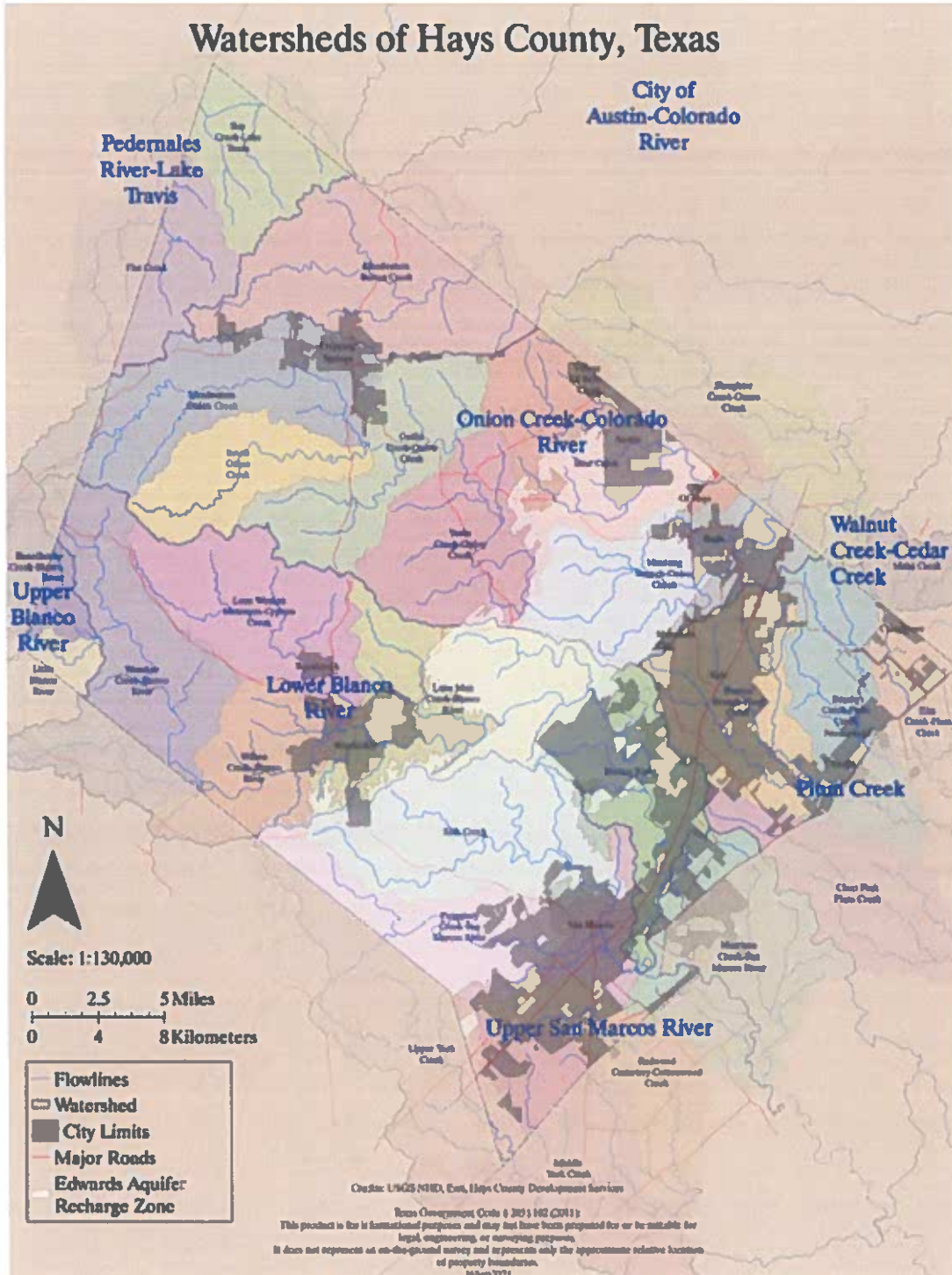


Blanco-Cypress Watershed Protection Plan Interlocal Agreement Program Update

Hays County Commissioners Court, September 30, 2025



Blanco River – Cypress Creek Watershed Protection ILA

*Hays County, Woodcreek, Wimberley,
Meadows Center for Water and
Environment, Watershed Association*

2025 Annual Overview

Hays County Commissioners
Court September 30, 2025



2003 CRP monitoring begins
2008 WPP analysis begins
2014 WPP approved
5/24 ILA executed
2026 ILA renews



70+

Water-focused programs
implemented
successfully



2,400+

People successfully engaged

Key Activities

- Regional Collaboration: Unified local partners, expanding into the Upper Blanco River.
- Watershed Coordinator: Leadership for implementation.
- Water Quality Monitoring: 13+ sites tracking water quality.
- Special Studies: Dye tracing, pollution modeling, and aquifer storage evaluations.
- Technical Training: Stream Team, riparian and water quality, 80+ trained, 110 wells tested.
- Field Work: Mapping, signage, OSSF checks, and citizen response.
- Policy Updates: Stormwater code revisions and One Water resolutions.
- Land & Water Conservation: 39,000+ acres protected, including Jacob's Well and Blue Hole.

Clean Rivers Program, Texas Stream Team, and Wimberley Advisory Group



485

of samples collected

43

sites monitored

109

pollution response
inquiries/complaints

Planned Actions

- Continue coordination with Executive Committee to identify priorities.
- Hays County subdivision revision engagement.
- Pinpoint sensitive areas for stormwater BMPs.
- Engagement upper Blanco River stakeholders.
- Address citizen water quality and development complaints.
- Working to ensure water quality goals are attained.
- Inspect and map stormwater/wastewater systems.

Working together for clean, clear, and flowing springs and streams.

Blanco-Cypress Watershed Protection Interlocal Agreement

Collaborative solutions for clean water and healthy communities

The health of our creeks, rivers, and aquifers is directly tied to the health of our communities. By investing in this pilot program, Hays County and participating partners are choosing to protect its most vital resource—clean, abundant water—for today and for generations to come. These efforts aim to safeguard our drinking water, preserve the unique character of the Hill Country, and ensure that future growth does not come at the expense of the natural systems that make this region so special.

The work of the Blanco-Cypress Watershed Protection Plan is more than a series of projects and policies—it is a promise to our future that the Blanco River and Cypress Creek will remain flowing and resilient. By aligning science, community action, and local leadership, we are laying the foundation for a thriving, resilient future where healthy watersheds continue to sustain both our people and our economy. This is our moment to act, and together, we can create a legacy of stewardship that defines Hays County for decades to come.

Blue Hole Park on Cypress Creek





Blanco River at the Narrows

Pathway to Collaboration

The path to today's Interlocal Agreement (ILA) began in the early 2000s, when the Meadows Center for Water and the Environment at Texas State University (Meadows Center), the Watershed Association - with Texas Commission on Environmental Quality (TCEQ) funding and strong support from local stakeholders - initiated efforts to protect the Cypress Creek watershed. Over the years, five major projects were completed, beginning with establishing water quality goals, watershed characterization, detailed water quality data collection, land use analysis, and pollution modeling to better understand the watershed's conditions and vulnerabilities.

This foundational work identified the best practices, critical groundwater recharge zones and strategies needed to maintain water quality and reliable streamflow in Cypress Creek and its tributaries. As the work progressed, multiple phases of Watershed Protection Plan (WPP) implementation were funded through successive TCEQ grants, each phase building local capacity and partnerships. The most recent grant supported development of the ILA itself, creating a formal structure to ensure long-term commitments from partner jurisdictions. By establishing shared responsibilities, resources, and decision-making processes, the ILA provides a framework to reduce nonpoint source pollution, protect critical spring flows, and achieve the long-term goals of the Cypress Creek Watershed Protection Plan.

Vision & Mission

Vision: To preserve and protect the waters of the Blanco River Basin and Cypress Creek through community-driven stewardship that ensures clean, clear, and flowing waters for generations to come.

Mission: Through collaborative governance and community stewardship, we protect the waters of the Blanco River and Cypress Creek by:

- Maintaining spring flows and water quality
- Supporting sustainable regional development
- Preserving our natural heritage
- Creating models for watershed governance
- Ensuring long-term investment in watershed health
- Implementing science-based monitoring and protection

ILA Program Overview

Through a collaborative partnership, Hays County, the cities of Wimberley and Woodcreek, the Meadows Center, and the Watershed Association are utilizing a **three-year pilot to accelerate implementation of the Blanco-Cypress Watershed Protection Plan (BCWPP)**.

The pilot funds three pillars of work

- 1** Continued Clean Rivers Program (CRP) water-quality monitoring on Cypress Creek and the Blanco River upstream and downstream of the Wimberley Valley funded by Hays County and data collection by the Meadows Center.
- 2** A dedicated Blanco-Cypress Watershed Coordinator housed within the Hays County Parks and Natural Resources Department.
- 3** Special studies and planning initiatives prioritized by the BCWPP Executive Committee and Management Team.

Together, these elements preserve and improve baseflow, nonpoint source pollution management, aquatic habitat, and recreational water quality while equipping local governments with practical tools to manage growth and drought.

Hays County staff Jonas Rosenthal demonstrates Secchi Disk data collection.



ILA Program Delivery

Program delivery blends science, training, and community engagement. Since late 2024, the team has participated in and convened a high-value roster of technical and leadership forums—**Texas Watershed Coordinator Roundtable, CAPCOG Regional Environmental Task Force, Hill Country Alliance Leadership Summit, TCEQ Groundwater Protection Committee, Texas Regional Stormwater Conference, Watershed Planning Short Course, and more**—ensuring local practice stays aligned with state and regional standards. In parallel, the **Clean Rivers Program monitoring program, Wimberley Advisory Group, and Texas Stream Team activities** (core sampling, optical brighteners, riparian evaluation, advanced water-quality, and E. coli training) underpin data-driven management. **Public-facing trainings have reached broad audiences:** the Texas Watershed Steward Workshop drew 80+ attendees; the Texas Well Owner Network event screened 110 private well samples—turning education into direct public-health value.



Summary of Screening Results

Number of samples screened: 110
Positives for total coliform: 39 (35%) *E. coli*: 3 (3%)
Nitrate concentration average: 0.74 ppm
Range: 0 – 5 ppm
Average salinity: 475 ppm TDS
Range: 10 – 1,836 ppm TDS
Average pH: 7.8
Range: 6.8 – 9.0

Screening results from the Water Well testing. (Source: Texas Well Owner Network)

Watershed Coordinator Responsibilities

The Watershed Coordinator, a Hays County employee, is the day-to-day integrator for the plan—advancing best management practices (BMPs), coordinating partners and stakeholders, securing funds, and reporting progress to the Management Team. Core duties include: leading BCWPP implementation; coordinating monitoring, testing, data collection and analysis; delivering education and outreach; developing partnerships; pursuing fundraising and managing grant accounting; advancing best management practices (BMPs) projects and permitting support; and maintaining program continuity across agencies. This role translates board-level priorities into field actions, policy updates, and measurable outcomes.

Outreach

Outreach is scaled through Hays County Parks and partners. In February–March 2025 alone, Parks delivered 33 group visits serving 1,775 students and teachers, while field programs installed or replaced 30+ “No Dumping” storm-drain markers (with CAPCOG) and stood up the Hays County Environmental Task Force to streamline interdepartmental coordination. Place-based education (e.g., Jacob’s Well field trips) reinforces stewardship while linking residents to tangible BMPs at home and in businesses. The Watershed Coordinator has directly engaged over 480 individuals through trainings, workshops, and stakeholder meetings. In addition, partner organizations—primarily the Watershed Association and the Meadows Center—have extended this reach significantly, connecting with more than 12,000 people across the local community through education, outreach, and related watershed protection efforts.



Left: Participants learning at the Watershed Steward workshop. (Source MCWE) Right: CAPCOG and Hays County partnered to provide and install “No Dumping” signs.



March 2025:

- 33 Group Visits
- Served 1,775 students & teachers
- Installed or replaced 30+ “No Dumping” storm-drain markers

Field Implementation *closes the loop from plan to practice*

Current and pending work includes mapping and evaluating stormwater and water and wastewater conveyances and water-quality ponds; identifying sensitive or disturbed sites for BMP installation; prioritizing locations for watershed and “No Dumping” signage; using comptroller data and GIS to flag businesses requiring Stormwater Pollution Prevention Plans; responding to citizen water-quality complaints and unpermitted development; and offering no-cost evaluations of on-site sewage facilities (OSSFs).

In addition, the team is participating in the stakeholder process with: Hays County’s updating of subdivision rules, water-quality, stormwater, and development codes with Hays County Transportation & Development Services; collaborating with Plum Creek Watershed Partnership and the City of Kyle on joint water quality projects; facilitating brush collection and free mulching days to reduce dumping and protect creeks; and partnering with Master Naturalists to establish demonstration gardens featuring native, water-tolerant plants.

Monitoring Today. Protecting Tomorrow.



Clean Rivers Program staff collecting flow measurements

The Clean Rivers Program conducts routine water quality monitoring to track conditions in the Upper Blanco River (Segment 1813) and Cypress Creek (Segment 1815). This includes monthly sampling at three Upper Blanco sites, quarterly sampling at four additional Upper Blanco sites, and quarterly sampling at six Cypress Creek sites.

Through the Clean Rivers Program, Texas Stream Team, and the Wimberley Advisory Group, the ILA supports a network of professional scientists and trained volunteers collecting vital data on the Blanco River and Cypress Creek. This monitoring provides early warning signs of water quality and flow changes, enabling timely, informed action before issues become costly crises.

The data also **guide planning and policy decisions**, helping manage growth while protecting public health, natural resources, and the region's unique character. Investing in monitoring now is a **smart economic choice**, preventing expensive emergency responses and safeguarding tourism, property values, and community resilience for the future.

Together, the Clean Rivers Program, Texas Stream Team, and the Wimberley Advisory Group form an extensive network of professional and volunteer monitors working to safeguard local water resources. Across the Blanco River and Cypress Creek watersheds, these programs collect more than 368 samples annually, providing a powerful foundation for data-driven decision-making.

This includes:

- Texas Stream Team monitoring at approximately 23 sites, generating an estimated 276 sampling events per year.
- CRP monitoring at 3 Upper Blanco River sites in Blanco County (monthly, 12 events each), 4 Upper Blanco sites in Hays County (quarterly, 4 events each), and 7 Cypress Creek sites (quarterly, 4 events each).
- Wimberley Advisory Group E. coli monitoring at 13 sites, collecting approximately 117 samples annually.



Meadows Center staff and Hays County's Jonas Rosenthal conducting Clean Rivers Program monitoring.

The Data Tells a Story

Upper Blanco River Data

Since July 2022, the Upper Blanco has experienced low or no flows (<10 cfs), leading to elevated total dissolved solids and occasional water temperature exceedances. Monitoring has detected nutrient impacts linked to wastewater treatment plant discharges, including total phosphorus spikes, rising Total Kjeldhal Nitrogen levels, and nutrient enrichment near FM 165. Additional findings include dissolved oxygen fluctuations, high pH measurements, and occasional E. coli single-sample exceedances, though geometric means remain within standards. These data help identify trends, assess pollution sources, and guide watershed management actions.

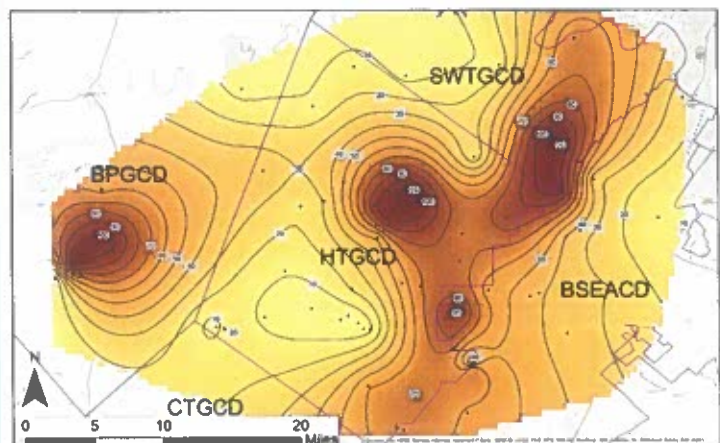
Cypress Creek Data

Cypress Creek monitoring under the Clean Rivers Program includes six sites from Jacob's Well to the Blanco River confluence. Recent data show E. coli levels exceeding the water quality standard geometric mean downstream of RR12, indicating elevated bacterial contamination in this reach. Dissolved oxygen values, both from grab samples and 24-hour monitoring, have also raised concerns for aquatic life health. During dry conditions observed in a recent dye trace study, the primary bacteria sources were identified as bat colonies and nonpoint source runoff, highlighting the importance of ongoing monitoring and management strategies to address these natural and diffuse contributors to water quality impairments.

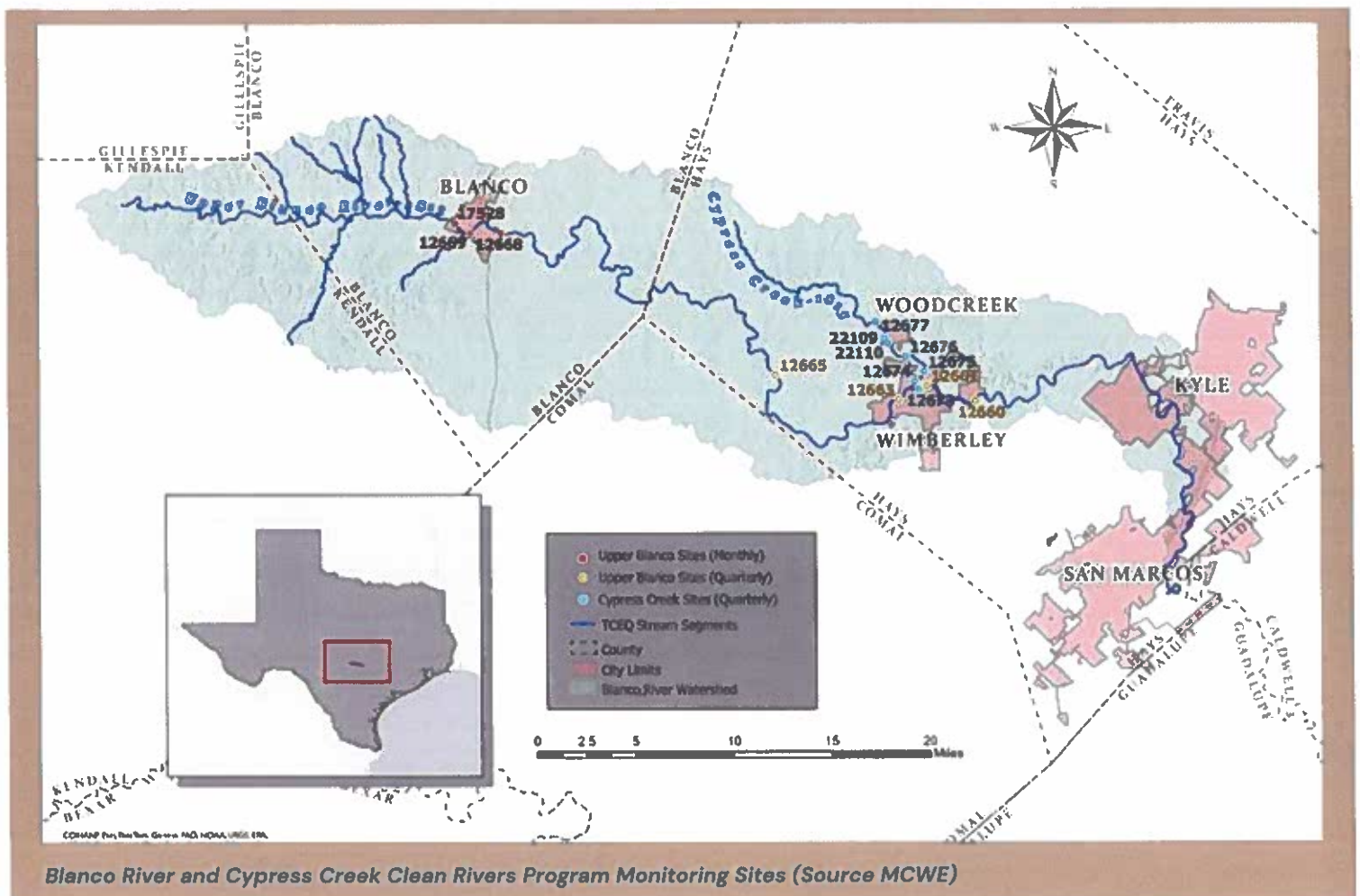


Drought curtailments in the Jacob's Well Groundwater Management Zone were developed to keep the Well flowing during drought conditions.

Map (right) shows a difference in Middle Trinity water level between March 2018 potentiometric surface (Hunt et al., 2019) and September 2023 potentiometric surface (drought conditions). Darker colors indicate a decline of 100'+ of water level. (Source: Potentiometric Study of the Middle Trinity Aquifer – BSEACD)



Additional water quality data is collected by the **Texas Stream Team and the Wimberley Advisory Group**, whose volunteers play a vital role in the long-term stewardship of local waterways. Through this **citizen science network**, trained community members monitor 36 sites across the Blanco River and Cypress Creek, providing consistent, high-quality data that complements professional monitoring efforts. This collaboration not only strengthens watershed management and protection strategies but also fosters public awareness, education, and **engagement**, empowering residents to take an active role in safeguarding the health of their rivers and creeks for future generations.

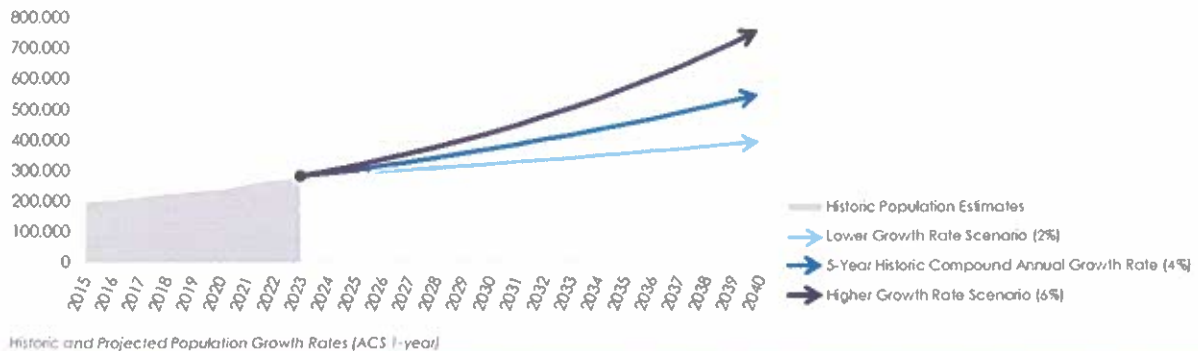


Each year, TCEQ reviews Clean Rivers Program and related monitoring data to **assess whether local waterways are meeting state water quality standards**. In its 2024 Texas Integrated Report, TCEQ identified Cypress Creek as impaired due to low dissolved oxygen levels and impacts to fish and macroinvertebrate communities. While the exact causes are not fully known, recent low flows and erratic hydrologic cycles are likely contributing factors.

There is encouraging news, however — TCEQ's analysis found **no impairments for contact recreation**, indicating that **swimming and other recreational uses remain safe** at this time.

Demographic Snapshot

- Projected County population of **550,000** by the year 2040 based on recent trends



Hays County population projections. Source Hays County Development Regulations Re-write, Key Concepts Review 09/02/2025



Cypress Creek flows change over time.



Jacobs Well spring flow changes over time.

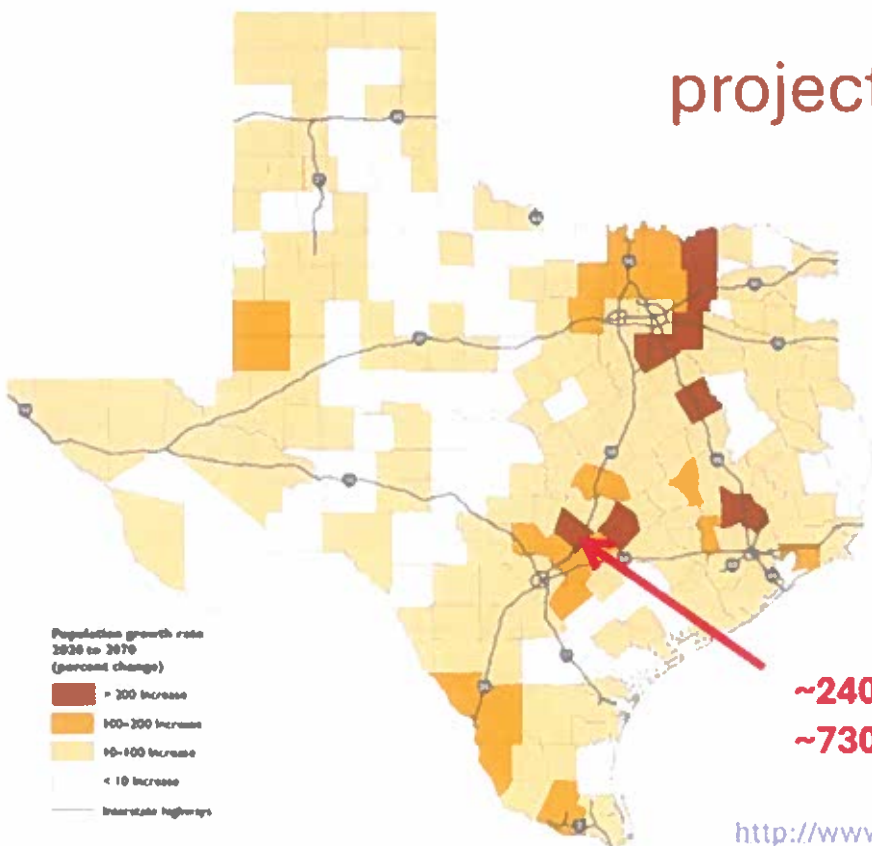
Policy and One Water Resolutions

Hays County is at the center of one of the fastest-growing regions in the country. According to the 2022 State Water Plan, the county's population is projected to triple over the next 50 years—from roughly 240,000 residents (2025 Hays County population estimated at 303,252) to an estimated 730,000 by 2070. According to the Texas Farm and Ranch Lands Conservation program, Texas is losing 1000 acres per day to land use fragmentation (TFRLCP 2024 Evaluation).

This growth brings tremendous opportunities for our communities but also significant challenges. As more people move to the Hill Country, the demand for water, wastewater, and infrastructure services will grow exponentially. If we don't plan carefully, this growth could strain our rivers, creeks, and aquifers—the very natural resources that define our region and make it such an attractive place to live.

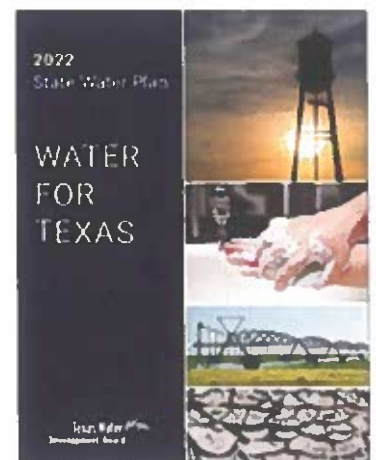
By acting now, we can attempt to ensure that our infrastructure keeps pace with development, our water supplies remain reliable, and our rivers and creeks stay clean and flowing for future generations.

Infographic provided by MCWE



projected population growth

**~240,000 (today) to
~730,000 (2070) Hays**



<http://www.twdb.texas.gov/waterplanning/swp/2022/index.asp>

One Water

One Water Resolutions, which promote integrated and sustainable management of water resources, has been widely embraced by local jurisdictions across the Wimberley Valley. Through collaboration among the Friends of the Little Blanco, the City of Blanco, and regional partners, programs such as WaterWise have been developed to promote conservation, education and efficiency. Formal commitments to these principles have been made through the adoption of One Water Resolutions by Hays County Commissioners Court, the cities of Wimberley, Woodcreek, and Blanco. Continued participation in rulemaking and policy development will be essential to translating these commitments into action, ensuring that future growth is guided by strategies that protect water quality, maintain baseflows through groundwater protection, and support the long-term health of local rivers, creeks, and aquifers.



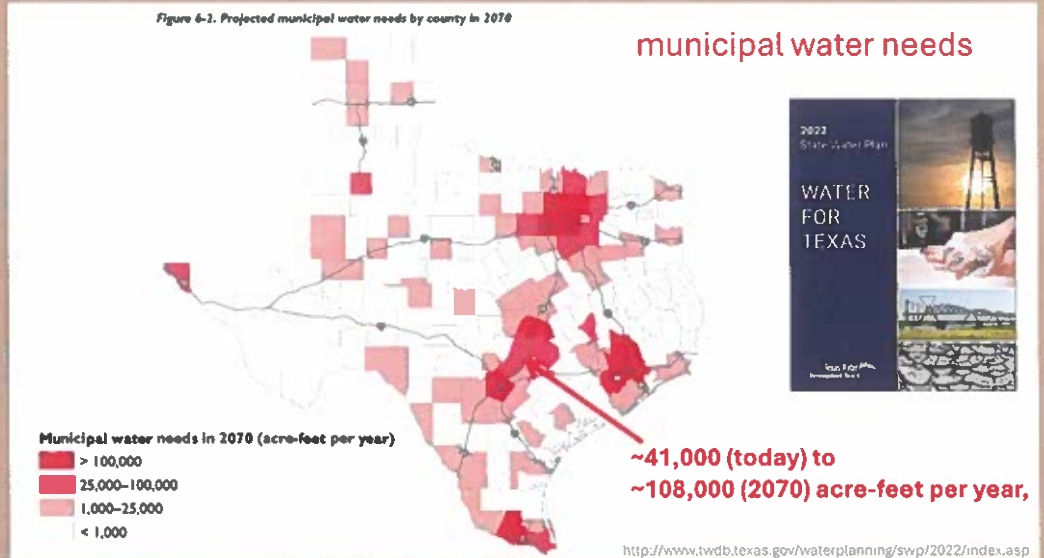
Photo provided courtesy of the Watershed Association



Image provided courtesy of the US Water Alliance

Regional Collaboration

Hays County, along with the cities of Wimberley and Woodcreek, have joined forces through a separate interlocal agreement to plan and manage sustainable, resilient water and wastewater systems for the Wimberley Valley. This partnership strengthens coordination across jurisdictions, aligns infrastructure investments with shared community values, and provides a unified voice when working with state and regional partners.



Infographic provided by MCWE

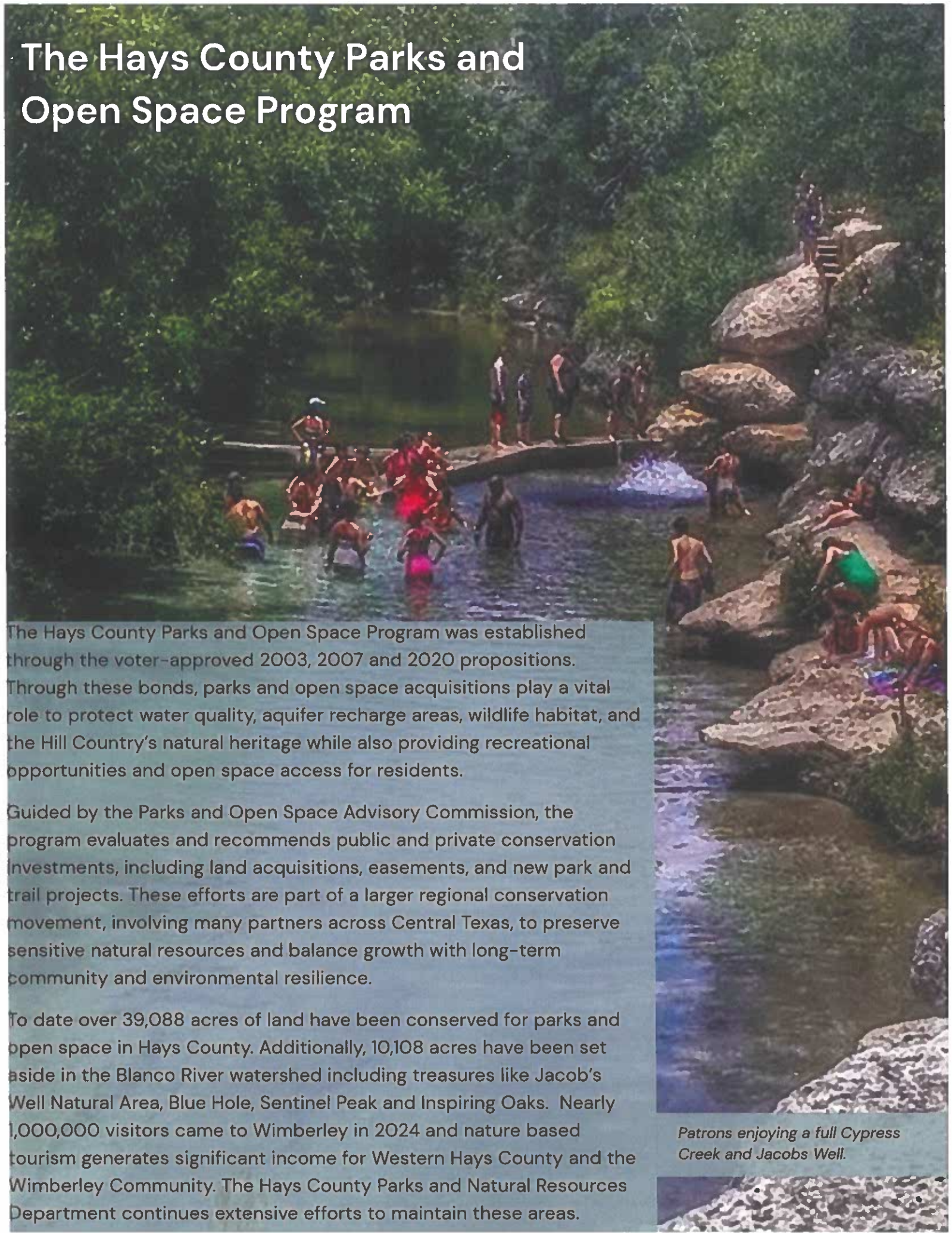
Through monthly collaboration among local leaders, appointees, and advisory partners, the group will guide priorities that protect rivers, creeks, and groundwater while supporting smart growth. This aims to provide cleaner water, reliable services, infrastructure planning and investment and a stronger future for citizens and the environment alike.



Blanco River Clean Rivers Program site downstream from WWTP (algae growth)

Strategically, the BCWPP also **advances alternative water-supply tools** to sustain baseflow at Jacob's Well Spring and reduce pressure on the Middle Trinity. Options under evaluation include conjunctive use of surface and groundwater; aquifer storage and recovery in the Lower Trinity; targeted development of the Lower Trinity to displace Middle Trinity pumping; expanded rainwater harvesting; temporary interconnections and pipelines; and, where appropriate, importing supplies. These tools are paired with land stewardship, demand management, and reuse to create a resilient, multi-path solution set for drought.

The Hays County Parks and Open Space Program



The Hays County Parks and Open Space Program was established through the voter-approved 2003, 2007 and 2020 propositions. Through these bonds, parks and open space acquisitions play a vital role to protect water quality, aquifer recharge areas, wildlife habitat, and the Hill Country's natural heritage while also providing recreational opportunities and open space access for residents.

Guided by the Parks and Open Space Advisory Commission, the program evaluates and recommends public and private conservation investments, including land acquisitions, easements, and new park and trail projects. These efforts are part of a larger regional conservation movement, involving many partners across Central Texas, to preserve sensitive natural resources and balance growth with long-term community and environmental resilience.

To date over 39,088 acres of land have been conserved for parks and open space in Hays County. Additionally, 10,108 acres have been set aside in the Blanco River watershed including treasures like Jacob's Well Natural Area, Blue Hole, Sentinel Peak and Inspiring Oaks. Nearly 1,000,000 visitors came to Wimberley in 2024 and nature based tourism generates significant income for Western Hays County and the Wimberley Community. The Hays County Parks and Natural Resources Department continues extensive efforts to maintain these areas.

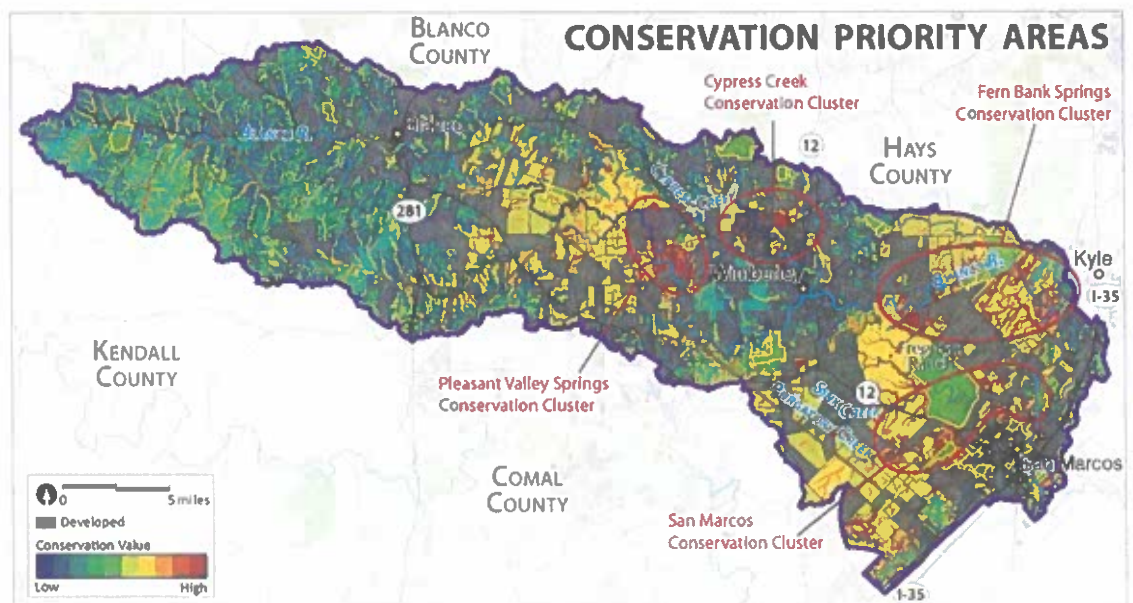
Patrons enjoying a full Cypress Creek and Jacobs Well.

Regional Habitat Conservation Plan

The Hays County Regional Habitat Conservation Plan provides a streamlined, locally managed option for landowners to comply with federal law while supporting the protection of high-quality habitat. Through an incidental take authorization permit issued by the U.S. Fish & Wildlife Service, Hays County can offer landowners Participation Agreements that allow development in a timely manner while ensuring mitigation fees directly support the acquisition and long-term management of a countywide preserve system. This approach reduces permitting delays, offers regulatory certainty for landowners, developers, and infrastructure providers, and ensures that growth in Hays County is balanced with the conservation of its most sensitive natural resources.



Graphic (right) depicts Blanco-Upper San Marcos Watershed Strategic Conservation Prioritization Study priority areas related to protecting aquatic habitat and maintaining streamflow.
(MCWE 2017 M. Miller)



Conclusion

INVESTING IN THE FULL LIFECYCLE OF WATERSHED MANAGEMENT

In sum, the ILA invests in the full lifecycle of watershed management—science, policy, projects, and people. It maintains rigorous monitoring (CRP, WAG, Stream Team), builds local capacity (trainings and subdivision and municipal code updates), delivers visible field improvements (land conservation, education, BMPs, signage, OSSF support), strengthens regional partnerships, and progresses long-term water supply strategies including supporting the Hays Trinity Groundwater Conservation District.. The Watershed Coordinator ensures these components move in concert, with transparent reporting to the Executive Committee and Management Team. This is a practical, results-oriented framework to protect Cypress Creek and the Blanco River while supporting community growth, public health, and the Hill Country economy.

The success of the **BCWPP** relies not only on the core commitments of Hays County and cities of Woodcreek and Wimberley, but also on the **added value provided by the Watershed Association and the Meadows Center**. These organizations bring a powerful combination of **research, advocacy, education, and outreach** that expands the capacity of the BCWPP and acts as a **catalyst for broader success**.

Through their programs and targeted legislative and community initiatives, **the Watershed Association and the Meadows Center** provide critical research, data resources, and public outreach that strengthen the BCWPP. Their expertise and partnerships expand local capacity, attract external funding, and help guide data-driven decisions — ensuring long-term protection of water quality, spring flow, and the unique natural heritage of the Texas Hill Country and Hays County.

