QAPP, SWQM procedures, Texas stream team, etc
- Public outreach and training: Sept 24 Texas watershed steward workshop with over 80 attendees, March 2025 TX well owner network workshop with 110 private well samples screened
- Outreach education with parks program. Austin international school Jacobs well field trip April 2025
- Group visits Feb and march was 33 groups over 1000 teachers and students
- Installation of 30+ "no dumping signs"
- Creation of Hays County Environmental Task Force
- Hays county parks and open spaces bond approved by voters 202 for \$75 mill + matching funds

- Water availability another main issue: depletion of groundwater- looking at different strategies to address water availability demands.
- This coming year: public trainings/outreach/ed resources include several sources
- Watershed coordinator goals 2025-26:
  - Examples educating businesses that need permits that do not have them
  - Facilitate discussions on illegal dumping
  - Hays county environmental task force meeting to brainstorm ways to reduce stormwater issues, illegal dumping
  - $\circ$   $\;$  Work with groups such as environmental naturalists

# Questions:

Have you heard more about bill about ability to change funding structure: can't remember exact status of bill. Counties should work on getting more authority to regulate stormwater and do enforcement. Issue with illegally bringing fill into floodplains. Good relationship with district attorney can be good.

15:49 Annalee Epps Geronimo And Alligator Creeks watershed update

- New website has come online!
- GC/AC watershed: around Seguin and New Braunfels
- 2008 bacterial impairment identified
- Lots of growth and land use change in past 10 years in watershed.

WPP: 2008 impairment, 2009 WPP initiated, 2012 WPP accepted

# Education:

- Free courses offered. Includes low impact development, stakeholder meeting, healthy lawns healthy waters, feral hog management workshop, lone star healthy streams
- Outreach: continued to do fall and spring cleanups, attended comal county agrifest, farmers market booths

Spring cleanup on April 12<sup>th</sup>. 13 sponsors. NB and Seguin locations. 158 volunteers

• Alamo group also participated in cleanup on a Friday during workday

Growing social media presence as well as the new website.

Questions/comments

SODL has some of the best demonstration projects for some things (native grass beds, permeable pavers). Encourage people to go out to SODL to view pilot projects. They are hoping to work more with some restoration and other projects as well.

15:58: final updates. Please contact GBRA contacts if anything is needed.