

Progress and Partnerships Implementing the Arroyo Colorado Watershed Protection Plan

Samantha Colunga

Texas Water Resources Institute – Texas A&M AgriLife

May 12, 2026



"This work is funded by Clean Water Act Section 319(h) nonpoint source grants from the U.S. Environmental Protection Agency, administered by the Texas State Soil and Water Conservation Board and the Texas Commission on Environmental Quality."

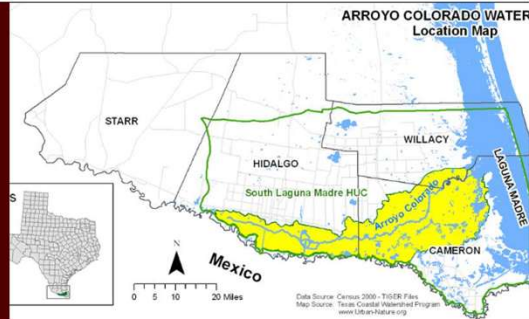
A photograph of a river with a dam structure in the background, overlaid with a white hand-drawn frame containing the text "Progress in the Watershed!". The river is in the foreground, and the dam is in the middle ground. The background shows a hillside with green vegetation and utility poles. The sky is blue with some clouds.

Progress in the Watershed!

The Arroyo Colorado Watershed

Located in the Lower Rio Grande Valley of South Texas, the Arroyo Colorado Watershed extends about 90 miles from Mission and drains into the Laguna Madre.

[READ MORE ABOUT THE WATERSHED](#)



What is a watershed?

An area of land that drains water to a common waterway, such as a stream, lake, or ultimately, the ocean. All land surfaces on Earth are within a watershed.

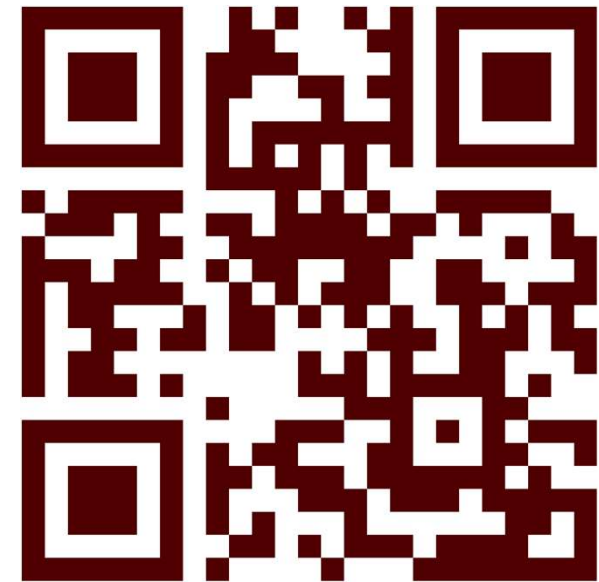
[FIND YOUR WATERSHED](#)

What is a Watershed Protection Plan (WPP)?

A framework for managing water resource quality and quantity within a specified watershed.



Website Updated!



Updates distributed to Mailing List (193 subscribers)



Arroyo Colorado Watershed Partnership

Email Campaign Archive

from Texas Water Resources Institute

[join our mailing list](#)

04/16/2026 - [Join us at these events in the Arroyo Colorado watershed!](#)

03/10/2026 - [Join us at these events in the Arroyo Colorado watershed!](#)

01/13/2026 - [Join us at these events in the Arroyo Colorado watershed!](#)

12/01/2025 - [Reminder: Join us at the Dec. 4 Arroyo Colorado Meeting](#)

11/19/2025 - [Join us for the Dec. 4 Arroyo Colorado Meeting](#)

10/31/2025 - [Join us for upcoming events: Arroyo Colorado Watershed Partnership Update](#)

10/16/2025 - [Arroyo Colorado Watershed Partnership Newsletter](#)

Facebook Updates



Preview	Views
Educational plant signs have be... Published • Dec 12, 2025	2,653
Native rain garden at the Rio H... Published • Dec 6, 2025	1,159
Great team work today at the ... Published • Dec 10, 2025	1,095
Water quality testing at the Arr... Published • Apr 6 at 4:52 PM	801
That's a wrap! After an entire w... Published • Feb 28 at 9:41 AM	577
Great time at World Water Day ... Published • Mar 26 at 4:35 PM	559
Maintaining the garden at Rio ... Published • Mar 15 at 1:36 PM	555
After 3 hours at Adolph Thoma... Published • Mar 23 at 4:52 PM	528
Maintenance Day Part 2 at Rio ... Published • Mar 27 at 7:09 PM	511
Meet the new Arroyo Colorado... Published • Oct 8, 2025	508

Arroyo Colorado Watershed Partnership
Published by Samantha Colunga · April 27 at 10:09 AM ·

Great turn out with the Rain Barrel Workshop at International Museum of Art & Science (IMAS)! Happy to lend a hand! Ten families built a 32 gallon rain barrel to take h... See more

McAllen Public Utility is with **City of McAllen Recycling Center** and **International Museum of Art & Science**.
April 27 at 8:28 AM ·

We loved teaming up with IMAS for the Rain Barrel Family Workshop, bringing the community together to learn, build, and conserve. Special thanks to the McAllen Recyclin... See more

No insights to show · [Create ad](#)

McAllen Public Utility and 6 others · 1 share

Like · Comment · Share

Arroyo Colorado Watersh...

See insights and ads · [Boost reel](#)

2 likes · 1 comment · 1 share

Rio Hondo Middle School
Mar 15 ·

Arroyo Colorado Wate...

Maintaining the garden at Rio Hondo... more

Original audio · Arroyo

3 likes · 1 comment · 1 share

Arroyo Colorado Watershed Partnership
Published by Samantha Colunga · April 7 at 7:23 PM ·

Never too early to get some native plants for Earth Day! Hope to see you there!

Spring PLANT SALE
WEATHER FORECAST
SATURDAY, APRIL 11, 2026

Sat. Spring Plant Sale Day!
40% Chance of Rain...
100% Chance of Great Deals
100% Chance of Plants
With a High of Pollinator Plants
RAIN OR SHINE, THE PLANTS WILL BE HERE!

9:00 AM – 12:00 PM
1390 W. Expressway 83 San Benito, TX 78586

Cameron County Master Gardeners · Cameron County Master Gardener Spring Plant Sale
April 7 at 6:50 PM ·

Saturday: Spring Plant Sale Day
Rain or Shine – The Plants Will Be Here!... See more

Arroyo Colorado Watershed Partners...
Mar 4 · 🌱

The TWRI and Arroyo Colorado Watershed Partnership look forward to supporting and collaborating on this project!

City of San Benito - Government
Feb 2 · 🌱

Big News for San Benito and ALL nature lovers! 🌱... See more

BIG WIN FOR SAN BENITO


CITY AWARDED \$750,000 GRANT

The Texas Parks & Wildlife Commission is funding major improvements at San Benito Wetlands, including:

- Walking trails & accessible benches
- Pollinator gardens & native habitat enhancements
- Pavilion, restroom & interpretive kiosk
- Bird blinds, bike rack & repair station

SAN BENITO WETLANDS

SAN BENITO
THE BOWL OF SOUTH TEXAS




CONSERVE. PROTECT. LEAD. **TEXAS AMERICA 250** News

TEXAS A&M FOREST SERVICE ABOUT US WILDFIRE & OTHER DISASTERS

Home / Grants & Assistance / Community Grants & Programs / Watershed Protection Plan Imple

WATERSHED PROTECTION PLAN IMPLEMENTATION GRANT




Partner Success in & around the Watershed!

- San Benito Wetlands
- City of Harlingen
- IMAS World Water Day and Rain Barrel Workshop
- American Forests preparing for Rio Reforestation

Water News in the RGV

- Data centers
 - Rio Hondo – Soluna Project Kati
 - Harlingen – planning phase with no official proposal (Eneus Energy)
- Groundwater Desalination
 - North Alamo Water Supply and Southmost Regional Water Authority – piloted studies in reverse osmosis (8.5-10 MGD)
 - McAllen Public Utility – geothermal energy to reduce energy use and deep well injection of brine (estimate 6 MGD)
- Seawater Desalination
 - Laguna Madre Water District (5 MGD) – report no adverse environmental impacts

Despite drought, new water supplies are developing in the Rio Grande Valley

Posted on April 15, 2026



Topics

Show all articles

Share



Work Groups

Wastewater Infrastructure

- Improve infrastructure and establish more discharge permits
- Enhanced wastewater treatment and reuse

Education & Outreach

- Educate about the Arroyo Colorado and its watershed
 - Foster local stewardship
- Increase volunteer opportunities

NPS Pollution & Stormwater Management

Habitat Restoration

- Restore and protect natural habitats
- Promote green infrastructure and native plants
 - Water quality monitoring

Agricultural Issues

- Identify high priority education topics to promote voluntary BMP adoption
- Provide workshops and field days about conservative practices



Update to the
Arroyo Colorado
Watershed Protection Plan



Education & Outreach

- Educate about the Arroyo Colorado and its watershed
 - Foster local stewardship
- Increase volunteer opportunities

**Watershed
Model**

**Rainfall
Simulators**

**65.75 hours at
E&O events**

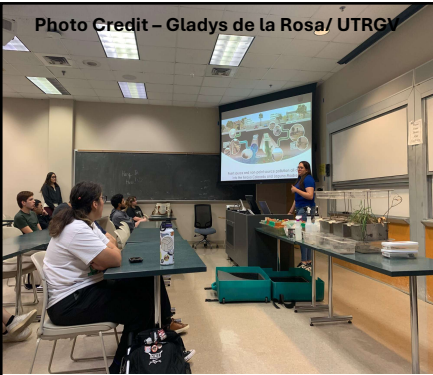


Photo Credit – Gladys de la Rosa/ UTRGV



Photo Credit – Elisa Velador



Photo Credit – Monte Alto ISD



Photo Credit – Elisa Velador



Photo Credit – Monte Alto ISD

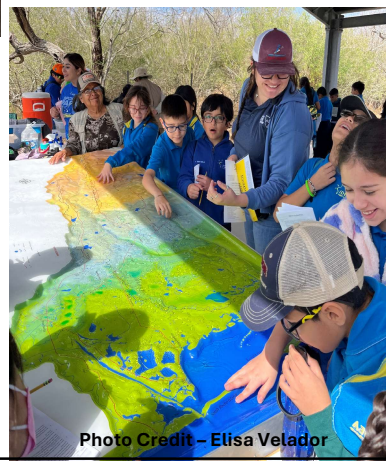


Photo Credit – Elisa Velador

Watershed Model with Partners

- Behind the Gates by East Foundation
 - Record breaking with over 1,900 students
- World Water Day by IMAS
- Women of the Land by East Foundation and Texas Wildlife Association
- Monte Alto ISD

Rainfall Simulators with Partners

- RGV Livestock Show
- Women of the Land by East Foundation and Texas Wildlife Association
- Native Plant Sales by Cameron County Master Gardeners
- Guest Speaker – UTRGV
- Monte Alto ISD





Habitat Restoration

- Restore and protect natural habitats
- Promote green infrastructure and native plants
 - Water quality monitoring

**Trees & native
plants**

**Community clean-
up events**



Photo Credit – Jeremy Ingles Jr. / American Forests



City of Alamo
April 17 at 8:08 AM

Creating a refuge for the butterflies

As The Refuge to the Valley, the City of Alamo is committed to creating spaces where nature can thrive and where the species that pass through our region can find the sanctuary they need.

This year, we are proud to introduce our second butterfly garden, with over 100 native pollinator plants carefully selected to support butterflies, providing the food and habitat they need to grow, rest, and continue their journey.

These small spaces make a big impact, helping protect biodiversity while creating beautiful, meaningful places for our community to enjoy.

Rio Grande Valley Chapter - Native Plant Society of Texas
Roberto Galtan - March 10

The City of Alamo and their Public Library were recipients of NPSOT's Bring Back the Monarch to Texas grant that helped pay for the native plants going into their new landscape. Twenty-six plants went in today and at least twice as many will be added in a couple of weeks. Not only will these plants help our wildlife, they will also help with their children and adult educational programs.

Funded by The National Wildlife Federation

city of mercedes
NATIVE HABITAT CREATION
Volunteers Needed !!

Help us transform our City Parks into beautiful Native Landscapes

1st & 3rd Thursday of Month
8:00AM - 10:00AM

2nd & 4th Thursday of Month
4:00PM - 6:00PM

Meet at the **Mercedes Library** for your assignments

434 S. Ohio Ave
Mercedes, TX 78570

Thank you to our collaborators:



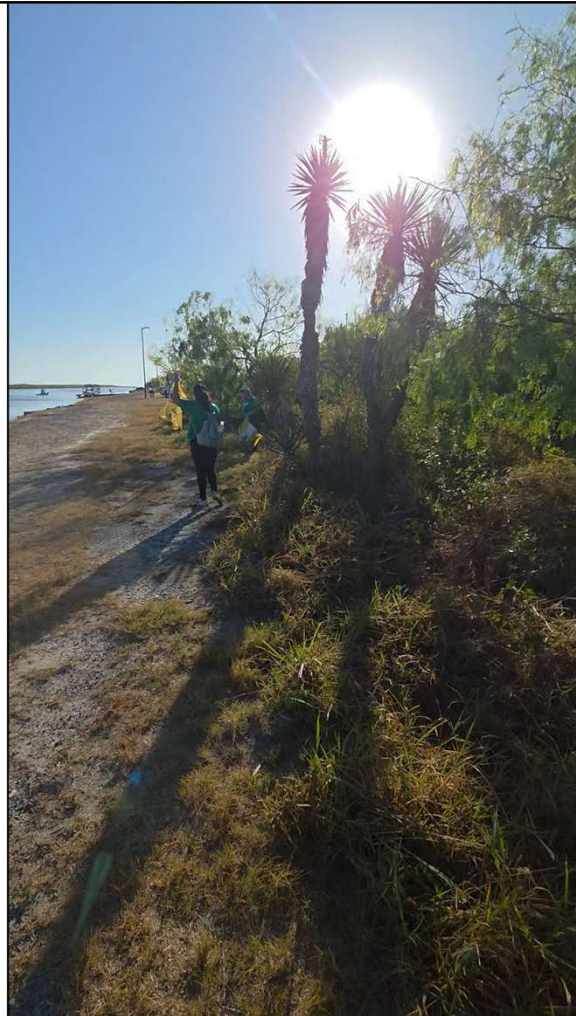
Tree Plantings

- 31st Annual Rio Reforestation by American Forests
- City of Mercedes, Alamo, San Benito, Harlingen, etc.

Native Plants & Gardens

- Texas A&M Master Gardeners
- Native Plant Society of Texas





Community Clean-Ups

- October 2025
 - 30 volunteers
 - 960 pounds of trash collected
- March 2026
 - 1 mile of shoreline
 - 10 volunteers
 - 52 bags of trash collected





Agricultural Issues

- Identify high priority education topics to promote voluntary BMP adoption
- Provide workshops and field days about conservative practices



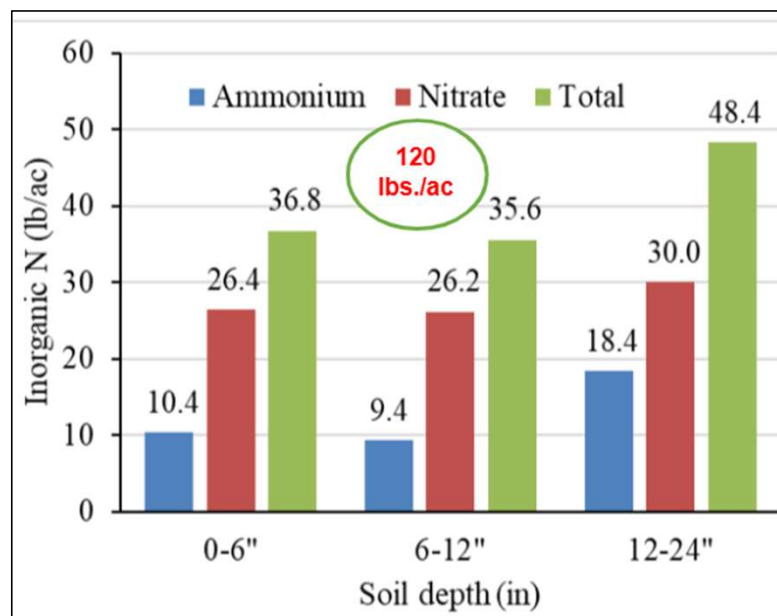
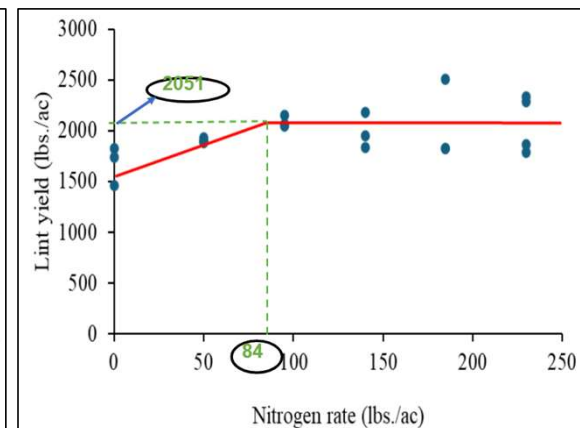
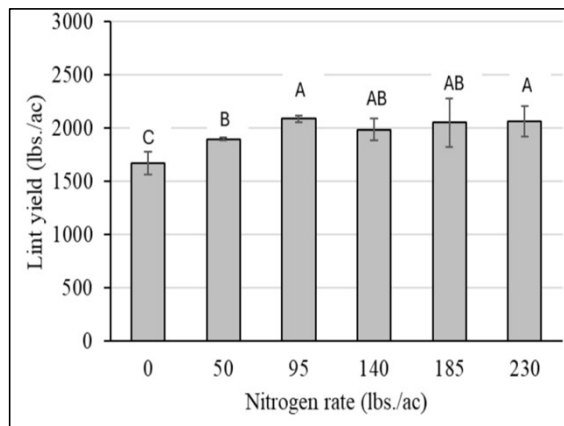
AgriLife



Connecting with Producers

AgriLife

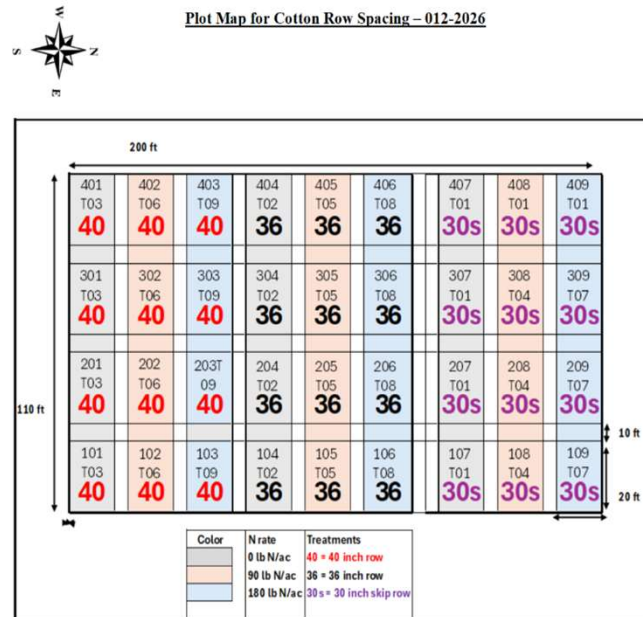
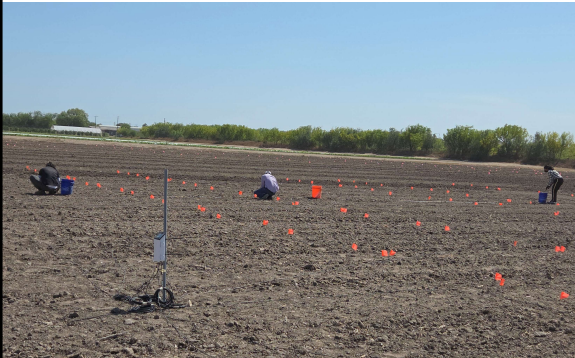
- Lyford, TX
- 60-120 lb. N/ac for cotton (1958)
- No yield increase beyond 95 lb./ac
- Optimal N rate estimated at 84 lb./ac corresponding to 2,051 lbs./ac of lint
- Significant residual N of 120 lbs./ac in top 24 inches of soil
- **Deep soil sampling could lower N fertilizer requirements**





AgriLife

- Determining how row spacing will impact resource utilization efficiency (soil moisture and nutrients)
- Cotton planted at 4 inches apart
- Teros 10 soil moisture sensors



AgriLife

- Business Planning and Tax Management Workshop
- Agribusiness
- Pasture Management
- 70 producers in attendance



"The Agribusiness Way"™ Development Course

By The Tennessee Agriculture Group, LLC

6 Comprehensive Modules

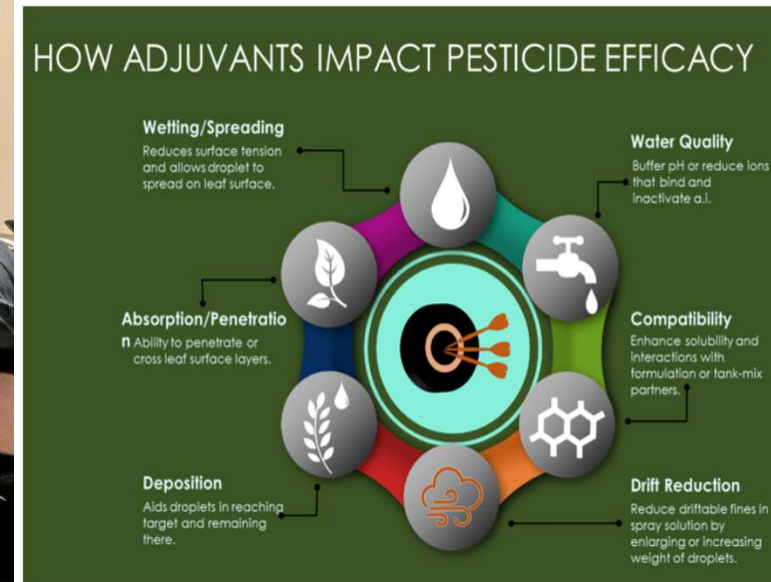
1 Certification Awarded

We equip students with a strong grasp of agribusiness taxation (Schedule F), entity structures, financial statements, and payroll management, helping them reduce financial and operational risks in their agribusiness operations.

Benefits Of Enrolling

- Free of charge
- Improve your financial management
- Uncover more agribusiness assets
- Build confidence in your entity
- Uncover growth strategies for your agribusinesses
- Open more time to tend to correlating agribusiness matters

SCAN TO ENROLL





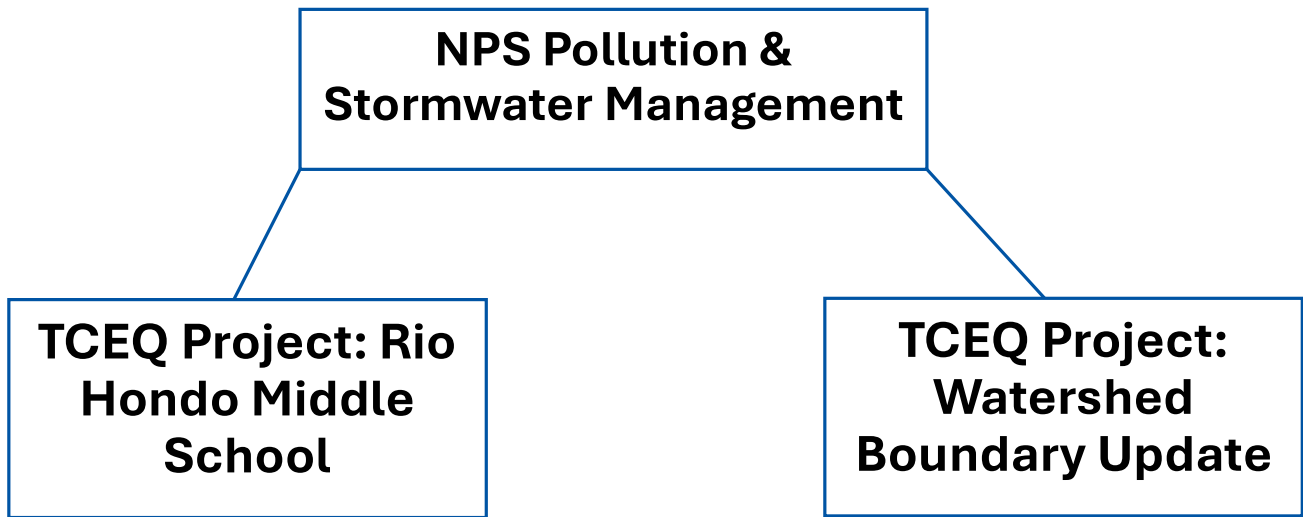
- Hay production
- 23 acres
- From 97 to 150 to 350 bales
- Uses drone to prevent runoff and turn off water when done



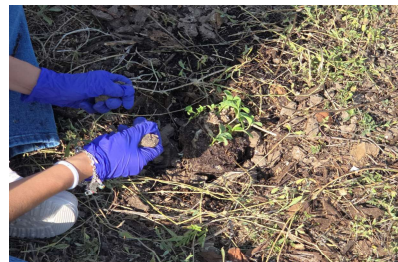
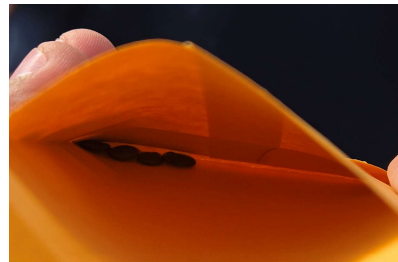
- Row Crop
- Strip Tillage (inputs are controllable)
- \$90 less per acre in terms of labor and machinery
- 20% less fertilizer
- Less seeding (more spaced-out rows)
- Trial and error producer



Project Updates!



As rain falls on impervious surfaces, such as roofs and sidewalks, water flows rapidly across...

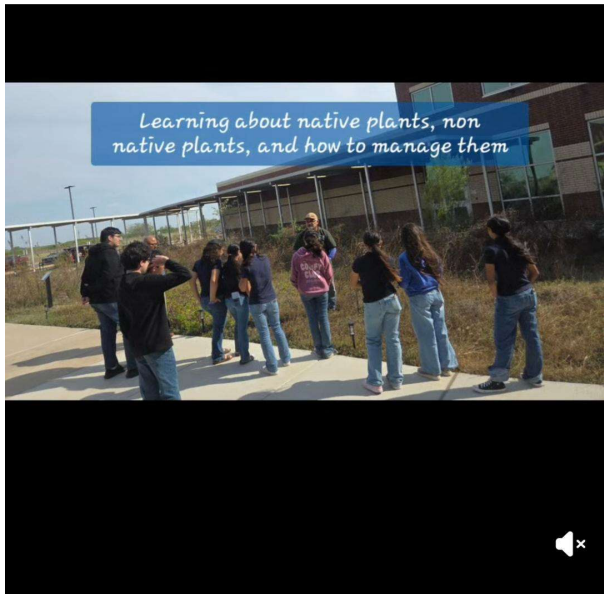


New Green Team

March Maintenance Days

- Learned native and non-native plants, maintenance, and watershed health
- Planted zizote milkweed and collected seeds





See insights and ads

Boost reel



Most relevant



David A. Garza, Cameron County Commissioner, Pct. 3

1w by Author

Great Job!!

Reply 1

From: Bobcat Spirit Day

Monday, January 19, 2026
Teacher Inservice--No School for Students

The Arroyo Colorado Watershed Partnership



Environmental Education at Rio Hondo Middle School Benefits More than the Arroyo Colorado

In October 2023, Rio Grande 202 teachers and students... Over the summer, science teachers were... environmental science and middle schools to incorporate...

From 24 different science classes, 417 students in grades... In October 2023, Rio Grande 202 teachers and students... Over the summer, science teachers were... environmental science and middle schools to incorporate...



For the morning work and signature page with SPOT classes...

Arroyo Colorado



For the morning work and signature page with SPOT classes...

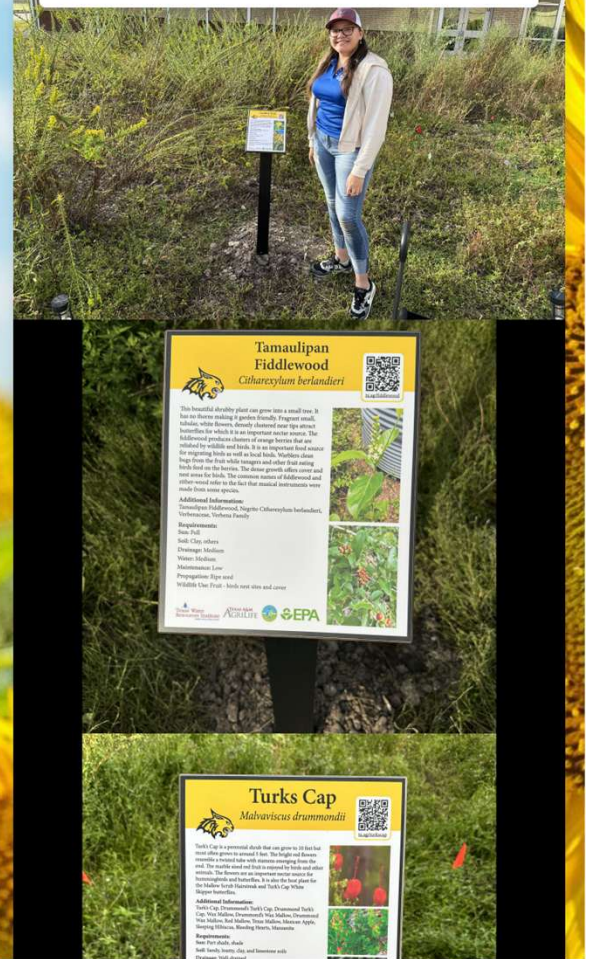
Most plants are now fully established and are providing... For the morning work and signature page with SPOT classes...



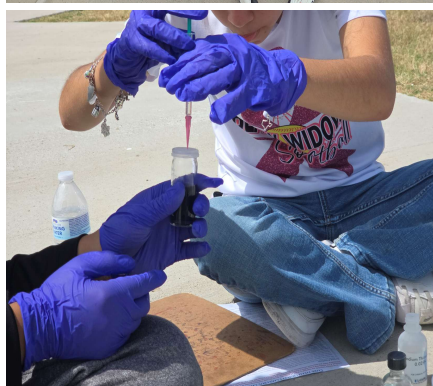
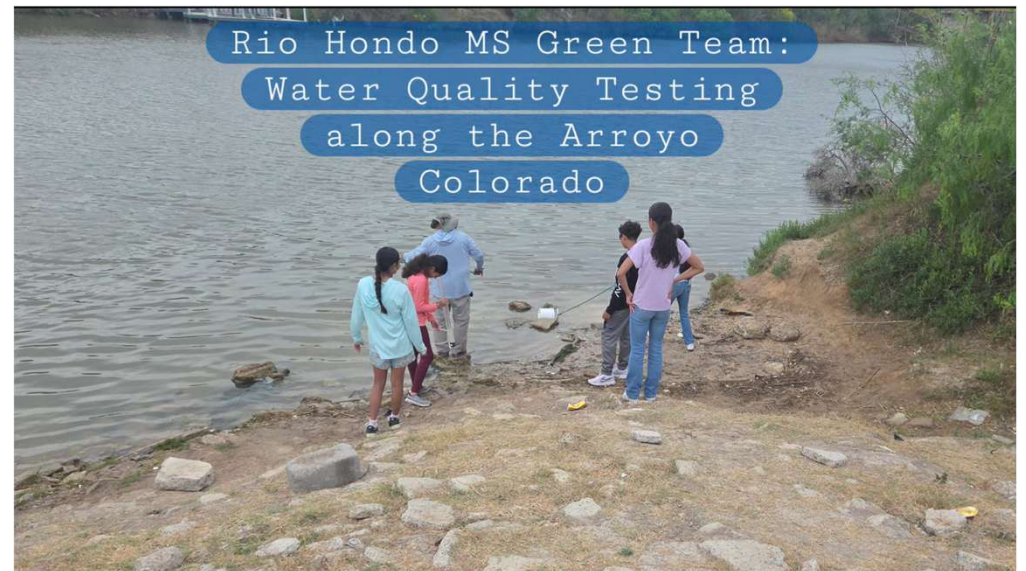
For the morning work and signature page with SPOT classes...

For the morning work and signature page with SPOT classes...

For the morning work and signature page with SPOT classes...



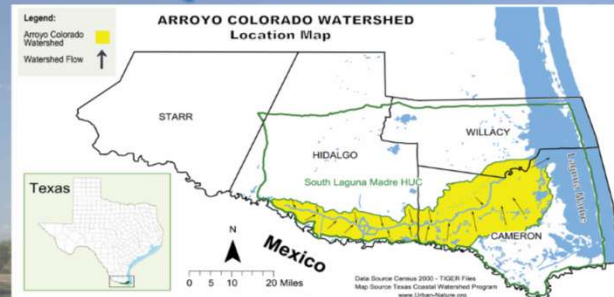
Testing Water Quality!



Signage for Parks and Crossing Signs



Arroyo Colorado



A watershed is an area of land where all precipitation and surface runoff drain downhill into a common outlet, such as a river, lake, or estuary.

When it rains in the Arroyo Colorado watershed, stormwater runoff carries pollutants into the Arroyo Colorado itself, the Laguna Madre, and even the groundwater.



DO'S

- Plant native trees - roots absorb and filter water.
- Recycle and dispose of trash properly.
- Use rain barrels to collect rainwater and reduce runoff.

DONT'S

- Don't overuse garden chemicals - they pollute water.
- Don't litter - wind and rain wash trash into waterways.

Learn More
 Más Información

Water quality in the Arroyo Colorado is suitable for activities involving limited body contact.

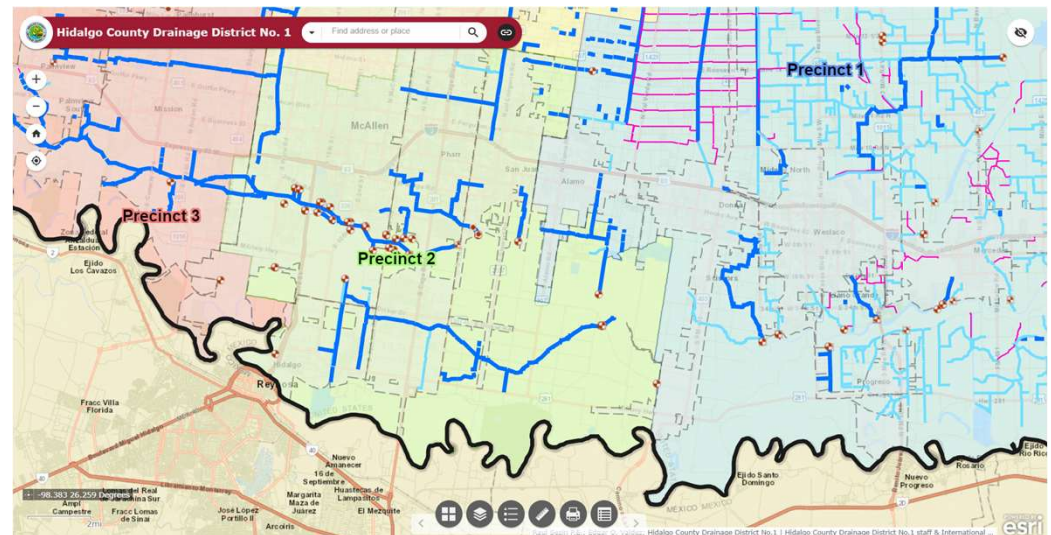
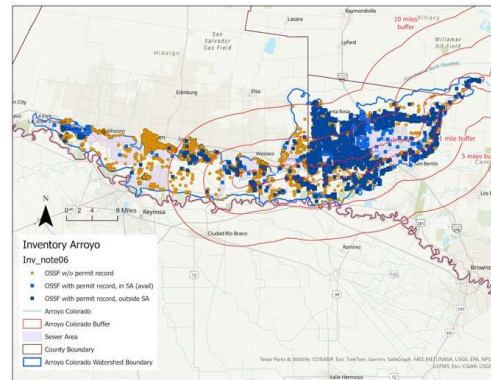
Enjoy boating, kayaking, and fishing!



- IMPORTANCE**
- Waterway:** Drainage and flood control
 - Habitat:** Supports fish, birds, and native plants
 - Economy:** Recreation and eco-tourism

Watershed Boundary Update

- Many GIS maps online
- Where does water actually flow?
- New drainage ditches entering the Arroyo Colorado?
- Need assistance from local drainage districts (HCDD1, CCDD)
- Expand OSSF Inventory



Water Quality Issues...



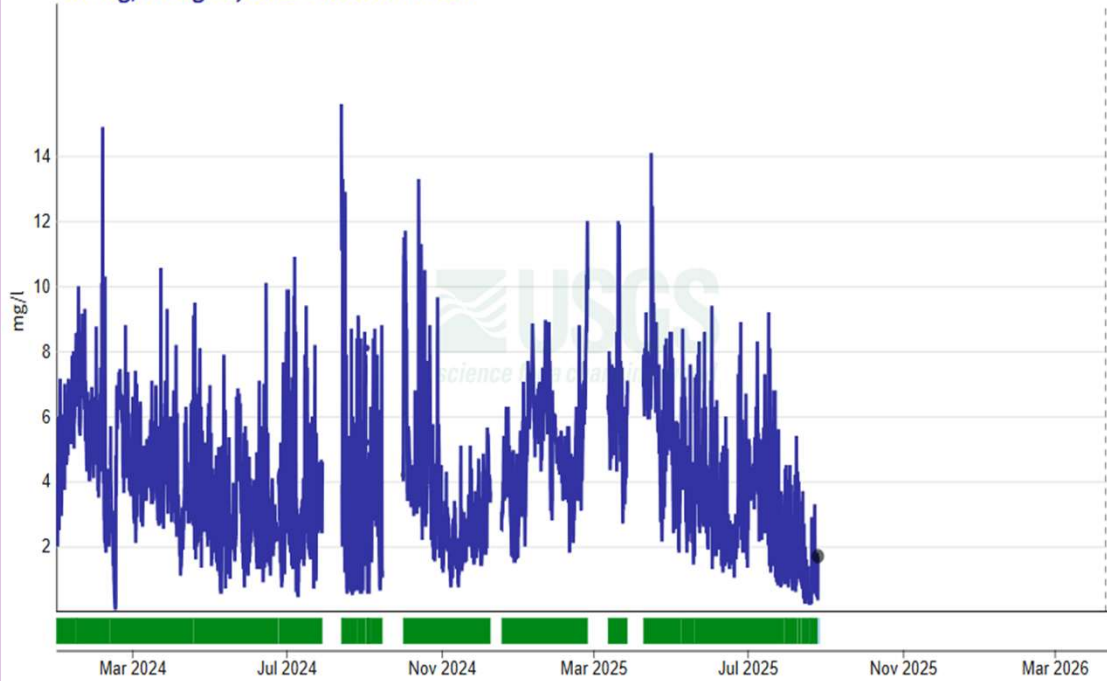
Continuous data

Arroyo Colorado at FM 106, Rio Hondo, TX - USGS-08470500

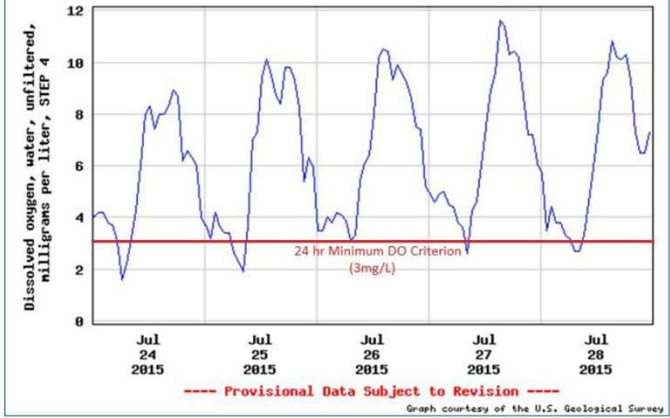
[Subscribe to WaterAlert](#)

- using custom time span -
January 1, 2024 - April 20, 2026
Dissolved oxygen, water, unfiltered, milligrams per liter

1.7 mg/l - Aug 25, 2025 04:00:00 PM CDT



USGS 08470500 Arroyo Colorado at FM 106, Rio Hondo, TX



Continuous data

Arroyo Colorado at FM 106, Rio Hondo, TX - USGS-08470500

[Subscribe to WaterAlert](#)

- using custom time span -
July 24, 2025 - July 28, 2025
Dissolved oxygen, water, unfiltered, milligrams per liter

1.2 mg/l - Jul 28, 2025 11:00:00 PM CDT



Get Involved!

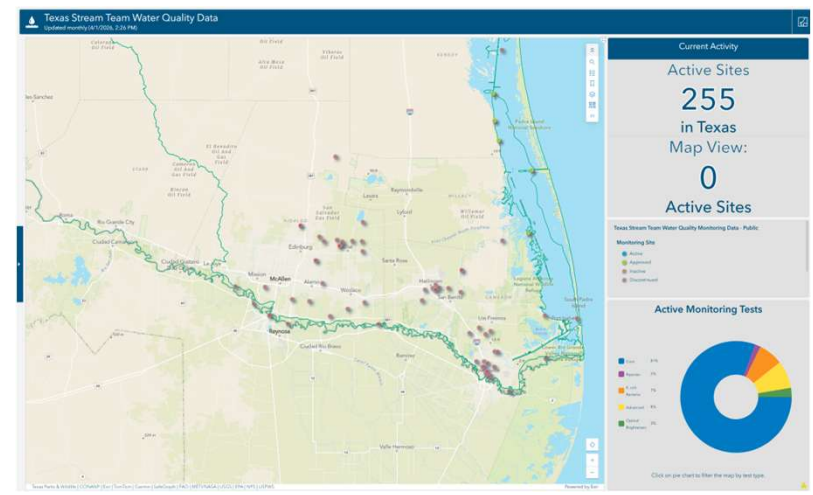
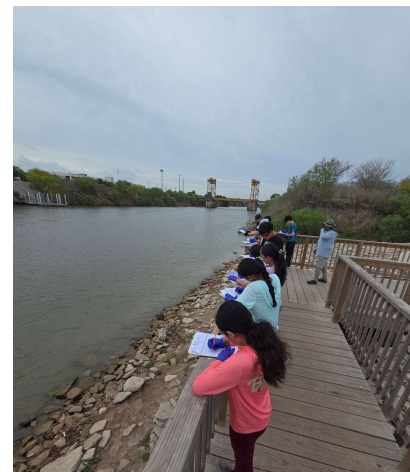


Water Quality Testing

Join a citizen scientist

Gain volunteer hours

Help us monitor water quality in the Arroyo Colorado



Clean Ups Along the Arroyo Colorado!

Join us at Adolph Thomae Jr. County Park on July 11 and October (TBD)



American Forests Marinoff Nursery

- Monday to Friday
- Assist with seed processing, seed sowing, soil preparation, or nursery care to help with thornforest restoration!
- Contact Jackie Trevino at jackelintrevino@gmail.com



Save the Date!

JOIN AGRILIFE EXTENSION, AND ARROYO COLORADO WATERSHED PARTNERSHIP IN ATTENDING:

JUNE 23, 2026

LONE STAR HEALTHY STREAMS AND FRIENDS WORKSHOP

8:00 AM - 2:00 PM
REGISTRATION BEGINS AT 7:30 AM
Weslaco AgriLife Center
2415 E. HWY 83 Weslaco, TX 78596

Topics:

- Private Water Well Education
- Septic System Maintenance
- Land and Livestock BMPs that Support Rural Watersheds
- Drift Management on Hay and Grazinglands
- Water Quality in Arroyo Colorado Watershed

2 CEUs
1 Drift, 1 General



FREE - well water and soil testing

Water Well: Collect in a new water bottle, 12-20oz, directly from well spigot, within 24hr

- Sample drop-off 8:00—10:00 a.m. **June 22** at D12 or County AgriLife Offices

Soil: Range, Grazing, Hay Lands - bring samples **June 23**.

Follow procedure on Texas A&M Soil Test form. **Limit 2.**

Register for FREE!

arroyocolorado.org/events/
or
call D12 AgriLife Weslaco Office at
979-314-9382

Limited to 100 participants



Light Breakfast and Lunch Provided

Program questions? LSHS program coordinator at 979-321-5950

To learn more visit lshs.tamu.edu



Texas A&M AGRILIFE EXTENSION
Weslaco AgriLife Center
2415 E. Hwy 83
Weslaco, TX 78596

Hidalgo County
410 N 13th Ave
Edinburg, TX
956-383-4026

Wiley County
471 W. Hidalgo Ave.
Raymondville, TX
956-689-2412

Cameron County
1390 W. Expy 83
San Benito, TX
956-361-8236

AgriLife Extension, and Arroyo Colorado Watershed Partnership present:



Lone Star Healthy Streams

Tuesday, June 23rd, 2026
Weslaco AgriLife Center
2415 E. HWY 83 Weslaco, TX 78596



Agenda

- 7:30 a.m. **Registration and coffee**
- 8:00 a.m. **BMPs in Support of Healthy Rural Watersheds**
- Leanne Jackson, Program Specialist - Lone Star Healthy Streams
- 9:00 a.m. **Arroyo Colorado Watershed Protection Plan Update**
- Samantha Colunga, Watershed Coordinator - Texas Water Resources Institute
- 9:15 a.m. **Drift Management for Range and Pastureland**
- Dr. Stacy Hines, Rangeland Habitat Management Specialist - AgriLife Extension
- 10:15 a.m. **Texas Conservation and Sustainability Initiative**
- Gabrielle Scott, Ambassador - AgriLife Research
- 10:30 a.m. **Rainfall Simulator and Break**
- 10:45 a.m. **"Well Informed" - Private Water Well Management**
- Joel Pigg, Program Specialist - Texas Well Owner Network
- 11:45 a.m. **Recognize Sponsors and Partners**
- Noon **LUNCH**
- Septic System Management**
12:30 p.m. - Joshua Segura, Extension Assistant - Biological and Agriculture Engineering
- Gustavo Olivares, Environmental Health Director - Cameron County Public Health
- 2:00 p.m. **Wrap-up, Program Evaluation, CEU certificates issued**



TEXAS STATE
Soil & Water
CONSERVATION BOARD

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

"Texas A&M AgriLife Extension Service is an equal opportunity employer and program provider. Texas A&M AgriLife Extension Service provides equal opportunities in its programs and employment to all persons, regardless of race, color, sex, religion, national origin, disability, age, genetic information, veteran status, sexual orientation, or gender identity. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating."

- Free soil testing for grazing, range and hay lands
- Free water well screenings for private water wells
- Educational training on groundwater and surface water protection.



texasriparian.org



Texas Riparian & Stream Ecosystem Workshop

Arroyo Colorado Watershed

June 2, 2026 | 8:00 a.m. - 4:30 p.m.

Texas A&M AgriLife Research and Extension Center
2401 Business Hwy 83 E, Weslaco, TX 78596

Online RSVP and Agenda:

<https://tamu.estore.flywire.com/products/weslaco26>



The **free** workshop will include both indoor classroom and outdoor presentations by multiple natural resource agency experts and an outdoor field portion on a stream to discover how it functions and the **role of riparian vegetation in properly functioning systems**.

An optional lunch (\$15) can be paid for in advance by Credit Card or cash onsite during the event. Snacks and coffee will be available. The workshop is being co-hosted by Texas A&M AgriLife Extension Service, Texas Riparian Association, and the Texas Water Resources Institute.

RSVP by May 26, 2026 at the link above.

Continuing Education Units available: Texas Department of Agriculture Pesticide Applicators License – 3 CEUs; Certified Crop Advisor - 7 CEUs; Texas Nutrient Management Planning Specialists – 6 hours; Texas Floodplain Management Association – 7 CEUs; International Society of Arboriculture - 8.25 CEUs (Certified Arborist: 2.75, Municipal Specialist: 2.75, BCMA - Science: 0.75, BCMA - Practice: 2); Texas Forestry Association – 6 hours; Society of American Foresters – 6.5 CFEs (6 Cat. 2 and 0.5 Cat. 1); Society for Range Management – 8 CEUs; Texas Board of Architectural Examiners "Acceptable for HSW credit"; and may also be used for CEUs for Professional Engineers.

For more information please contact Alexander Neal at 979-314-2351 or Alexander.Neal@ag.tamu.edu.



Funding provided through a Clean Water Act Section 319(b) Nonpoint Source Grant from the Texas State Soil and Water Conservation Board and U.S. Environmental Protection Agency.

SOUTH TEXAS GRAZING LAND COALITION PRESENTS:

COFFEE & COWS PASTURE WALK

Thursday, May 14, 2026 | 8:30 AM - 11:30 AM
Ranchos Garza

18005 Jara Chinas Road Penitas, TX 78576

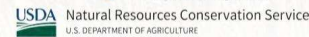
Come see how good management practices build resilient pastures, even during drought. South Texas GLC is teaming up with Juan Lino Garza of Ranchos Garza to host our first Coffee and Cows Pasture Walk right outside of La Joya, Texas. While there is no agenda, the conversation could be steered in the direction of the following topics: brush management, rotational grazing, stocking rates, weather and drought, cattle markets and alternatives to selling your herd, and screwworm updates and prevention.

Join us for this valuable experience! The event is free and coffee and tacos will be provided. For more information, please contact:

Servando Leal | sleal1874@gmail.com | 956.740.7378

From La Joya, head north on Jara Chinas Road (signs for FM 2221 N) for about 6.3 miles. We will meet at the house on the corner at 8:30 and then travel to the ranch at 9:00, which will be a five minute drive.

Or scan the QR code below to open the location in Google Maps.



Upcoming WPP Implementation



Continue to find, apply, and secure funds

TWRI applied to the TWDB RFP (3/18/2026) to improve water use efficiency and enhance water conservation with voluntary producers



Continue any education and outreach activities to disseminate information regarding the ACWPP



Continue connecting and engaging with stakeholders to identify needs



Maintain the website and share updates on the mailing list/Facebook



Re-establish and facilitate both steering committee and work group meetings



Follow us on Facebook!



Contact Info

Samantha Colunga

samantha.colunga@ag.tamu.edu

979-314-9382

<https://arroyocolorado.org/>

Join our Mailing List!

