

THE CENTRAL TEXAS GREENPRINT FOR GROWTH CONSERVATION & ECONOMIC OPPORTUNITY FOR HAYS COUNTY



THE TRUST *for* PUBLIC LAND
CONSERVING LAND FOR PEOPLE



HAYS COUNTY



For those driving south from Austin or north from San Antonio, the rural roads of Hays County serve as the entry into the venerable landscape of the Texas Hill Country. The tail end of the aptly named Devil's Backbone jigs and jags its way from just outside Wimberley north to Blanco along the rocky live oak and juniper-studded hills and cliffs of Central Texas. The region is laden with ancient freshwater rivers and streams, and subterranean Edens and caves. Through the ages these waters and rich landscapes have drawn Native Americans, European settlers, independent southern pioneers, college students, tourists, and commuters. And they continue to come.

As much as those hills, rivers, and caves define the terrain of Hays County, human activity is forever transforming this landscape from a once-peaceful countryside into suburbs for workers in Austin and San Antonio looking for more affordable and gracious living.

Between 1960 and 2000, Hays County grew by 229 percent. Its total population has increased since then by another 53 percent to almost 140,500 residents. By 2020, that number is projected to rise to more than 180,000 people, making Hays the second-densest county in the region behind Travis. Most of this growth centers along the I-35 corridor in towns like Buda, Kyle, and San Marcos. The western portions of the county have seen changes, too. Rural subdivisions of single-family homes for retirees, telecommuters, and urban dwellers looking for respite are rising along the rolling hills. While this growth has increased revenues, the direct costs for providing roads and bridges, new schools and utilities, and the consequences of loss of place are now being realized.

Hays County, like much of the Central Texas region, grapples with the question, "How do we grow responsibly while protecting our drinking water, creating safe spaces for our children to play, and conserving those caverns, springs, and crystal-clear limestone-bottomed rivers that can only be found here?"

The effort to answer that question began in 2002 when Envision Central Texas (ECT) initiated a public process to address growth challenges in the region, such as land use, transportation, and the environment. Many thousands of Central Texans participated in the ECT visioning process and expressed their desire to shape future growth in ways that will preserve their unique character and natural resources. Recognizing that strategies to encourage growth away from precious drinking water supplies and other important resources span jurisdictional boundaries and require cooperation, The Trust for

Public Land (TPL), ECT, and the Capitol Area Council of Governments (CAPCOG) launched a regional Greenprint in three Central Texas counties under growth pressure—Bastrop, Caldwell, and Hays. By taking a holistic view of the region’s “green infrastructure,” the Central Texas Greenprint for Growth identifies high-priority opportunities for land conservation to meet local parks and open space needs, and ecosystem protection goals, as well as opportunities for directing growth away from sensitive areas.

As part of the Central Texas Greenprint for Growth, TPL and a technical team of local experts developed individual opportunity maps for each of the six community goals identified by Hays County citizens and one composite map showing where multiple goals overlapped:

- Protect Water Quality and Quantity
- Protect Sensitive Ecological Areas
- Conserve Farm and Ranch Lands
- Enhance Park and Recreation Opportunities
- Protect Scenic Corridors
- Protect Cultural/Historic Resources

The most intense colors indicate the best opportunities for conservation, with dark red ranking the highest.

The role of these maps, however, is much broader. As conservation opportunity maps, developed with broad consensus, they can be used by decision makers to guide future infrastructure investments, such as schools, road, bridges, and housing away from sensitive areas such as aquifer recharge zones and endangered species habitat. While development is essential to a thriving economy, it also can fragment and destroy healthy, functioning ecosystems. Therefore, these maps also reveal opportunities for:

- New parks and facilities to meet growing population needs;
- Areas that provide recreational and habitat connectivity that enhance residential living;
- Target areas for environmental enhancement or restoration to improve business retention and recruitment;
- Concentrations of farm and ranch lands to maintain their economic viability and buffer them from encroaching development;
- Encouraging sustainable growth that preserves Hays County’s unique identity.

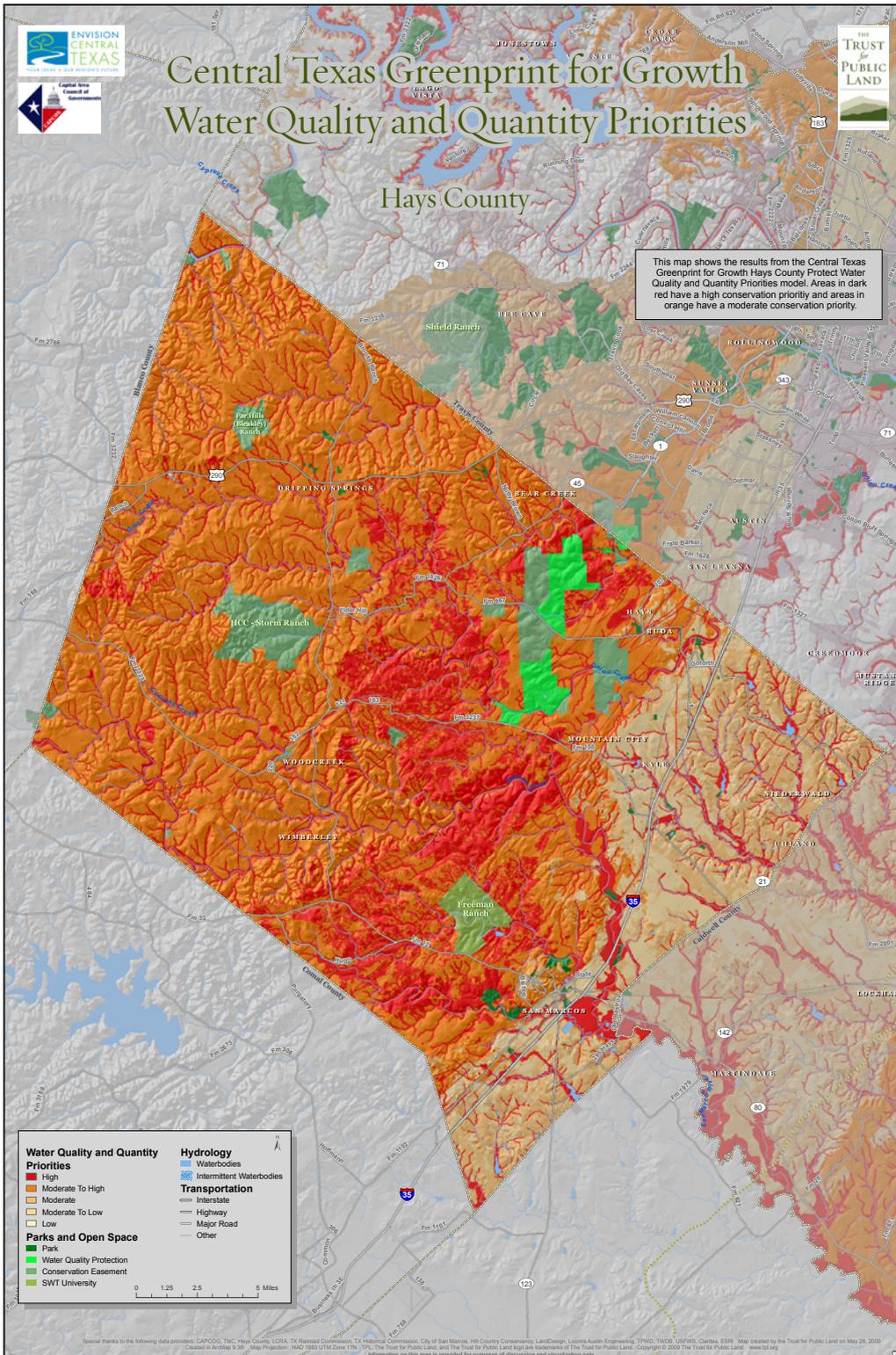
WHAT IS A GREENPRINT?

You need a blueprint to build a house. You need a Greenprint to build a sustainable community. A Greenprint represents The Trust for Public Land’s unique application of Geographic Information System (GIS) modeling and mapping technology that identifies the best places for conservation, resource management, and growth to occur. While seeking to protect natural, historical, cultural, and recreational resources, a Greenprint also provides a “best path” approach for development.

The Greenprint process involves several steps:

- (1) constituency building;
- (2) goal setting;
- (3) data gathering and analysis;
- (4) GIS modeling and mapping; and
- (5) identifying practical strategies for goal implementation.

The result can include a dynamic, interactive web-based tool that helps leaders make informed land-use decisions based on community values, which, in turn, promote economically vibrant, healthy, and attractive communities.



PROTECTING WATER QUALITY

The protection of drinking water and surface water features is the most charged and compelling issue in the region, and Hays County citizens weighted this goal the highest among the six identified. This map shows rivers, streams, creeks, and their associated floodplains, springs, and forested uplands as important to protecting water quality and quantity. For Hays, in particular, known karst or fault areas are identified because these represent places where water flows directly from the surface into the Trinity and Edwards aquifers. Hays County has protected nearly 7 percent of the priority areas shown through local, state, or federal conservation. However, with more than 340,000 of high-priority water quality acres unprotected, Hays has ample conservation opportunity.

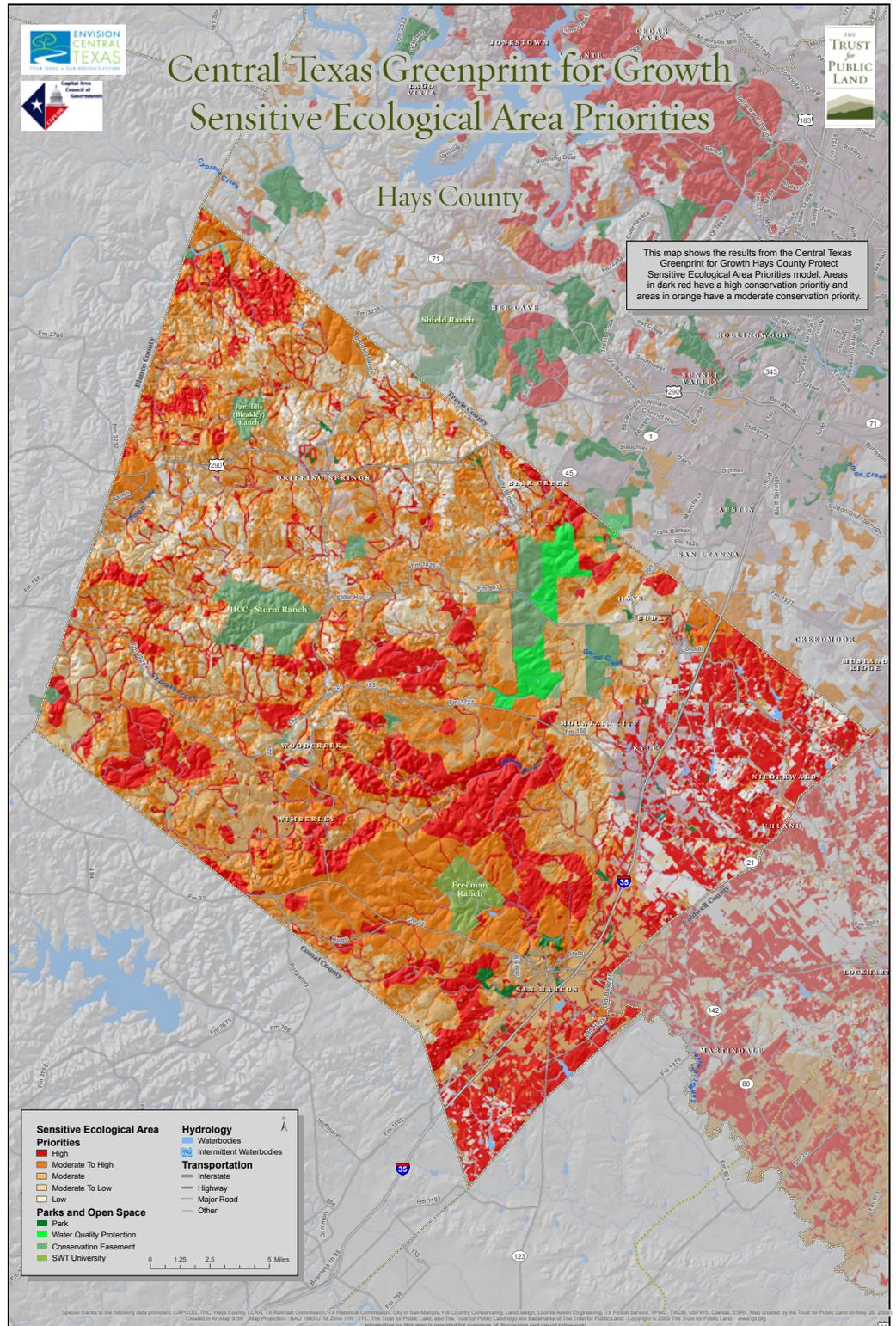


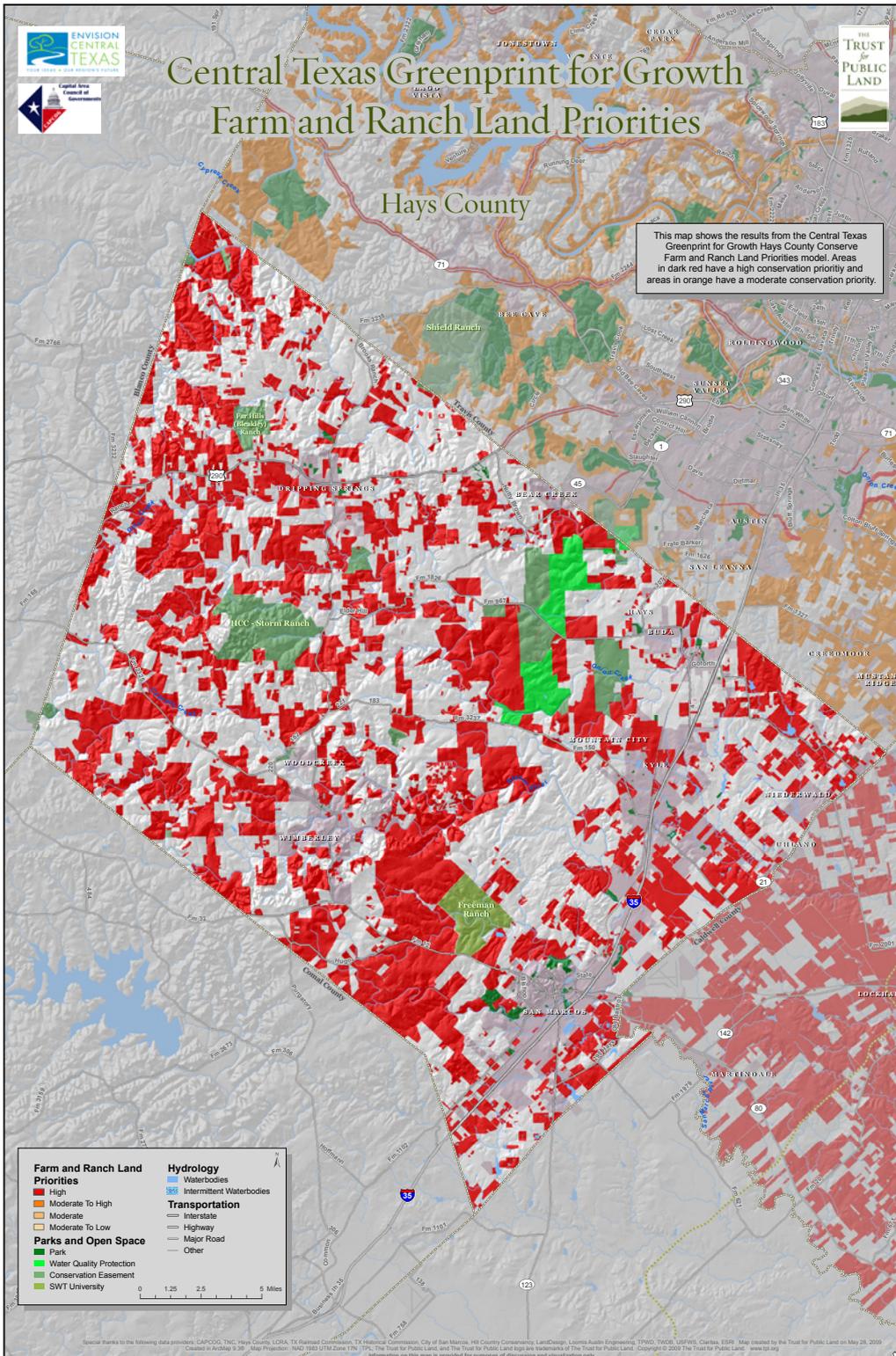
ABOVE: The Jacob's Well, an artesian spring that pumps water directly from the aquifer to the surface. PHOTO BY ROLF NUSSBAUMER.

PROTECTING SENSITIVE ECOLOGICAL AREAS

Citizens weighted protecting sensitive ecological areas second highest among the Greenprint goals and with good reason. Hays County provides a wealth of habitat for threatened and endangered species as well as corridors for wildlife, such as the golden-cheeked warbler and black-capped vireo, the San Marcos salamander, and other animals and plants endemic to the county. More than 250,000 acres scored as high priority in the Greenprint, of which just below 6 percent are currently protected.

One example of a conservation success is the 50-acre Jacob's Well Natural Area near Wimberley, thought to be the longest underwater cave in Texas and sacred to Native Americans. This artesian spring used to pump thousands of gallons of crystal-clear water per minute into Cypress Creek, but persistent drought and developmental impacts have affected the volume. It supports a rich diversity of wildlife, including the endangered species mentioned. Its conservation meets multiple Greenprint goals—recreational, water quality, and ecological.





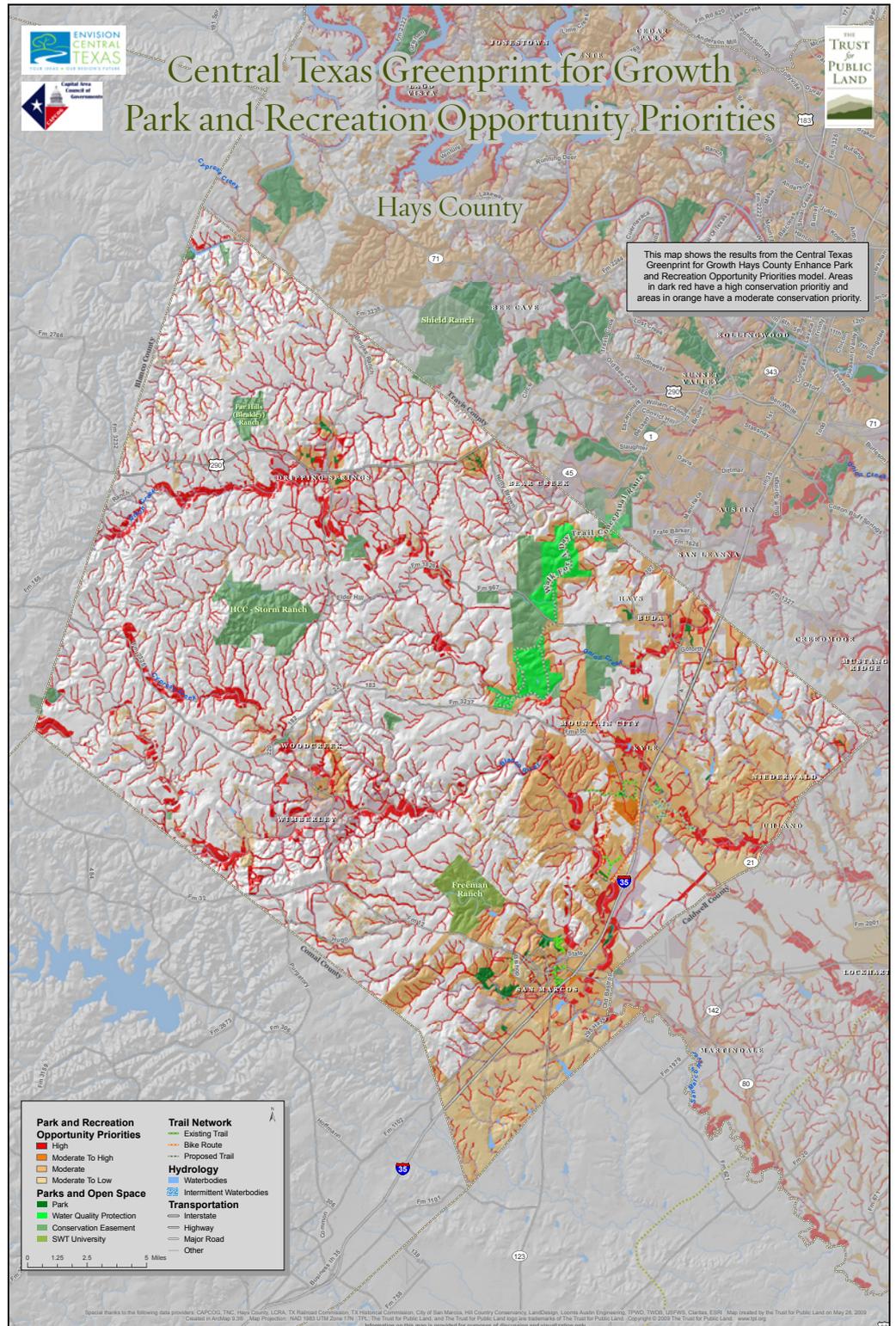
CONSERVING FARM AND RANCH LANDS

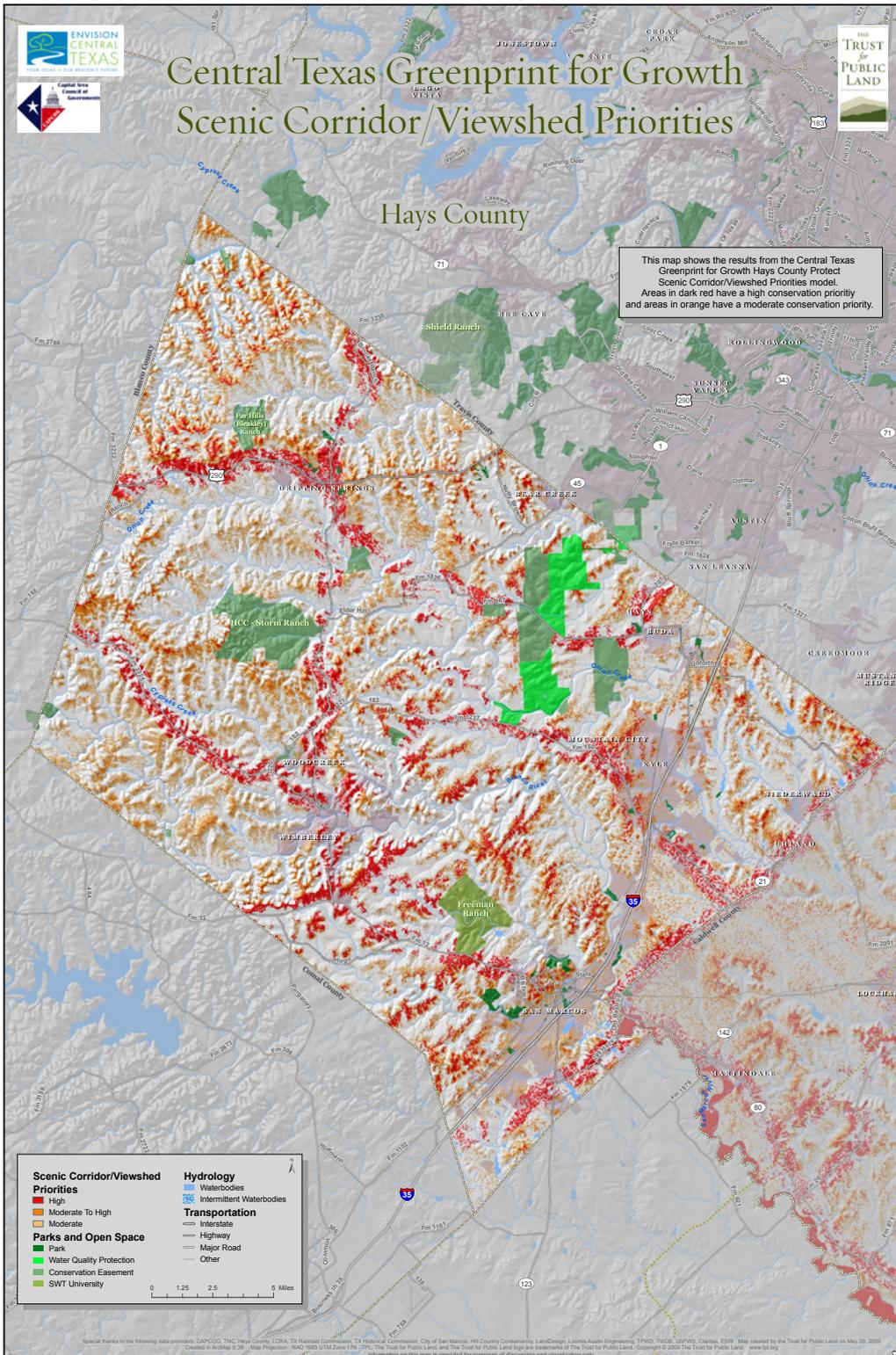
The Balcones Escarpment represents the dividing line between the Texas Hill Country and a rich agricultural heritage. The fertile soils of the east and the grazing lands to the west are the most vulnerable to conversion from productive farms and ranches to residential and commercial development—the reason why they are so important to Hays County citizens. The map shows where almost 170,000 acres were identified as high priority for conservation, of which only 3 percent have been conserved through working land easements. As more people are turning to locally grown foods for health and environmental reasons, awareness for ensuring this traditional economy and rural way of life has increased. Working land easements provide financial relief for farmers and ranchers and create public-private partnerships that benefit all residents of and visitors to the region.

ENHANCING PARKS AND RECREATIONAL AREAS

This map illustrates in dark red and orange areas that provide the best opportunities to improve outdoor recreation in Hays County. Places with young populations tend to demand a diversity of outdoor experiences. With a median age under 30 years, and high levels of income and education, Hays is no exception. However, without an active and consistent effort among the cities and county to acquire more parkland today, future residents will be underserved.

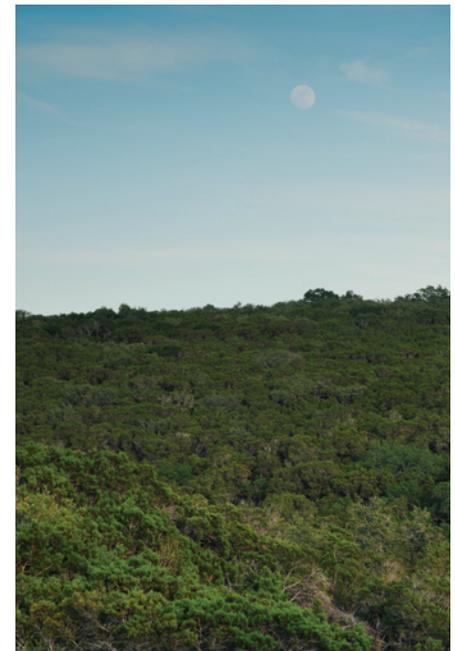
A Level of Service (LOS) analysis compared Hays County's amount of public parkland with Comal and Ellis, two other Texas counties of similar land area, population, and proximity to a major city. While denser than the other two counties, Hays offers fewer public parks than they do, at 13.1 acres of public parkland per 1,000 residents. Most of the public parkland is located within the cities and consists of neighborhood and community parks. The demand, as expressed in the Greenprint, is for public access to water for fishing, swimming, and hiking, and for spaces that expand existing parks. Recent bond elections show that Hays County citizens have strong interest in creating new open space. Hays County has an opportunity to build on this interest by creating a system of parklands that protects some of the best landscapes and habitat the county has to offer, while providing opportunities for outdoor recreation.





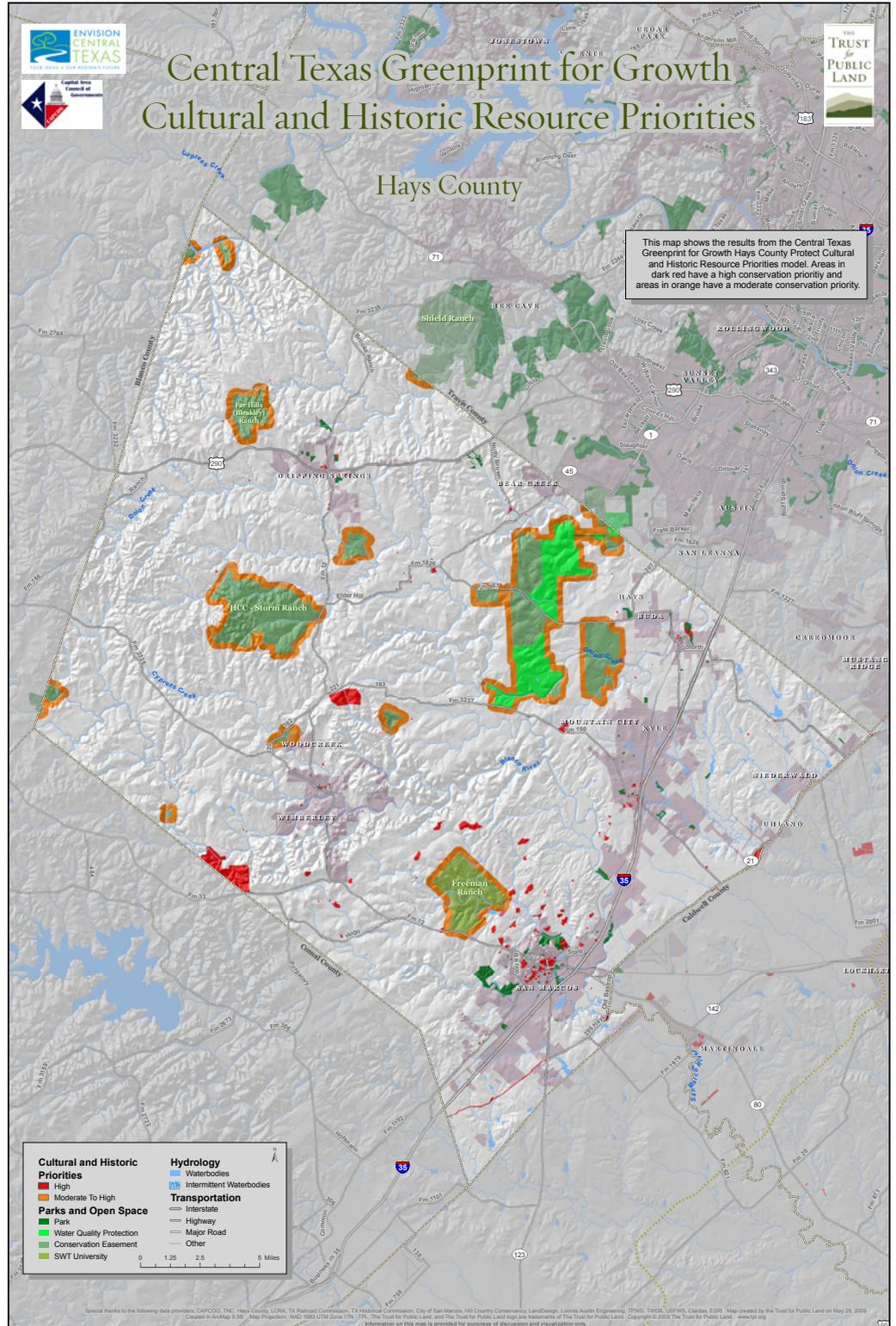
PROTECTING SCENIC CORRIDORS

“The sun has ris’n, the sun has set, and we are still in Texas yet” is a common refrain uttered by travelers driving across the state. In Hays County you can drive through the rolling hills, awed by the vastness of the burnt-umber sunset, or chance the hairpin turns of the Devil’s Backbone on your way to a roadhouse or an antique shop. Protecting these important scenic corridors matters to Hays County citizens. This map shows where scenic routes, community gateways, and high elevations for long-distance views exist and are worth preserving. To date, less than 5 percent of the 58,000 acres represented here have been protected.



PROTECT CULTURAL AND HISTORIC RESOURCES

The lands and sites that tell the stories of where we have been and how far we have come represent almost 45,000 acres of buffers around conservation easements, historic districts, cemeteries, military facilities, and cultural sites in Hays County, of which only 5 percent have been conserved. The Texas Historical Commission designated San Marcos as a Main Street city. The Sink Creek watershed's caves, wells, and cliffs are identified as high priority for protection.



LEFT: Achild's moon over Devil's Backbone.
PHOTO BY ROLF NUSSBAUMER.

OVERALL CONSERVATION OPPORTUNITIES



The Overall Conservation Opportunities map highlights in dark red and orange the areas of the county where multiple Greenprint goals overlap, based on the weights established by Hays County citizens:

Protect Water Quality and Quantity	35%
Protect Sensitive Ecological Areas	25%
Preserve Farm and Ranchlands	15%
Enhance Recreation Opportunities	12%
Protect Scenic Corridors and Viewsheds	9%
Protect Cultural Resources and Historic Sites	4%

This map shows the intersections of sensitive ecological areas or agricultural lands with rivers, streams, and aquifer recharge zones as prime targets for park and open space conservation. Of the roughly 120,780

acres identified as high priority in Hays County through this analysis, only 4 percent have been conserved, leaving ample opportunity to pursue both public and private initiatives that achieve county goals. Greenprint goals will not be achieved through land conservation alone. A willing seller conservation program is only one step toward Greenprint implementation; the rest requires regional cooperation, an engaged public, and private-public partnerships. To this end, the Hays County citizens recommended a number of strategic actions:

Action 1. Create developer incentives to increase recreational open space, such as a Transfer of Development rights program for municipalities and streamlined permitting processes for low-impact developments and those that participate in the county's Habitat Conservation Plan.

Action 2. Form public-private partnerships to encourage private landowners to conserve properties, as well as to assist local governments with acquiring, managing, and operating parks, recreational open spaces, and conservation lands.

Action 3. Identify funding through a variety of local, state, federal, and private resources to acquire and maintain lands identified through the Greenprint. Recommendations included harnessing sales tax revenue for conservation purposes; utilizing local bond options by building on the successes of past issues; and using FEMA land acquisition dollars once the county's Hazard Mitigation Plan is updated.

The Central Texas Greenprint for Growth offers a vision for the future of Hays County and the surrounding areas. Its ultimate success depends upon the sustained commitment and follow-through by citizens and their representatives.

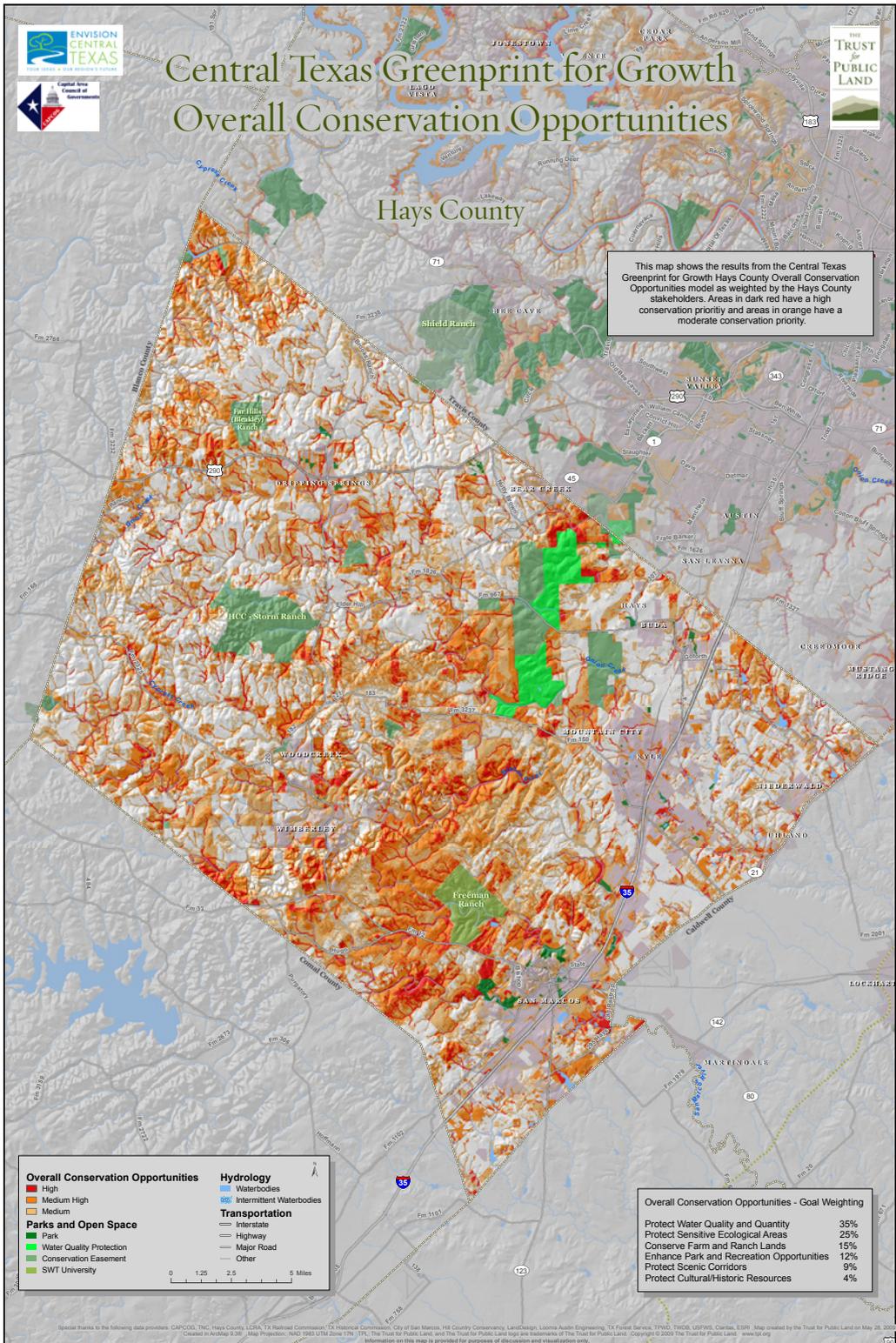


Central Texas Greenprint for Growth Overall Conservation Opportunities



Hays County

This map shows the results from the Central Texas Greenprint for Growth Hays County Overall Conservation Opportunities model as weighted by the Hays County stakeholders. Areas in dark red have a high conservation priority and areas in orange have a moderate conservation priority.



Overall Conservation Opportunities	Hydrology
High	Waterbodies
Medium High	Intermittent Waterbodies
Medium	Transportation
Parks and Open Space	Interstate
Park	Highway
Water Quality Protection	Major Road
Conservation Easement	Other
SWT University	

0 1.25 2.5 5 Miles

Overall Conservation Opportunities - Goal Weighting	
Protect Water Quality and Quantity	35%
Protect Sensitive Ecological Areas	25%
Conserve Farm and Ranch Lands	15%
Enhance Park and Recreation Opportunities	12%
Protect Scenic Corridors	9%
Protect Cultural/Historic Resources	4%

Special thanks to the following data providers: CAPCOG, TNC, Hays County, LCRA, TX Railroad Commission, TX Historical Commission, City of San Marcos, Hill Country Conservancy, LandDesign, Lotemia Austin Engineering, TX Forest Service, TPWD, TWDB, USFWS, Corfas, ESRI. Map created by the Trust for Public Land on May 28, 2009. Created in ArcMap 9.3.1. Map Projection: NAD 83 UTM Zone 17N. TPL, The Trust for Public Land and The Trust for Public Land logo are trademarks of The Trust for Public Land. Copyright © 2009 The Trust for Public Land. www.tpl.org

The *Central Texas Greenprint for Growth* represents a partnership of The Trust for Public Land, the Capital Area Council of Governments, Envision Central Texas, and the constituent communities of Bastrop, Caldwell, Hays, and Travis counties. The project partners gratefully acknowledge the following supporters for their generous contributions to this project:

Federal Highway Administration • Lower Colorado River Authority • Shield-Ayres Foundation
Bastrop County • Caldwell County • Hays County

The project partners also wish to thank the members of the Central Texas Greenprint Regional Steering Committee, the Technical Advisory Team, and the Hays County Stakeholders Group. A full list of names for those who provided their time, energy, and enthusiasm is available in the *Central Texas Greenprint for Growth Report*, which is available for download at www.tpl.org/centraltxgreenprint.

For more information about the *Central Texas Greenprint for Growth*, contact Envision Central Texas, 6800 Burleson Road, Bldg. 310, Suite 165, Austin, TX 78744 (512) 916-6037, www.envisioncentraltexas.org, or The Trust for Public Land, Texas State Office, 816 Congress Avenue, Suite 1680, Austin, TX 78701 (512) 478-4644. The full versions of the *Central Texas Greenprint for Growth* and the *Travis County Greenprint for Growth* reports are available for download at www.tpl.org/centraltxgreenprint. Central Texas Greenprint maps will be maintained by the Capitol Area Council of Governments, www.capcog.org.

The Trust for Public Land conserves land for people to enjoy as parks, gardens, and other natural places, ensuring livable communities for generations to come.



ABOVE: Sunflowers in bloom at the Montesino Farm and Ranch near Wimberley. PHOTO BY ROLF NUSSBAUMER.