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The Central Texas Greenprint for Growth

A Regional Action Plan for Conservation and Economic Opportunity

Published by The Trust for Public Land



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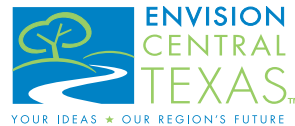


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A Regional Action Plan for Conservation and Economic Opportunity

October 2009

Project Partners
The Trust for Public Land
Capital Area Council of Governments
Envision Central Texas



Founded in 1972, The Trust for Public Land is a national non-profit organization that conserves land for people to enjoy as parks, gardens, and other natural places, ensuring livable communities for generations to come.

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Hays County

Caldwell County

THE CENTRAL TEXAS GREENPRINT

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¹The Travis County Greenprint for Growth process occurred independently of this effort, between October 2005 and October 2006. To see the full Travis County Greenprint For Growth report, go to http://www.tpl.org/tier3_cd.cfm?content_item_id=21758&folder_id=264 to download the report or to review the full stakeholder list for Travis County.

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Executive Summary

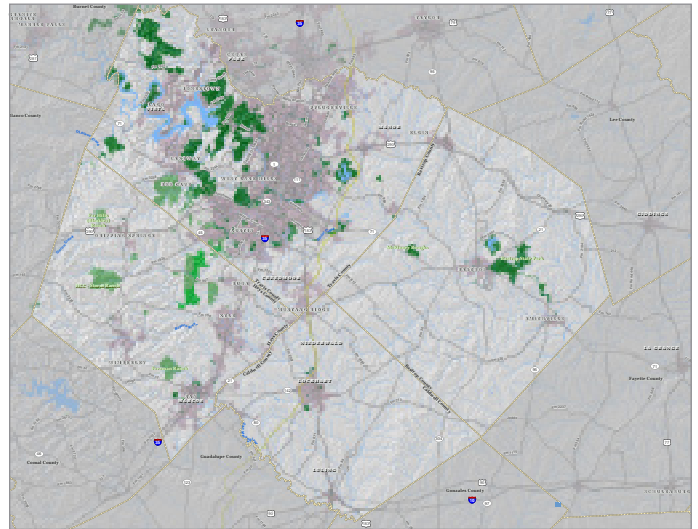
Central Texas is incredibly diverse and rich in a variety of ecosystems, including cypress lined riparian corridors, tall piney woods, expanses of fertile grasslands, cool spring-fed swimming holes, and oak-topped hills. The character of this landscape defines Central Texas, and is a source of pride and passion for its citizens. It is, in fact, these wide-open spaces that many hope to pass on to their great grandchildren.

To preserve this outstanding quality of life and that quintessential Texas landscape, stakeholders within the region came together to address land use and conservation on a regional scale. The Central Texas Greenprint for Growth presents a unique opportunity to identify the attributes of the region that make it so extraordinary, to map these characteristics, to prioritize strategies for their protection, and to identify areas where future growth should best occur.

In 2002, Envision Central Texas (ECT) started a public process to address growth challenges in the region, particularly relating to land use, transportation, and the environment. Based on this community input, ECT released a common, regional vision statement in 2004 that included an increased focus on parks and open space.

The following year, Travis County, the City of Austin, the University of Texas at Austin, Capitol Area Council of Governments (CAPCOG), The Trust for Public Land (TPL), and ECT worked together on the Travis County Greenprint for Growth to begin addressing the need for strategies and comprehensive conservation efforts. From October 2005 to October 2006, an extensive stakeholder input process and data compilation of the county's existing land features occurred. With that information, TPL developed an interactive computer model for Travis County that defines, maps, and prioritizes conservation opportunities. The Travis County Greenprint identified four conservation goals, including the protection of water quality and quantity, recreational opportunities, sensitive and rare environmental features, and cultural resources. The Travis County Greenprint is currently being used by decision makers as a tool in planning and conservation.

Recognizing that the protection of natural, cultural, and recreational resources spans jurisdictional



The Central Texas Greenprint for Growth Study Area includes Bastrop, Caldwell, Hays, and Travis counties.

boundaries, ECT and CAPCOG expanded the Greenprint effort to include three surrounding counties to obtain a comprehensive and holistic view of the region's "green infrastructure" and conservation priorities. This regional Greenprint for Growth identifies the high priority areas for conservation that meet ecosystem protection goals, local open space and park needs, and help realize the overarching vision of sustainable growth for the Central Texas area. The majority of this report is dedicated to the process for Bastrop, Caldwell, and Hays Counties, though the regional maps incorporate the results from the Travis County Greenprint.²

Between May 2008 and June 2009, concerned citizens, local experts, business owners, elected officials, and governmental agency representatives from Hays, Bastrop and Caldwell Counties came together to engage in a community-driven process to develop the Central Texas Greenprint for Growth. Through a series of county-level stakeholder meetings and the involvement of a technical review team, as well as a regional steering committee, these three counties identified, separately but consistently, the following key conservation goals:

- Protect Water Quality and Quantity
- Protect Sensitive Ecological Areas
- Preserve Farm and Ranch Lands
- Enhance Recreation Opportunities

² A full version of the Travis County Greenprint for Growth report is available at www.tpl.org/centraltxgreenprint.

What is a Greenprint?

- Protect Cultural Resources and Historic Sites
- Protect Scenic Corridors and Viewsheds

Each of the three counties came up with its own unique rankings for the conservation goals they defined. Opportunity maps were developed for each goal, identifying lands that could be conserved to best meet community preferences. A regional composite map then was created to highlight those lands that met overlapping conservation goals.

Local stakeholders in each county also came together to create a list of potential action steps to move their conservation agendas forward.³ These included creating meaningful incentives to encourage developers to incorporate green space or set aside recreational open space as part of their projects, forming public-private partnerships to expand conservation opportunities, and providing funding for parks and open space preservation. The recommendations formed by the citizens of each county provide a menu of options for Central Texas communities to explore. Raising and leveraging local, state, and federal funding is an integral part of implementing the Greenprint goals. General obligation bonds or other public finance measures, combined with state and federal grant programs, private philanthropic dollars, and non-profit organization resources provide the patches of material necessary to weave together a “funding quilt” for conservation.

Central Texas too, is like a quilt – a vibrant urban city, a rugged hilly countryside, a fertile river valley of farms and ranches – stitched together and passed down to future generations to enjoy. It is ultimately a combination of these diverse attributes, each with its own rich history and culture, and each with a desire to prosper and grow, that spurred citizens and communities across the region to draft a Greenprint for the years ahead. With regional cooperation and local action, all Central Texans can use these community-defined priorities to set goals for conservation and improve planning for housing and infrastructure, so that these important tools for economic development can occur in harmony with the unique environment that surrounds them.

Greenprinting uses TPL’s unique application of Geographic Information System (GIS) mapping and modeling technology to help local governments and communities make informed land use decisions, guiding where growth and development should ideally occur in relation to the protection of important natural, cultural, and recreational resources.

A Greenprint is not, however, a set of static maps. Rather, it is set up to be a dynamic, interactive tool that guides actions that will result in more sustainable, vibrant, and green communities. The model utilizes GIS data along with the community’s ranking (or “weighting”) of individual protection goals to identify the areas that offer the highest conservation benefits. TPL’s Greenprint process fosters collaboration by bringing together a diverse group of community stakeholders and considering their priorities in combination with broader region-wide interests and local data to produce graphic results that illustrate the best opportunities for conservation and economic development that are backed by strategic actions for implementation.

The Greenprint Process in a Nutshell

Constituency Building

- Identifying Community Values
- Establishing Conservation Goals and Criteria to Express Community Values

Data Gathering and Analysis

- Understanding Existing Conditions
- Assembling Local Geographic Information System (GIS) Data
- Creating GIS Models
- Ranking Goals and Criteria
- Translating Models into Opportunity Maps

Implementation Strategies

- Identifying Practical Strategies for Implementation
- Developing a Greenprint Web Page

³Travis County did not engage in this process because it conducted a separate Greenprint process between October 2005-2006. The results of the Travis County process have been incorporated in this regional analysis, where appropriate, and inconsistencies among goals and criteria have been addressed.

The Central Texas Greenprint Process and Timeline

At-a-Glance

May 2008 – October 2009⁴

PHASE I: MAY – SEPTEMBER 2008

CONSTITUENCY BUILDING AND INITIAL RESEARCH

Created Regional Steering Committee, Technical Advisory Team, and County Stakeholder groups. Interviewed key leaders in the counties. Inventoried existing resources and developed a comprehensive database of existing parks and open space in the counties. Began current conditions and conservation finance research.

PHASE II: MAY 2008 AND OCTOBER 2008

DEVELOP LOCAL CONSERVATION PRIORITIES

Conducted stakeholder input meetings in each county to identify goals and priorities.

PHASE III: NOVEMBER – FEBRUARY 2009

CONSERVATION GOAL MAPPING

With a Technical Advisory Team, The Trust for Public Land (TPL) developed an interactive Geographic Information System (GIS) computer model that visually represents the conservation goals identified by the Stakeholders.

PHASE IV: MARCH – MAY 2009

REFINE GOAL MAPS

Utilized stakeholder and technical input to refine the model, and to define and prioritize the parks and conservation acquisition needs in each county. Conducted local county stakeholder meetings to develop local “weighting” of goals.

PHASE V: JUNE 2009

FINALIZE GREENPRINT AND DEVELOP IMPLEMENTATION STRATEGIES

Presented model and final maps for review by stakeholders and finalized results. Developed Conservation Action Steps to implement the Greenprint results.

PHASE VI: JULY – OCTOBER 2009

FINALIZE GREENPRINT RESULTS

Placed the model online with the Capital Area Council of Governments (CAPCOG) and published final materials.

⁴The Travis County Greenprint process occurred independently from October 2005 to October 2006. For purposes of the Central Texas Greenprint, every effort was made to incorporate Travis County results where appropriate.

Introduction

Residents of Central Texas enjoy a remarkably high quality of life. With hip urban centers, strong neighborhoods, green river corridors, quaint small towns, hill country views, fertile farm and ranch lands, tall forests, and a variety of cultural and outdoor recreation opportunities, one might say Central Texas has it all.

The region's diversity makes it attractive to businesses and residents, providing economic, environmental, and educational opportunities for its population of 1.3 million people, which experts predict will double to three million within a few decades. With rapid development, many local communities are falling behind the curve in terms of addressing their growing park, recreation, and green infrastructure needs. (See Appendix A for a full description of current conditions and regional demographics.)

The region continues to struggle with a myriad of issues as it grows and morphs from what was once mostly rural into a rapidly urbanizing and sub-urbanizing area. Some of the most pressing issues of concern to Central Texans include:

- increasingly severe and prolonged drought conditions, creating strong concern for the health of the aquifers and surface drinking water supply;
- threatened endangered species due to habitat degradation;
- concern for maintaining infrastructure needs to accommodate the increase in residential growth to the region;
- the disappearance of farm and ranch land; and
- a strong desire to provide additional outdoor recreational opportunities for growing populations.

As Austin, the dominating economic and development force in the region, continues to expand its sphere of influence, communities in the region are concerned about maintaining their unique identities and small town, rural feel. Many residents of surrounding counties describe the changes to their communities and worry about how this sprawl has occurred at such a rapid rate with seemingly no controls or guidelines.⁵ They worry about what it means for the health of their drinking water supply and the level of congestion on their highways. Meanwhile, the lack of county land use

authority outside of city limits hinders communities' abilities to impact the pace and type of development occurring around them. Communities are struggling to find ways to better steer their own destinies.

The question that many Central Texans wrestle with is this: How can we best balance growth?

The Central Texas Greenprint

In an effort to provide some answers to that question, Envision Central Texas (ECT), the Capital Area Council of Governments (CAPCOG) and The Trust for Public Land (TPL), a national non-profit organization dedicated to conserving land for people, embarked on a Greenprint for the Central Texas region. Beginning in Travis County in 2005 and expanding into three other counties – Bastrop, Caldwell and Hays – in 2008, ECT, CAPCOG, and TPL have conducted an extensive citizen-driven process to create a road map for a sustainable and vibrant region.

GREENPRINT CONSTITUENCY

As part of the Greenprint process, TPL, CAPCOG, and ECT have worked with leaders at both the local and the regional level to provide input into the decision-making tool for identifying conservation opportunity areas. This started with the building of a local constituency to direct and inform the convening organizations.

- **The Central Texas Greenprint Regional Steering Committee**
Composed of one or two representatives from the four counties and local municipalities within them, the Steering Committee guided the Greenprint process, ensuring that it included comprehensive community engagement while keeping in sync with individual community plans and priorities.⁶
- **The Central Texas Greenprint Stakeholder Groups**
Every county had its own Greenprint Stakeholders Group (GSG). Each GSG included members of the Steering Committee as well as broad-based representation from

⁵ Derived from community stakeholder interviews.

⁶ The Travis County Greenprint for Growth involved a separate stakeholder process than the Central Texas Greenprint; however, Travis County representatives served on the Regional Steering Committee and the results of the Travis County Greenprint have been incorporated to show overlapping regional priorities.

economic, environmental, recreational, historical, and other community interests. The group brainstormed potential goals for their respective counties, ranked goals in relationship to one another, provided ideas for data sources, and recommended strategic action steps for Greenprint implementation.

The group represented the diverse range of stakeholders living or working on related conservation and development issues in the region. The GSG ensured that conservation, aquifer protection, parks, recreation, cultural, and other natural resource goals and objectives reflecting the entire county were appropriately represented in the GIS model and the maps and reports that were ultimately produced.

- **The Central Texas Greenprint Technical Advisory Team**

The Technical Advisory Team (TAT) provided expert review and advice regarding data, model design, rationale, content, and results. The TAT was made up of 2-3 advisors from each county with expertise in at least one of the following areas: natural resource protection, water quality and supply, habitat protection, storm water management, cultural assets, parks and recreation, land use planning, and Geographic Information System (GIS) data. A number of regional advisors also served on the team. The TAT was responsible for making technical recommendations regarding model criteria defined for each goal; identifying best available data sources; helping to insure that defensible science was used for all models; advising on modeling assumptions; and reviewing input data and model results for accuracy.

DATA GATHERING AND ANALYSIS

Through interviews and public meetings residents articulated their preferences and priorities for conservation and use of open space. Next, data about the land base was linked to these preferences

and priorities. Using computer modeling and GIS mapping technology that considered multiple factors (e.g., topography, endangered species habitat areas, location of aquifers, and population trends), maps were developed that clearly pinpoint community priorities. This information gathering stage involved:

- **One-on-one Interviews**

TPL, ECT, and CAPCOG project staff interviewed five dozen individuals who offered a range of perspectives on the historical, political, and economic context, as well as other aspects of living and working in this region. (See Appendix B for a description of community interviews and a list of interviewees.) Some of these findings provided context for this report and were used to structure and prepare for the Greenprinting process.

- **Current Conditions**

Focusing on the distinct characteristics of each county, TPL, with assistance from ECT and CAPCOG, conducted an in-depth analysis of the region's demographics, economics, land use, geography, and historic and natural resource features (see Appendix A).

- **Greenprint Goal Setting**

In summer and fall of 2008, residents within each county, representing a diverse array of interests, came together to participate in the Greenprint Stakeholder Group Goals and Criteria Workshops to provide input on what the conservation priorities should be for the region.⁷ Despite the fact that each county goal development workshop was held independently, stakeholders from all counties arrived at very similar goals for conservation within the region:

- Protect Water Quality and Quantity
- Protect Sensitive Ecological Areas
- Preserve Farms and Ranchland⁸
- Enhance Recreation Opportunities
- Protect Cultural Resources and Historic Sites⁹
- Protect Scenic Corridors and Viewsheds¹⁰

⁷ The Travis County process occurred separately between October 2005 and October 2006.

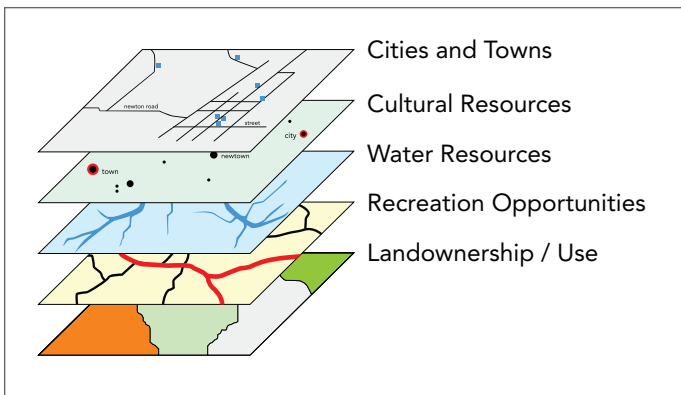
⁸ Travis County data on farm and ranchland conservation opportunities is included in its goal: "Preserve Cultural Resources."

⁹ Travis County data on cultural and historic sites is included in its goal: "Preserve Cultural Resources."

¹⁰ Travis County data on scenic corridors and viewsheds is included in its goal: "Preserve Cultural Resources."




The Central Texas Greenprint Opportunity Maps

TPL developed individual maps for each of the five community goals identified by the stakeholders. TPL, with assistance from CAPCOG and the TAT, reviewed the list of community-generated goals, conducted a data inventory, and compiled GIS layers to construct a GIS computer model that generates land conservation opportunity maps, which all member communities will be able to access. CAPCOG will maintain a web-based system of the final Greenprint results on behalf of the counties and municipalities involved.



Graphic 1 depicts how GIS data layers are overlaid to build Greenprint models.

The maps are color-coded based on the criteria weightings and identify where Central Texas communities can most efficiently and effectively direct their resources to meet the Greenprint goals.¹¹ The most intense colors indicate the best opportunities:

-  Dark Red = High Opportunity
-  Dark Orange = Moderate – High Opportunity
-  Orange = Moderate Opportunity

The benefit of the Greenprint computer model is that it provides a scalable tool through which sections of land, a county, or a region, can be viewed. General viewers will be able to see which lands ranked as priorities and why they are priorities. The conservation of these identified lands will ensure the biggest “bang for the buck” for the region, in terms of meeting multiple objectives and targeting grant funds for conservation, restoration and management.

¹¹ For the full list of model criteria, data sources, and GIS methodology, go to <http://www.tpl.org/centraltxgreenprint>.

Protect Water Quality and Quantity

The protection of drinking water and surface water features was identified by stakeholders as the predominant issue of the region. The protection of the aquifers and their recharge zones has been a contentious issue in Travis County for decades. As growth moves into the surrounding counties and drought leads to reduced water supplies region-wide, Hays, Bastrop, and Caldwell Counties are beginning to feel the intense pressure and importance of this issue.

The highest priority areas identified on the map are rivers, streams, creeks and their associated floodplains, springs, and forest lands important to water quality. In Hays County, known karst areas are also identified as high priority because they are places where water flows directly from the surface into the aquifer.

Fourteen percent of Travis County's water quality priority areas are protected.¹² As Travis County is highly urbanized, fewer opportunities to protect these lands exist, although a healthy 132,000 acres are identified as opportunities for priority water quality protection. Among the other three counties, Hays County has the next largest portion of its important water quality lands protected, with nearly seven percent of its priority area conserved. Though with over 341,000 acres of high priority lands identified, much conservation opportunity remains.

Caldwell and Bastrop Counties have roughly 70 percent and 80 percent (respectively) of their county land area identified as high priority for water quality and quantity protection, and only 0.3 percent and two percent (respectively) conserved to date. That translates into over 445,000 acres in Bastrop County and over 244,000 acres in Caldwell County of high priority area remaining for drinking and other water resource protection. It is unrealistic to think that all of these lands will be conserved, and important to remember that these are just opportunity maps illustrating which lands might be appropriate for conservation based on the landscape features.



Photo by Rolf Nuschauer

The San Marcos River, Caldwell County.



Photo by Rolf Nuschauer

The Blanco River, Hays County.

¹² The *Travis County Greenprint for Growth* did not include the boundaries of the Edward-Trinity Aquifer. These boundaries were incorporated into the *Central Texas Greenprint for Growth*.

Protect Sensitive Ecological Areas¹³

This map illustrates those lands that could be conserved to protect important habitat for threatened and endangered species, as well as to provide wildlife corridors within the region. This map prioritizes those areas where known endangered species are present, lands adjacent to already protected areas that support these species, and corridors where the best habitat connectivity opportunities could occur.

Throughout Hays County, the endangered golden-cheeked warbler habitat areas are identified as highest priority. In Bastrop County, the endangered Houston toad habitat areas, which largely encompass the “Lost Pines” region of the county, are also identified as the highest priority. The Sandhills ecosystem of eastern Caldwell and southeastern Bastrop Counties is also highlighted as a moderate-high priority for protection.

About 43 percent (over 875,000 acres) of the Central Texas region is identified as a high priority opportunity for protecting these sensitive ecological areas. Almost 30 percent of the high priority rare and sensitive environmental features in Travis County have already been protected. In contrast less than one percent of these types of lands have already received some sort of protection in Caldwell County.



Photo by Rolf Nussbaumer

Cypress trees on the Blanco River, Hays County.



Photo by Greg Lastley

The endangered Golden-cheeked Warbler.

¹³ For the Travis County Greenprint for Growth, this goal was referred to as “Rare and Sensitive Environmental Features.”

Preserve Farm and Ranch Lands

Stakeholders across the region placed a high conservation value on the protection of farm and ranch land. This goal reflects the desire of many residents to preserve a traditional economy, the area's scenic character, and rural way of life. On the map, the bright red areas show existing farms and ranches that, if protected, could help to preserve this type of landscape and livelihood for the region.

Travis County stakeholders incorporated the protection of farmland into their goal titled "Cultural Resource Priorities." As the majority of the high priority acres identified for this goal are farm or ranch land acreage, that goal is included for discussion here. The highest priority (red) areas within that county represent areas within the county that include multiple cultural values (farmland, historic sites, scenic corridors, etc.). Thus, farm and ranch land acreage, on its own, shows up only as a moderate-high priority on the Travis County map. For Bastrop, Caldwell, and Hays Counties, farm and ranch land was the only criteria; thus, it is identified as a high priority everywhere it exists.

Region-wide the vast majority of these priority agricultural lands are not yet protected with working land easements, which would guarantee that their current uses continue. Less than one percent of farm and ranchland in Bastrop and Caldwell Counties, and only three percent in Hays County, have been conserved. In total, 977,749 acres (nearly 49 percent) exist as high priority within the four-county region.¹⁴



Photo by Tom Dureka

Longhorn cattle, Bastrop County.



Photo by Rolf Nussbamer

Montesino farm near Wimberley, Hays County.



Photo by Rolf Nussbamer

Eggplants thrive in the warm Central Texas sun.

¹⁴ 263,126 acres of this total are from Travis County and includes the preservation of a small portion of other cultural resources within the county along with farm and ranchland.

Enhance Recreation Opportunities

This map indicates in dark red and orange the areas that provide the best opportunity for improving recreational opportunities within Central Texas. Many of the priority areas identified would enhance or expand existing protected lands, as well as provide park opportunities along river corridors and close to more urban population centers.

Most of the high priority areas identified to reach this conservation goal lie along rivers and streams and would provide public access to water for fishing, swimming, and hiking. Floodplains, particularly along the Colorado and other major river corridors, are also identified as high priorities throughout the region. This map delineates more than 275,000 acres within the region as potential priority recreation lands. Six percent of those acres are already “conserved,” which is defined for the purposes of this Greenprint as state, federal, municipal parks and open space, conservation easements, and water protection lands.

More than 258,000 acres remain as priority opportunities, representing roughly 13 percent of the study area.



Photo by Rolf Nussbamer

Hiking trail at McKinney Roughs Nature Park, Bastrop County.



Photo by Rolf Nussbamer

Swimming hole on the San Marcos River, Caldwell County.



Photo by Rolf Nussbamer

Bluffs over the Colorado River, Bastrop County.

Protect Scenic Corridors and Viewsheds¹⁵

The areas in red on this map indicate the location of scenic roadways and viewsheds within the region. County stakeholders identified these as the most scenic routes or those that provide a gateway into their communities. A separate analysis identified the highest elevation lands within the region where the greatest opportunity for long-distance views exists. The highest priority areas are indicated both by where those two basic criteria overlap and the location of valuable viewsheds.

In Bastrop County, stakeholders also highlighted the Colorado River and Wilbarger Creek as scenic corridors for transportation, recreation, and tourism. Caldwell County highlighted the San Marcos River as well as Town Branch as scenic corridors.¹⁶

The model shows more than 212,000 high priority scenic corridor and viewshed acres (about 11 percent of the study area).¹⁷ Just over 6,000 acres (0.3 percent) of the high priority scenic lands are currently conserved.



Photo by Rolf Nussbamer

The Devil's Backbone, Hays County.

¹⁵Protection of scenic corridors was not an individual goal in Travis County. The Travis County portion of this map contains their broader “Cultural Resource Protection” goal, which included data on scenic corridors.

¹⁶Inconsistencies with the Travis County Greenprint stem from the inclusion of the Visibility Index and Trinity River Aquifer after the Travis County Greenprint was completed.

¹⁷Travis County has not been included in the statistic for this region as the land identified as part of the “Cultural Resource Protection” goal was incorporated into the discussion of farm and ranchland.

Protect Cultural Resources and Historic Sites¹⁸

This map identifies in dark red those areas that contain cultural or historic resources or landmarks deemed important and in need of protection. The darkly colored areas include buffers for existing conservation easements, cemeteries, military facilities, and historic sites and districts. Specifically included in Bastrop County is the “Lost Pines” ecoregion, which represents an iconic part of the cultural heritage of that county. In Hays County, stakeholders identified the unique features in the Sink Creek watershed (caves, wells, and cliffs) as important to include in this goal.

Within Bastrop, Hays, and Caldwell Counties, almost 100,000 acres have been identified as high priority for this goal. Bastrop County has protected 10 percent of its identified high priority cultural and historic resource lands. Caldwell County has conserved only one acre identified as high priority on the map. More than 50 percent of identified high priority cultural resource lands in Hays County have already been protected. About 15 percent of Travis County’s cultural resource acres are already protected.¹⁹ Overall about 15 percent of the region was identified as an opportunity for cultural resource protection in the future.



Photo by Rolf Nusbaumner

The inner workings of the historic Zedler Mill.

¹⁸Travis County portion of this map contains their broader “Cultural Resource Protection” goal, which included data on cultural resources and historic sites.

¹⁹The Travis County “Cultural Resource Protection” goal map includes farm and ranch land and scenic corridors in addition to cultural resources and historic sites.

Central Texas Greenprint for Growth

Regional Cultural/Historic Resource Priorities



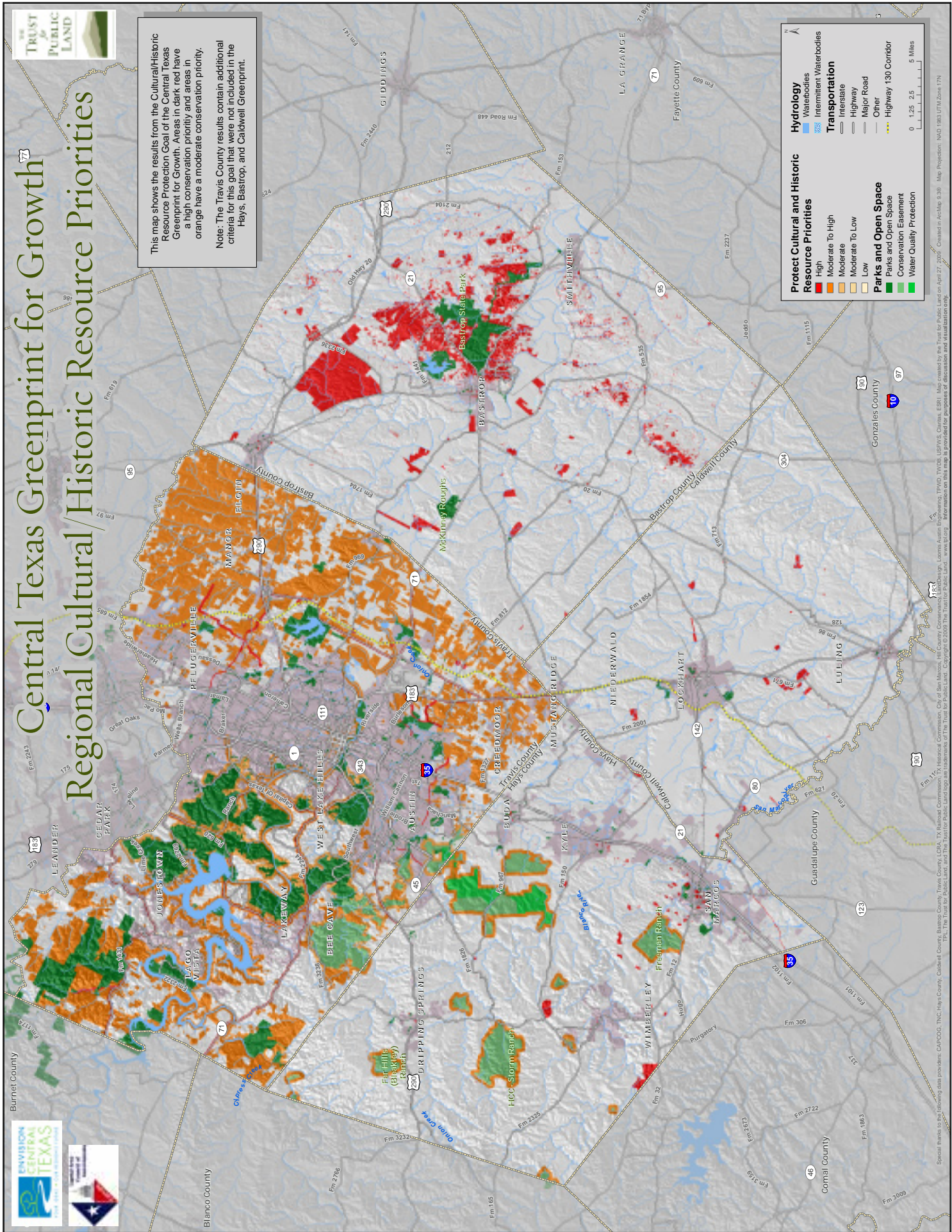
This map shows the results from the Cultural/Historic Resource Protection Goal of the Central Texas Greenprint for Growth. Areas in dark red have a high conservation priority and areas in orange have a moderate conservation priority.

Note: The Travis County results contain additional criteria for this goal that were not included in the Hays, Bastrop, and Caldwell Greenprint.

Protect Cultural and Historic Resource Priorities	
High	Dark Red
Moderate to High	Red
Moderate	Orange
Moderate to Low	Light Orange
Low	Yellow
Parks and Open Space	
Parks and Open Space	Green
Conservation Easement	Light Green
Water Quality Protection	Dark Green

Hydrology	
Waterbodies	Blue
Intermittent Waterbodies	Light Blue
Transportation	
Interstate	Thick Grey Line
Highway	Thin Grey Line
Major Road	Dashed Grey Line
Other	Dotted Grey Line
Highway 130 Corridor	Yellow Dashed Line

0 1.25 2.5 5 Miles



Special thanks to the following data providers: CAPCOG, TNC/Hays County, Caldwell County, Blanco County, Gillespie County, Travis County, Hays County, Bastrop County, Caldwell County, Fayette County, Guadalupe County, Burnet County, Blanco County, Comal County, Gillespie County, Hays County, Travis County, Bastrop County, Caldwell County, Fayette County, Guadalupe County. The Trust for Public Land is a 501(c)(3) nonprofit organization. All rights reserved. © 2010 The Trust for Public Land. All trademarks are the property of their respective owners. The Trust for Public Land is a 501(c)(3) nonprofit organization. All rights reserved. © 2010 The Trust for Public Land. All trademarks are the property of their respective owners. The Trust for Public Land is a 501(c)(3) nonprofit organization. All rights reserved. © 2010 The Trust for Public Land. All trademarks are the property of their respective owners.

Overall Regional Priorities

The stakeholders of the region created one “Overall Priorities” map that highlights areas of the landscape where multiple goals can be accomplished in one place. On this map, the darker the red, the more community goals would be met by some level of conservation in that area. The computer model assigned “weights” at the direction of the Stakeholder Groups in order to allow some goals described above to have more emphasis on the overall priorities than others.

The Stakeholder Groups for each county applied the following weightings to each conservation goal. (See Table 1 for a listing of regional goal priority weights.) Of the Central Texas region’s over two million acres, roughly 422,000 are identified as high priority overall. That equates to almost 21 percent of the region as being high priority and capable of meeting multiple Greenprint goal objectives. Given the need to balance resource protection with growth, this is intended to present a realistic opportunity map, indicating the best places for land conservation that meet the region’s goals.

Though five percent of the region’s high priority areas are already conserved (See Table 2), ample priority landscapes remain in all four counties. Those overall priority lands yet to be conserved are depicted in Table 3, both by total acreage and the percentage of land in the region that acreage represents.

In Bastrop County the overall regional opportunity map highlights the Lost Pines area as a high priority for conservation, because it is able to achieve multiple goals. In Travis County, critical habitat areas in the western part of the county are highlighted, as well as surface waters and floodplain to the east. In Hays and Caldwell Counties, intersections of sensitive ecological areas or agricultural lands with rivers, streams and aquifer recharge zones emerge as prime targets for park and open space conservation.

From Travis County through to Bastrop County, the Colorado River and its tributaries emerge as high priority resources for the region, due in part to the fact that so many different goals (water quality, recreation, scenic, ecological) could be achieved through the protection of riverfront property along the corridor.

Table 1. Regional Goal Priority Weights

Goal	Bastrop County	Caldwell County	Hays County	Travis County*
Protect Sensitive Ecological Areas	17%	14%	25%	25%
Protect Scenic Corridors and Viewsheds	13%	12%	9%	NA
Preserve Farms and Ranchland	19%	19%	15%	NA
Protect Water Quality and Quantity	27%	33%	35%	25%
Enhance Recreation Opportunities	15%	18%	12%	25%
Protect Cultural Resources and Historic Sites	9%	4%	4%	25%

*The names of Travis County Greenprint goals are slightly different but fit within the goal names outlined above. Please refer to the Travis County Greenprint report for further clarification on Travis County Greenprint goals.

Table 2. Overall High Priority Opportunities Conserved

Area	Total Acres	High Priority Opportunity Acres Conserved (% of area)*
Region (4 Counties)	2,014,295	20,359 (5%)
Bastrop	574,118	3,312 (3%)
Caldwell	350,365	335 (0.4%)
Hays	435,065	4,905 (4%)
Travis	654,747	11,807 (12%)

*High Priority Acres identified here are those that have either High (5) or Medium High (4) greenprint value. Conserved Lands include state, federal, municipal parks and open space, conservation easements, and water protection lands.

Table 3. Region-wide Conservation Opportunity Lands by Conservation Goal	
Conservation Goal	High Priority Acres (% of region) Not Yet Conserved
Protect Water Quality and Quantity	1,163,930 (58%)
Enhance Park and Recreation Opportunities	258,246 (13%)
Conserve Farm and Ranch Land	929,537 (46%) ²⁰
Protect Sensitive Ecological Areas	851,300 (42%)
Protect Cultural and Historic Resources	93,901 (5%) ²¹
Protect Scenic Corridors	206,527 (10%) ²²

²⁰ Includes Travis County data, acreage contained within their “Cultural Resources” goal, as this is comprised mostly of farm and ranchland conservation opportunities.

²¹ Numbers here do not include any acreage from Travis County; cultural and historic resources identified for protection are included under “Conserve Farm and Ranch Land.”

²² Numbers here do not include any acreage from Travis County; scenic resources identified for protection are included under “Conserve Farm and Ranch Land.”

Implementation Strategies

A regional conservation priority map, developed with broad stakeholder and leader consensus that clearly articulates shared goals and opportunities can help guide future infrastructure investments, such as new schools, roads and bridges, and housing. Although essential to a thriving economy, development can fragment and destroy healthy, functioning ecosystems that provide regional benefits, such as drinking water source protection.

The Central Texas Greenprint maps reveal areas of opportunity for protecting lands in a variety of ways, such as:

- identifying park or open space land that communities can acquire to achieve one or more conservation goals;
- directing growth toward less environmentally sensitive areas by transferring development densities away from lands needed for recreational connectivity and resource preservation;
- identifying important water quality or aquifer recharge areas for protection;
- planning for new recreation facilities to meet growing population needs near new or existing development; and
- targeting areas for enhancement or restoration to improve business retention and recruitment.

Land Conservation

Regulations, incentive policies, and land conservation are each important and often complementary. However, land conservation differs from regulations or incentives, which are subject to frequent changes based on shifting political realities and public policy. As a general rule, land conservation has broader support because it is achieved through the mutual agreement of willing landowners and willing buyers of land or easements and has perpetual benefits to the public. Often, a fair price for value foregone is a critical element to successful land conservation, and sources of funding to provide such compensation are a necessary condition for success.

Land conservation provides many opportunities for considering community needs and desires because it can be applied to natural resources, parks, habitat, forests, farmland, and more. In Central Texas, there exists a wealth of natural, cultural, and scenic resources worthy of conservation, but neither the money nor the will exists to protect every parcel. Thus, a primary goal of this process is to facilitate an acceleration of both the pace and the quality of land conservation in Central Texas by bringing multiple voices to conservation, employing the best technology available, and taking steps to assure that implementation is both efficient and effective.

The practice of effective land conservation requires the employment of public and private tools to protect land for public enjoyment. Land conservation typically involves:

- fee simple land acquisition;
- donated or purchased conservation/historic preservation easements;
- purchase or donation of development rights;
- land or improvements value donations; and
- incentives for developer set-asides of open space.

The common thread woven among these conservation tools is the value of conserving the lands most important to the recreational, environmental, and economic needs of Central Texas.

Local Implementation Strategies

Land conservation is one of the key, but not the only, tool in the box for preserving important landscapes and water resources while sustaining and improving economic vitality. Stakeholders have identified a number of other action items to implement the Greenprint goals.²³ Each action item is explored in greater detail in this section. The descriptions beneath each action plan goal include specific strategies suggested by county stakeholders that could be taken to realize the goal.

²³The Travis County Greenprint for Growth did not include action planning; therefore, it does not have a list of community-generated implementation strategies. However, the strategies identified by the surrounding counties are applicable and can provide ideas and examples for action by the local governments and citizens of Travis County.

BASTROP COUNTY IMPLEMENTATION STRATEGIES

ACTION 1. CREATE DEVELOPER INCENTIVES.

- a. County and municipalities should adopt a conservation subdivision ordinance.
- b. Cities and county should streamline development approval processes to encourage open space dedications.
- c. Municipalities should consider establishing a transfer of development rights (TDR) program at city or county level.

ACTION 2. FORM PUBLIC-PRIVATE PARTNERSHIPS.

- a. Land trusts, master naturalists, cities, county, and others collaborate to provide information, access, and resources for conservation-minded developers.
- b. Corporations, developers, and/or other private entities and local governments create partnerships to incentivize the development and maintenance of public parks.
- c. Partner with groups who have an interest in ecotourism to increase Bastrop County's ecotourism draw and attract developers aligned with this perspective.
- d. School districts, municipalities, Chamber of Commerce, county, non-profit organizations, state and federal government form a partnership to create joint-use facilities.
- e. Work with Rails-to-Trails on potential partnership opportunities related to the re-alignment of the Union Pacific rail, and ensure that realignment takes into account the Greenprint results.

ACTION 3. INCREASE FUNDING.

- a. Conduct a needs assessment to determine the targets and sources of funding for land acquisition.
- b. Seek federal funding through various open space acquisition grant programs. Raise awareness among individual landowners about federal funding programs.
- c. Dedicate dollars from hotel occupancy tax toward parks/open space. Try to find projects that would meet the state's requirements.



Photo by Diane Miller

Greenprint stakeholder meeting, Bastrop County.

- d. Organize to pursue, and develop plans for, a local bond measure for conservation to address Greenprint goals.
- e. Adopt a parkland dedication ordinance that requires developers to provide parks or contribute a fee in lieu of providing parks.
- f. Lobby the state legislature for the full release of revenue that supports Texas Parks and Wildlife Department local open space grant programs.

ACTION 4. IMPROVE QUANTITY OF PARKS AND IMPROVE PARK MAINTENANCE.

- a. Create a "Friends of Parks" organization or Regional Park Task Force.
- b. Conduct a park equity analysis.
- c. Develop a countywide master park plan.

ACTION 5. INCREASE EDUCATION RELATED TO RECREATION AND CONSERVATION.

- a. Conduct outreach in schools.
- b. Establish conservation information programs in public libraries.
- c. Host celebration/awareness events on parkland to increase awareness.
- d. Utilize the Greenprint as an educational tool; educate all potential partners on the Greenprint.

CALDWELL COUNTY IMPLEMENTATION STRATEGIES

ACTION 1. CREATE DEVELOPER INCENTIVES.

- a. County and municipalities should adopt a conservation subdivision ordinance.

- b. Establish a transfer of development rights (TDR) program for Lockhart and Luling.
- c. Update city planning/zoning and master plans to recognize the Greenprint.
- d. Investigate land swaps for developers.
- e. Establish a fee abatement program that reduces impact fees to encourage park/open space development, similar to the program currently used for infill development.
- f. Adopt a parkland dedication ordinance to require more parks or greenspace within new subdivisions and better maintenance.

ACTION 2. FORM PUBLIC-PRIVATE PARTNERSHIPS.

- a. Local churches, land trusts, state and local governmental agencies should:
 - 1. Investigate opportunities for historic designations
 - 2. Pursue conservation easements and other conservation strategies in priority areas.
- b. County and municipalities should partner with non-profits to acquire grant funds for park projects/land conservation.

ACTION 3. PROVIDE FUNDING.

- a. Explore potential non-profit and state and local government partners for conservation easements for agriculture.
- b. Obtain support from city and county officials for grant applications for conservation projects through governmental, private or non-profit entities.
- c. Seek endowments to fund park projects, recreation centers, etc.

ACTION 4. IMPROVE QUALITY AND QUANTITY OF PARKS AND IMPROVE PARK MAINTENANCE.

- a. County should consider exploring an expanded role in new park development and hiring a park/planning coordinator.
- b. Those entities charged with managing parks should consider increased involvement of youth groups, church groups, 4-H as park volunteer resources.
- c. Seek collaborations with Lions Club, Kiwanis, American Legion, and Veterans of Foreign



Photo by Rolf Nussbanner

Monarch butterfly enjoying a sunflower, Hays County.

Wars to help with park purchase and possibly maintenance.

ACTION 5. INCREASE EDUCATION RELATED TO RECREATION AND CONSERVATION.

- a. Educate landowners on estate planning, including options to donate land through their will, life estate, etc.
- b. Educate community on the Greenprint results/maps/report. (Include governmental and non-profit organizations in this effort.)
- c. Incorporate recreation and conservation element into school district curriculum.

HAYS COUNTY IMPLEMENTATION STRATEGIES

ACTION 1. CREATE DEVELOPER INCENTIVES.

- a. Establish a Transfer of Development Rights program in municipalities.
- b. Adopt a City/County park dedication ordinance that allows developers to pay a fee in lieu of providing park space.
- c. Create a fast track or streamlined permitting process for low impact development and participation in the Habitat Conservation Plan, using the already identified areas.
- d. Encourage cluster development through the adoption of a conservation subdivision ordinance.
- e. Create incentives to attract commercial and residential developers to desired corridors as part of a County Master Plan or a conservation subdivision ordinance.

Land Conservation Funding Opportunities for Central Texas

ACTION 2. FORM PUBLIC-PRIVATE PARTNERSHIPS.

- a. Develop criteria for the county to abide by in determining whether to partner with different entities.
- b. Establish a partnership to fund a grant program to defer the costs of private landowners who donate conservation easements (e.g. appraisals, legal fees, etc.).
- c. Establish a partnership to create a demonstration conservation development (e.g. for an aquifer-friendly development).
- d. Develop an education process to build better relationships with the real estate and development community in order to demonstrate to them the financial value of green space. Form a working group and identify champions to carry that message.
- e. Ensure coordination among the many public/private/ non-profit potential partners, possibly through the Hays County planning staff.
- f. Partner with surrounding counties to push for county land-use authority.

ACTION 3. PROVIDE FUNDING.

- a. Investigate options for capturing sales tax revenue for conservation purposes; obtain a percentage of state sales tax dollars where local governments have not fully utilized their sales tax.
- b. Utilize a local bond option; these requests need to be tied to actions that are coordinated and greatly needed, and must tell story of successes with two bond issues already passed.
- c. When available, use FEMA land acquisition dollars; requires an updated County Hazard Mitigation Plan.
- d. Establish a county-wide tax increment financing program.
- e. Capture a percentage of the “roll-back tax” paid by developers when they remove land from agricultural production as a contribution into a county-wide fund to purchase open space.

To achieve broad implementation of the Greenprint, substantial financial resources are necessary. Federal, state, and local funding sources can be knit together to form a “funding quilt” for the creation of park and open space conservation opportunities. In order to identify the most appropriate sources of funds, one must examine the breadth of options and funding programs available to Central Texas communities. Most funding for land conservation in America came from local governments. Across the country between 1998-2005 there was a total of \$24 billion (annual average of \$3 billion) spent on land conservation at the local, state and federal levels of government. Sixty-seven percent of the total dollars spent came from local governments, twenty-eight percent comes from state governments and only four percent from the federal government.²⁴ Therefore, it is important to have a dedicated source of local revenue to leverage grant money offered by the state and federal programs.

CONSERVATION FINANCE IN TEXAS

In Texas, since 1991, voters have passed 81 local measures and one statewide funding measure, creating more than \$1.1 billion in new funding for land conservation. Since 2000, 49 of 56 conservation finance ballot measures have passed in Texas, an 88 percent passage rate, which is well above the 75 percent national average during this time. In this time period nearly \$800 million in local conservation funds have been generated. In 2008, four land conservation ballot measures went before voters in various counties and municipalities across Texas, with a 100 percent passage rate. The average level of support in each community was 63 percent. These results show that despite the slowing economy, voters continue to support land conservation at the ballot box. Since 2000, several measures have been approved in Bastrop, Caldwell, Hays, Travis, and Williamson Counties. (See Table 4 for a list of recent conservation measures in Texas.)

²⁴ Figures are derived from TPL's LandVote and Conservation Almanac databases.

Table 4. List of TX Local Conservation Measures*

Jurisdiction Name	Date	Finance Mechanism	Conservation Funds Approved	Status	% Yes
Allen	5/12/07	Bond	\$8,000,000	Pass	71%
Alvin	11/6/01	Bond	\$3,150,000	Pass	63%
Arlington	1/15/00	Sales tax		Fail	43%
Arlington	5/7/05	Bond	\$3,375,000	Pass	59%
Arlington	11/4/08	Bond	\$2,250,000	Pass	58%
Austin	11/7/00	Bond	\$13,400,000	Pass	65%
Austin	11/7/06	Bond	\$20,000,000	Pass	73%
Austin	11/7/06	Bond	\$50,000,000	Pass	69%
Bee Cave	11/7/06	Bond	\$3,500,000	Pass	77%
Bexar County	11/4/03	Bond	\$3,700,000	Pass	58%
Cedar Park	11/6/01	Bond	\$10,600,000	Pass	59%
Cedar Park	11/6/07	Bond	\$10,980,000	Pass	58%
Collin County	11/4/03	Bond	\$5,500,000	Pass	63%
Collin County	11/6/07	Bond	\$17,000,000	Pass	68%
Dallas	5/3/03	Bond	\$42,874,109	Pass	82%
Dallas	5/3/03	Bond	\$3,667,144	Pass	77%
Dallas	11/7/06	Bond	\$36,750,000	Pass	81%
Denton	2/5/05	Bond	\$7,000,000	Pass	54%
El Paso	5/6/00	Bond	\$4,000,000	Pass	64%
El Paso	2/7/04	Bond	\$2,089,198	Pass	64%
Frisco	9/14/02	Bond	\$5,200,000	Pass	81%
Frisco	5/13/06	Bond	\$22,500,000	Pass	72%
Georgetown	11/4/08	Bond	\$9,000,000	Pass	58%
Harlingen	9/13/03	Bond		Fail	44%
Harris County	11/6/01	Bond	\$15,000,000	Pass	63%
Harris County	11/6/07	Bond	\$38,000,000	Pass	52%
Hays County	6/2/01	Bond	\$3,500,000	Pass	70%
Hays County	5/12/07	Bond	\$30,000,000	Pass	68%
Highland Village	5/4/02	Bond		Fail	38%
Highland Village	5/4/02	Bond		Fail	40%
Highland Village	5/4/02	Bond		Fail	38%
Highland Village	5/4/02	Bond		Fail	45%
Highland Village	11/2/04	Sales tax	\$3,750,000	Pass	61%
Irving	11/7/06	Bond	\$5,000,000	Pass	69%
Kendall County	11/2/04	Bond	\$5,000,000	Pass	62%

Continued on next page

*Dollars may be less than the total bond amount, as they refer to the portion of the bond set aside for land conservation

Table 4. List of TX Local Conservation Measures*

Lubbock	5/15/04	Bond	\$340,000	Pass	71%
Missouri City	9/13/03	Bond	\$395,000	Pass	65%
Missouri City	11/4/08	Bond	\$5,000,000	Pass	72%
Murphy	11/4/08	Bond	\$1,900,000	Pass	65%
Pasadena	8/1/02	Bond	\$13,500,000	Pass	71%
Plano	5/7/05	Bond	\$37,600,000	Pass	73%
Plano	5/9/09	Bond	\$15,200,000	Pass	59%
Rockwall	11/8/05	Bond	\$5,955,000	Pass	59%
Round Rock	11/6/01	Bond	\$17,300,000	Pass	68%
Rowlett	5/4/02	Bond	\$520,000	Pass	67%
Rowlett	5/13/06	Bond		Fail	38%
San Antonio	5/6/00	Sales tax	\$65,000,000	Pass	56%
San Antonio	11/4/03	Bond	\$3,890,000	Pass	60%
San Antonio	5/7/05	Sales tax	\$90,000,000	Pass	55%
San Antonio	5/7/05	Sales tax	\$45,000,000	Pass	54%
San Antonio	5/12/07	Bond	\$34,918,490	Pass	69%
San Marcos	11/8/05	Bond	\$2,000,000	Pass	68%
Seabrook	11/6/07	Bond	\$2,150,000	Pass	60%
Travis County	11/6/01	Bond	\$28,600,000	Pass	57%
Travis County	11/8/05	Bond	\$40,000,000	Pass	66%
Williamson County	11/7/06	Bond	\$10,000,000	Pass	61%

*Dollars may be less than the total bond amount, as they refer to the portion of the bond set aside for land conservation

Local Conservation Finance Options

The most reliable form of funding to achieve park and recreation objectives over the long term is local funding. Owing to the competition for state, federal, and private funding, these sources must be viewed as supplements or incentives, not as the central funding source for a program.

Nationwide, a range of local public financing options have been utilized to fund parks and recreation. These

include the property tax, the local sales tax, general obligation bonds, and less frequently used mechanisms such as special assessment districts, a real estate transfer tax, impact fees, and income taxes. Central Texas communities have several funding options that, if implemented, would generate revenues for parks and open space objectives. (See Table 5 for a listing of common conservation funding sources.)

Table 5. Common Local Conservation Financing Sources in Texas

Method	Definition	Pros	Cons
General obligation bond	Loan taken out by a city or county against the value of the taxable property	<ul style="list-style-type: none"> allows for immediate purchase of open space, locking in land at current prices distributes the cost of acquisition over time popular with voters when restricted to parks and open space 	<ul style="list-style-type: none"> extra interest costs of borrowing funds may be used only for capital projects and improvements voter approval required
Property tax	Tax on real property paid for by commercial and residential property owners	<ul style="list-style-type: none"> steady source of revenue relatively easily administered tax burden fairly broadly distributed small increases create substantial funding popular with voters when restricted to parks and open space 	<ul style="list-style-type: none"> competition for other public purposes overall concern among taxpayers about high rates no procedure for dedicating property tax revenue for specific purposes there is currently no record of a jurisdiction funding land acquisition through only property tax revenue
Sales Tax	A tax levied on the retail price of an item	<ul style="list-style-type: none"> could be a large source of funding, depending on tourism cost of tax is borne not just on residents can be used both for capital projects and for operation and maintenance of parks and recreation programs 	<ul style="list-style-type: none"> revenue can fluctuate from year to year depending on economic conditions legislation requires revenue to be spent on decreasing debt and lowering the property tax rate before using it for other purposes average impact per household tends to be larger than other finance mechanisms only used in a few circumstances in TX

BONDS

The most popular funding mechanism in Texas for land conservation has been general obligation bonds. To raise funds for capital improvements, such as land acquisition or building construction, counties or municipalities may issue bonds. There are two types of bonds: general obligation bonds, which are secured by the full faith and credit of the local property taxing authority, and revenue bonds that are paid by project-generated revenue or a dedicated revenue stream such as a particular tax or fee. The governing body of any county, municipality or flood control district may issue bonds to acquire lands for park or historic purposes.²⁵ Counties, municipalities and flood control districts may not issue general obligation bonds that are to be paid from property taxes without approval by the voters in an election.²⁶

PROPERTY TAX

Property taxes provide more revenue for local services in Texas than any other source. The local governing body establishes the property tax rate each year, within certain limits (see Table 5). The state may not levy or collect property taxes.²⁷ The county or municipal portion of the property tax revenue may be directed to acquire parkland and open space and obtain conservation easements.²⁸ However, there is no statutory procedure for dedicating property tax revenue for specific purposes other than the local governing body passing a resolution.²⁹ Decisions to allocate property taxes for conservation purposes must occur annually during the local budgeting process. Research is necessary to determine the political palatability and feasibility of this mechanism for funding parks and open space in Central Texas counties.

SALES TAX

Counties or municipalities may levy a sales and use tax for the purposes of financing a venue or related infrastructure, which includes establishing or adding to a parks and recreation system. Counties or municipalities may impose this tax; however no county jurisdiction may have an aggregate of local sales taxes



Caldwell County Courthouse, Lockhart.

greater than two percent and no municipal sales tax may be greater than one and one-half percent.³⁰ Many jurisdictions are already at their cap.

Counties or municipalities may also impose a special purpose district. If the county has capacity to levy a countywide sales tax, they could look to form a County Assistance District. Municipalities may institute a Public Improvement District or a Municipal Development District funded by a sales tax.³¹ These can fund the acquisition or maintenance of parks. Additional research would be necessary to determine the feasibility of this mechanism for funding parks and open space purposes.

Because the sales tax is imposed in Texas specifically for property tax relief, jurisdictions are required to first spend revenue from the sales tax to reduce the property tax rate. For county purposes, sales tax revenue must also be used first for debt service payments before it can be used for specific projects like land conservation.

STATE FUNDING PROGRAMS

Since 1995, the Texas Legislature has appropriated some of the revenue generated from the sale of sporting goods to fund the state park system and local grants program of the State Parks Division. During FY 2006 the revenue amount allocated to the Texas Parks and Wildlife Department (TPWD) (\$32 million) was

²⁵ Texas Constitution, Article XVI, §59(c-1); Local Gov't Code § 331.004(a); Id. at (c).

²⁶ Gov't Code § 1251.001.

²⁷ Texas Constitution, Article VIII, § 1-c.

²⁸ Telephone conversation with State Property Tax division.

²⁹ Id.

³⁰ Tax Code § 321.506.

³¹ Personal communications with Josh Hasty, Local Sales and Use Division, and Bob Ashton Local Government Services, both with the State Comptroller of Public Accounts.

about 30 percent of the total collected (\$105 million). However, the Texas Legislature has historically diverted the funds towards other needs. Beginning in FY 2008, 94 percent of sporting goods sales tax collections each biennium is to be credited to the TPWD and six percent to the Texas Historical Commission.

With a portion of the sporting goods sales tax collections the TPWD runs four grant programs for land acquisition and park development. There are two additional programs that fund the development of buildings on parkland (i.e. recreation or nature centers). Land acquisition programs are:

- *Small Community Grant Program*, which provides 50 percent matching grant funds to eligible municipalities and counties to meet the recreation needs of small Texas communities with a population of 20,000 and under. The maximum award is \$75,000. Eligible projects include ball fields, boating, fishing and hunting facilities, picnic facilities, playgrounds, swimming pools, trails, camping facilities, beautification, restoration, gardens, sports courts, and support facilities.
- *Outdoor Recreation Grant Program*, which provides 50 percent matching grant funds to municipalities, counties, and other local units of government with a population less than 500,000 to acquire and develop parkland or to renovate existing public recreation areas. There are two funding cycles per year with a maximum award of \$500,000. Eligible sponsors include cities, counties, river authorities, and other special districts. Projects must be completed within three years of approval.
- *Urban Outdoor Recreation Grant Program*, which provides 50 percent matching grant funds up to \$1 million to specific cities and counties over 500,000 in population for the acquisition and development of park land. Local governments must apply, permanently dedicate project areas for public recreational use, and assume responsibility for operation and maintenance.
- *Regional Grant Program*, which provides 50 percent matching fund, reimbursement grants to eligible local governments for both active recreation and conservation opportunities. This grant program was created to assist local governments with the acquisition and development of multi-jurisdictional

public recreation areas in the metropolitan areas of the state. It allows cities, counties, water districts, and other units of local government to acquire and develop parkland. This program is currently inactive, but may be reinstated.

To supplement the work of TPWD, the Texas Legislature established the Texas Farm and Ranch Lands Conservation Program in 2005. The program enables Texas to purchase conservation easements from willing landowners in order to prevent the development of rural lands with outstanding ecological or cultural value. However, the Legislature has not appropriated funding for this program to date. Between 1998 and 2005, TPWD spent almost \$80 million on land acquisitions totaling approximately 160,000 acres, through outright purchases and local grant programs.³²

Federal Funding Programs

Federal programs can provide grants to local governments in Texas for the purpose of acquiring and maintaining land for parks and open space. The federal government administers other grant programs, however these are most applicable to local governments in Central Texas.

NATIONAL FISH AND WILDLIFE FOUNDATION-KEYSTONE INITIATIVE GRANTS & SPECIAL GRANTS PROGRAMS

<http://www.nfwf.org/programs.cfm>

Through the National Fish and Wildlife Foundation's Keystone Initiatives Grant Program, NFWF funds projects to conserve and restore bird, fish, and wildlife populations, as well as the habitats on which they depend. The Foundation awards matching grants to projects that address priority actions laid out by their strategic plan, work proactively to involve other conservation and community interests, leverage funding, serve multiple objectives, involve strong partnerships, and fit into a larger ecosystem approach to conservation. The most successful applications will display the long-term environmental benefits of a project that yield high quality conservation returns. In addition to the Keystone Initiative matching grants, the Foundation administers a variety of special grant programs with specific conservation objectives, programmatic guidelines, and timelines.

³² *Conservation with Sbarlette Maney*, Texas Parks and Wildlife Department

Private Funding

Eligible grantees include federal, tribal, state, and local governments, educational institutions, and non-profit conservation organizations. Grants can range from \$50,000 to \$300,000 and typically require a 2:1 nonfederal match.

LAND AND WATER CONSERVATION FUND (LWCF)--STATESIDE NATIONAL PARK SERVICE

The stateside LWCF program provides a 50-percent match to states for planning, developing and acquiring land and water areas for natural resource protection and recreation enhancement. Funds are distributed to states based on population and need. Once the funds are distributed to the states (through the appropriate state park and recreation agency), it is up to each state to choose the projects, though the National Park Service has final approval. Eligible grant recipients include municipal subdivisions, state agencies and tribal governments, each of whom must provide at least 50 percent matching funds in either cash or in-kind contributions and a detailed plan for the proposed project. Grant applications are evaluated based on the technical merits of the project, the public/private partnerships, and how the project addresses the identified needs and priorities of a statewide comprehensive plan. In FY 2008, Texas received \$1,203,151 from the state grant portion of the LWCF. The program is administered by the Recreation Grants Branch of the TPWD.

FARM AND RANCH LANDS PROTECTION PROGRAM (FRPP) USDA NATURAL RESOURCES CONSERVATION SERVICE

<http://www.nrcs.usda.gov/programs/frpp/>

USDA Farm and Ranch Lands Protection Program provides matching funds to state, tribal, or local governments and non-governmental entities to assist in the purchase of development rights to keep productive farm and rangeland in agricultural uses. Grants are awarded by the Natural Resource Conservation Service (NRCS) on a competitive basis, according to national and state criteria, and require up to a 50 per cent non-NRCS match to cover the cost of the easement. Up to 25 percent of donated land value can be counted as the match. In FY 2008, eligible entities in Texas received \$4.08 million through this program.

Private funds from foundations, nonprofit land trusts, corporations, and individuals are often used to complement other funding for the creation of park and recreation opportunities. Land trusts in particular have been very active in Central Texas communities. This section reviews the missions of land trusts in the region. Although not discussed in detail, there are likely to be foundation, corporate, and individual donor opportunities as well.

The cumulative total of land protected by Texas' 40 private local and regional land trusts is over 1.3 million acres. Texas land trusts own 149,843 acres, hold conservation easements on 578,346 acres, worked to transfer or assist in the protection of an additional 486,924 acres, and helped protect another 91,622 acres by other means, such as through lease or conservation buyer.³³ Below is a list of the land trusts operating in Central Texas.

Hill Country Conservancy (Hays and Travis Counties) marshals public and private resources to preserve the natural areas and scenic vistas, aquifers and springs, rivers and streams, working farms and ranches, and the rural heritage of the Central Texas Hill Country for people to enjoy and cherish for generations to come. www.hillcountryconservancy.org

Hill Country Land Trust (Hays County) is organized to work with private landowners who voluntarily elect to preserve the natural character of their property through the donation of land conservation easements. www.hillcountrylandtrust.org

Pines & Prairies Land Trust (Bastrop and Caldwell Counties) operates to protect significant open space and natural, historic, and cultural resources and to preserve the quality of life for current and future generations through education and by owning and protecting conservation easements and land. www.pplt.org

Guadalupe-Blanco River Trust (Caldwell and Hays Counties) works to promote and encourage the conservation, stewardship and enjoyment of the land and water resources of the Guadalupe and Blanco River watersheds, while maintaining their unique and irreplaceable natural heritage. www.gbrtrust.org

³³<http://www.texaslandtrustcouncil.org/>

Wimberley Valley Watershed Association

(Hays County) is dedicated to protecting the region's water quality and quantity by promoting sustainable watershed management through community education, conservation, and land protection. Through education programs that focus on understanding watershed dynamics and preventing pollution, the Wimberley Valley Watershed Association works to raise community awareness and promote environmentally sound land management. www.jacobswellspring.org

Westcave Preserve (Hays County) is dedicated to sustaining the preserve as a unique ecological treasure and offering it as a scientific and educational resource to the community. They provide a variety of programs for children and adults with the goal of inspiring greater environmental conservation and awareness. They seek creative solutions and strive to build a community of caring neighbors with the shared goal of ensuring that Westcave's ecological diversity and exceptional beauty remain intact for future generations. www.westcave.org

Other Land Trusts Operating in the Central Texas Region

According to the Texas Land Trust Council, the following state and national land trusts are operating in Central Texas: American Farmland Trust, Archaeological Conservancy, Conservation Fund, Ducks Unlimited, Inc., National Wild Turkey Federation, Native Prairies Association of Texas, Quail Unlimited, Texas Agricultural Land Trust, Texas Cave Management Association, Texas Land Conservancy, Texas Parks and Recreation Foundation, Texas Parks and Wildlife Foundation, The Nature Conservancy, The Trust for Public Land, Travis Audubon Society, Wetland Habitat Alliance of Texas, and the Wildlife Land Trust, Humane Society.³⁴

³⁴ www.texaslandtrustcouncil.org

Property Profiles

The Central Texas Greenprint for Growth Opportunity Maps show where multiple regional priorities converge for conservation. However, the number of acres identified can prove overwhelming even to the most sophisticated conservation organizations and local governments. But the Texas spirit is hardly meek and many fine examples of successful preservation exist within the Central Texas landscape. This section highlights a handful of recently conserved sites, one from each of our four counties. These are examples of high priority Greenprint locations, and showcase the types of natural and historic public amenities that are envisioned by the goals of the Central Texas Greenprint.

COLORADO RIVER REFUGE – BASTROP COUNTY



The lazy Colorado River, Bastrop County.

The Colorado River Refuge is the signature public preserve of the Pines and Prairies Land Trust (PPLT). The 60-acre property containing 1.5 miles of river frontage along the Colorado was acquired by the land trust in December 2004. Magnificent, mature riparian forest, unspoiled views and unique geological features adorn this sublime stretch of the Colorado. According to PPLT Executive Director Tom Dureka, “Birding is excellent under the cathedral-like canopy of giant trees and around the unusual rock outcrops.” Located approximately two miles from historic downtown Bastrop, visitors will experience a peaceful and quiet river, with no highway noise or houses in sight. Adjacent to and downstream from the preserve, another local group, Environmental Stewardship, has restored and created a safe and easy river access point for canoeing, kayaking and swimming in the lovely, lazy Colorado River. The Colorado River Refuge is open daily, dawn to dusk.³⁵

ZEDLER MILL – CALDWELL COUNTY

The City of Luling is working with the Zedler Mill Foundation, the Luling Economic Development Corporation and several local, state and national partners to restore the Zedler Mill to its rightful place as a local landmark that will illuminate the history and life of early Caldwell County settlers. The mill provides an ideal park setting, as it is located on the banks of the serene San Marcos River. The old milldam provides a crisp, cool swimming hole for locals on those hot, long dog-days of summer. The atmosphere of the mill campus is historic, but it is also a place of great natural beauty and recreational opportunity.

Part of the educational vision for this future park is to inform visitors about the complexities of life at the turn of the century and to illustrate the difficult, yet rewarding, pioneer lifestyle of the areas’ earliest citizens. Hiking trails and pocket gardens are envisioned throughout, along with a butterfly garden at the entrance to the park. The Zedler Mill campus restoration will provide a unique educational and natural experience for local visitors, restoring the site to its proper place of prominence within the community.³⁶



Dam in the San Marcos River at Zedler Mill, Caldwell County.

³⁵ Information on the “Colorado River Refuge” was procured from direct communication with Tom Dureka, PPLT, and from <http://www.pplt.org>.

³⁶ Information about the Zedler Mill campus and restoration was procured from <http://www.zedlermill.com/Zedler%20Mill%20Philosophy.htm>.

JACOB'S WELL NATURAL AREA – HAYS COUNTY

Jacob's Well is the quintessential Texas swimming hole. It is a crystal clear artesian spring, pumping thousands of gallons of water each minute into Cypress Creek. Jacob's Well is thought to be the longest underwater cave in Texas and was considered a sacred place by Native Americans. Jacob's Well is a unique ecological habitat that supports a rich diversity of wildlife, including several endangered species.

Jacob's Well is located in Wimberly, Texas, where "growing pressures on the aquifer from the region's expanding population coupled with increasing sources of pollution are endangering both the flow and water quality of Jacob's Well and Cypress Creek."³⁷ Recently the well has experienced significantly reduced flows, so the Wimberly Valley Watershed Association (WVWA) worked tirelessly to preserve the land around the well and to educate the public about ways to protect this precious resource. With the help of a number of local partners, the now unified fifty-acre parcel know as the Jacob's Well Natural Area is acquired and will be managed and restored as a nature preserve by the WVWA.³⁸



Enjoying the serenity of Jacob's Well, Hays County.

Photo by Rolf Nussbamer



Photo by Jim Innes

Hikers on Walk for a Day Trail, Travis County.

"WALK FOR A DAY TRAIL" – TRAVIS AND HAYS COUNTIES

The Hill Country Conservancy, in cooperation with the City of Austin, the City of Sunset Valley, Hays County, the Lady Bird Johnson Wildflower Center, and other partners, has begun strategic planning to complete land acquisition and construct what will comprise a regional "Walk-for-a-Day" trail system. On these trails in Hays and Travis Counties, people will be able to run, hike, or bike for an entire day surrounded by cool clean streams, abundant wildlife, and breathtaking views. The trail will provide a variety of experiences from exploring the more narrow, urban wilderness of the Balcones Escarpment and Edward's Aquifer recharge zone, to the wide expanses of open Texas ranchlands and grasslands.

The regional trail called the Capital Area Trail System (known locally as "Walk for a Day" or "WFAD") will begin in central Austin and meander for approximately 34 miles southward into Hays County. The trail will begin at Lady Bird Lake (formerly Town Lake) and wander through the Barton Creek Greenbelt, travel through developed suburban neighborhoods, and several historic Texas ranches now owned and managed for water quality and wildlife habitat by the City of Austin, and end up at the Onion Creek Natural Area (on FM 150 in Hays County).³⁹

³⁷ <http://www.visitwimberly.com/water>.

³⁸ Information about Jacob's Well was procured from <http://www.visitwimberly.com/water>.

³⁹ Information about the "Walk for a Day Trail" was procured from direct communication with Butch Smith, HCC, and from <http://www.billcountryconservancy.org/land-projects/walk-for-a-day-trail>.

Conclusion

With a stunning regional landscape, a wealth of recreational and cultural opportunities, and a strong economy, Central Texas continues to grow at a fast and furious pace. This growth and development is quickly transforming a once mostly rural landscape into a rapidly urbanizing metropolis.

Residents express concern about how this growth will impact their communities and their way of life. They seek to improve the tools at their disposal to better guide land use and ensure the sustainability and special qualities of this region.

Issues like drinking water protection and endangered species habitat degradation are forcing some local governments to take action. Edwards Aquifer, golden-cheeked warbler, black-capped vireo and Houston toad protection have all been driving forces for conservation planning in the region. Planning efforts

by local governments throughout the region also seek to protect natural resources and provide ample park and recreation amenities for their citizens. (See Appendix C.) Local citizens and groups struggle to protect important natural features, like clear, flowing springs, unique wildlife habitats, rich farmland, and river access points. The region clearly values its natural environment and has a great stake in its protection.

Water, in particular, is a critical issue in Central Texas. With continued drought, many residents wonder not just if, but when their wells will run dry. Rivers are being tapped to their limits and lakes are reaching their lowest levels in history. Water is likely to be the key concern of the next generation of Central Texans, both as an environmental issue and as the primary factor limiting economic growth. However, with a sustained and strategic effort for water quality and quantity protection, the region can rise to meet this challenge.



Photo by Rolf Nuschammer

Butterflies share the trail at the Colorado River Refuge, Bastrop County.

In addition, when we compare provision of park and open space amenities of Central Texas counties to counties elsewhere in the country with similar land area, population, and proximity to a major city, Central Texas counties fall short. (See Appendix D.) Bastrop, Caldwell and Hays Counties rank low in the amount of parkland they are currently providing to their citizens. As the population of the region continues to rise, counties will continue to decrease their parkland totals per resident without aggressive new parkland acquisition. With a continued effort to implement the Greenprint and secure funding for land acquisition and development, the trend of parkland deficits can be reversed.

With the pace of rapid growth that the region is experiencing, there are many challenges ahead to achieving a sustainable balance between growth and the protection of essential natural and cultural resources. Working together, Central Texas citizens can move forward to capitalize on this vision for the region, to preserve that which is most precious, while ensuring a bright economic future.

Appendix A

Current Conditions

DEMOGRAPHICS

Residents of Central Texas number around 1.3 million, with a projected doubling in population size in the next 20 to 30 years. Population size and density within the four county region differ dramatically, from the largely urban Travis County which contains most of the City of Austin, to the more pastoral Caldwell County. What Central Texas counties all share is a recent history of rapid growth that will likely continue into the foreseeable future. Statistics on population growth for each of the four counties can be found in Table I.

County	Land Area in Square Miles	Population in 2000	Population in 2008	Projected Population in 2020	Projected Population Growth Rate (2000-2020)	Projected Density (population per square mile) in 2020
Bastrop	888	57,733	73,491	99,329	72.0%	112
Caldwell	546	32,194	36,899	49,975	55.2%	92
Hays	678	97,589	149,476	181,508	86.0%	268
Travis	989	812,282	998,543	1,108,849	36.50%	821

Travis County’s population increased from 812,282 in 2000 to 998,543 in 2008, experiencing 23 percent growth. With a land area of 632,960 acres, its population density was roughly around 821 persons per square mile.⁴¹ The vast majority of the population resides within the City of Austin.

Hays County’s total population increased from 97,575 to 140,476 between 2000 and 2008 (53 percent). Census Bureau data shows a 229 percent growth for Hays County between 1960 and 2000. Despite this, Hays County has, region-wide, a moderate population density of 144 people per square mile.⁴²

Bastrop County experienced growth of 27 percent between 2000 and 2008, from 57,716 residents to 73,491 residents⁴³. The county population in 2005 (66, 371) is projected to nearly double to over 112,000 by 2025.⁴⁴ Bastrop County’s population density of 65 people per square mile is a relatively low number compared to Hays and Travis Counties.⁴⁵ The county’s

population was mostly concentrated in three large towns: the City of Bastrop, which makes up 11 percent of the county population, Elgin with 13 percent, and Smithville with six percent.⁴⁶

Caldwell County is the most rural county in the region; however, growth is occurring at surprisingly high rates there also. The county experienced 39 percent growth between 1990 and 2007. The most recent census data reveals 36,705 residents living within the county. Population density is about 60 residents per square mile, with the majority of residents living in Lockhart (11,615), Luling (5,080) and Martindale (953).⁴⁷

ECONOMICS⁴⁸

The Central Texas region is known for its diverse and thriving economy. The region has always had a strong economy with a solid public sector job base (state, county, and city governments), and recently the City of Austin in particular has been successful in building a strong technology sector. With that success, housing development throughout the region has been in a boom as well.

Central Texas is home to several major universities including the University of Texas at Austin and Texas State University in San Marcos, along with a number of smaller, private campuses, and Austin Community

⁴⁰ United States Census Bureau and The University of Texas at San Antonio, Texas State Data Center and Office of the State Demographer, Institute for Demographic and Socioeconomic Research (IDSER): <http://txsdc.utsa.edu/tpepp>.

⁴¹ 2000 census.

⁴² Id.

⁴³ Id.

⁴⁴ Texas State Data Center County Projections

⁴⁵ 2000 census.

⁴⁶ City of Bastrop Master Parks Plan Update, July 2008.

⁴⁷ The Handbook of Texas Online, <http://tsbaonline.org/handbook.online/articles/CC/bccl.html>.

⁴⁸ Much of the Travis County information is not included here as they had a separate greenprint process that was completed in October 2006. Please consult the full Travis County Greenprint for Growth report (www.tpl.org/centraltxgreenprint) for additional information.

College District. The attractiveness of the area causes many students who attend these colleges to stay in the area, resulting in a largely well-educated population.

The more rural parts of the region have experienced this growth as more and more residential development is occurring, bringing with it a demand for services, and increase in traffic congestion, and a whole host of changes to these once rural and largely agricultural communities.

BASTROP COUNTY

Bastrop County's economy is growing as it becomes more of a bedroom community to Austin. While the county's per capita income is \$22,000, just below the national average of \$25,267, its median income as of 2006 was \$53,157, which was 18 percent higher than the state average of \$44,922.⁴⁹

In 2005, Bastrop County qualified as "economically disadvantaged," meaning that in comparison to other counties in the state, Bastrop County had "below average per capita taxable property value, below average per capita income and above average unemployment."⁵⁰ The City of Austin, Bastrop County's neighbor to the northwest, has a tax base of approximately twenty times the size of Bastrop County's.⁵¹

Nearly 10 percent of the population lives in poverty.⁵² There is a shortage of rural healthcare and community college opportunities in the county as well as opportunities for work. Currently, over 50 percent of the workforce in Bastrop County commutes to Travis County every day.⁵³ The biggest employers in Bastrop County are in manufacturing, retail trade, health care and social services, accommodations and professional,

and scientific or technical assistance. Current county spending priorities are focused on law enforcement, roads/transportation and other infrastructure needs.⁵⁴

CALDWELL COUNTY

Caldwell County per capita income in 2005 (BEA) was \$21,992, which is below the national average (\$25,267). Thirty-two percent of all incomes in Caldwell County were below the poverty level.⁵⁵ More than 50 percent of workers commute to Travis and Hays Counties for employment.⁵⁶ Since 2000, the majority of Caldwell County's workforce has engaged in "educational, health, and social services; manufacturing; retail trade; construction; and public administration. Petroleum, agribusiness, and varied manufacturing were the leaders in the county economy."⁵⁷ According to Lockhart's Comprehensive 2020 Plan adopted in 2000, the service and retail trade industries employ the most people across the county (62 percent of total employment and 56 percent). The manufacturing industry is also significant (14 percent of employment). Smaller industries include agriculture services, forestry, and fishing.⁵⁸

HAYS COUNTY

Hays County is in the midst of a wave of fundamental changes as it transitions from being a rural area – known mostly for being the location of Texas State University and a Hill Country tourist destination – to being a far flung and urbanizing suburb of Austin and San Antonio, which are located to its north and south, respectively. Along the I-35 corridor, towns like Buda and Kyle are undergoing explosive growth, mostly fueled by Austin commuters in search of less expensive housing.⁵⁹ Apparently in response to the rising number of residents, commercial development is growing along the highway. In fact, most of the county's commercial

⁴⁹ 2006 *American Community Survey*.

⁵⁰ *Lost Pines Habitat Conservation Plan (LPHCP)*, December 2006, p. 5.

⁵¹ *Id.*

⁵² *Id.*, p. 1

⁵³ *Opportunity Bastrop County*, 2007, p. 11

⁵⁴ Based on conversations with Bastrop County Judge, Ronnie McDonald.

⁵⁵ "Lockhart: Planning for the 21st Century," (Adopted April 2000) produced for the City of Lockhart by Wilbur Smith Associates, p. 14.

⁵⁶ "Lockhart Economic Development: Shaping Tomorrow's Economy Starts Today," PowerPoint presentation on July 28, 2006 at Lockhart High School by Betty Voights, Executive Director of the Capital Area Council of Governments, p. 21. Industry employment data was obtained from Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor, with total employment data in Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA), augmented with County Business Patterns (CBP) and Nonemployer Statistics (NES) published by the U.S. Census Bureau.

⁵⁷ *The Handbook of Texas Online*, <http://www.tshaonline.org/handbook/online/articles/CC/bcc1.html>.

⁵⁸ "Lockhart: Planning for the 21st Century," (Adopted April 2000) produced for the City of Lockhart by Wilbur Smith Associates, p. 14.

⁵⁹ Per Hays County interview.

facilities are closely aligned with the I-35 corridor. The western portions of the county are also experiencing population growth but at a different rate and of a different type. Rural subdivisions are occurring in unincorporated areas in the county, as opposed to within municipal limits, and feature single-family homes. Many residents in western Hays County may be commuting to Austin, many others are retired, telecommuting, or self-employed.⁶⁰

Based on the Census Bureau data, Hays County residents are relatively young with a median age of 27.9 years, as compared with the national average of 36.4 years. Probably as a result, a high proportion – 70.8 percent versus the national average of 65 percent – is working. Reflecting the draw of Austin’s job market, the mean travel time to work is nearly 30 minutes. Income and education levels are higher than national averages.⁶¹

GEOGRAPHY AND NATURAL FEATURES

Central Texas is home to some of the most stunning landscapes and diverse ecosystems in the state, and even the country. The Colorado River that flows through the heart of Travis and Bastrop counties is one of the most biologically diverse corridors in the state. In fact, the highest concentration of bird diversity in Texas is found along the Colorado River.⁶² The Texas Hill Country with its rolling hills, cowboy mystique, rugged terrain, expansive views, and unique wildlife, remains a popular destination for life and leisure, luring tourists from across the globe.

Below is a summary of the geography and natural features of each county, including water resources.

HAYS COUNTY

Hays County is roughly 693 square miles. It is physically divided by a geologic formation called the Balcones Escarpment that extends north to south, roughly paralleling I-35. Approximately three quarters of the county lies northwest of the escarpment and is characterized by hilly topography, springs and the oak and cedar forest that typifies Texas’ “hill country.” The southeast quarter, which includes the I-35 corridor, is flat and productive agricultural land and prairie that is rapidly being converted to suburbs.



Photo by Rolf Nussbamer

Paddling down the Blanco River, Hays County.

Hays County contains a wealth of springs, creeks, and rivers that are among the county’s most valuable resources and iconic landscapes. Hays County is also home to endangered and rare species. The woodlands, grasslands, springs, and waterways underlain with porous limestone in Hays County are known to harbor the federally listed golden-cheeked warbler and black-capped vireo, San Marcos salamander, two types of fish and one plant endemic to Hays County.

Water is the prominent environmental issue in Hays County. Springs, creeks, and rivers are the county’s signature natural features. They provide treasured recreational opportunities, scenic amenities that are key to a healthy tourism industry, and critical habitat for a host of species, some of them federally designated as threatened or endangered.

Drinking water is also a concern. The Trinity Aquifer serves those residents in the western portion of the county, while communities along the I-35 corridor to the east usually have deep wells into the Edwards Aquifer or get their water from surface pipelines. Recent water shortages and reduced flows of well-known springs have spiked a wave of concern. In addition to quantity issues, the quality of Hays County’s drinking water supply is also easily degraded. The highly permeable karst limestone rock that underlies the county is covered with only a thin layer of topsoil and vegetation. As a result, rainwater and anything present in it rapidly penetrates into the aquifer, quickly entering the water supply.

⁶⁰ From community stakeholder interviews.

⁶¹ 2000 census.

⁶² Discovering the Colorado – A Vision for the Austin-Bastrop River Corridor, 2006.

CALDWELL COUNTY

Caldwell County is made up of approximately 546 square miles of flat to rolling terrain with elevations ranging from 375 to 500 feet above sea level.⁶³ The Luling-Darst Creek fault zone bisects the county from southwest to northeast. The northwest portion of the county is part of the blackland prairie region, which is identified by its low-rolling to flat terrain, tall grasses, mesquite, and black soils. The southeastern portion of the county has more hills, and sandy soils that support a wider variety of vegetation such as hardwoods like oak and elm.

The county is located mostly within the Guadalupe River basin “and is drained primarily by Plum Creek and its tributaries, and by the San Marcos River, which forms the boundary with Guadalupe County. Wildlife in the area includes deer, javelinas, coyotes, bobcats, beavers, otters, foxes, raccoons, skunks, turkeys, squirrels, and a variety of small birds, fish, and reptiles.” Major mineral resources found in the county are clay, industrial sand, gravel, oil, and gas.⁶⁴

Water is also an important issue in Caldwell County. The Carrizo-Wilcox aquifer is located partially in the county, and serious threats to the aquifer exist due to increasing development and the growing needs of larger nearby cities. Local communities are already concerned about guaranteeing an adequate supply of drinking water for the future.

Lockhart’s Comprehensive Plan recommends that the city investigate additional drinking water supply sources (e.g. building a lake on Plum Creek, drawing from the San Marcos River, or procuring water from the Guadalupe River/Canyon Lake).⁶⁵ The Plum Creek watershed is also noteworthy. It lies within the Guadalupe River Basin, which drains South Central Texas from the Hill County to the Gulf of Mexico. It covers most of Caldwell County and portions of Hays and Travis Counties.⁶⁶

BASTROP COUNTY

Bastrop County is home to several significant natural features, which include the Colorado River corridor, the “Lost Pines” forestlands, Lake Bastrop, the Yegua Knobbs bog, and the Balcones Escarpment. The area around the 900-acre Lake Bastrop has been developed into North and South Shore Parks, providing a combined total of 50 acres for recreation. Yegua Knobbs bog has attracted attention because of the fact that such bogs are a rare occurrence for Central Texas.⁶⁷

Bastrop State Park protects a vast region of pine forests known as the “Lost Pines,” which also provide critical habitat for the federally endangered Houston toad. “Lost Pines” refers to the region of loblolly pine and hardwoods that was isolated from the main body of East Texas Pines by approximately 100 miles of rolling, post oak woodlands. This pine-oak woodland covers approximately seventy square miles and is part of the most westerly stand of loblolly pines in the state.⁶⁸

The Balcones Escarpment sits just above the upper Gulf plains where the county is located. It is a geologic fault zone several miles wide and was formed during the Tertiary era as tension occurred between the Gulf Coast and lands further inland. The Balcones fault group forces water to the surface by artesian pressure, which results in the formation of surface artesian wells or springs. The fault group extends in a curved line across Texas from Del Rio to the Red River. The segment near Bastrop County, extending northeastward from San Antonio to Austin is about 300 feet high.⁶⁹ Across the county, elevation ranges from 400 to 600 feet above sea level.⁷⁰

Otherwise, Bastrop County is defined by its rolling uplands and broken hills with sandy, loamy soils, and woods with post oaks and some cedar, hickory, elm, and walnut trees. The northwest and central southeast corners contain blackland prairie, waxy clay soils and

⁶³ *The Handbook of Texas Online*, <http://www.tsbaonline.org/handbook/online/articles/CC/bcc1.html>.

⁶⁴ *Id.*

⁶⁵ “Lockhart: Planning for the 21st Century,” (Adopted April 2000) produced for the City of Lockhart by Wilbur Smith Associates, p. 14.

⁶⁶ *Plum Creek Watershed Protection Plan* (February 2008), produced by Plum Creek Watershed Partnership, p. 5.

⁶⁷ *Parks, Trails and Green Space Initiative*, February 2008, p.1

⁶⁸ <http://www.tpwd.state.tx.us/spdest/findadest/parks/bastrop>.

⁶⁹ *Handbook of Texas Online*, *Balcones Escarpment*, <http://www.tsbaonline.org/handbook/online/articles/BB/rxb1.html>.

⁷⁰ *Handbook of Texas Online*, *Bastrop County*, <http://www.tsbaonline.org/handbook/online/articles/BB/hcb3.html>.

tall grass. Bisecting the county from northwest to southeast is the Colorado River, a precious riparian ecosystem containing a wealth of species and the highest bird diversity in Central Texas.

The Carrizo-Wilcox Aquifer is the primary water source in Bastrop County, and the Highland Lakes and Lake Bastrop provide power generation to the area. Municipal water accounts for over one-half of the total surface water demand and steam electric generation accounts for an additional one-third of the total demand.⁷¹

The Carrizo-Wilcox is composed of sand interblended with gravel, silt, clay, and lignite, which are ideal for water storage and recovery. Water quality from the Carrizo is good and many use it without treatment.⁷² The aquifer extends from the Rio Grande in South Texas northeastward into Arkansas and Louisiana and provides water to all or parts of 60 counties. The aquifer is divided into three distinct formations: the Hooper, Simsboro, and Calvert Bluff. Of the three, the Simsboro, (which covers Bastrop County) on average holds the most water-bearing sands.⁷³ Around Bastrop County, some conversion to surface-water use has slowed the rate of water-level decline.



Photo by Rolf Nusskammer

Bastrop State Park, Bastrop County.

⁷¹ Texas Water Development Board, Chapter 4.0 Comparison of Water Demands with Water Supplies to Determine Needs: 4.1.1 Bastrop County.

⁷² Aquifer Storage and Recover, from Edwards Aquifer website, <http://www.edwardsaquifer.net/asr.html>.

⁷³ <http://www.twdb.state.tx.us/publications/reports/GroundWaterReports/GWReports/R345%20Aquifers%20of%20Texas/Majors/carrizo.pdf>

Appendix B

Community Interviews

The project partners interviewed the following people in 2008, at the beginning of the Greenprint process. These individuals were selected as representatives who could provide a range of perspectives on the historical, political, economic, environmental, and other aspects of living and working in this region. Information gleaned from these interviews was utilized to help design subsequent portions of the Greenprinting process, and many of their ideas have been incorporated into this report to help characterize regional opportunities and constraints as they relate to this initiative.

Molly Alexander, Associate Director, Downtown Austin Alliance, resident of Elgin

Kelly Allen, Lazy Eight Ranch

Gary Amaon, Citizens Parks Advisory Team (CPAT), Hays County

Jorge Anchando, CPAT, Hays County

Rick Arnic, Public Affairs Representative, Lower Colorado River Authority

Trey Bailey, Executive Director, Luling Economic Development Corporation

Rene Barker, Hydrologist

Commissioner Jeff Barton, Hays County

Joe Beal, Councilman, City of Bastrop

Charles Bergh, Travis County Parks Department

Commissioner Clara Beckett, Bastrop County

Mike Blizzard, Political Consultant

Kathy Boydston, Texas Parks and Wildlife Department

Donna Brasher, CPAT, Hays County

Valarie Bristol, Travis Audubon

Curt Busk, CPAT chair, Hays County

George Cofer, Hill Country Conservancy

Commissioner Will Conley, Hays County

Kirk Cowan, Lower Colorado River Authority

Todd Dercasz, San Marcos Greenbelt Alliance

Tom Dureka, Executive Director, Pines and Prairies Land Trust

Commissioner Karen Ford, Hays County

Jeff Francel, The Nature Conservancy of Texas

William Groves, Chair of the Lockhart Parks and Recreation Board

Tim Hogsett, Texas Parks and Wildlife Department

Kirk Holland, Barton Springs – Executive Director, Edwards Aquifer Conservation District

Melanie Howard, City of San Marcos

Rick Ilgner, Edwards Aquifer Authority

Commissioner Debbie Gonzalez Ingalsbe, Hays County

Patti Jacobs, Co-owner Bastrop Cattle Company

Pat Johnson, CPAT, Hays County

Steve Klepfer, Business Owner

Michael Kuck, The Luling Foundation

Clif Ladd, Loomis Partners

Joe Lessard, Finance Consultant

Adena Lewis, President, Smithville Chamber of Commerce

Bob Long, Ministerial Alliance

Melinda Mallia, HCP Citizens Advisory Committee

Todd McClanahan, Park Superintendent, Bastrop State Park

Judge Ronnie McDonald, Bastrop County

Ann Mesrobian, Bastrop County Environmental Network

Christy Muse, Executive Director, Hill Country Alliance

Chris North, San Marcos Greenbelt Alliance

Jonathan Ogren, University of Texas at Austin Academic and Planning Consultant

Jerry Pinnix, Hays County Parks

Bernie Rangel, Parks Manager, City of Lockhart and President, Caldwell County Hispanic Chamber of Commerce

Commissioner Joe Roland, Caldwell County

Philip Ruiz, Chair, Lockhart Planning and Zoning Committee

David Salazar, CPAT, Hays County, City of Kyle Councilmember

Ray Sanders, former Mayor of Lockhart

John Sanford, CPAT, Hays County

Andy Sansom, River Systems Institute

Raymond Slade, Hydrologist

Judge Liz Sumter, Hays County

Sandra Tenorio, Buda City Council

Betty Voights, Executive Director, CAPCOG

Diane Wassenich, San Marcos River Foundation

Doug Wierman, Trinity Aquifer

Marilee Wood, CPAT, Hays County

Judge H.T. Wright, Caldwell County

Appendix C

The Central Texas Planning Summary

Existing local parks and open space plans and priorities are of particular importance to both the Greenprint and any strategic investments to be made by these Central Texas counties.⁷⁴ They are adopted policies of the local governments and generally were created with high levels of public input. These plans, where they exist, each contains good information about community priorities and they are summarized briefly below.

BASTROP COUNTY – Creating Opportunity for Parks and Open Space

Residents of Bastrop County have shown an increasing interest in parks and open space through the completion of their first county park in the Cedar Creek area and through input on the countywide strategic planning document, “Opportunity Bastrop County.” The public input received in this planning process revealed that “residents strongly supported the county expanding its park system to other areas.”⁷⁵ In addition, Lower Colorado River Authority park statistics illustrate an increasing trend of park usage in the county over the past several years.⁷⁶

BASTROP COUNTY – Opportunity Bastrop County (OBC) (2007)

OBC was completed 2007 to direct and inform Bastrop County planning efforts. OBC seeks to link schools to open space planning and encourage strong investment in open space preservation. Primary conservation objectives outlined in the report are to preserve farmlands, ranch lands, and wildlife habitat, as well as to protect water quality and quantity.

In order to meet these objectives OBC identified three goals: 1) develop conservation subdivision regulations; 2) develop additional parks; and 3) preserve agricultural

lands and streamsides.⁷⁷ Additionally, the county feels that the “development of river access points will help to build the tourism industry.”⁷⁸

Going forward, the county is looking to the development and use of a conservation subdivision ordinance, which would allow development at a higher density than otherwise permitted in exchange for a larger portion of the property being left as public open space. These subdivision regulations are a popular option because “the cost savings (in storm water detention facilities, reduced infrastructure costs, etc.) and enhanced values make this type of subdivision attractive to many developers.”⁷⁹

BASTROP COUNTY – Lost Pines Habitat Conservation Plan (LPHCP) (2008)

In 2008 a permit was issued to allow Bastrop County to issue certificates of participation to landowners or developers who impact or destroy habitat for the federally endangered Houston toad. Approximately 124,000 acres in Bastrop County have been designated as critical habitat for the toad. The LPHCP provides a local option for mitigation of development that impacts the endangered species.⁸⁰

CITY OF BASTROP – City of Bastrop Master Parks Plan Update (2008)

In 2007 the City of Bastrop’s Parks Board and City Council initiated the update of the city’s Master Parks Plan to address “rapid growth, changing demographics, and evolving preferences for different types of park and recreational services.”⁸¹ The plan identified the need for a full time Parks and Recreation Department, which can serve to acquire more land for the park system, adopt new standards, and leverage the financial resources to do so.⁸² Additionally, the city aims to “implement regulations that require developers of

⁷⁴ Travis County’s separate Greenprint process that was completed in October 2006. Please consult the full report (http://www.tpl.org/tier3_cd.cfm?content_item_id=21758&folder_id=264), as well as the City of Austin’s Park and Recreation Department (<http://www.ci.austin.tx.us/parks/>), and the Travis County Department of Transportation and Natural Resources (<http://www.co.travis.tx.us/tmr/default.asp>) for more information and for current planning documents, including the Balcones Canyonlands Conservation Plan.

⁷⁵ *Opportunity Bastrop County*, 2007, p. 5.

⁷⁶ Lower Colorado Regional Authority park statistics and conversations with Lorie LeBlue and LCRA.

⁷⁷ *Opportunity Bastrop County*, 2007, p. 9, 10, 16.

⁷⁸ *Id.*, p. 16.

⁷⁹ *Id.*, p. 4.

⁸⁰ For more information visit: http://www.co.bastrop.tx.us/ips/cms/othercountyoffices/Development_Services/LostPinesHabitatConservation.html.

⁸¹ *City of Bastrop Master Parks Plan Update*, July 2008, p. 17.

⁸² *Id.*, p. 66 and 67.



Photo by Rolf Nussbamer

Fields of green and gold, Caldwell County.

new residential subdivisions to dedicate land for neighborhood or pocket parks or pay a development fee in-lieu of land dedications.”⁸³

The city would like to provide substantial additional parklands in the decades to come.⁸⁴ The city set a park standard of having a park every ¼ mile within new subdivisions. However, in many residential areas there is limited land available for parks, and the city recommends creating pocket parks in these instances.⁸⁵

CITY OF ELGIN – *City of Elgin Parks, Recreation and Open Space Master Plan (2006) and Comprehensive Plan Community Meeting Summaries (2008)*

Elgin adopted a park master plan in 2006 and is also in the process of completing a city comprehensive plan. The overarching goal of the Master Park Plan is to “craft a long range plan based on public need, tourism and potential to attract quality business growth” and improve quality of life for residents.

Guiding principles of the comprehensive plan that were identified in community meetings held in 2008 include: 1) preserve the local history and natural landscape; 2) ensure sustainable development patterns

and accommodate diverse needs; and 3) connect modes of transportation to community and region to ensure they are safe and affordable.⁸⁶

In addition, the city would like to see more mixed-use areas with “green space, parkland, landscaping, trails, school sites, and sidewalks.”⁸⁷ Like the City of Bastrop, the residents mentioned conservation subdivisions as a way to meet some of these goals.⁸⁸

Going forward the city proposes that a detailed Pathways Master Plan be crafted, that the Park Land Ordinance be amended so that the parks department can “play a decisive role in approval and accepting park land or ‘fee in lieu of’ from all future developments,” and that the city should consider possible incentives for developers to create a public golf course.⁸⁹

CITY OF SMITHVILLE – *Smithville Comprehensive Plan (2007)*

The City of Smithville park, open space and recreation objectives are to develop lands for passive recreation, such as walking trails. In order to achieve this, the plan recommends there be “park set aside standards in subdivision ordinances.”⁹⁰ The city would like to consider offering density bonuses to provide incentives for developers who meet the needs of the community.⁹¹ Additionally, the city would like to identify and prioritize trail development, ensuring connectivity through town to increase pedestrian safety and amenities.⁹² Other community wishes include increased river accessibility, development of additional boat ramps, and new relationships with river outfitters to increase tourist opportunities.⁹³

CALDWELL COUNTY – *Planning Parks and Open Space for the Future*

Several important natural and cultural features exist within the county and are ripe for conservation efforts.

⁸³ Id., p. 72.

⁸⁴ Id., p. 36.

⁸⁵ Id.

⁸⁶ Elgin Comprehensive Plan Community Meeting PowerPoint, 2008, p. 1, available at <http://www.elgintx.com/planningreview.asp>.

⁸⁷ Elgin Comprehensive Plan Community Meeting/Stakeholder Interview Summary, 2008, p. 6.

⁸⁸ Elgin Comprehensive Plan Community Meeting PowerPoint, 2008, p. 8.

⁸⁹ *City of Elgin Parks, Recreation and Open Space Master Plan*, p. 17 and 21.

⁹⁰ Smithville Comprehensive Plan, Land Use, 2007, p. 3-15.

⁹¹ Id., p. 3-18 and 3-19.

⁹² Id., p. 29 – 32.

⁹³ Id., p. 25- 28.

One interviewee acknowledged that important green spaces to protect are the floodplains of Plum Creek, Clear Fork Creek, and the San Marcos River. Another person mentioned Lake Lockhart. Cultural landmarks, such as the historic courthouse and buildings on the square in Lockhart, the site of the Battle of Plum Creek, and the Chisholm Trail, a very small portion of which passes through the county, were also identified as significant resources in need of protection.

The San Marcos River is also highly valued for its recreation opportunities, as well as providing a critical drinking water source. The San Marcos River provides 80 percent of Luling's drinking water. Residents would like to have river access points, such as near the Zedler Mill, where efforts are currently underway to turn the mill into a museum and put in a boat launch with improved parking.

CITY OF LOCKHART – Lockhart 2020 Comprehensive Plan (2000)

The Lockhart 2020 Comprehensive Plan is the city's 20-year master plan to guide policy decisions. The 2020 plan states that the city would like to be characterized by "livable neighborhoods," "quality recreational and cultural activities," and "quality of its built environment and the integration of the natural landscape," among other things.⁹⁴

Parks are discussed in the 2020 plan. Specifically, with regard to the Central Business District, the plan suggests that a public gathering area such as a park would play an "important economic and social role."⁹⁵ One land-use goal articulated in the plan is to "enhance and expand the existing parks, recreation, and community facilities in Lockhart." The 2020 plan lists the following, more specific policies that relate to land use, parks and open space:

- "Flood plain areas should not be encroached upon by future development;
- Natural areas and development constrained areas should be used for natural open space;
- Environmentally sensitive areas should be protected;
- Existing natural features and unique topography should be used to provide adequate separation or buffer between incompatible land uses."⁹⁶

CITY OF LULING – Comprehensive Master Plan (1994)

Luling is currently working on updating its Comprehensive Master Plan. The 1994 plan has a recreation and open space component that inventories existing park and recreational facilities and creates suitable development plans for those facilities.

CITY OF LULING – Park, Recreation and Open Space Master Plan (2001)

Luling's Park, Recreation and Open Space Master Plan objectives include increasing recreational opportunities for citizens, improving and renovating existing parks and facilities, developing staff and resources for program development and implementation, and identifying funding for development and parkland acquisition. Luling currently has approximately 10 small parks.

HAYS COUNTY – Taking Action to Protect Habitat and Enhance Parks

In 2001 Hays County adopted its Parks and Open Space Master Plan, which was updated in 2006.⁹⁷ The original plan was developed with much public engagement including; a mail out "needs assessment," public hearings, community forums, input from an appointed citizen's committee, and guidance from local experts.

The plan articulates a vision for the county to have a system of both parks and open space. It focuses largely on passive forms of recreation and protection of aquifer recharge zones, based on the theory that the municipalities and sports leagues were providing acceptable levels of active recreation opportunities to county residents.⁹⁸

The open space component of the plan refers to the importance of the natural environment to the economics and desirability of the county. The specific objectives state that the county will seek out opportunities to protect or acquire "unique natural open space for sustainable public use."⁹⁹ There are goals stated for water protection, public education, and an emphasis on partnerships.

⁹⁴ Lockhart 2020 Comprehensive Plan, p. 1.

⁹⁵ Id., p. 11.

⁹⁶ Id., p. 3.

⁹⁷ *Hays County Parks and Open Space Master Plan, 2006.*

⁹⁸ Id., p. 12.

⁹⁹ Id., p. 13.

CITY OF SAN MARCOS – Parks, Recreation and Open Space Master Plan (2002)

Priorities identified within this plan are the acquisition of parkland and greenspace; provision of trails and related amenities; and creation of neighborhood or regional swimming pools.

CITY OF WIMBERLEY – Master Plan, Parks and Recreation (2001)

Priorities include building a community center (completed); acquiring property on Cypress Creek, Blanco River, and other waterways as open space, parks, and nature preserves; expanding sports fields and playgrounds; and developing trails for hiking, biking, and horses.

CITY OF DRIPPING SPRINGS – Parks, Recreation and Open Space Master Plan (2007)

Priorities within this planning document are to increase accessibility and use of existing parks

(basically park improvements); acquire additional open space; expand existing parks; expand aquatic resources; and develop a tennis complex.

CITY OF KYLE – A Vision of Parks, Trails and Open space 2006-2016 (2006)

Priorities included here, in the order ranked, are playgrounds, picnic facilities, trails, recreation center, natural areas, neighborhood greenspace, basketball courts, parks around water, sports fields, and a river park.

CITY OF BUDA – The Parks System Master Plan component of the City Comprehensive Plan (2000)

The Buda Parks System Master Plan provides guidance on future decisions concerning capital improvement needs, recreation programming needs, and other park programs for the citizens of Buda, Texas. The plan is intended to provide the City of Buda with the ability to plan for short term and long-term goals designed to meet the Buda community needs for parks, recreation, and open space.



Photo by Rolf Nussbaumer

Damselfly on the Colorado Riv er.

Appendix D

Level of Service Analysis¹⁰⁰

This analysis compares the amount of public parkland¹⁰¹ in Bastrop, Caldwell, and Hays Counties to seven other counties with similar land area, population, and proximity to a major city. The major city is noted in the parenthetical following each county: Comal and Guadalupe Counties, Texas (San Antonio); Ellis County, Texas (Dallas); Waller County, Texas (Houston); Valencia County, New Mexico (Albuquerque); Pottawatomie County, Oklahoma (Oklahoma City); and Harvey County, Kansas (Wichita).¹⁰²

BASTROP COUNTY

In this analysis, Bastrop County is compared to Guadalupe, Valencia, and Pottawatomie Counties. Bastrop County has more park acreage than the three comparison counties with 136 acres per 1,000 residents, significantly above the average of the four counties (see Table II). However, it is Bastrop State Park, owned by the Texas Parks and Wildlife Department, and the Lower Colorado River Authority's McKinney Roughs Nature Center that contributes a quarter of the parkland in the county. Similarly in Valencia County, the U.S. Forest Service is the principal public recreational landowner, with the local communities and school district contributing just over two percent of the parkland totals.

Putting population in context with overall land area, Bastrop County is behind Guadalupe and Pottawatomie Counties, but ahead of Valencia County, with 81 residents per square mile in 2007. That will likely change, as Bastrop County is projected to grow by 72 percent from 2000-2020, much faster than comparison counties. In fact, Bastrop County is expected to reach almost 100,000 residents by 2020 and increase in density to 112 residents per square mile. (See Appendix A, Table I.) Without an aggressive land acquisition plan, Bastrop County's rapid growth rate could quickly erode any parkland gains.

CALDWELL COUNTY

In this analysis, Caldwell County is compared to Waller and Harvey Counties. In terms of park acreage totals, Caldwell County is between Harvey and Waller Counties with 19.1 acres per 1,000 residents. With respect to total parkland as a percent of county land area, Caldwell County ranks second of the three counties with 0.20 percent of the county land area dedicated as parkland, again below the average of the three counties (see Table II).

Texas Parks and Wildlife Department and Texas Department of Transportation combined own 75 percent of the total parkland for Caldwell County. Three cities also contribute acreage to the total parkland available in Caldwell County. In contrast to Waller and Caldwell Counties, which provide no countywide parkland, Harvey County's parks department owns almost 80 percent of the available parkland in the county.

Considering population in the context of overall land area, Caldwell County is in the middle of the three counties with 67 residents per square mile in 2007. Caldwell County is projected to grow by 55 percent from 2000-2020, four times faster than Harvey County (14 percent) and almost as fast as Waller County (58 percent) in the same time period. Caldwell County is expected to reach almost 50,000 residents in 2020 and increase in density to 92 residents per square mile. (See Appendix A, Table I.)

Without an aggressive land acquisition plan, Caldwell County's future population will be further underserved by parks. According to projections, Caldwell County will be providing less parkland per person in 2020 than it did in 2007.

¹⁰⁰ Please reference the full Travis County Greenprint for Growth for the complete Level of Service Analysis for that county (www.tpl.org/centraltxgreenprint).

¹⁰¹ Numerous cities have parks within private communities, but Homeowners' Association (HOA) parks were excluded from this study. Although some HOA parks are eventually turned over to their respective cities to maintain, many are not. Unless publicly owned, parks in private communities were not calculated in the acreage totals for the counties.

¹⁰² Researchers at The Trust for Public Land acquired current and projected parkland data by contacting the individual cities, towns, or villages within each county. Researchers also contacted any other public park or recreation landholders, including county, state, and federal agencies; river authorities; a conservancy district; and non-profit organizations. All other data analyzed was obtained from the United States Census Bureau except the population projections, which are from these sources: (1) The University of Texas at San Antonio, Texas State Data Center and Office of the State Demographer, Institute for Demographic and Socioeconomic Research (IDSER): <http://txsdc.utsa.edu/tpepp>; (2) University of New Mexico, Bureau of Business and Economic Research: <http://bber.unm.edu/demo/table1.htm>; (3) Oklahoma Department of Commerce: <http://www.okcommerce.gov>; and (4) The University of Kansas, Institute for Policy and Social Research: <http://www.ipsr.ku.edu/ksdata/ksab/population>.



Photo by Rolf Nussbamer

Blanco River, Hays County.

HAYS COUNTY

In this analysis, Hays County is compared to Comal and Ellis Counties. In terms of park acreage totals, Hays County is in between Comal and Ellis Counties with 13.1 acres per 1,000 residents, below the average of the three counties (see Table II). Hays County also ranks second of the three counties based on total parkland as a percent of county land area, with 0.43 percent of the county land area dedicated as parkland, again below the average of the three counties (see Table II).

The principal public recreational landowner for Hays County is the City of San Marcos. The other five local communities also contribute a substantial amount of parkland to county residents. The county parks department owns just over two percent of the total available parkland. In contrast, Comal County has almost twice the amount of parkland as Hays County, though 84 percent of that parkland is provided by the U.S. Army Corps of Engineers and the Texas Parks and Wildlife Department.

Putting population into the context of land area, Hays County has the highest population density of the three counties with 209 residents per square mile in 2007. (See Appendix A, Table I.) Hays County is projected to grow by 86 percent from 2000-2020, faster than both comparison counties. (See Appendix A, Table I.) With Hays County expected to reach over 180,000 residents by 2020, increasing in density to 268 residents per square mile, future residents will find themselves further underserved by parks.

CONCLUSION

Bastrop, Caldwell and Hays Counties rank low in current parkland totals and will continue to decrease in parkland totals per resident without aggressive new parkland acquisition. As the population growth rate is projected to increase substantially in the next 10 years, it is imperative that public parkland be available to the residents of these counties.

It is likely that these historically more rural, but now quickly urbanizing counties have not emphasized parkland acquisition due to their lower population density and a traditional predominance of privately-owned open space. They may not currently have the management structures or financial resources in place for significant parkland acquisition. The low level of service of parks outside the city limits can best be addressed through county-led processes for identifying and acquiring lands for parks to meet growing needs. Continued planning and implementation efforts will result in changes to reverse the parkland deficits.

Table II. Acres of Parkland per 1,000 Residents and As Percent of Land Area by County and Agency

Agency	Population in 2007	Acres by Agency	Total County Park Acres	Total Acres per 1,000 Residents	Land Area in Acres	Park Acres as Percent of Land Area
Bastrop County, Texas	72,248		9,826	136.0	568,544	1.73%
Texas Parks and Wildlife Department		6,943				
Lower Colorado River Authority		2,497				
Bastrop Public Works, Parks and Recreation Department		109				
Smithville Parks and Recreation Department		100				
Elgin Parks and Recreation Department		87				
Pines and Prairies Land Trust		60				
Environmental Stewardship		30				
Valencia County, New Mexico	71,364		8,412	117.9	683,283	1.23%
U.S. Forest Service		8,210				
Village of Los Lunas Parks Division		126				
Belén Parks and Recreation Department		62				
Middle Rio Grande Conservancy District		10				
Village of Bosque Farms		3				
Guadalupe County, Texas	112,777		583	5.2	455,130	0.13%
Seguin Parks and Recreation Department		289				
Schertz Parks, Recreation and Community Services Department		179				
City of Cibolo		88				
Guadalupe-Blanco River Authority		25				
City of Marion		1				
City of New Berlin		1				
City of Staples		0.25				
Pottawatomie County, Oklahoma	69,038		154	2.2	504,128	0.03%
Shawnee Parks Maintenance Division		107				
Tecumseh Public Works/Parks Department		28				
Town of McLoud		17				
Town of Wanette		2				
			Average, These Counties:	65.3		0.78%

Agency	Population in 2007	Acres by Agency	Total County Park Acres	Total Acres per 1,000 Residents	Land Area in Acres	Park Acres as Percent of Land Area
Harvey County, Kansas	33,493		2,117	63.2	345,171	0.61%
Harvey County Parks Department		1,650				
Hesston Parks Department		194				
Newton Community Development and Parks Department		171				
Halstead Parks and Recreation Department		66				
City of North Newton		20				
City of Burrton		10				
City of Walton		5				
City of Sedgwick		1				
Caldwell County, Texas	36,705		703	19.1	349,267	0.20%
Texas Parks and Wildlife Department		264				
Texas Department of Transportation (Plum Creek Wetlands Mitigation County Park)		260				
Lockhart Parks and Recreation Department		97				
Luling Parks and Recreation Department		80				
City of Martindale		2				
Waller County, Texas	35,933		38	1.0	328,723	0.01%
City of Hempstead		26				
City of Prairie View		5				
Katy Parks Department		4				
City of Pattison		1				
City of Waller		1				
City of Brookshire		N.A.				
			Average, All Counties:	27.8		0.27%

Agency	Population in 2007	Acres by Agency	Total County Park Acres	Total Acres per 1,000 Residents	Land Area in Acres	Park Acres as Percent of Land Area
Comal County, Texas	105,187		3,061	29.1	359,328	0.85%
U.S. Army Corps of Engineers		1,349				
Texas Parks and Wildlife Department		1,239				
New Braunfels Parks and Recreation Department		453				
City of Bulverde		15				
City of Garden Ridge		6				
Hays County, Texas	141,480		1,745	12.3	433,837	0.40%
San Marcos Parks and Recreation Department		1,140				
Kyle Parks, Recreation and Facilities		231				
City of Wimberley		130				
Hays County Parks Department		107				
Dripping Springs Parks, Recreation and Open Space		94				
Buda Parks Department		33				
City of Niederwald		10				
Ellis County, Texas	143,468		707	4.9	601,542	0.12%
Waxahachie Parks and Recreation Department		286				
Ennis Parks and Recreation Department		156				
Midlothian Parks and Recreation Department		105				
Red Oak Parks and Recreation Department		57				
Ferris Parks Division		51				
Town of Maypearl		20				
Grand Prairie Parks and Recreation Department		16				
Town of Italy		10				
Town of Alma		4				
Town of Milford		1				
Glenn Heights Parks and Recreation Department		1				
Town of Garrett		0.17				
Ovilla Public Works Department		N.A.				
			Average, All Counties:	15.5		0.46%
N.A. = Not Available						



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