

Local Watershed Protection Plans

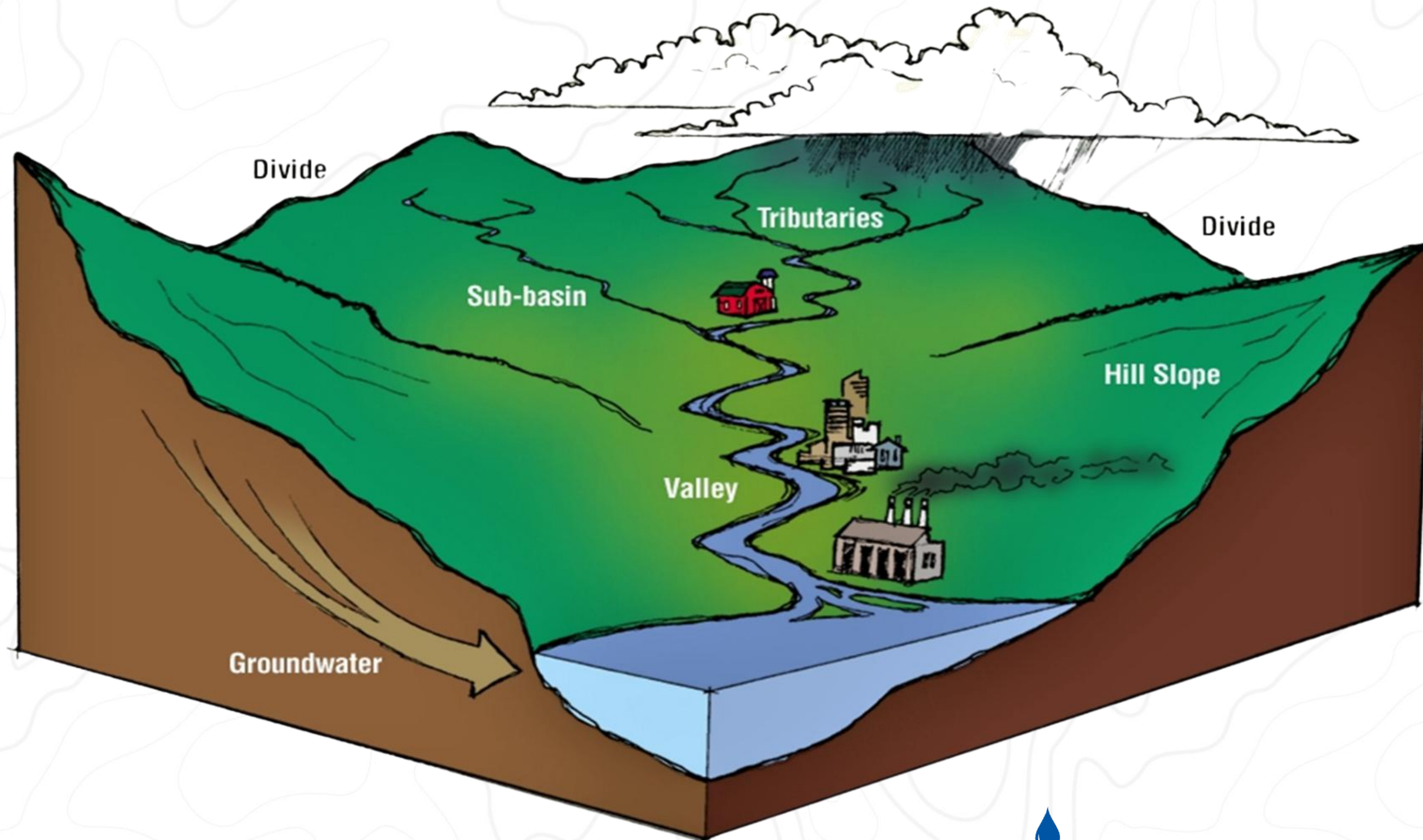
April 10, 2026

EAC | Mary Michael Zahed, Program Specialist

What is a Watershed?



What is a watershed for real?

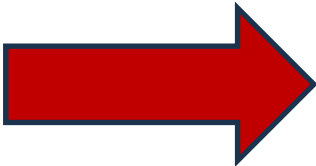


Which watershed do you live in?



2026 TCEQ Integrated Report of Surface Water Quality

Segment ID	Segment Name	AU ID	Impairment Description	Year First Listed	Impairment Category
1814	Upper San Marcos River	1814_01	Total dissolved solids in water	2010	5r
		1814_02	Total dissolved solids in water	2010	5r
		1814_03	Total dissolved solids in water	2010	5r
		1814_04	Total dissolved solids in water	2010	5r
1815	Cypress Creek	1815_01	Depressed dissolved oxygen in water	2020	5r
			Impaired fish community in water	2020	5c
			Impaired macrobenthic community in water	2020	5c
1817	North Fork Guadalupe River	1817_01	Impaired fish community in water	2020	5c
			Impaired macrobenthic community in water	2020	5c
1818	South Fork Guadalupe River	1818_01	Impaired fish community in water	2020	5c
			Impaired macrobenthic community in water	2020	5c
1901	Lower San Antonio River	1901_02	Impaired fish community in water	2012	5c
1901A	Escondido Creek	1901A_01	Bacteria in water (Recreation Use)	2014	5c
1901B	Cabeza Creek	1901B_01	Bacteria in water (Recreation Use)	2014	5c
1901F	Ecletto Creek	1901F_01	Bacteria in water (Recreation Use)	2020	5c
			Depressed dissolved oxygen in water	2016	5c
1902	Lower Cibolo Creek	1902_01	Bacteria in water (Recreation Use)	2004	5r
		1902_02	Bacteria in water (Recreation Use)	2004	5r
		1902_03	Bacteria in water (Recreation Use)	2004	5r
		1902_04	Bacteria in water (Recreation Use)	2004	5r
		1902_05	Bacteria in water (Recreation Use)	2004	5r
1902A	Martinez Creek	1902A_01	Bacteria in water (Recreation Use)	2016	5r
1902B	Salitrillo Creek	1902B_01	Bacteria in water (Recreation Use)	2010	5r
1902C	Clifton Branch	1902C_01	Bacteria in water (Recreation Use)	2014	5r
			Depressed dissolved oxygen in water	2014	5r
1903	Medina River Below Medina Diversion Lake	1903_01	Bacteria in water (Recreation Use)	2010	5r
		1903_02	Bacteria in water (Recreation Use)	2010	5r
		1903_03	Bacteria in water (Recreation Use)	2010	5r
1905	Medina River Above Medina Lake	1905_01	Bacteria in water (Recreation Use)	2020	5c



Impairments in 2026

Medina River

- Impaired for bacteria, concern for nitrate

Cibolo Creek

- Impaired for bacteria, low levels of dissolved oxygen, high nutrient levels

San Antonio River

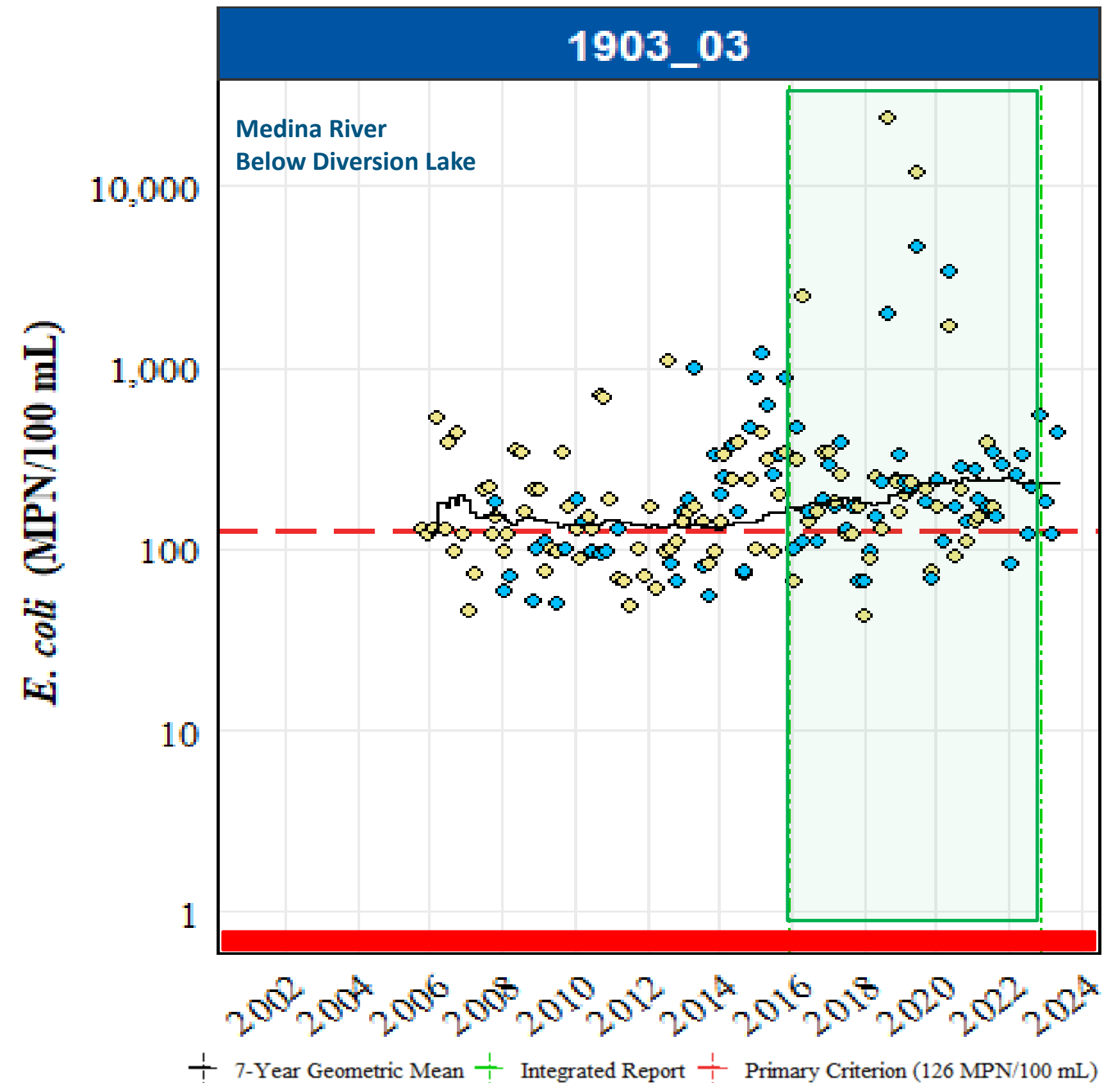
- Impaired for bacteria, impaired fish community

Leon Creek

- Impaired for bacteria and PFAS

Salado Creek

- Low levels of dissolved oxygen



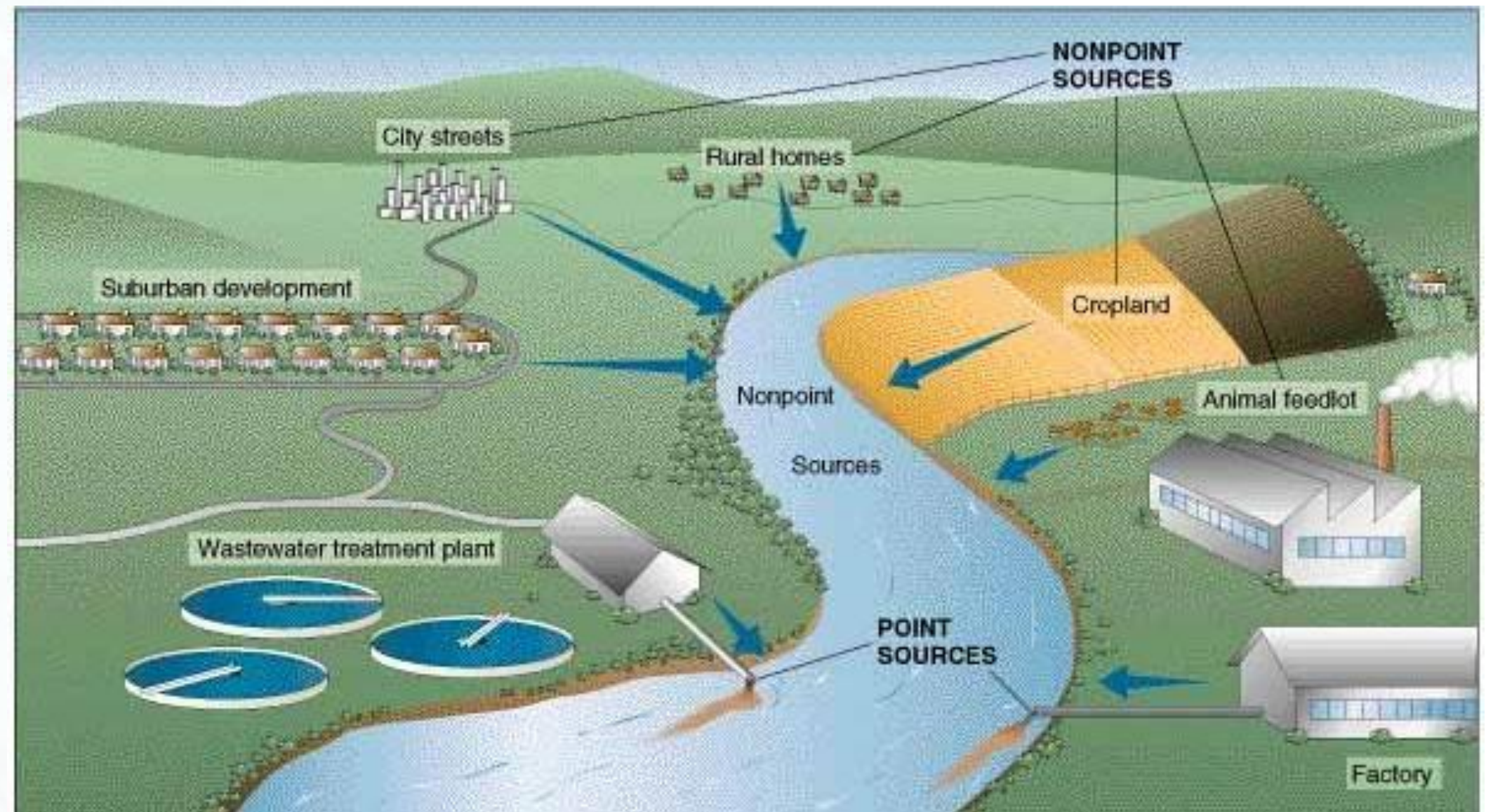
Pollution Sources

Point Source

- Wastewater treatment plants, factories

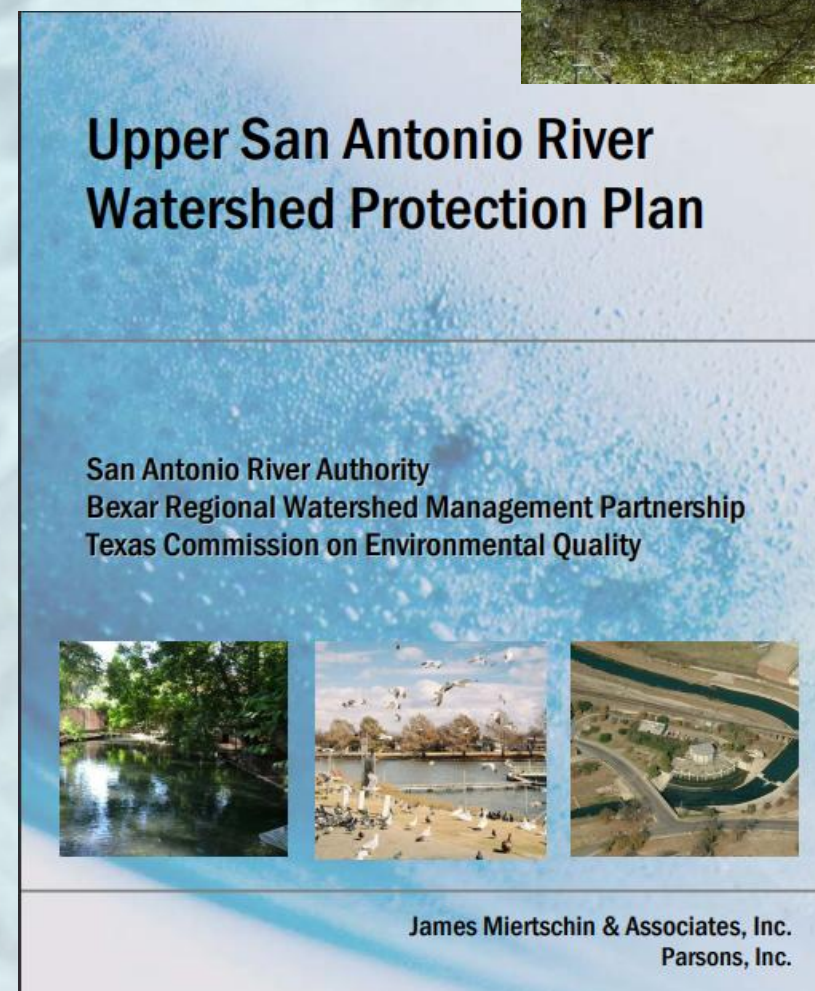
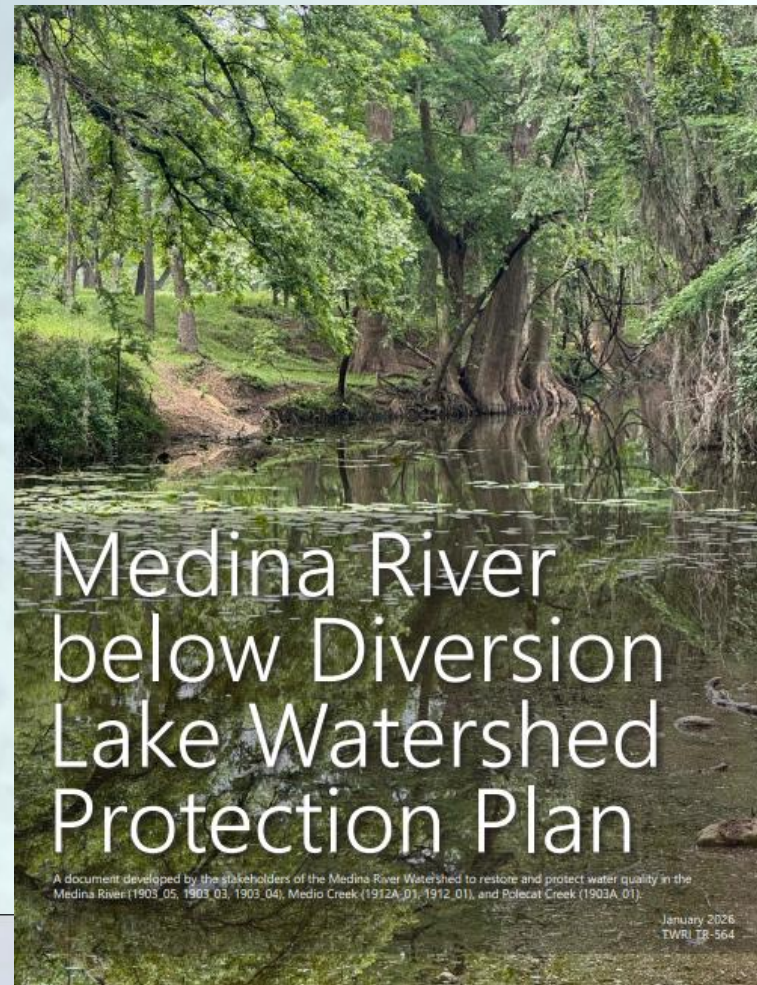
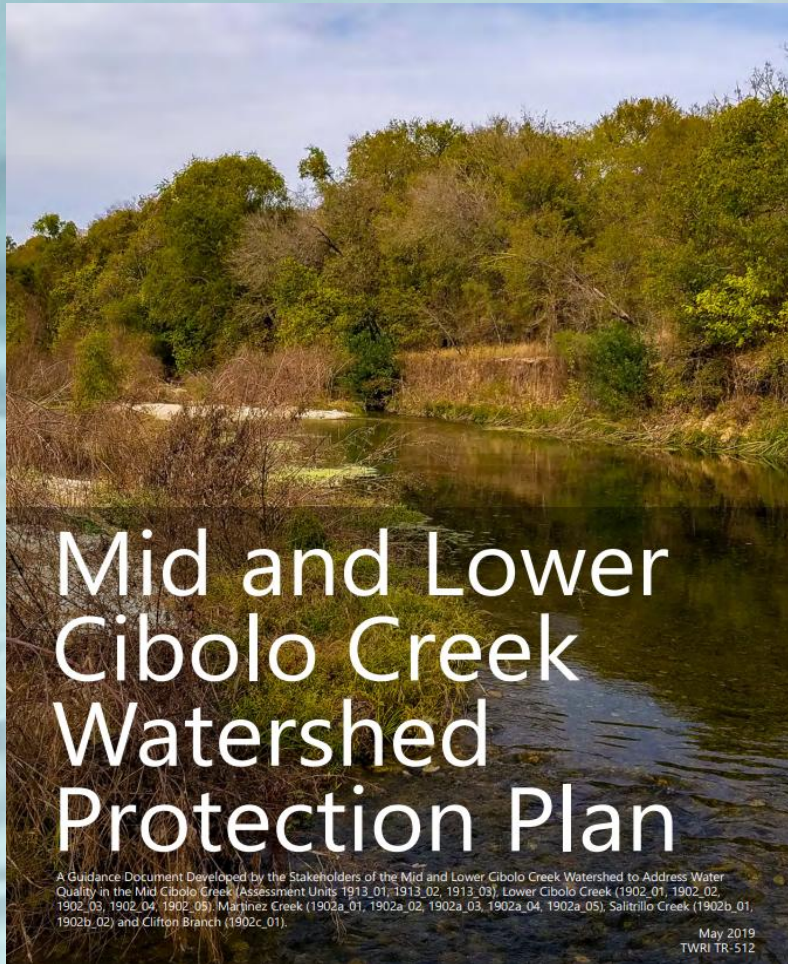
Nonpoint Source

- Feral hogs/wildlife
- Pet waste
- Stormwater runoff
- Livestock
- Abandoned wells
- Failing septic systems



Strategies For Improving Water Quality

- **Total Maximum Daily Load (TMDL)** – Driven by federal Clean Water Act requirements
- **Total Maximum Daily Load Implementation Plan (I-Plan)** – Stakeholder driven plan that outlines how the TMDL will be achieved
- **Watershed Protection Plan (WPP)** – Stakeholder driven plan that holistically addresses all impairments and concerns in a watershed.



Watershed Protection Plans (WPPs):

- Voluntary plan of action
- Stakeholder driven
- Local EPA approved
 - Mid and Lower Cibolo Creek WPP (2019)
 - Upper San Antonio River WPP (2006)
 - Medina River Below Diversion Lake WPP (2025)





Find segment or address



Legend

Segments (Line)

— Not Impaired

— Impaired

Segments (Polygon)

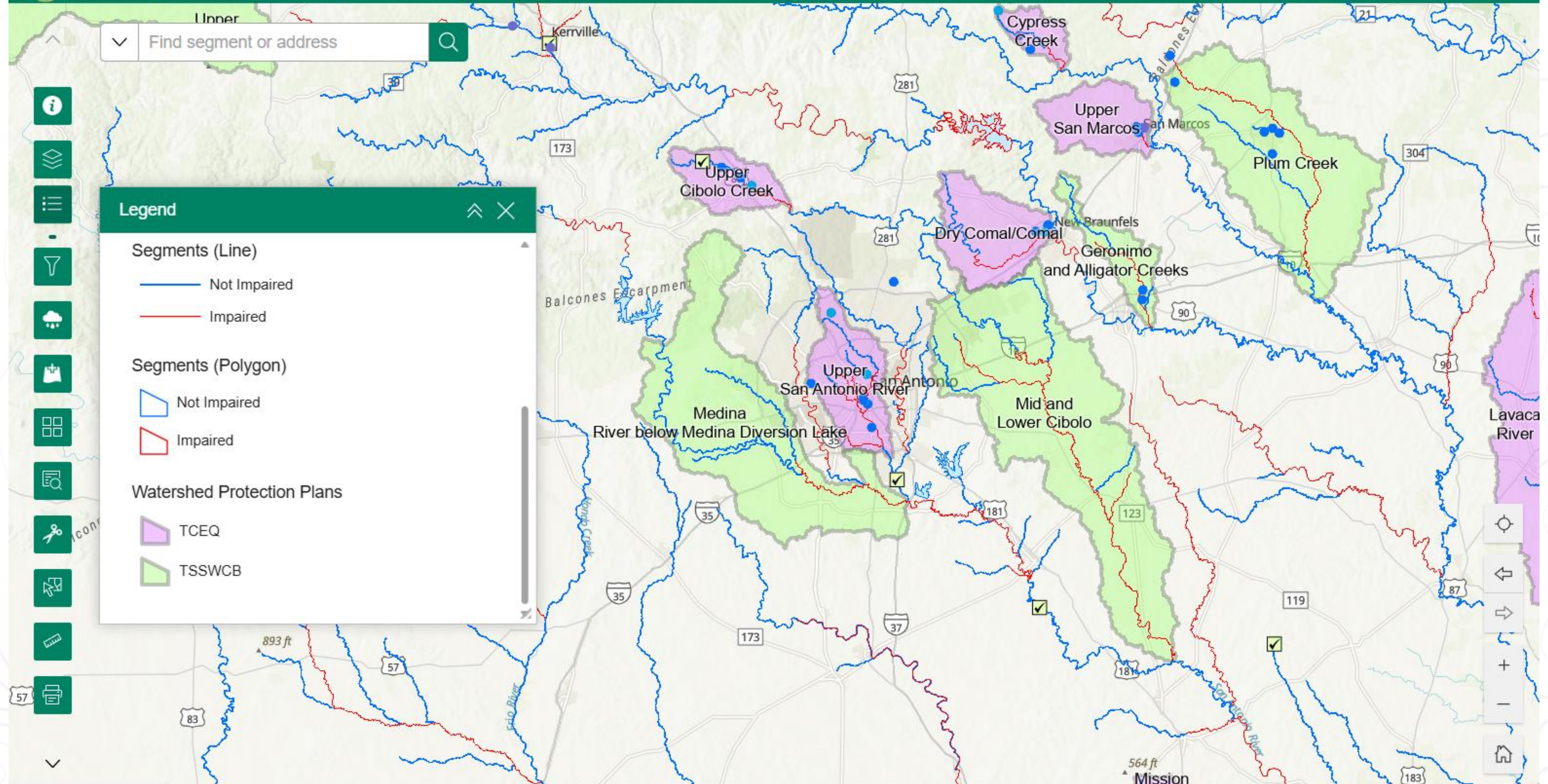
Not Impaired

Impaired

Watershed Protection Plans

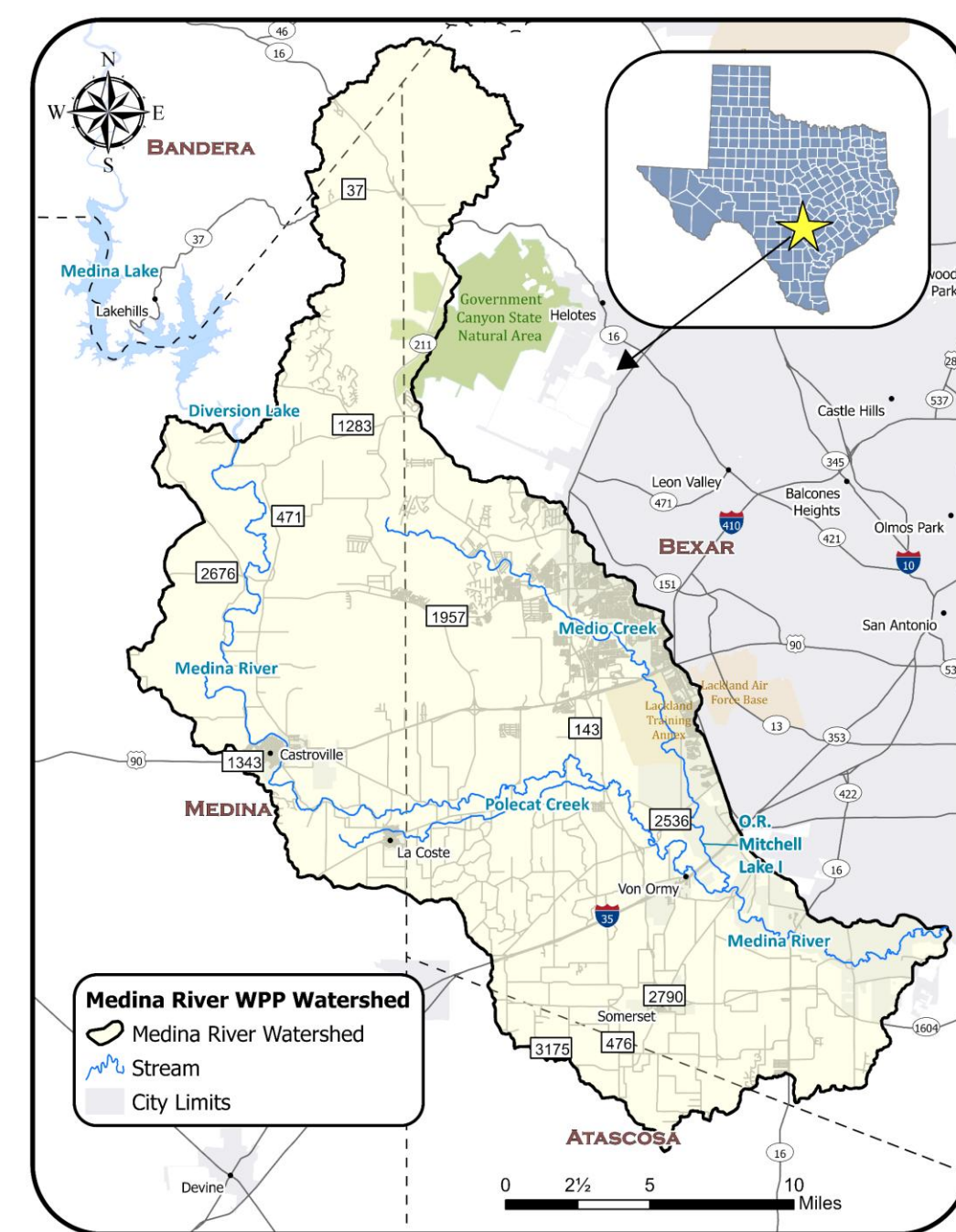
TCEQ

TSSWCB



Medina River Below Diversion Lake WPP

Mid & Lower Cibolo Creek WPP



Medina River

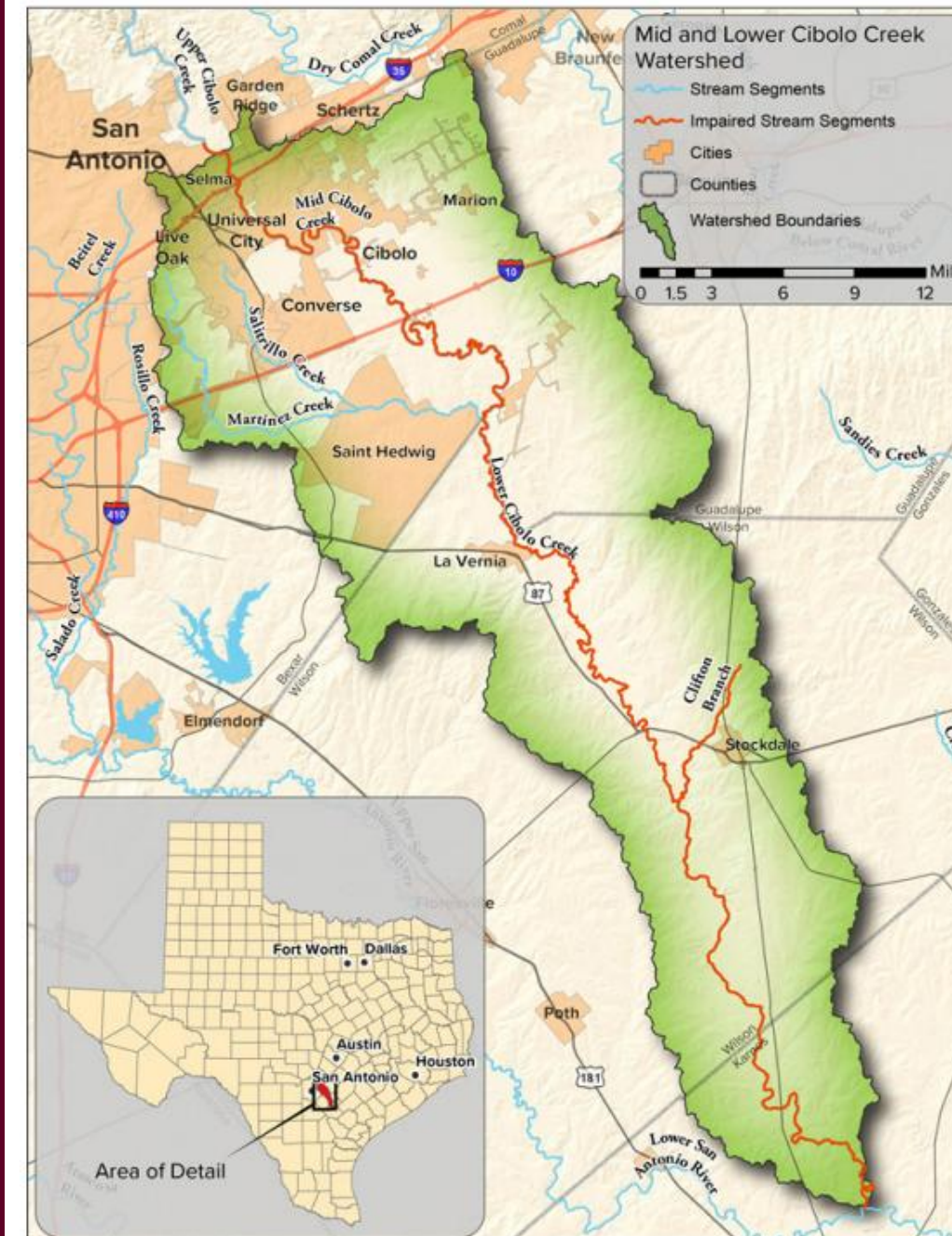
- ✓ impaired for bacteria
- ✓ concern for nitrate

Medio Creek

- ✓ impaired for bacteria

Polecat Creek

- ✓ not impaired
- ✓ no concerns



Cibolo Creek

- ✓ impaired for bacteria

Martinez Creek

- ✓ impaired for bacteria

Salitrillo Creek

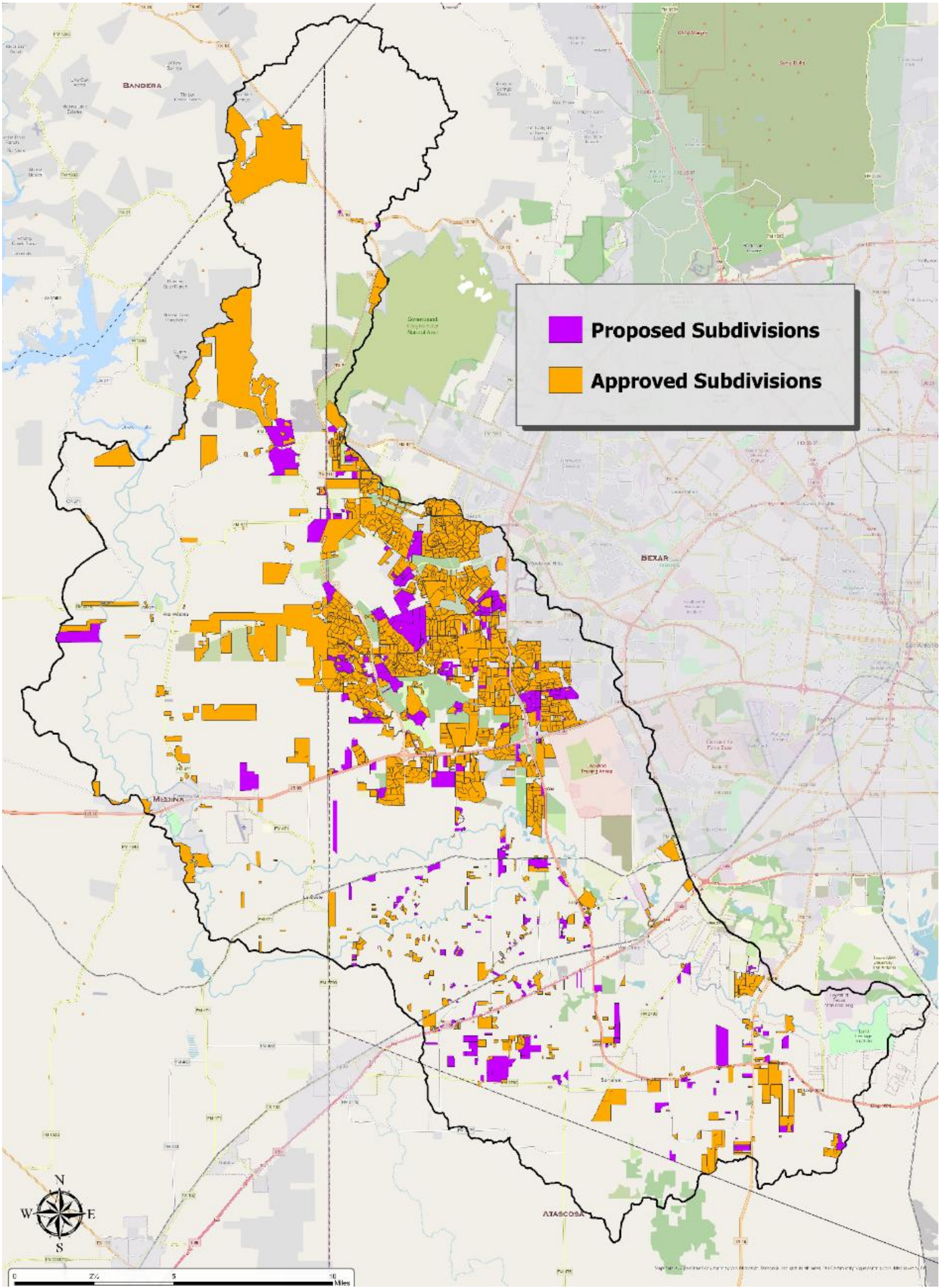
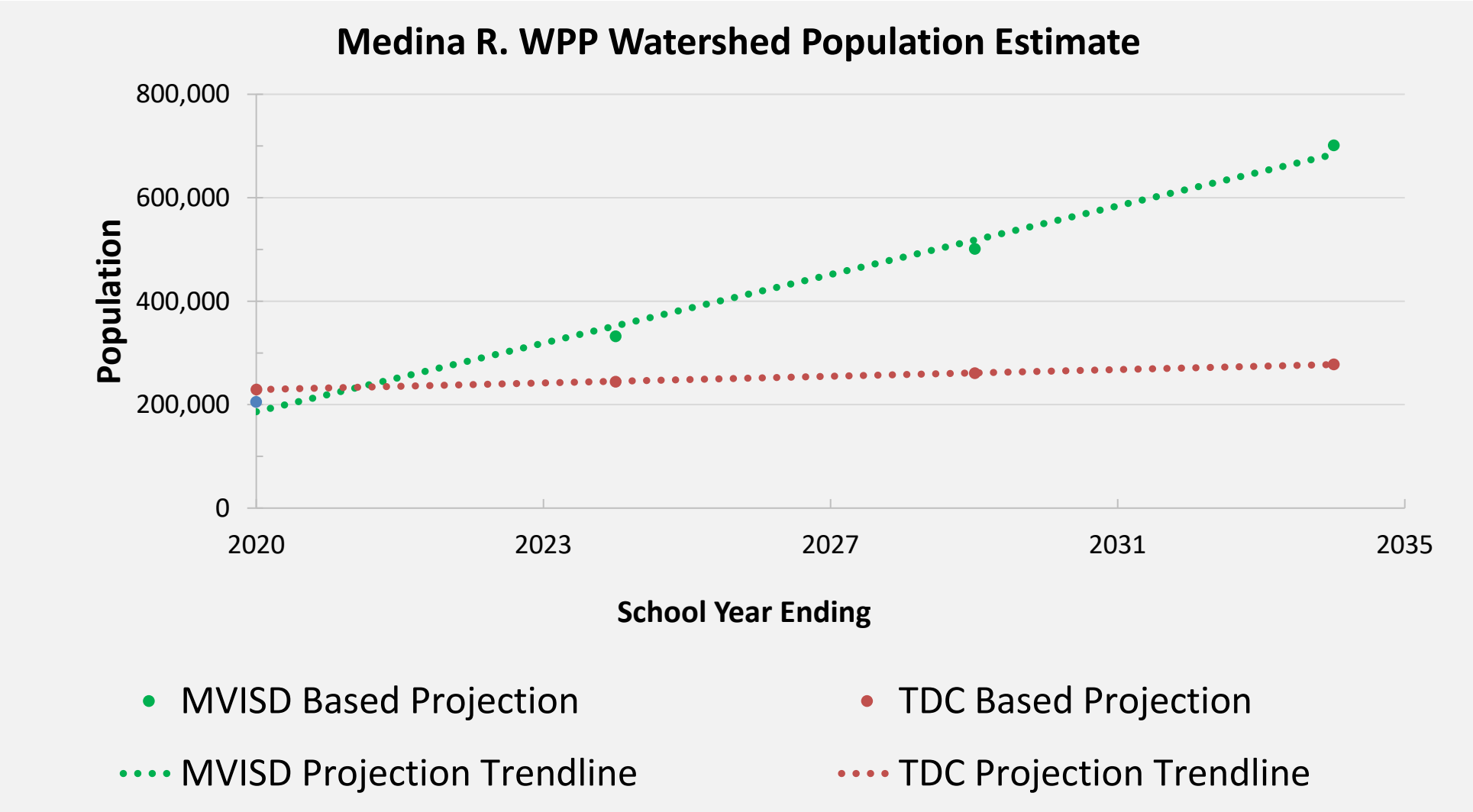
- ✓ impaired for bacteria

Clifton Branch

- ✓ impaired for bacteria
- ✓ low DO

Example of Stakeholder Input: Medina River Population Trends

Estimated population increase of 240%
2020 - 2035



Existing and Proposed Subdivisions
as of May 2025 (~ 52k acres, ~20%)

Management Measures for Load Reductions

Chapter 6 Recommended Implementation Strategies

Reduce SSOs and Unauthorized Discharges.....

Address Failing On-Site Sewage Systems

Manage Pet Waste

Manage Stormwater Runoff.....

Implement Water Quality Management Plans and Conservation Plans

Reduce Feral Hog Population

Reduce Illicit Dumping.....

Restore Degraded Streams and Riparian Areas

Conserve Land

Management Measure – Manage Abandoned Wells

So, what are we doing?



Hands-on workshops



Riparian Restoration Project



Getting out in the community!!



Highlighting Success Stories



Medina River Watershed Protection

244 followers • 80 following

Through education, outreach, and community-driven action, we're working to improve the water quality of the Medina River below Medina Diversion Lake. The Watershed Protection Plan targets pollution reduction from multiple sources across the watershed.

 Environmental Conservation Organization



 Sign Up

 Following

 Search this Page

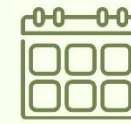
**“Only if we understand, will we
care. Only if we care, will we
help. Only if we help shall all
be saved.”**

Jane Goodall

MID & LOWER CIBOLO CREEK WATERSHED PROTECTION PLAN: PUBLIC MEETING



**La Vernia Chamber of
Commerce Hall**
West, 12301 U.S. Hwy 87 W,
La Vernia, TX 78121



Wednesday
April 29, 2026
1:00 PM - 3:00 PM



- Learn about the water quality in the Cibolo Creek
- Contribute to the direction of the Watershed Protection Plan
- Hear about upcoming projects and events to address local water resources along the creek
- Learn more at <https://cibolo.tamu.edu/> or our facebook:



MEETING INCLUDES SNACKS & COFFEE

RSVPs appreciated but not required

Contact Mary Michael Zahed at mary.lipfordzahed@ag.tamu.edu
or 979.314.8092

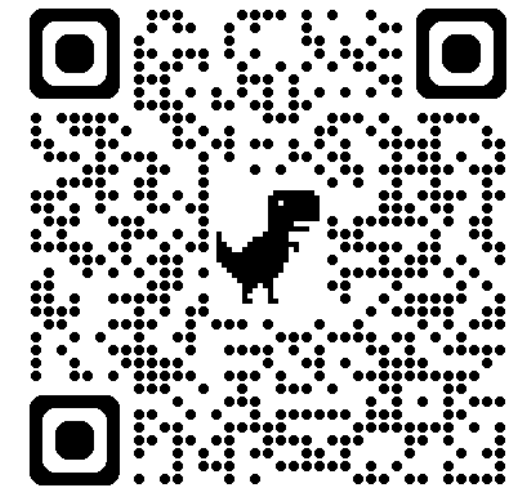
SAVE THE DATE: Texas Well Owners Network, Rainwater Harvesting, and Healthy Lawns

June 11th – Floresville

June 12th – Poteet

Time/Location: TBD

Subscribe for updates on the workshop:



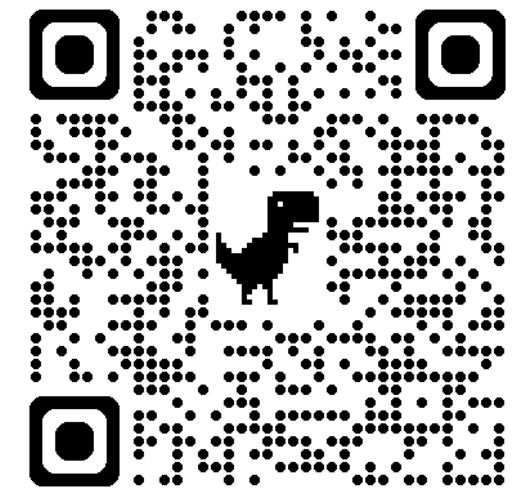
Test your private well water, learn how to build a rain barrel, talk to
your local Ground Water Conservation District and more.



SAVE THE DATE: Medina River LandSmart Workshop

Saturday June 20th
9:00 am – 2:00 pm
Location: TBD

Subscribe for updates on the workshop:



Targeting small and new landowners on stewarding their land, tax options, bee keeping, and knowing your soil

Medina River Below Diversion Lake

Mid & Lower Cibolo Creek WPP

Follow us on
Facebook!





Medina River Watershed Protection

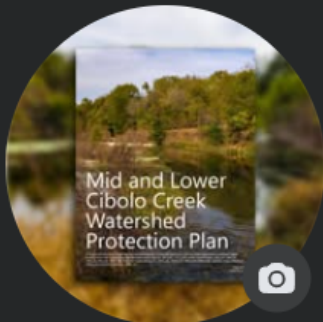
244 followers • 80 following

Through education, outreach, and community-driven action, we're working to improve the water quality of the Medina River below Medina Diversion Lake. The Watershed Protection Plan targets pollution reduction from multiple sources across the watershed.

Environmental Conservation Organization



[Sign Up](#)[Following](#)



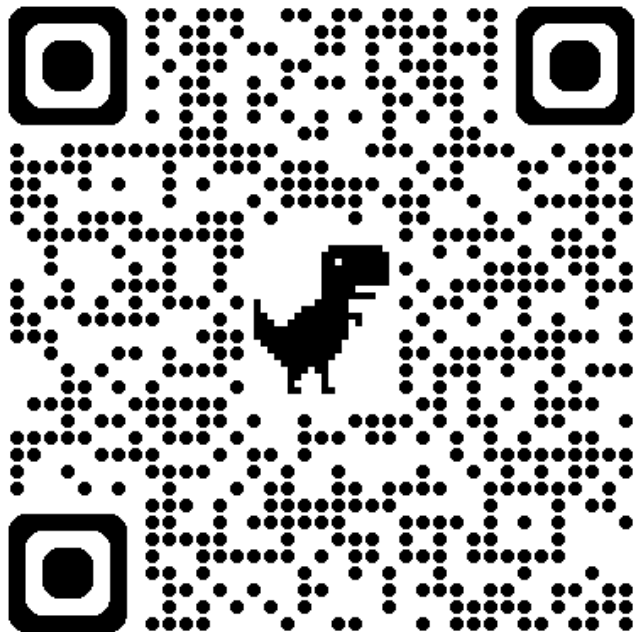
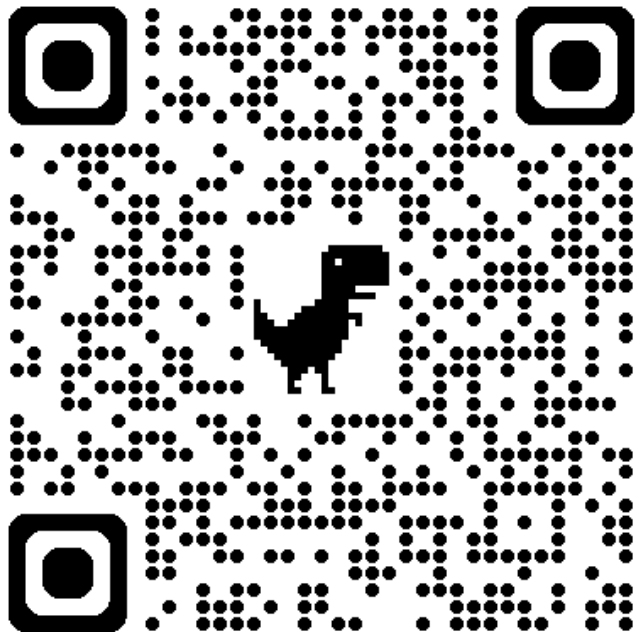
Cibolo Creek Watershed Partnership

10 followers • 43 following

Through education, outreach, and community-driven action, we're working to improve the water quality of the Mid and Lower Cibolo Creek. The Watershed Protection Plan targets pollution reduction from multiple sources across the watershed.

Environmental Conservation Organization

[Professional dashboard](#)[Edit](#)[Advertise](#)



Thank you!

Mary Michael Zahed
Program Specialist
Texas Water Resources Institute
979-314-8092
mary.lipfordzahed@ag.tamu.edu

Medina River Project Website:
<https://medina.twri.tamu.edu/>

Cibolo Creek Project Website:
<https://cibolo.tamu.edu/>

*Funding for this project is provided through a Clean Water Act Section 319
Nonpoint Source Grant from the Texas State Soil and Water Conservation Board
and the U.S Environmental Protection Agency*