# Mid and Lower Cibolo Creek Watershed Meeting Overview

Clare Entwistle Texas Water Resources Institute





### Topics for Today

- Review of previous meeting & Update on Formation of Steering Committee/Work Groups
- Estimating Pollutant Sources
- Needed load reductions
- Next Steps & Open Discussion





# **Review of Previous Meeting**





### Watershed Waterbodies

- Mid-Lower Cibolo Creek (~92 miles)
- Martinez Creek (~26 miles)
- Salatrillo Creek (~11 miles)
- Clifton Branch (~8 miles)



### Summary of Water Quality Conditions

- Ongoing primary contact recreation impairment in Lower Cibolo & Clifton Branch due to E. coli bacteria
- Concern in Martinez Creek due to E. coli bacteria
- Dissolved Oxygen impairment in Clifton Branch, improving DO in Mid Cibolo Creek
- Nutrient concerns based on TCEQ screening levels in the Mid Cibolo, portion of Lower Cibolo, Martinez Creek, and Salatrillo Creek







# What is a Watershed Protection Plan?

- Watershed Protection Plans (WPP) address complex water quality issues across multiple jurisdictions
- ⊙ The goal is to improve, restore or maintain good water quality within a particular watershed
- WPPs are tools to better leverage the resources of local governments, state and federal agencies, and non governmental organizations
- WPPs are a voluntary, proactive approach to integrating activities and prioritizing BMP implementation





### Key Elements of Watershed Plans

- Identification of Sources of Bacteria
- Estimated Loading Reductions Needed
- Description of Management Measures
- Education and Outreach Needed
- Schedule for Implementation
- Implementation Milestones
- Possible Sources of Financial Assistance and Estimated Costs
- Measures of Success (i.e. indicators to measure reductions)
- Monitoring plan to evaluate effectiveness





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### Mid and Lower Cibolo Creek Watershed Protection Plan Development

About

gs Reports

Resources

The Mid and Lower Cibolo Creek Watersheds are located in Guadalupe, Bexar, Wilson, and Karnes counties. The headwaters of the watershed are located in the developing I-35 corridor North and East of San Antonio. Cibolo Creek meanders south approximately 90 stream miles before its confluence with the San Antonio River and includes Martinez Creek, Salatrillo Creek, and Clifton Branch (Location Map link).

In 2004 and still in 2014, the Texas Commission on Environmental Quality (TCEQ) listed the Lower Cibolo Creek as an impaired water body for primary contact recreation due to elevated levels of *E. coli* bacteria. Excessive amounts of the indicator bacteria *E. coli* in a water body signify an increased risk for disease-causing pathogens to be present in the water body. Both *E. coli* bacteria and other pathogenic organisms that may be present in Lower Cibolo Creek come from the fecal material of birds and warm-blooded mammals. The mid and Lower Cibolo Creek also have concerns for elevated levels of nitrate, total phosphorus, and depressed dissolved oxygen levels, which can hinder aquatic life.

Furthermore, the Mid and Lower Cibolo watersheds have seen increased residential development, as well as increased hydraulic fracturing activity associated with the Eagle Ford Shale formation. With this development, it is increasingly important to develop a plan that protects the watershed's creeks and streams.

#### Contacts

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### Mid and Lower Cibolo Creek Watershed Protection Plan Development

About Meetings Reports Maps Resources

### Upcoming Meetings

#### **Cibolo Creek General Stakeholder Meeting**

Thursday, August 31, 2017 6-8 PM La Vernia Chamber of Commerce Hall 12301 US Hwy 87 W

#### Past Meetings

July 18, 2017 General Stakeholder Meeting

- Agenda
- Presentations
  - Meeting Overview
  - Watershed Characteristics
  - Next Steps and Timeline

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May 18 & 30, 2017 General Stakeholder Meetings

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#### Texas Water Resources Institute

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Phone: 979.845.1851 Fax: 979.845.0662 Email: <u>twri@tamu.edu</u> TWRI and the <u>Texas A&M Natural Resources Institute</u> are working together to foster and communicate research and educational outreach programs focused on water and natural resources science and management issues in Texas and beyond.



### Mid and Lower Cibolo Creek Watershed Protection Plan Development

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#### Resources

- San Antonio River Authority
- Watershed Wise Program
- Coping with Feral Hog
- Septic Systems
- Tips for Maintaining your Septic System
- Tips for Maintaining your Aerobic Septic System

Previous Watershed Protection Plans

- Navasota River WPP
- Plum Creek WPP
- Geronimo and Alligator Creeks WPP

Example Watershed Protection Plans

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# Steering Committee & Ground Rules

Clare Entwistle Texas Water Resources Institute





### **Entities Represented**

- Cibolo Creek Municipal Authority
- ⊙ Guadalupe County Farm Bureau
- City of Marion
- Output State
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- Guadalupe County Commissioner
- Wilson County Farm Bureau
- Private Landowner
- Evergreen UGWCD
- City of Stockdale
- Wilson County SWCD
- SARA







# Cibolo Creek Stakeholder Group Ground Rules





### Purpose and Goals Steering Committee

- Purpose: Facilitate local stakeholder input and development of the Watershed Protection Plan
- Goals: Develop a WPP for bacteria and depressed dissolved oxygen impairments
  - ensure local perspective is included in the development of the implementation plan
  - Encourage an open dialogue on water quality issues
  - Ensure all pollution source categories identified in the 2014 Integrated Report are addressed
  - Pursue successful implementation of the WPP once it is developed





### Membership

- Steering Committee: Advisory group to identify and represent insight, suggestions, and concerns from the stakeholders. The Committee will serve as the decision-making body
- Stakeholders: All individuals and organizations in the watershed that affect or are affected by the water quality problems, decisions, or projects. Help develop and implement actions to improve water quality.





### Representation

- The Committee will include a variety of stakeholders that reflects the diverse interest within the Mid and Lower Cibolo Creek watershed
- Comprised of a reasonable number of members (no more than 24 stakeholders)
  - A larger number can be sought if deemed necessary by the group
  - Any additional entities that should be represented can be sought and added into the committee.





### Replacements

- Committee members may be replaced if unable to continue serving.
  - New Committee member should be from the same area/affiliation as the member being replaced
  - Can be identified by outgoing member and agreed upon by other committee members





### **Alternates and Absences**

- Those unable to attend a meeting may send a substitute, provide input via another Committee member or send input via email to TWRI, SARA, or TSSWCB.
- Three or more absences in a row of which TWRI, SARA, or TSSWCB was not informed of beforehand and/or no designated alternate was present constitutes a resignation.
  - Absence will not count against you if we are informed beforehand or an alternate is present to serve in your absence.





## Meetings

- Meetings are open to the public
- Observes may make comments or ask questions
- Location and Arrangements are the responsibility of TWRI based on Committee's preference
- Agenda will be created by TWRI with consultation of Committee members, SARA, and TSSWCB.
- TWRI or a designated representative will be responsible for meeting notes/minutes
- Quorum: To conduct official business of the Committee, a quorum must be present.
  - 51% of designated Committee members or alternates present





### **Decision-Making Process**

• Committee makes decisions by consensus rather than voting

• Quorum must be present for discussion and consensus vote.





### Ground Rule Acceptance

- Any changes/edits now before adoption?
- Once adopted, ground rules may be changed by consensus of the Committee members
- Work Group meetings will adhere to the Ground Rules described and will be informed of this before participating in work groups.





# Questions?

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