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CHAPTER ONE

INTRODUCTION

WHAT IS A MASTER PLAN?

A master plan is the process of putting the desires and goals a community holds for its future down on paper. It looks at how different elements of the community, such as land use, economy, transportation, and natural resources, are not only interrelated but affected by change. A master plan provides guidelines for decisions concerning development and redevelopment and it suggests where various land uses could be located and how they relate to one another. A master plan also provides direction for public service and capital facilities decisions as well as environmental resource protection. A master plan is developed as a tool to encourage private investment and to guide public investment in a manner that enhances the community and environment.

WHY IS A MASTER PLAN NEEDED?

The development of a master plan is a critical step in addressing growth and development and in preserving the qualities of Las Animas County that residents and visitors enjoy. The Las Animas County Master Plan expresses the needs and desires of the county's citizens concerning the future of Las Animas County. It provides direction for the county's decision-makers regarding future land development, with the primary objective of preserving and enhancing the quality of life for current and future citizens.

A master plan responds to the expectations of residents for consistent decision making by county elected officials and staff. As a "blueprint" that will determine the future of Las Animas County, the master plan will establish a framework for government decisions and outline a series of goals, policies, and actions concerning land use, economy, public infrastructure and services, the environment, and natural resources.

Introduction

In addition to guiding land use decisions, a master plan also serves as a guide for public investment. Through wise land use planning, the county ensures that landowners are provided a reasonable use of land while the county is able to judiciously use its fiscal resources to provide the efficient and affordable services employers and residents need.

The plan will also help to focus the county's fiscal and other resources on specific actions, such as road improvements, to address problems identified by the public.

THE PLANNING PROCESS

The planning process is a participatory process that includes a series of three community workshops held at various locations throughout the county. The preparation of the plan balanced public involvement with political acceptance, and technical analysis with policy development. The result will be a master plan that is a community plan, expressing the desires of the community.

The process used for developing the plan can be simplified into five basic steps:

- **Identifying Issues.** A series of community workshops were held in October 2000 at the Hoehne Community Center, the Branson School, the Aguilar School, the Primero School, and the Kim Activity Center. The purpose of the meetings was to obtain feedback from citizens to identify and prioritize issues facing Las Animas County.
- **Understanding Existing Conditions.** The existing conditions and trends of Las Animas County's current land use, economy, population, public infrastructure and services, environment, and natural resources were researched, documented, and mapped.
- **Developing Plan Options.** Based on the issues that were identified at the first series of community workshops, various plan options were developed. These plan options were presented to the public and discussed at a second series of community workshops in January 2001 at the same locations

Use of the Master Plan

in Branson, Hoehne, Aguilar, Primero, and Kim. Participants completed a questionnaire expressing preferences for various plan options.

- **Preparing a Draft Plan.** Results of the plan options questionnaire were compiled, and preferred options were integrated into a draft plan. This draft was presented to the public for review at the third, and final, series of community workshops in April 2001 at the same locations as the previous community workshops.
- **Preparing the Final Plan.** Comments received from the community workshops, comments provided to the Las Animas County Planning and Land Use Office, and provided by Las Animas County staff, the Planning Commission, and the Board of County Commissioners at work sessions held on April 3 and April 24, 2001 were added to the draft plan. A Summary of Recommended Modifications was also prepared that summarized the changes.
- **Plan Adoption.** The revised draft plan along with the Summary of Recommended Modifications was adopted by the Las Animas County Planning Commission and Board of County Commissioners on May 7, 2001.

Concurrent with the preparation of the master plan, the Las Animas County zoning and subdivision codes are being reviewed and updated to address specific land use issues and achieve consistency with the new master plan.

USE OF THE MASTER PLAN

The Las Animas County Master Plan is considered an advisory document only and is not binding on the zoning discretion of Las Animas County. Although the plan is advisory, it is the basis for regulatory measures, including development code updates and development review recommendations. The master plan serves as the foundation for future intergovernmental agreements, capital improvement programming, and detailed studies and programs. The master plan is also a community database that can be used as supporting documentation for pursuing grants for community development activities.

Introduction

The master plan should be referenced by county staff, the Planning Commission, and the County Commissioners when reviewing development proposals, updating land use regulations, working on intergovernmental issues, outlining work programs, preparing annual budgets, and evaluating the county's progress in meeting identified goals. The master plan should also be used to guide residents, landowners, and developers concerning land planning and community development objectives within Las Animas County.

The Preferred Plan Map, found in the Chapter 3, establishes four basic planning areas within Las Animas County: Established Community Areas, Cooperative Planning Areas, Rural Resource Areas, and Rural Conservation Areas. These planning areas should be used in conjunction with the Las Animas County zoning and subdivision codes as well as the Las Animas County Official Zoning Map to guide the appropriate location, character, type, and intensity of new development.

At the conclusion of the plan, in Chapter 4, are *concepts, policies, and implementation actions*. Plan goals and objectives, expressed as *concepts*, are followed by *policies* that articulate the directions as statements of public policy. *Implementation actions* list one or more implementation measures that can be taken by county staff, the Planning Commission, or the Board of County Commissioners, as appropriate, to support the concepts and policies.

GLOSSARY OF PLANNING TERMS

Throughout this document you will see various words and terms that appear in blue, underlined text. These are terms that are defined in a "Glossary of Planning Terms" located in the appendix of the document. Digital versions of this document have hyperlinks between the terms and the definition. This means if you click on an emphasized term, you will be immediately linked to the definition in the glossary.

CHAPTER TWO

EXISTING CONDITIONS AND ISSUES

INTRODUCTION

The existing conditions of Las Animas County are divided into the following three categories:

- Population, Economy, and Land Use
- Public Infrastructure and Services
- Environment and Natural Resources

The issues that were identified by citizens at community workshops held in October 2000 in the towns of Hoehne, Branson, Aguilar, Primero, and Kim have been incorporated into the chapter and appear in sidebars where applicable.

ISSUES

Availability of 2000 Census Data

At the time of publication, the only county-level 2000 Census data available was population data. Additional 2000 Census data regarding topics such as housing, income, age, marital status, and commuting time will be available in the next two years.

POPULATION, ECONOMY, AND LAND USE

INTRODUCTION

The population, economy, and use of land within Las Animas County are interrelated. Las Animas County's historic settlement, [cultural resources](#), and economic conditions dictate land use patterns. Existing and future land use patterns are also shaped by environmental constraints and service infrastructure. An understanding of population attributes, the local economy, and the use of land within Las Animas County provides guidance as to what type and rate of growth may be appropriately anticipated.

HISTORY OF LAS ANIMAS COUNTY

Pre-Settlement

The Raton Basin is a geologic formation located at the heart of the western portion of Las Animas County. For several thousand years, the Raton Basin was a frontier region. To the south lived the pueblo dwellers in what is today New Mexico. The Utes and the Apaches, more primitive hunting tribes, inhabited the area north of the basin. The pueblo tribes regarded the Spanish Peaks (known to them as the Huajatollas) as frontier landmarks, setting their territory apart from the “wild” tribes to the northeast.

By the 1500s, the Apaches had moved into the Raton Basin from the north. In the early 1500s, Spanish explorers came over the mountain passes from New Mexico and began to trade with the Apaches and the Utes that inhabited the mountain regions. Both tribes acquired horses from the Spanish, which allowed them to carry and trade more goods and increased the range over which they could hunt and raid. Consequently, the rate of both trade and warfare escalated at a rapid pace.

From approximately 1650 to 1725, the Apaches dominated the area, raiding tribes, such as the Wichitas and the Caddoes, that were settled on the rivers of the central plains, as well as fringes of the Spanish settlements. In the mid-1700s, after acquiring guns from French traders, the Comanches moved into Apache territory.

Las Animas County experienced little Spanish activity, considering the dominance that the Spaniards had over the region. One group of Spaniards, the expedition of Captain Francisco Leyva de Bonilla, did, however, make their mark on the county. Leyva de Bonilla led a rebellious group of Spanish soldiers that broke off from an official expedition to one of the New Mexico villages. After spending some time in New Mexico, the expedition moved into the plains of the Raton Basin. Ultimately, the men were killed by Wichitas near one of the tributaries of the Arkansas River. Because the men were traveling without priests, the river was called Rio de Las Animas Perdidas en Purgatorio, which is known today as the Purgatoire River.

Throughout the 1800s, both the Americans and Spaniards considered the land in the Raton Basin to be their own. From the time of Zebulon Pike’s expedition into the area through the exploits of Steven Long,

Population, Economy, and Land Use

the Americans saw the region as theirs. The Spanish, and after 1821, the Mexicans as well, disputed this and made many attempts to protect the isolated outpost of the Mexican frontier. The Spanish built a fort near Sangre de Cristo Pass in 1819 that was later abandoned, as was much of the Raton Basin. American fur trappers and traders made their way into the basin during the 1820s and 1830s.

Settlement

In the 1840s, the Mexican government decided to prevent American invasion into southern Colorado and northern New Mexico by settling the land. Consequently, grants of millions of acres of land were made to Mexican citizens if they promised to settle on the land. The Maxwell Grant, located in the southwest portion of Las Animas County, was one of these grants and is where the first small settlements in the county arose.

“Placitas” (family communities), “ranchitos” (small ranches), and religious sites were built by the Hispanic people who settled the valleys of the Purgatoire and Apishapa Rivers in Las Animas County.

Settlements by the Mexican government ended in 1848 when the Mexican War ended. With the defeat of Mexico, the United States gained clear title to the rest of Colorado and most of what is known today as the western United States. American settlers began to filter into the Raton Basin, and by 1865 a range cattle industry had developed. Cattlemen placed their herds on the public domain and fenced off the range, eventually coming to view the lands along the rivers as theirs by prior right.

ISSUES

Protection of the Historic Hispanic Cultural Landscape

Although some of the adobe and log structures of the Hispanic culture that once inhabited Las Animas County have survived, the passage of time and a surge in development have caused many Hispanic architectural sites to be destroyed or to be at risk. Many county residents feel that the historic Hispanic cultural landscape needs to be identified and protected.

In 1998, Colorado Preservation, Inc. named the western portion of the county as one of Colorado's most endangered historic places. The Hispanic Cultural Landscape of the Purgatoire (HCLP) is a project that was created to record the various elements of the Hispanic culture in the region, to build pride through awareness and education, and to move toward creating historic designation for this area of important historic and cultural value.

In June of 1999, a mini grant for a context study was awarded to the HCLP from the Colorado Historical Society State Historical Fund. The money was administered through the Trinidad Historical Society. A historical archaeologist, a historian, a historical architect, and two folklorists are conducting the study.

The context study is exploring area history pertaining to adobe, stone, and log structures; land grants; ranching and agriculture, including acequias (irrigation ditches); mining; railroads; and family and oral traditions.

Existing Conditions and Issues

In the 1870s, the Denver and Rio Grande Western Railroad and the Atchison, Topeka and Santa Fe Railroad both reached Trinidad, and the Raton Basin boomed. Coal mining became a major industry by 1880. By 1890, the area around Trinidad and Walsenburg became the most important coal-mining region in the state. The importation of foreign workers caused Trinidad to develop strong ethnic communities. There were Italians, Serbs, and Slavs along with the native Spanish-speaking population. This mixture of cultures caused tension and discontent that culminated in a series of strikes against mine owners.

By the early 1920s, coal mining was starting to become mechanized and coal production was generally dropping. Many miners left the area and agriculture became the mainstay of the region's economy. Cattle ranching and alfalfa and wheat farming, along with some coal mining, were the main production industries in the 1920s and 1930s. The advent of major highways brought tourists into the area during the 1930s as well.

ISSUES

Protection of Historic and Archeological Sites

Historic and archeological sites within the county need to be identified and appropriately preserved. Although the Colorado Historical Society has listed many sites on the National or State Register of Historic Places or as a National Historic Landmark, Las Animas County needs to take measures to preserve these local treasures, as well as many others, on a local level. The county needs to both identify and enact preservation measures to protect its historic and archeological sites.

It should be noted that residents of Branson expressed concern that if such elements were

Historic and Archeological Sites

Las Animas County has numerous sites of archeological or historic significance. Archeological sites are not identified in order to preserve their artifacts from disturbance. The following historic sites are officially listed or eligible for listing on the National or State Registers of Historic Places.

The Avery Bridges

Both of the Avery Bridges, one located in Aguilar (National Register 06/24/1985, 5LA1823) and the other in Hoehne (National Register 06/24/1985, 5LA1821), are pin-

connected, three-panel steel modified Avery pony trusses that were based on a design patented by Colby M. Avery in 1894. The Trinidad Foundry and Machine Company was the only company in Colorado known to have manufactured Avery trusses. Of the few that were constructed, the Aguilar and Hoehne bridges are the only ones with this modified design.

Population, Economy, and Land Use

Cokedale Historic District (National Register 01/18/1985, 5LA5782)

Cokedale is a significant example of a company-owned coal camp and was a part of the coal mining and coke industry that served as the basis of the southern Colorado economy around 1900. While most similar coal camps were dismantled as mines ceased operation after World War I, Cokedale continued to thrive until 1946. Constructed in 1906–1907, it was considered a model camp, with housing, educational, and recreational facilities provided by the employer, the American Smelting and Refining Company. Most of the houses, public and commercial buildings, and coke ovens have survived essentially intact. The two rows of double-sided units are the largest surviving group of coke ovens in the state.

Ludlow Tent Colony Site (National Register 06/19/1985, 5LA1829)

The Ludlow Tent Colony Site is in the Town of Ludlow on Delagua Canyon Road.

In 1913, Colorado was the eighth largest coal-producing state in the nation and Ludlow was at the heart of bituminous coal-field country. The Colorado Fuel and Iron Company, owned by the Rockefeller family, was the largest producer in the region, employing about 14,000 workers, 70 percent of whom were foreign immigrants.

By 1913, living and working conditions had become so intolerable that the United Mine Workers Union (UMW) organized a massive campaign to unionize the Colorado coal miners. Miners walked off the job in a strike that began September 23, 1913. The mining company forced the miners out of their homes into eight UMW tent camps, Ludlow being the largest.

Several times during the strike company guards fired into the camps. The Colorado governor called in the National Guard that October, but the guard employed company police and interactions between striking miners and the guard became increasingly antagonistic. The guards attacked the Ludlow camp in a daylong barrage of gunfire on April 20, 1914. Camp residents hid in pits that they had dug underneath their tents. Later that afternoon, the National Guard looted the camp, set it on fire, and then seized and executed three strike leaders. When the smoke cleared, two women and 11 children were found burned to death in one of the tent pits.

Existing Conditions and Issues

In the aftermath, the miners gained control and drove the guard back into Trinidad, seizing control of the mining district. Ten days later, the miners' war forced President Woodrow Wilson to send in federal troops to restore order. The strike continued but eventually fell apart several weeks later.

The country's shocked reaction to the massacre eventually changed labor relations from one of confrontation with strikers to negotiation, and to this day, the UMW maintains the Ludlow site as a shrine to the sacrifice that laborers made to the labor movement.

Bridge over Burro Cañon (National Register 02/04/1985, 5LA1825)

The Bridge over Burro Cañon, located in Madrid, was completed in 1936. The bridge consists of three skewed semicircular arches with multiplates fabricated by the Hardesty Manufacturing Company. It features rusticated stone facing and grapevined mortar joints, trademarks of WPA workmanship in southeastern Colorado. The bridge is Colorado's only WPA bridge of skewed construction employing a multiplate liner.

Colorado Millennial Site (National Register 04/08/1980, 5LA1115)

The Colorado Millennial Site, also known as Hackberry Spring or Bloody Springs, is located in the Ruxton vicinity.

Baca House (National Register 02/26/1970, 5LA1630)

The Baca House, located in Trinidad, was built in 1870. The interior of this adobe house blends Hispanic folk art with Victorian furnishings. It is now operated as part of the Trinidad History Museum by the Colorado Historical Society.

Frank G. Bloom House (National Register 02/26/1970, 5LA2180)

This large, mansard roofed Victorian house was built for cattle baron Frank Bloom and his wife Sarah in 1882. It is now operated as part of the Trinidad History Museum by the Colorado Historical Society.

Carnegie Public Library (National Register 04/14/1995, 5LA2179.21)

The Carnegie Library in Trinidad is one of 31 Carnegie libraries constructed in Colorado. Kansas architect John G. Haskell's neoclassical design includes symmetrically balanced windows and a

Population, Economy, and Land Use

dominant, central porch entry. His use of round-arched window openings with decorative moldings is a distinctive variation on the style.

Corazon de Trinidad District (National Register 02/28/1973, 5LA2179)

The Corazon de Trinidad District, which means the “heart of Trinidad” district, is roughly bound by Brown Street, Chestnut, Elm, Walnut, 3rd Street, South Animas, West 1st Street, and North Nevada.

First Baptist Church (National Register 01/28/2000, 5LA8697)

This 1890 late Victorian sandstone church is located in Trinidad. The structure shows great attention to detail and excellent stone work. It is the second commission on record for the architectural firm of Charles W. Bulger and Isaac Hamilton Rapp. Although short-lived, the firm designed several fine Trinidad buildings.

First Christian Church (National Register 11/07/1995, 5LA6551)

The First Christian Church was built in 1922 and was one of the last buildings designed by the prominent Trinidad-based architectural firm of Rapp, Rapp, and Hendrickson. The Mediterranean-inspired structure exhibits classical detailing in the Roman Doric order used in the entablature and main entry.

Jaffa Opera House/Hausman Drug

(National Register 02/07/1972, 5LA2181)

The Jaffa Opera House, now Hausman Drug, is located at 100–116 West Main Street in Trinidad.

Raton Pass

(National Register 12/19/1980, National Historic Landmark, 5LA2182)

Raton pass, located 12 miles south of Trinidad, is part of the Santa Fe Trail and experienced heavy traffic at critical moments in the trail’s colorful history. The Army of the West led by General Stephen Watts Kearny used this route in 1846 on its way to conquer New Mexico. Raton Pass was the strongest link between the southwest and the Union throughout the Civil War. The Atchison Topeka and Santa Fe Railroad laid tracks over the pass in 1879.

Existing Conditions and Issues

Reilly Canyon Bridge P-18-U and P-18-7

(State Register 12/08/1999, 5LA8579)

The Reilly Canyon Bridge spans Reilly Creek as part of an abandoned segment of State Highway 12. It includes three separate spans over the creek and a large single-span overpass for the Denver and Rio Grande Railroad. The bridge was constructed in 1936 by the Works Progress Administration. Its rock-faced masonry and beaded mortar joints are characteristic of WPA construction in southeastern Colorado.

Trinidad Post Office (National Register 01/22/1986, 5LA2179.93)

This well-preserved building was constructed in 1920 and is the purest example of the Beaux-Arts-inspired styling reflected in Colorado's post offices.

Rourke Ranch Historic District (National Register 09/21/2000, 5LA8813)

The Rourke Ranch, located in Villegreen, played a significant role in the settlement and agricultural development of the Purgatoire River area and continues to reflect the interaction of its Hispanic and Anglo-American settlers. Beginning in the early 1880s, brothers Eugene and James Rourke began acquiring the lands of departing Hispanic farmers and sheep ranchers, eventually assembling one of the largest cattle ranches in the area. The district includes the site of Eugene Rourke's original 1875 ranchstead, which was abandoned in favor of a new ranch headquarters after a flood in 1904. The collection of intact buildings and structures at the new ranchstead dates from the first decades of the 20th century and reflects a range of construction techniques and traditions, including the use of adobe, horizontal and vertical logs, and stone as building materials.

Torres Cave Archaeological Site

(National Register 04/29/1980, 5LA1310)

The Torres Cave Archaeological Site is located in the Villegreen vicinity. A 1977 excavation of the site resulted in the analysis of over 600 artifacts that revealed the site had functioned as a hunting and foraging station from approximately 350 A.D. to 1400 A.D.

Santa Fe Trail

The Santa Fe Trail was originally an Indian trail through the Arkansas River valley. Between 1882 and 1872, wagon trains departed from

Population, Economy, and Land Use

Missouri to Santa Fe each spring, traveling 10 miles per day on a trip that took six months round-trip. These wagons rutted trails that can still be seen today in certain areas of the county. In Las Animas County, the Santa Fe Trail parallels U.S. Highway 50 from La Junta, continuing down U.S. 350 to Trinidad. The entire trail is 188 miles long, connecting Lamar to Trinidad. The trail includes Raton Pass, a mountain gap used by Native Americans for centuries, and Bent's Old Fort, an old trading post that is the byway's midpoint and now a National Historic Site.

A list of additional historic resources is available from the Colorado Historical Society.

POPULATION

The population of Las Animas County has fluctuated over the past 100 years. In 1900, the population was approximately 22,000, growing to a high of almost 39,000 in 1920. In the next decade, however, the population began to decline and continued to do so over the next 60 years, reaching the century low of 13,765 in 1990 (Table 1). The 2000 Census figures show that this trend has reversed and the population in Las Animas County has begun to grow again.

Table 1. Historic Population of Las Animas County

Year	Population
1900	21,842
1910	33,643
1920	38,974
1930	36,008
1940	32,369
1950	25,902
1960	19,983
1970	15,744
1980	14,897
1990	13,765
2000	15,207

Source: Census Bureau, 2000

Existing Conditions and Issues

From 1990 to 2000, the population of the county has increased by 10.5 percent. This increase is significantly lower than the population increase of 30.6 percent experienced by the state as a whole (Table 2).

Table 2. Population Comparison
of Las Animas County and the State of Colorado

Year	Population Estimate	
	Las Animas	Colorado
1980	14,897	2,889,964
1990	13,765	3,294,394
2000	15,207	4,301,261
Increase 1990–2000	10.5%	30.6%

Source: Census Bureau, 2000

Although a 10.5 percent increase in population may not seem to be cause for alarm, population projections for the next 25 years indicate that the county’s population will increase by 32.9 percent by the year 2025, with a total of almost 24,500 people. This amounts increasing the county population by one-third of what it is today.

Table 3. Population Projections
for Las Animas County and the State of Colorado

Year	Population Projection	
	Las Animas	Colorado
2000	15,207	4,301,261
2005	20,300	4,629,421
2010	21,887	5,059,914
2015	23,014	5,499,757
2020	23,780	5,942,414
2025	24,328	6,392,015

Source: Demographic Section, Colorado Division of Local Government, June 2000
Note: Population projections for 2005 through 2025 should be updated by the State Demographer based on new 2000 Census figures in the near future.

ECONOMY

Over the past 10 years, the civilian labor force in Las Animas County has increased by 20.4 percent from 5,504 to 6,857 people. Although a 3.7 percent decline in the civilian labor force was reported between the years 1998 and 1999, there was an increase of 3.4 percent from 1999 to 2000.

The majority of people employed in Las Animas County work in the service industry (39.25 percent) or the retail trade industry (21.04 percent); thus, 60.29 percent of the workforce is employed in one of the two industries. The agricultural industry employs almost 8 percent of the workforce, while transportation employs approximately 7 percent. Around 5 percent of the workforce is employed by the public administration and construction industries.

ISSUES

Economic Development

Perry Stokes Airport as a Potential Resource

The airport was identified as a potential economic resource in several communities.

Tourism as a Potential Resource

Hoehne and Primero suggested tourism as a means of economic development in the county. Branson was generally opposed to the idea of trying to draw tourists into their community.

Need for New Rural Industries in Ranching Communities

Many citizens feel there is a need for new rural industries to continue to sustain and support the ranching communities. For instance, the decline in the number of students enrolled in the school in Branson is one indicator that there is a need for new industry. It was suggested that the county needs to explore new industries such as cedar, wind power, and other sources of alternative energy.

Impacts of the New Trinidad Correctional Facility

The Trinidad Correctional Facility, located east of Hoehne off Highway 350, is currently under construction and is scheduled to open in 2002. The new prison is expected to bring

Table 4. Civilian Labor Force in Las Animas County

Year	Force
1990	5,504
1999	6,625
2000	6,857
Increase (1990–1999)	20.4%
Increase (1999–2000)	-3.4%

Source: American Community Network Web Site, www.acn.net

Existing Conditions and Issues

Table 5. Employment by Industry in Las Animas County, 2000

Industry	Total Employed	Percentage of Workforce
Services	2,372	39.25%
Retail Trade	1,271	21.04%
Agriculture	474	7.85%
Transportation	428	7.08%
Public Administration	343	5.67%
Construction	320	5.30%
Finance, Insurance, Real Estate	209	3.46%
Manufacturing	192	3.18%
Mining	161	2.67%
Wholesale Trade	132	2.19%
Communications	129	2.14%
Armed Forces Employment	11	0.18%
Total	6,042	100.00%

Source: American Community Network Web Site, www.acn.net

As of 1996, the three leading employers in Las Animas County were the BNSF Railroad, School District #1, and Trinidad State Junior College. At the time this data was collected, the oil and gas industry was not as established within the county as it is today.

Consequently, Evergreen, the major oil and gas employer in the county, was not considered a leading employer. Today, approximately 202 people are employed by Evergreen within the county. Eighty-

two of these employees work directly for Evergreen, 20 work through a temporary service, and the remaining 100 have been brought in from other areas to work on the pipelines.

As seen in Table 7, the unemployment rate in Las Animas County has decreased by 4.8 percent over the past 10 years. Per capita income has risen 30.4 percent in the county over the past eight years.

I S S U E S

The Oil and Gas Industry Supports the County Economy

The oil and gas industry is currently the number one employer in the county, supplying approximately 450 jobs. Some residents feel this industry is capable of sustaining itself in the county for the next 40 to 50 years.

Population, Economy, and Land Use

Table 6. Leading Employers in Las Animas County, 1996

Employer	Number of Employees
BNSF Railroad	250
Trinidad State Junior College	185
School District #1	175
Las Animas County	156
City of Trinidad	150
Mt. San Rafael Hospital	145
Trinidad State Nursing Home	138
Wal-Mart Stores, Inc.	120
Holiday Inn/Baldwin Construction	65 (seasonal variations)

Source: 1996 Energy/Impact Profile

Table 7. Unemployment in Las Animas County

Year	Unemployment Rate
1990	8.8%
1999	5.2%
2000	4.0%

*Sources: Census Bureau, 1990
and American Community Network Web Site, www.acn.net*

Table 8. Per Capita Income in Las Animas County

Year	Per Capita Income
1990	\$12,229
1991	\$13,177
1992	\$13,468
1993	\$14,174
1994	\$14,547
1995	\$15,781
1996	\$15,616
1997	\$16,505
1998	\$17,561

Source: Colorado Division of Local Government

According to economic measures, Las Animas County is growing and prospering. With a population that is expected to increase by almost 33 percent in the next 25 years, a civilian labor force on the rise, and

Existing Conditions and Issues

an unemployment rate that is falling, the economy should continue to flourish. An increase in tourism should continue as well. As the county grows, the pressures that come along with growth must be anticipated and properly addressed.

LAND USE

ISSUES

Special Use Conditions

Many residents believe the county needs to review its special use permitting process for oil and gas uses. There is concern that current special use permits for gas compressors and other special uses are issued without proper special use conditions. There is also a need for a better public input process for oil and gas uses at the county level. Some western county residents feel that noise standards are too lenient in rural areas and that there are problems with

The total land area of Las Animas County is approximately 4,788 square miles or 3,064,385 acres. Private land accounts for 2,567,876 acres.

Land Use Categories

A preliminary land use analysis was conducted by Balloffet-Entranco. Zoning, land cover, and subdivision data were used to create a Las Animas County Current Land Use Map.

Categories mapped include Urban/Settlements, Urban

Residential, Rural Residential, Ranchette, Agricultural, and Public Lands.

Urban/Settlements

The Urban/Settlement land use category consists of the incorporated cities and towns of Trinidad, Aguilar, Branson, Kim, Starkville and Cokedale, as well as the unincorporated settlements of Hoehne, Earl, Model, Trinchera, Stonewall Gap, Stonewall, Zamara, Cordova Plaza, Primero, Velasquez Plaza, Segundo, Valdez, Sarcillo, and Tijeres. There are approximately 5,764 acres of the Urban/Settlements land use category within the county.

Urban Residential

The Urban Residential land use category consists of one-acre to 10-acre lots. There are approximately 2,065 acres of Urban Residential land use within the county.

Population, Economy, and Land Use

Rural Residential

The Rural Residential land use category consists of 15-acre to 30-acre lots. Within the county, there are approximately 5,609 acres of Rural Residential land use.

Ranchette

The Ranchette land use category consists of lots that are 35 acres in size or greater. There are approximately 214,197 acres of Ranchette land use in Las Animas County.

Agricultural

The Agricultural land use category consists of all land that is in agricultural production, including both farming (irrigated and dry land) and ranching activities. There are approximately 1,693,140 acres of Agricultural land use within the county.

Public Lands

Public Lands include State of Colorado lands, U.S. Forest Service lands, and Bureau of Land Management lands. Within the county, there are approximately 316,568 acres of Public Lands. Of the land in the county, the State of Colorado owns approximately 159,666 acres of this land, the U.S. Forest Service owns approximately 22,860 acres, the Bureau of Land Management owns approximately 8,073.99 acres, and the U.S. Military owns approximately 236,379 acres (Piñon Canyon Maneuver Site).

Zoning

In 1978, Las Animas County adopted the Las Animas County Zoning Resolution and zoned its unincorporated territory. The resolution divided the county into five basic zoning districts—Plains Agriculture, Highland Agriculture, Ranchette, Rural Residential, and Urban Residential. The Planned Unit Development Zone was considered a “special boundary” that could overlap the basic zoning districts. The location of these zones and special zones were depicted on maps

ISSUES

Commercial and Industrial Zoning Districts

Currently, the county does not have a commercial or industrial zoning district. The only way that a commercial or industrial use can develop in the unincorporated county is through the PUD process. Consequently, industrial and commercial uses that should be developing within a traditional commercial or industrial zone are using the PUD process in a way that is improper and that essentially violates the intent

Existing Conditions and Issues

entitled Zoning Maps of Las Animas County, dated February 16, 1972, and October 1, 1978.

In 1994, Las Animas County adopted an amended resolution and accompanying maps that together are known as the Las Animas County Land Use Guide. Today, Las Animas County has five zoning districts: Agricultural (A), Ranchette (R), Rural Residential (RR), Urban Residential (UR), and Planned Unit Development (PUD).

Agricultural (A)

The purpose of the Agricultural district is to protect productive agricultural lands and preserve the visual amenity and cultural values associated with agricultural lifestyles in rural, unincorporated areas of Las Animas County. The minimum district size is 40 acres with a minimum lot size of 5 acres.

Ranchette (R)

The Ranchette district generally includes prime irrigated farmlands as well as the land along the Interstate 25 corridor within the county. The main purpose of this district is to encourage agricultural production and to allow development compatible with irrigated agriculture. Eighty acres is the minimum district size, with a minimum lot size of 35 acres.

Rural Residential (RR)

The Rural Residential district generally comprises areas along Highway 12 from Stonewall Valley to Trinidad where public services and facilities are available. The minimum district size for Rural Residential is 20 acres, with a minimum lot size of 12,500 square feet.

Urban Residential (UR)

This zone generally consists of areas immediately adjacent to Trinidad and Aguilar and within the Purgatoire Valley that are conducive to intense development due to the availability of public services and facilities. Twenty acres is the minimum district size and 7,500 square feet is the minimum lot size.

Planned Unit Development (PUD)

Population, Economy, and Land Use

Any of the districts listed above may be developed in accordance with the Las Animas County Planned Unit Development concepts and procedures. The intent of a PUD is to encourage creative planning that is consistent with the goals and policies of Las Animas County. The overall density of a PUD may exceed the density specified for the zoning district in which it is located, and variances may be granted from other zoning and subdivision requirements. This, however, may only occur when it can be demonstrated that such waivers would further the purpose of the PUD and would comply with county goals and policies.

ISSUES

Concerns Regarding the Accuracy of County Mapping

Citizens expressed concerns about the accuracy and adequacy of the county's current mapping system.

County zoning is delineated on the Las Animas County Zoning Map. The majority of land is zoned Agricultural (approximately 92.1 percent), emphasizing that Las Animas County is a rural, agricultural county. Approximately 6.1 percent of the county is zoned Ranchette, 1.2 percent is zoned Rural Residential, 0.4 percent is zoned PUD, and 0.2 percent is zoned urban residential.

Table 9. Las Animas County Zoning Districts

Zoning District	Total Acres	Percentage of County
Agriculture	2,818,462	92.1%
Ranchette	185,358	6.1%
Rural Residential	35,478	1.2%
PUD	13,494	0.4%
Urban Residential	6,431	0.2%

Subdivision

ISSUES

Concerns Regarding Trinidad's Annexation Policies

There is concern in the county regarding the City of Trinidad's current annexation policies and practices.

Existing Conditions and Issues

ISSUES

Explore Potential Options for Regulating or Influencing 35-Acre Subdivisions

Although options are limited, many residents would like the county to explore what controls it can exercise on 35-acre subdivisions. Options might include regulating access to new subdivisions based on safety issues and creating a Land Preservation Subdivision incentive. A Land Preservation Subdivision incentive for new subdivisions provides density bonuses in exchange for creative site layouts that preserve open lands and sensitive environmental areas.

Oil and Gas Conflicts in New Subdivisions

Several communities expressed that conflicts between the oil and gas industries and new subdivisions are becoming more and more common in the county. It was suggested that the county provide “newcomer” information and develop proactive strategies to avoid new conflicts.

Currently, 78 subdivisions are platted on approximately 177,169 acres, or 5.8 percent of the land in Las Animas County. These numbers exclude Tatum Tracts, which are located in the Maxwell Land Grant area of the county that is unsurveyed. Of all the subdivisions, 59 are zoned Agricultural, 13 are zoned Ranchette, 5 are zoned PUD, and one is zoned Rural Residential. Subdivisions are shown on the Las Animas County Subdivision Map. (Information regarding the total number of platted lots in the county was not available from the Planning Department or the Assessor’s Office. Information regarding the number of platted lots that are actually developed was not available either.)

Housing

In 1990, 76 percent of the housing in Las Animas County was single family residences (73 percent detached and 3 percent attached), 13 percent was mobile homes, and the remaining 11 percent was multifamily units (U.S. Census Bureau, 1990).

Housing vacancy rates in the county have been steadily decreasing since 1992. With the projected population growth, it is expected that this trend will continue.

ISSUES

Limited Housing Stock

The combined trends of (1) decreasing vacancy rates, (2) increasing age of housing stock, and (3) increasing population indicate that Las Animas County may soon face the issue of limited available housing.

Population, Economy, and Land Use

Table 10. Housing Vacancy Rates, 1990–1997

Year	Total Housing Units	Occupied Units	Vacant Units	Vacancy Rate
1990	6,975	5,421	1,554	22.28%
1991	7,011	5,467	1,544	22.02%
1992	7,066	5,393	1,673	23.68%
1993	7,104	5,728	1,376	19.37%
1994	7,143	5,953	1,190	16.66%
1995	7,202	6,081	1,121	15.57%
1996	7,314	6,171	1,143	15.63%
1997	7,397	6,286	1,111	15.02%

Source: Colorado Division of Local Government

As shown in Table 11, 63 percent of the housing stock is over 50 years old. Most of these older homes are in need of some form of repair, and many are in very poor condition.

Table 11. Age of Housing in Las Animas County

Year Structure Built	Number of Units
1989–1990	87
1985–1988	172
1980–1984	698
1970–1979	1,192
1960–1969	474
1950–1959	606
1940–1949	568
1939 or earlier	3,241

Source: Census Bureau, 1990

Natural gas and propane are the primary heating sources, supplemented by wood and electricity.

Table 12. Las Animas County Heating Sources

Heating Source	Number of Units
Utility Gas	3,383
Bottled, Tank, or LP Gas	1,163
Wood	437
Electricity	283
Coal or Coke	97
Solar Energy	31

Existing Conditions and Issues

Fuel Oil, Kerosene, etc.	17
No Fuel Used	8
Other Fuel	2

Source: Census Bureau, 1990

I S S U E S

The Oil and Gas Industries' Impact on Road Conditions

Residents reported that county roads are deteriorating due to overuse and abuse by oil and gas industry trucks. Overweight trucks and drilling rigs are using bridges that they should not be traversing and are damaging cattle guards. Roads are deteriorating due to heavy truck use and watering of roads by the oil and gas companies to control fugitive dust. Many residents feel the county needs to establish road impact fees for the oil and gas industries and that it need to identify public versus private roads and require companies to pay for the use of private roads.

Inadequate Road Maintenance

There is concern that there is a lack of general road maintenance, maintenance equipment, and gravel within the county. Road crews are removing gravel with plows. It was suggested that the county needs to better educated employees regarding road maintenance.

Lack of Conformance to County Road Standards

Residents feel that county roads are not being built and/or maintained to county road standards.

Inadequate Road Signage

It was reported that the lack of road signage within the county is creating problems. The lack of signage creates difficulties for fire protection, law enforcement, and emergency medical services in finding their way throughout the county. The lack of speed limit signs has

PUBLIC INFRASTRUCTURE AND SERVICES

INTRODUCTION

Public infrastructure and services are important determinants of Las Animas County's capacity to guide and accommodate future growth. Infrastructure—roads, airports, railroads, and utilities—provide the physical framework for development activities, augmented by county, municipal, special district, and private sector services. An understanding of public infrastructure and services provides guidance as to where future growth may be directed efficiently and cost-effectively.

Las Animas County's infrastructure and services are categorized into three major components: transportation, utilities, and county services.

TRANSPORTATION

Mobility and circulation in Las Animas County is accomplished principally through a regional, county, and local road network. Transit and air services are limited, although economically

important rail lines transect the county.

Public Infrastructure and Services

Roads

There are four major transportation corridors within Las Animas County, Interstate Highway 25 (I-25), State Highway 12 (SH 12), U.S. Highway 160 (US 160), and U.S. Highway 350 (US 350). I-25 is a divided highway that is classified as Interstate-rural, except within Trinidad where it is classified as Interstate-urban. I-25, located in the western portion of the county, is a major north-south link and part of the National Highway System (NHS). I-25 passes through Trinidad and continues south to New Mexico.

State Highway 12 is primarily designated a major collector-rural, with the exception of the last mile before its intersection with I-25, which is classified as other primary arterial-urban. SH 12 is a 70-mile undivided highway between Walsenburg and Trinidad and is a Scenic and Historic Byway, known as the Highway of Legends.

U.S. Highway 160 East is an undivided highway classified as a minor arterial-rural. US 160 runs east-west and is located in the eastern portion of the county. US 160 connects Trinidad to Kansas through the southern portion of Las Animas County and Baca County, traversing the Comanche National Grasslands on the way. Two state highways branch off of US 160, including State Highway 109 and State Highway 389. State Highway 109 branches off of US 160 just north of Kim and continues north to La Junta. State Highway 389 branches off of US 160 at Walt's Corner and continues south to Branson.

U.S. Highway 350 is a 40-mile undivided highway classified as a minor arterial-rural. US 350 links Trinidad to La Junta and the Santa Fe Trail, which parallels the highway, and is designated a historic route.

County roads provide local access to Las Animas County's vast unincorporated areas. The majority of county roads are unpaved with conditions ranging from good to poor. There are currently 1,704.5 miles of road in Las Animas County, 1,568 of which are eligible for the Highway Users Tax Fund. The remaining 136.5 miles of road are not maintained. Aguilar, Branson, Kim, Segundo, Hoehne and the Las Animas County Fair Grounds all have road maintenance shops.

Existing Conditions and Issues

Table 13. Las Animas County Annual Average Daily Traffic

Location	1996	1997	1998	1999
I-25				
Aguilar Road Interchange	7,000	7,100	7,634	7,668
El Moro Interchange	7,700	8,036	8,640	8,442
Main Street Interchange	10,100	10,232	10,550	10,429
Country Club Drive Interchange	8,550	8,662	8,931	8,831
NM/CO State Line	8,300	7,900	8,494	8,344
SH 12				
County Road 9.6	650	510	532	537
County Road 13 (Stonewall)	1,100	480	501	548
County Road 31.9 (Weston)	1,550	1,350	1,409	1,404
County Road 47.7 (Valdez)	1,800	1,300	1,357	1,378
County Road 55.7 (Cokedale)	1,850	1,450	1,513	1,523
County Road 67.3 (Jansen)	3,300	3,362	3,446	3,427
State Street	8,400	8,557	8,823	8,748
US 160				
I-25 Interchange, Goddard Avenue Junction	3,000	3,850	3,970	3,084
State Highway 350 Junction	390	400	418	411
County Road 113	230	241	252	247
State Highway 389 Junction	170	178	186	183
Trinidad Avenue (Kim)	240	252	263	258
County Road 215 (Andrix)	350	367	383	374
US 350				
State Highway 160 Junction	1,050	850	887	849
County Road 48 (Earl)	410	450	427	423
County Road 64 (Tyrone)	310	325	339	336
County Road 70 (Thatcher)	280	294	307	304
County Road (Delhi)	280	294	307	304

Table 14. Las Animas County
Vehicle Miles Traveled

Year	Miles
1990	367,765
1991	367,022
1992	377,456
1993	397,032
1994	432,215
1995	453,878

Public Infrastructure and Services

1996	454,848
1997	447,467

Transit

Regional Service

The two primary transit providers in the region include the Huerfano–Las Animas Council of Governments and the Las Animas County Rehabilitation Center (which provides client-specific transportation services). Although transit services are available to the entire population, due to limited services they have been geared towards the transit-dependant population, which includes primarily the elderly and people with disabilities. The *Colorado Transit Needs and Benefit Study* prepared by LSC Transportation Consultants, Inc. of Tahoe City, California, estimated that the two primary transit providers serve less than 10 percent of the local transit demand.

Local Service

Local, general public-transit service is also provided by the Huerfano–Las Animas Council of Governments in Trinidad. Taxi service in the county is provided by “Your Ride,” with services focused on Trinidad.

Inter-City Service

Inter-city transit service is operated by the Texas, New Mexico, and Oklahoma transit service (TNM&O), with stops in Trinidad, Aguilar, and Walsenburg.

Greyhound

Eleven Greyhound buses pass through Trinidad each day, providing connections for both passengers and small freight to the north, south, and southwest via I-25. Bus connections to the northeast and southeast are available from major stops along the I-25 corridor as well.

Carpooling is relatively common in the region. In 1990, 17 percent of the workers in Las Animas County shared a ride with one of more other people on their trip to work. This is a high percentage; in other counties within Colorado, the rate typically averages 13 percent.

Existing Conditions and Issues

Airport

Perry Stokes

The Perry Stokes Airport, also known as the Trinidad Municipal Airport, is located 10 miles northeast of Trinidad off US 350. The airport provides general aviation services, including hanger rental, tie downs, fueling, and car rental. Some of the airport's features include visual approach glide indicators, a directional finder, a rotating beacon, a very-high-frequency omnidirectional radio range runway light system, and a low-frequency instrument landing system. The airport has a 5,500-foot hard-surface runway and a 5,500-foot auxiliary runway. In 1996, all flights, including local general aviation, itinerant general aviation, air taxi, and military flights, totaled 15,750. Present day flight totals are consistent with this statistic.

Currently, only chartered aircraft are available at the airport. Passenger air service is provided in Pueblo, Colorado Springs, Denver, and Albuquerque, with connections worldwide.

Rail

There are two rail lines that operate in Las Animas County, Union Pacific (UP) and Burlington Northern Santa Fe (BNSF). (Burlington Northern merged with Santa Fe in the mid 1990s, forming BNSF.)

BNSF

The BNSF line runs north-south, connecting New Mexico and Colorado to the east-west tracks in southern Wyoming. On average, 12 trains operate on this track each day. There is considerable switching in Trinidad because the trains have to be broken in half in order to make the climb over Raton Pass.

Passenger Service

Passenger service within Las Animas County is provided by Amtrak's "southwest chief route" through Trinidad, which runs on the BNSF line. This route operates between Chicago and Los Angeles. Other cities served by this route include La Junta, Colorado; Albuquerque and Raton, New Mexico; Kansas City, Kansas; and Flagstaff, Arizona. One eastbound train and one westbound train stops in Trinidad three days each week. Although Amtrak currently stops in both Trinidad and Raton on the same route, it is possible that within the next five years one of the stops may be discontinued. It has been suggested that

Public Infrastructure and Services

upgrading the train station in Trinidad, which currently has an unmanned office, may encourage Amtrak to keep the Trinidad stop.

Freight Service

Both BNSF and UP provide freight service to the county. Although there is some freight activity related to methane gas extraction, most freight simply travels through the county with a different origin as well as destination.

Intersection Delays

The merger of the Burlington Northern and Santa Fe rail lines has created some issues for the town of Trinidad. Soon after the merger, it was decided that the freight trains operating on the Santa Fe tracks over Raton Pass would no longer need to travel northeast to La Junta to make a connection to Denver. Instead, the trains could switch onto the Burlington Northern tracks in Trinidad and continue the trip north. Manual switches that require a five-minute safety delay to ensure the track is clear are currently used to switch tracks. These delays, combined with the time it takes to stop and start the train, have resulted in intersections around and under I-25 being blocked for 20 to 30 minutes.

UTILITIES

Utilities in Las Animas County consist of water systems, wastewater systems, and energy providers. Solid waste disposal and the availability of telecommunications are also important utility issues.

Water

Domestic Water

Within the county, the towns of Hoehne, Primero, Segundo, and Weston are all supplied domestic water by the City of Trinidad. The towns of Aguilar and Kim have central well systems that supply domestic water. Branson receives its water via pipeline from a spring on Joe Davis Mesa. The remainder of the unincorporated county is supplied by individual wells and cisterns.

Overall, the water quality provided by these wells is high. Currently, contamination issues are minimal, but there is uncertainty regarding the potential impact that the wells being drilled for methane gas

Existing Conditions and Issues

extraction may have on the quality and quantity of county well water. The potential impacts of water re-injection are of exceptional concern.

Trinidad's water system, maintained by the City of Trinidad Utilities Department, includes water supply, treatment, storage, and distribution. North Lake and Monument Lake, located approximately 40 miles west of Trinidad, provide raw water storage for the city. Each lake has a pipeline that carries water from these reservoirs to the Trinidad Filtration Plant located just 10,000 feet east of Monument Lake.

The Trinidad Filtration Plant has a design capacity of 8.2 million gallons per day (mgd). From the plant, treated water is pumped to the City of Trinidad by a 36-mile transmission pipeline that also has a design capacity of 8.2 mgd. Treated water is stored in several storage tanks. However, the amount of water that can be retained in the tanks is inadequate if demand exceeds supply for a prolonged time.

Trinidad's growing residential community is placing increased demands on the water system. The city has also committed to serve two major facilities east of Trinidad, the Department of Corrections' new prison facility and the Piñon Canyon Maneuver Site (PCMS), both having the potential to become major water consumers. As previously mentioned, the PCMS is a remote military training site that is a sub-post of Fort Carson.

ISSUES

Lack of Water Supply

A lack of water supply was identified as an issue by residents in Hoehne, Branson, and Kim. It was suggested that the county and the City of Trinidad need to work together to hold onto and acquire water rights.

Irrigation

Currently there are approximately 25 ditch companies within Las Animas County that draw water from the Purgatoire and Apishapa River. Ditch rights on the Purgatoire date back to 1861 and on the Apishapa to 1867, when priorities were first assigned. Irrigation ditches are assessed through the County Assessor's Office.

Sanitary Sewer

The City of Trinidad has the only central sewer system in the county, and the city is served by the City of Trinidad Wastewater Treatment Plant (WWTP). The Towns of Aguilar and Cokedale have lagoon

Public Infrastructure and Services

systems that collect and treat wastewater. The remainder of the county uses individual septic systems.

Over the past 20 years, the number of septic systems installed in the county has increased by 89 percent, from 20 in 1980 to 180 in 2000.

Table 15. Individual Septic Systems Permits Issued in Las Animas County

Year	Number of Permits
1980	30
1985	34
1990	53
1995	135
2000 (as of December 15)	180

Source: County Health Department

Wastewater from the City of Trinidad WWTP is treated through an activated sludge process. Final effluent water is discharged into the Purgatoire River and the sludge is applied to a 99-acre, city-owned agricultural field adjacent to the treatment plant. The WWTP has a 1.5-mgd peak treatment capacity and a 1.2-mgd average flow. Capacity was exceeded several times in the past five years.

Energy Providers

Electricity

San Isabel Electric provides electric service to most of unincorporated Las Animas County, and Southeast Power serves a small portion of the county. Additional information was not available from the electricity providers at the time this document was prepared.

The City of Trinidad owns and maintains approximately 70 miles of an electricity distribution system, serving 4,200 customer accounts. Although it formerly generated its own power and still owns a power plant, the city purchases its power from the Arkansas River Power Authority. The power is distributed to the city over San Isabel lines. The city power plant is now used

ISSUES

Location of Overhead Utility Lines

Residents in the town of Branson identified that overhead utility lines are both a health and aesthetic concern.

Existing Conditions and Issues

for emergency generation.

Natural Gas

Primero Gas, the retail branch of Evergreen Resources, Inc., provides natural gas to the City of Trinidad, which then distributes natural gas to Trinidad and several areas in the county to the north, south, and east of Trinidad. Areas served to the north of Trinidad include several Rural Residential developments along North Linden Avenue, the industrial park north of Trinidad, and the North and South Garcia areas. The new rest area at I-25 Exit 18 is the most northern point of distribution in the county. To the south, several businesses, including a hotel and several churches, are served along Santa Fe Trail Road. The most southern point of distribution is the Wendy's restaurant at I-25 Exit 11. Areas that are served to the west include approximately 12 Rural Ranchette customers scattered within a 12-mile area east of Trinidad near Highways 160 and 350. Highway 160 runs from Trinidad east to the county border and Highway 350 runs from Trinidad northeast to the north border.

The city recently entered into a contract with Primero and was able to lock in a relatively low rate for two years, in contrast to the flexible price the city has been paying Colorado Interstate Gas (CIG) (an affiliate of The Coastal Corporation, a Houston-based energy holding company). Up until April 2000, CIG was the only company able to transport gas; however, the rapid development of methane gas in the west portion of the county has created more options for the county.

In the past, natural gas may only have been used for heating. However, it is now being used more and more to power electricity plants that supply power for heating and cooling residential, commercial and industrial uses, which has created year-round demand for this natural resource.

As previously mentioned, Trinidad's gas distribution system is municipally owned. The primary point at which the city receives gas is located at the master meter station just east of the city limits. Trinidad's original gas pipeline infrastructure was constructed in 1951, and currently the pipeline infrastructure is comprised of both steel and polyethylene pipeline. High-pressure mains feed into regulator stations that lower the pressure to a level that is acceptable for distribution to residential uses.

Public Infrastructure and Services

Those in the county not served by electricity or natural gas use propane, wood, coal, or solar energy for heating. Propane gas is provided by San Isabel Propane, Al's Gas Service, La Junta Valley Oil, and Rosebud Propane.

Solid Waste

ISSUES
Lack of Telecommunications Infrastructure Residents in Hoehne, Branson, and Aguilar indicated that a lack of telecommunications

Solid waste in Las Animas County is collected by private contractors, including U.S. Disposal and Right Way Disposal. There is one landfill site within the county, the city-owned Trinidad Landfill, located on State Street.

Recycling is available at Las Animas County Rehabilitation Center, Big R, and Safeway.

Telecommunications

Telecommunications infrastructure within Las Animas County is owned by Qwest. Internet service is available through local, private providers, including Active Matrix Internet Solutions, Amigo Net, and Bewell.net.

COUNTY SERVICES

Las Animas County government services include general administration, law enforcement, emergency services (which includes fire protection and ambulance service), education, libraries, recreation, and road maintenance.

Administration

County government administration facilities are located in Trinidad, the county seat, at the Las Animas County Courthouse at 200 East First Street.

Existing Conditions and Issues

Law Enforcement

The Las Animas County Sheriff's Office provides law enforcement services within the unincorporated areas of Las Animas County. As of August 2000, the Las Animas County Sheriff's Office employed 38 staff members. Ten of these staff members are level-one officers who possess the authority to arrest; 20 are detention officers who man the new jail facility. The officers' jurisdiction includes an area that exceeds 4,700 square miles and contains approximately 1,700 miles of county road. The lengthy distances that officers have to drive often make it difficult for them to respond to calls in a timely fashion.

In 1999, the department received 155 calls for assistance, a 31-percent increase from the previous year. By July 1, 2000, the department has already received 99 calls for assistance, already a 21-percent increase from 1999. The sheriffs' department contracts law-enforcement services to the Town of Aguilar, providing one resident deputy. No towns within the county have separate police departments.

The county's Law Enforcement Center, located at 2309 East Main Street, consists of the Sheriff's Office, the Trinidad Police Department, a 911 communication center, a 105-bed jail, emergency ambulance service, and the coroners department.

The Trinidad Correctional Facility, a 230-bed prison located east of Hoehne off Highway 350, is currently under construction and is scheduled to open in 2002. The prison was originally scheduled to open in May 1999; however, the initial construction contract was terminated in 1998 due to poor quality of work, and the schedule has been delayed.

ISSUES

Inadequate Law Enforcement

There is a general consensus in the outlying areas of the county that law enforcement coverage is low and response times are poor. In many cases, officers have to drive over 60 miles to get to the scene of a crime. The town of Branson expressed the sentiment that they "cannot get a response" from law enforcement agencies.

Emergency Services

Fire

There are seven fire departments within Las Animas County, including Fisher’s Peak, Stonewall, Hoehne, Branson, Kim, Bon Carbo, and Spanish Peak. All are volunteer fire departments and only two, Fisher’s Peak and Stonewall, are actual fire districts funded through mill levies that have a tax base for their departments. Currently, approximately 400,000–500,000 acres of the county are not covered by a fire district at all.

ISSUES

Inadequate Fire Protection

Many residents expressed that there is a lack of fire protection in many areas of the county. Response time can reach one to two hours. Although most citizens agree that there is a lack of fire protection, not all agree on what should be done about it. While the county is encouraging communities to form official districts, some citizens are concerned about the increased taxation that will result. Some citizens expressed the need for fire department training. In the eastern portion of the county, volunteers are fighting fires on government land.

The Fisher’s Peak district has two firehouses, one in Starkville and the other on the north city limits of Trinidad. Stonewall also has two firehouses, one in Stonewall and the other off Highway 12 at Segundo. Hoehne’s firehouse is at the school, Branson and Kim’s are located at the county shops, Bon Carbo’s is located in what used to be the Town of Bon Carbo, and Spanish Peak’s is located at Gulnare.

The county is considering taking advantage of the Emergency Fire Fund (EFF), a fund that offers support in extreme fire situations when the normal resources of the county are insufficient. In order for Las Animas to become eligible for the EFF, however, all districts need to be on a tax-based system.

If all areas of the county become tax-based fire districts, the county will be able to provide initial-attack wildland fire protection coverage for the entire county. Initial-attack centers provide quick response to fire and the ability to contain it immediately. In order to obtain a permit for an initial-attack center, the county also needs protective safety clothing for the firefighters, adequate training, and quick-attack vehicles. Currently, for example, Hoehne has a 1954 GMC truck and Branson has a 1964 International four-wheel-drive pickup truck, and neither vehicle is suitable for initial-attack use.

Existing Conditions and Issues

Emergency Medical Services

Emergency medical services are provided to the county through a contract the county holds with the Trinidad Ambulance District. The contact must be renewed annually. The Trinidad Ambulance District provides advanced life-support services, responding to approximately 1,250 calls per year in Trinidad and Las Animas County. The ambulance facility located at the new Public Safety Building on East Main Street houses four ambulances and one rescue truck. Paid personnel include six paramedics, one EMT Basic and one EMT Intermediate.

The district has four Quick Response Teams (QRTs) in towns throughout the county, including Stonewall, Aguilar, Kim, and Branson. All QRTs are under the direction of the Trinidad Ambulance District and are financed and insured by the district as well. Two of the QRTs, those in Stonewall and Kim, have transporting capability via an ambulance. Stonewall has seven trained EMTs and Kim has six. The remaining two QRTs, in Aguilar and Branson, both have quick-response vehicles that carry basic medical equipment for treating and stabilizing a victim, including backboards, oxygen, and bandages. These vehicles may not be used for patient transport. Aguilar has four trained first-responders while Branson has seven.

Education

Las Animas County has six school districts, Trinidad 1, Primero Reorganized 2, Hoehne Reorganized 3, Aguilar Reorganized 6, Branson Reorganized 82, and Kim Reorganized 88. Table 16 summarizes

ISSUES

Inadequate Emergency Medical Services

Concerns were expressed regarding the lack of emergency medical services in many areas of the county. A large part of the problem is that many communities only have first responders, as opposed to EMTs. First responders cannot transport patients without an EMT on board.

Need for Emergency Response Plans

Residents in Aguilar indicated that communities need local emergency response plans that are well publicized.

Lack of Central Dispatch System

The county currently lacks a central dispatching system. In many areas of the county, a 911 call regarding fire is routed to an answering service in Pueblo, which then calls down a list provided by the appropriate fire district until a volunteer is reached. The state is currently considering installing the 800mH frequency as the official channel for government communications; however, this channel may

ISSUES

Need to Identify New School Sites

Some residents suggested that the county should begin planning for new school sites.

Public Infrastructure and Services

the various schools in each district as well the district's setting, square mileage, and 1999 fall enrollment and graduation rate.

The Trinidad district has three elementary schools, a junior high school, a senior high school, and two private schools. The Hoehne district has an elementary school, a junior high school, and a senior high school. Primero, Aguilar, Branson, and Kim each have an elementary school and a combined junior and senior high school.

Trinidad State Junior College, the only secondary school in the county, is a fully accredited two-year community college. Trinidad State Junior College awards the Associate of Arts, Associate of Science, Associate of General Studies, and Associate of Applied Science degrees. The college is recognized for its law enforcement, gunsmithing, and nursing programs.

Libraries

The only major public library within the county is the Carnegie Public Library, located in Trinidad. The Carnegie Public Library is a member of the Arkansas Valley Regional Library Service System and is open 67 hours per week. The library owns 30,000 volumes (including a large local history and genealogy section) and 1,100 audio/video materials. The Carnegie Public Library also has a summer reading program, preschooler story hours, special school programs, and four computers for Internet access. There is a local library located in the Town on Aguilar.

Recreation

While considering recreation opportunities in the county, three types of recreation were considered: athletics-based recreation, natural resource-based recreation, and activity-based recreation.

Table 16. Las Animas County School Districts

School District	Elementary Schools	Middle/Junior High Schools	High Schools	Private Schools	Setting	Square Miles	1999 Fall Enrollment	Graduation Rate (1999)
Trinidad 1	East Street (Grades 02–03) Eckhart (Grades K–01) Park (Grades 04–05)	Trinidad (Grades 06–08)	Trinidad (Grades 09–12)	Trinidad Catholic Schools (Grades K–12) Grace Christian Center (Grades K–08)	Outlying City	258.75	1,664	76.1%
Primero R-2	Primero (Grades K–06)	See High Schools	Primero (Grades 07–12)	None	Rural	475.00	177	100.0%
Hoehne R-3	Hoehne (Grades K–06)	Hoehne (Grades 07–08)	Hoehne (Grades 09–12)	None	Rural	72.00	337	100.0%
Aguilar R-6	Aguilar (Grades PK–06)	See High Schools	Aguilar (Grades 07–12)	None	Rural	853.00	171	87.5%
Branson R-82	Branson (Grades K–06)	See High Schools	Branson Undivided (Grades 07–12)	None	Rural	716.50	48	100.0%
Kim R-88	Kim (Grades PK–06)	See High Schools	Kim Undivided (Grades 07–12)	None	Rural	425.20	78	100.0%

Athletics-Based Recreation

Trinidad Sports and Recreation Department

The Trinidad Sports and Recreation Department manages the Trinidad Community Center, which is a 16,000-square-foot facility located in Trinidad’s Southside Park. The community center provides a regulation-size gymnasium, 11 tennis courts, four baseball/softball fields, a meeting room, and a playground. Seasonal programs at the center include basketball, wrestling, baseball, softball, football, and soccer. Other city facilities include the city’s heated municipal outdoor pool that is open for seasonal use only.

Fisher’s Peak YMCA

The Fisher’s Peak YMCA is located in Trinidad and provides swimming, tennis, and golf lessons for children and young adults. The YMCA also operates the Trinidad State Junior College gym.

American Youth Soccer Organization

The mission of the American Youth Soccer Organization (AYSO) is to develop and deliver quality youth soccer programs that promote a fun, family environment based on the following philosophies: everyone plays, balanced teams, open registration, positive coaching, and good sportsmanship. The AYSO in Las Animas County has nine board members that work year-round on the program. Enrollment has been about 400 children for the past two years.

Natural Resource–Based Recreation

Trinidad Lake State Recreation Area

Trinidad Lake State Recreation Area, located three miles southwest of Trinidad, is a 2,300-acre state park managed by the Colorado Division of Parks and Outdoor Recreation. The State Recreation Area contains a 900-acre reservoir on the Purgatoire River that is managed by the U.S. Army Corps of Engineers. The reservoir, under peak water conditions, provides water skiing, fishing, windsurfing, sailing, and

Lack of Athletic-Based Recreation in Outlying Areas

Many residents felt that athletic-based recreation programs are limited in areas outside of Trinidad. Consequently, most communities utilize the Trinidad programs. The Towns of Hoehne, Aguilar, and Primero each have a community ball field and gymnasium, and the Towns of Hoehne, Aguilar, Primero, Kim, and Branson each have a school ball field and gymnasium. However, these facilities are not used for recreational programs outside of normal school programs.

The Colorado State University Technical Assistance Program is currently working on a parks, recreation, and tourism master plan for Las Animas County. The plan is intended to focus on three primary initiatives—creating a county-wide recreation district, creating a heritage area that would include a large geographical area focused on the Upper Purgatoire River, and

Existing Conditions and Issues

power boating. Trinidad Lake State Recreation Area also has a 62-unit campground with full-service hook-ups and showers, hiking trails, boat ramps, dock facilities, and a visitor center.

Scenic Highway of Legends

The Scenic Highway of Legends, or State Highway 12, was designated a Colorado State Byway in 1987 and a National Forest Byway in 1988. The byway runs from the high plains of eastern Colorado through San Isabel National Forest, crossing Cuchara Pass at 9,994 feet elevation. Some of the landmarks along the route include (1) Native American archaeological sites traced back to the Jicarillo Apache who once lived in the area; (2) the Town of Cokedale with its intact coal camp and ovens from the early 1900s; (3) Cordova Plaza, a family-oriented farming village from the 1860s; and (4) Cuchara Pass, an old Indian trail used as early as 1779, which later became a wagon route and then a mail route.

The Scenic Highway of Legends, Inc., partnering with Las Animas and Huerfano counties, has made developing a master plan for the highway their top priority. Their intent is to develop a prioritized plan for the creation of additional interpretive materials, including educational products, additional interpretive signage with associated pullouts, and a preliminary plan for a network of multi-use trails along the Highway of Legends. The Hospitality Manager's Committee, which works with bed and breakfasts and motels, is beginning to organize the promotion of packaged tours of the area.

Bosque del Oso State Wildlife Area

The Bosque del Oso State Wildlife Area is located in the Sangre de Cristo Mountains 20 miles west of Trinidad adjacent to Highway 12. The parcel comprises 29,940 acres and is the single largest contiguous tract of land open to the public in Las Animas County. Activities permitted in the area include camping, hunting (mule deer, elk, bear, turkey, small game, and mountain lion), and cold-water stream fishing.

Spanish Peaks State Wildlife Area

The Spanish Peaks State Wildlife is 6,450 acres in size and area is located 17 miles northwest of Cokedale. Wildlife in the area includes deer, elk, rabbit, squirrel, turkey, bear, and mountain lion.

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Lake Dorothey/James M. John State Wildlife Areas

The Lake Dorothey/James M. John State Wildlife Areas are located near the southern border of Colorado in Las Animas County southeast of Trinidad. The Lake Dorothey area is 4,804 acres in size and the James M. John area is 8,200 acres. Wildlife in the areas include deer, turkey, elk, bear, mountain lion, coyote, waterfowl, and bobcat. Coldwater lake and stream fishing are permitted on the Lake Dorothey property in which rainbow and cutthroat trout are found.

Apishapa State Wildlife Area

The Apishapa State Wildlife Area is located approximately 18 miles to the southeast of Walsenburg and consists of 7,935 acres. Wildlife in the area includes deer, antelope, bighorn sheep, rabbit, turkey, scaled quail, and doves.

Comanche National Grasslands

The Comanche National Grasslands cover 435,707 acres in Las Animas, Otero, and Baca counties. There are a total of approximately 56,901 acres in Las Animas County, 49,255 managed by the U.S. Forest Service and the remaining 7,646 acres managed by the State of Colorado. This area was home to the Comanche Indians between approximately 1749 and 1805.

From 1870 to 1898, large cattle outfits covered much of the grasslands, and from 1903 to 1926, homesteading was very popular. Each homesteader farmed a minimum of 40 acres of each 160-acre homestead, although many farmed much more. This area suffered as a result of the great Dust Bowl of the 1930's.

In 1938, the federal government began purchasing thousands of acres of severely damaged land and retired it from cultivation. The U.S. Forest Service has been responsible for managing this land since 1954.

In 1960, some of this land was designated as national grassland, including the Comanche National Grasslands. The grasslands are managed for many uses including livestock grazing, wildlife habitat, recreation, and mineral production.

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Activity-Based Recreation

Las Animas County Fairgrounds

The Las Animas County Fairgrounds, located in north Trinidad off North Linden Street, were constructed in the early 1900s. Existing facilities include a rodeo arena, an outdoor arena, a race track, a 4-H barn, horse stalls, grandstand seating, a park area, office space, maintenance buildings, and parking. The fairgrounds are currently used for the annual county fair, which is held every summer and features livestock shows. The fairgrounds are also used for rodeos, horse shows, and horse races at other times of the year. The Las Animas County Fairground Complex Master Plan was presented to the County Commissioners in July 2000 and is currently on hold, although it is anticipated that the plan will eventually be adopted.

Funding Sources

Las Animas County pays for infrastructure and services from its general fund. Revenues for the general fund are derived from property tax and specific ownership tax. Most county departments have some sort of fee structure that creates revenue for the county. Departments that generate revenue include the county treasurer, the assessor, various clerks, zoning and building, and the jail. Intergovernmental revenues and interest income also supplements the general fund.

The county's road and bridge fund is derived principally from the Highway Users Tax Fund, with additional monies from property tax dollars.

The Department of Social Services receives 20 percent of its funding from the county and 80 percent from the State of Colorado. The Perry Stokes Airport receives funding from the Federal Aviation Administration. Las Animas County also receives funding from the Colorado State Lottery.

The assessed valuation of taxable property in Las Animas County for 2000 was \$159,000,500. The Taxpayers' Bill of Rights (TABOR) limits the county to collecting \$2,942,568 in taxes plus an abatement of \$2,997. However, the county owes \$372,830 in previous TABOR

ISSUES

The Importance of the County Fair

Residents in Kim and Branson stressed the importance of the County Fair to the county. Both communities wanted to see a new events center but felt it was critical that it be affordable and available to locals. Some citizens felt the events center should be funded by means other

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violations, which will reduce the amount of revenue for this budget year to \$2,572,735. This sets the mill levy at 16.180 with the inclusion of a tax credit, which has been deemed the best way to repay the amount collected in previous years over TABOR levels. Of the mill levy, 12.833 mills will be allotted to the general fund, 2.668 mills will go to social services, .050 mills will go to the contingent fund, and .629 mills will be set aside for capital expenditures. The road and bridge

department will no longer receive any funding out of the mill levy. Las Animas County property tax levies in 1999 totaled 22.811 mills.

ISSUES

Impacts of the Oil and Gas Industries on the Landscape

There is serious concern, especially in the western areas of the county, regarding the negative impacts that drilling and running of gas lines by the oil and gas industries is having on the rural landscape in the county. Residents believe the county needs to identify areas that are appropriate for oil and gas development. It was suggested that the location of oil and gas development be centralized in the county and be

ENVIRONMENT AND NATURAL RESOURCES

INTRODUCTION

The physical environment is a strong determinant of future growth and development potential. The physical

character of the environment, such as its topography, geology, soils, and vegetation, influence land use patterns. The use of natural resources, including minerals, water, timber, and agriculture, is similar to the development of land for residential, commercial, or industrial purposes and requires consideration as to the carrying capacity of the environment.

The carrying capacity of the environment is moderated by environmental constraints. Geologic hazards, flooding potential, wildfire, and sensitive wildlife habitat are examples of environmental constraints to land development. Consequently, the character of the physical environment, which includes both its resources and constraints, provides direction as to where future growth may be appropriate and where it should be avoided in Las Animas County.

PHYSICAL CHARACTER

Location and Topography

Las Animas County is located in southeast Colorado adjacent to the New Mexico border. The county falls into two major ecosystems, the Southern Rocky Mountains to the west and the Eastern Plains east of

Existing Conditions and Issues

I-25. Within these two major ecosystems, there are five smaller ecosystem types, including mountains, foothills, prairies, mesas, and canyon lands.

Southern Rocky Mountains

The Southern Rocky Mountain ecosystem within the county generally consists of mountains and foothills.

Mountains

The most western portion of the county, bound by Highway 12 to the east, is mountainous terrain with elevations from 9,880 to 13,398 feet. The Culebra Range of the Sangre de Cristo Mountains runs through this area, with various peaks of the range running north-south just across the county border in Costilla County. This mountain topography can be described as predominantly rough terrain that consists of steep, forested slopes and exposed bedrock.

Foothills

The foothills, with elevations ranging from 6,000 to 9,000 feet, lay to the east of the mountains and generally extend to I-25. The topography of the foothills varies from steep in some areas to gently rolling and almost flat in other areas.

Eastern Plains

The Eastern Plains ecosystem within the county consists of prairies, mesas, and canyon lands.

Prairies

The majority of the Eastern Plains ecosystem within the county consists of prairies. The prairies are relatively flat with gently rolling hills, interrupted by the occasional mesa and areas that have eroded to form canyon lands (as discussed below). Elevations generally decrease from west to east and range from approximately 6,500 feet to 4,400 feet.

Mesas

There are several large mesas in the southeastern part of the county, including Raton Mesa and Mesa de Maya. Fisher's Peak, located at the western end of Raton Mesa and just south of Trinidad, stands 10,400 feet above sea level, in great contrast to the 6,000-foot elevation of

Environment and Natural Resources

Trinidad below. Mesa de Maya, located in the southeast corner of the county, rises 1,000 feet over the surrounding prairies in some places.

Canyon Lands

There are areas in the county, most surrounding the Purgatoire River and a few surrounding the Apishapa River, where steep canyons have been eroded through several strata of rock. These canyons extend up to five miles across and in some places are over 500 feet deep.

Climate

The southern location and low humidity, combined with elevations in the 6,000-foot range, all contribute to the pleasant climate of Las Animas County. Average daily high temperatures are in the 80s during the summer months and in the 40s during the winter (Table 17). The average annual precipitation is 15.11 inches, and the average annual snowfall is 42.3 inches. The Las Animas County area is considered a high desert and a semi-arid to arid climate.

Table 17. Las Animas County Average Monthly Climate Summary, 1948–2000

Month	Average Maximum Temperature (F)	Average Minimum Temperature (F)	Average Total Precipitation (in.)	Average Total Snowfall (in.)	Average Snow Depth (in.)
January	48.1	18.7	0.44	6.7	1
February	51.5	22.1	0.50	6.9	1
March	56.5	27.1	0.96	8.0	0
April	65.4	34.8	1.15	5.5	0
May	73.7	44.0	1.98	0.7	0
June	82.9	52.8	1.58	0.0	0
July	86.3	57.6	2.55	0.0	0
August	84.0	55.9	2.57	0.0	0
September	78.9	48.8	1.13	0.1	0
October	69.4	37.7	0.97	1.5	0
November	56.4	27.0	0.83	5.8	0
December	49.2	20.7	0.45	7.0	1
Annual	66.9	37.2	15.11	42.3	0

Source: Western Regional Climate Center

Existing Conditions and Issues

Air Quality

In general, air quality in Las Animas County is good and attains state air quality guidelines. The Colorado Division of Air Quality has monitored the area in the past due to emissions from coal mining operations. The monitoring was considered unnecessary when the coal mine closed and was removed. The Division of Air Quality has issued emission permits for several industries in Las Animas County, including the Trinidad Municipal Power Plant, which is used only during peak periods. The power plant burns coal, natural gas, and diesel fuel and is in compliance with its emission permits. Other facilities with permits include several gravel pits, natural gas wells, and a concrete batch plant.

Portable sources of air pollution, such as asphalt or batch plants, can create air quality problems as well. These uses set up operations, create emissions, and close operations before they are detected by the state. Consequently, these uses are difficult, if not impossible, for the state to regulate.

Nonpoint sources of air pollution, which are not regulated by the state, can also contribute to air quality problems. Fugitive dust from gravel and dirt roads is the chief nonpoint air quality problem, occurring predominantly in rural areas.

Geology

Mountains

The Sangre de Cristo Mountains were formed by a steep uplift of granite that was flanked by sedimentary rock. The main geologic formation in this area is the Sangre de Cristo Formation, consisting of arkosic conglomerate, sandstone, and shale, which are sedimentary rocks of the Permian and the Pennsylvanian ages.

The Spanish Peaks (the Huajatollas), located in the northwest portion of Las Animas County, are well known for their prominent “dikes” that radiate out from the peaks and sharply define the terrain.

Foothills

At one time, the Eastern Plains extended all the way to the mountains. Erosion, however, has turned the prairies that were adjacent to the mountains into what are presently the foothills. The foothills form

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what is known as the Raton Basin, or the Trinidad Coal Field, an area rich in coal. The Vermejo coal formation is also located in this area. At one time the prairies were covered by a large sea, and the Raton Basin and the Vermejo formation are a result of tidal and marsh deposits on the edges of this sea. Today, approximately 11.3 million tons of coal lies beneath 872 square miles of the county.

There are two major geologic formations in this area. Moving west to east, first there is the Raton Formation, consisting of arkosic sandstone, siltstone, shale, and major coal deposits, which are sedimentary rocks of the early Tertiary and late Cretaceous ages. Further east is the Poison Canyon Formation, consisting of arkosic conglomerate, sandstone, and shale, which are sedimentary rocks of the Tertiary age.

Prairies

Beginning at I-25 and moving eastward, there are generally four major geologic formation within the prairies: (1) Pierre Shale, Undivided; (2) Niobrara Formation; (3) Carlile Shale, Greenhorn Limestone, and Graneros Shale; and (4) the Dakota Sandstone and Purgatoire Formation. All are sedimentary rocks of the Cretaceous age.

The Pierre Shale, Undivided is just that, shale. The Niobrara Formation is calcareous shale and limestone. The Carlile Shale, Greenhorn Limestone, and Graneros Shale Formation, again, speaks for itself. And the Dakota Sandstone and Purgatoire Formation is sandstone and shale.

Mesas

The mesas in the county, known as the Raton Mesa Group, are the result of basalt lava flows created by an ancient line of volcanoes that ran east-west. These basalt lava caps have protected the mesas from erosion over time. The Raton Mesa Group begins with Fisher's Peak and continues eastward for approximately 80 miles. The altitude of the mesas decline as they move eastward.

The main geologic formation for both Raton Mesa and Maya de Mesa consists of basalt flows and associated tuff, breccia, and conglomerate of the "late-volcanic bimodal suite" that range from 3.5 to 26 million years old. The formation includes basalts of the Hinsdale Formation in

Existing Conditions and Issues

the San Juan Mountains, the Servilleta Formation in the San Luis Valley, and many other occurrences.

Canyon Lands

The major canyon land formation in the eastern portion of the county is the Purgatoire River Canyon. Most geological formations in this canyon consist of the Morrison, Ralston Creek, and Entrada (or Exeter) Formations. The rocks are sedimentary rocks of the Jurassic age. Also within the canyon are the Dockum Group Formation, which consists of red sandstone, siltstone, and local limestone, and the Upper Permian Rocks, Undivided, which consists of siltstone, dolomite, and sandstone, sedimentary rocks of the Permian age.

Soils

Soil survey mapping for Las Animas County is currently in progress, and consequently, Soil Survey Geographic (SSURGO) data, the most detailed level of soil mapping done by the Natural Resources Conservation Service, is not currently available. The Las Animas County soil survey is about 91 percent complete. The field work required for the survey should be finished in approximately three years and an additional year will be needed to finalize and tie up loose ends. According to the Las Animas County soils survey leader, publication of the county soil survey should occur in anywhere from four to six years.

State Soil Geographic (STATSGO) soil data is available. This data is very general and does not provide a breakdown of detailed soils types for the county. According to the U.S. Geological Survey, there are 16 very general soil types within Las Animas County. These are Baca-Wiley-Campo, Dargol-Fuera-Vamer, Capulin-Torreón-Apache, Gulnare-Allens Park-Wahatoya, Leadville-Granile-Lakehelen, Louviers-Rombo-Travessilla, Manvel-Minnequa-Penrose, Mirror-Teewinot-Bross, Argiustolls-Rock Outcrop, Raton-Barela-Crooked Creek, Richfield-Ulysses-Colby, Trag-Haverson-Manzano, Travessilla-Carnero, Travessilla-Rock Outcrop-Baca, Vona-Dalhart-Manter, and Wiley-Kim-Baca.

Due to the extremely general nature of the STATSGO data, it was not possible to determine the specific location of areas constrained from development by their soil type. It can be seen from the soil type descriptions below that limitations can occur in any soil type.

Environment and Natural Resources

Mountains

The mountains of Las Animas County consist mainly of the Leadville-Granile-Lakehelen soil type. The mountain peaks that occur along the western county border consist of Mirror-Teewinot-Bross soils.

Leadville-Granile-Lakehelen are moderately deep to very deep, well-drained soils on very steep mountain slopes. Leadville and Granile soils are very deep and are very cobbly and stony. Lakehelen soils are moderately deep to bedrock. Permeability is moderate and shrink-swell potential is low. Major limitations are steepness of slope and large stones and cobbles.

Mirror-Teewinot-Bross are moderately deep to very deep soils that formed in colluvium, residuum, and glacial till on mountain tops. Permeability is moderately rapid and shrink-swell potential is low. These soils contain high amounts of rock fragments. Major limitations are depth to bedrock for Mirror and Teewinot soils, large cobbles and stones, steepness of slope, and short frost-free season.

Foothills

The foothills of Las Animas County consist of three major soil types, Gulnare-Allens Park-Wahatoya, Louviers-Rombo-Travessilla, and Dargol-Fuera-Vamer. Trag-Haverson-Manzano soil types also occur along the Purgatoire River.

Gulnare-Allens Park-Wahatoya are shallow to moderately deep, well-drained soils on steep to very steep hills in the foothills. They have moderate permeability and low shrink-swell potentials, severe limitations for depth to bedrock.

Louviers-Rombo-Travessilla are shallow and moderately deep, well drained soils on steep hills in the foothills. Louviers and Rombo soils are on steep backslopes and are derived from shale. Permeability is slow, and shrink-swell potential is high. Travessilla soils are on summits and are derived from hard sandstone. Permeability is moderately rapid and shrink-swell potential is low. Major limitations are depth to bedrock, shrink-swell potential, and steepness of slope.

Dargol-Fuera-Vamer are shallow to very, very deep, well-drained soils that formed in alluvium and colluvium on steep hills of the Raton Formation. Major limitations are depth to bedrock on Vamer soils,

Existing Conditions and Issues

shrink-swell potential, slow permeability, sloughing when wet, and steep slopes. Areas best for development are along drainages, fans, and terraces.

Trag-Haverson-Manzano are very deep, well-drained soils that formed in alluvium on fans, terraces, and floodplains. Permeability is moderate and shrink-swell potential is slight to moderate. Limitations are slight except for floodplains, where flooding is possible.

Prairies

The prairies consist mainly of the Travessilla-Carnero and the Manvel-Minnequa-Penrose soils types. There are also smaller occurrences of the following soil types: Wiley-Kim-Baca, Baca-Wiley-Campo, Vona-Dalhart-Manter, Richfield-Ulysses-Colby, and Travessilla-Rock Outcrop-Baca. Again, the Trag-Haverson-Manzano soil type occurs along the Purgatoire River in this area.

Travessilla-Carnero are shallow and moderately deep, well-drained soils that formed from sandstone on ridges and scarps in the plains. Permeability is moderately rapid to moderate. Shrink-swell potential is low to moderate. The primary limitation is depth to bedrock.

Manvel-Minnequa-Penrose are very deep, moderately deep, and shallow, well-drained soils formed from limestone on hills, scarps, and fans in the plains. Permeability is moderate and shrink-swell potential is low. Major limitation is depth to bedrock for Minnequa and Penrose soils.

Wiley-Kim-Baca are very deep, well drained soils on nearly level to gently sloping plains. These soils typically have well-developed subsoils that have moderate to high shrink-swell potentials and moderately slow to slow permeability and that are slightly to moderately alkaline.

Baca-Wiley-Campo are very deep, well-drained soils on nearly level to gently sloping plains. These soils typically have well-developed subsoils that have moderate to high shrink-swell potential and moderately slow to slow permeability and that are slightly to moderate alkaline.

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Vona-Dalhart-Manter are very deep, somewhat excessively drained soils that formed in eolian sediments in the plains. Permeability is moderately rapid to moderate and shrink-swell potential is low. Major limitations are excess leaching and erosion.

Richfield-Ulysses-Colby are very deep, well-drained soils on nearly level to gently sloping plains. These soils typically have moderate to high shrink-swell potentials and moderately slow to slow permeability. They are slightly alkaline. Limitations are slight.

Travessilla–Rock Outcrop–Baca are shallow to very deep, well-drained soils that formed loess and sandstone in canyon areas. Baca soils are on summits; Travessilla soils are on shoulders and backslopes. Baca soils have slow permeability and moderate shrink-swell potential. Travessilla soils have moderately rapid permeability and low shrink-swell potential. Major limitations are depth to bedrock and steepness of slopes in Travessilla soils and shrink-swell potential in Baca soils.

As mentioned above, Trag-Haverson-Manzano are very deep, well-drained soils that formed in alluvium on fans, terraces, and floodplains. Permeability is moderate and shrink-swell potential is slight to moderate. Limitations are slight except for floodplains, where flooding is possible.

Mesas

The Capulin-Torreón-Apache, Arguistolls–Rock Outcrop, and the Raton-Barela–Crooked Creek soil types occur in and around the mesas in the county.

Capulin and Torreón soils are very deep. Apache soils are shallow to basalt bedrock. All of these soils are well drained. These soils are on or near basalt mesas or lava plateaus at elevations of 7,000 to 9,600 feet. Permeability is slow and shrink-swell potential is high. Major limitations are slow permeability and depth to bedrock. Capulin and Torreón soils have well-developed subsoils, moderate to high shrink-swell potentials, and moderately slow to slow permeability and are slightly to moderately alkaline. Apache soils have severe limitations for depth to bedrock (less than 20 inches). As mentioned above, this soil type is considered, for the purposes of this plan, to be a minor constraint to development.

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Argiustolls–Rock Outcrop soils are shallow to very deep, well-drained soils on extremely steep backslopes of basalt mesas and lava plateaus. Major limitations are steep slopes, high shrink-swell potential, large stones on the surface, and depth to bedrock.

Raton and Barela soils are shallow to deep and are well drained. Crooked Creek soils are very deep and poorly drained. These soils formed in alluvium and residuum on basalt in Raton soils and high water table in Crooked Creek soils.

Canyon Lands

The canyon lands consist primarily of the Travessilla–Rock Outcrop–Baca soil type. These are shallow to very deep, well-drained soils that formed from loess and sandstone in canyon areas. Baca soils are on summits; Travessilla soils are on shoulders and backslopes. Baca soils have slow permeability and moderate shrink-swell potential. Travessilla soils have moderately rapid permeability and low shrink-swell potential. Major limitations are depth to bedrock and steepness of slopes in Travessilla soils and shrink-swell potential in Baca soils.

Vegetation

Located in two major ecosystems, the Southern Rocky Mountains and the Eastern Plains, Las Animas County has diverse vegetation.

Ponderosa Pine Woodland

This vegetation type occurs on soils ranging from shallow to deep, well-drained soils on terraces and is formed in alluvium. The surface texture is typically a brown cobbly sandy loam and is usually covered by a mat of pine litter. These areas are dominated by Ponderosa pine with the main shrub being Gamble oak. Mountain mahogany is also present. Other woody species that may be present are Rocky Mountain juniper and Piñon pine on drier sites. And Engleman spruce at higher elevations. The potential understory is dominated by Arizona fescue, Mountain muhly, and Western wheatgrass. Potential annual production is about 1,000 pounds per acre. Other less dominate species that may be present are Bluegrass, Blue grama, Sedge, and Prairie junegrass along with a very limited amount of forbs such as Hairy

ISSUES

Noxious Weed Control

The need for noxious weed control is an issue for many residents throughout the county.

Environment and Natural Resources

goldaster, Pussytoes, Lupine, and Vetch.

Mixed Conifer

This vegetation type occurs ridges and steep slopes. Elevations ranges from 6,500 and above. Average precipitation ranges from 18 inches to 24 inches with the majority of moisture falling between May and September.

The species common to the plant community include Ponderosa pine, Douglas fir, White fir, Engleman spruce, Piñon pine and Gambel oak. Grasses found on these sites include Arizona fescue, Parry oatgrass, and Mountain muhly and Juniper species.

Foothills

This vegetation community occurs on ridges, hog-backs, mesas, and steep slopes. Slope varies from nearly level to 45 degrees. Elevations ranges from 5,200 to 7,000 feet. Precipitation averages 13 to 17 inches annually with some fluctuation. The majority of the precipitation is received between May and October.

True mountain mahogany, big bluestem, little bluestem, sideoats grama, yellow Indiangrass, and Griffith wheatgrass are the dominant plants in the potential plant community. Numerous shrubs and forbs are present in small amounts. Piñon pine, Rocky Mountain juniper and Ponderosa pine are also found on these sites. The soil is the determining factor in the amount of grasses, forbs, shrubs, and trees. Foothill sites include rocky, shallow, loamy, and clayey foothills.

Shortgrass Prairies

This vegetation community is found on level to gently rolling uplands with moderate slope, sometimes up to ten percent. The climate is semi-arid with precipitation averaging 10-13 inches annually. Soils are moderately deep to deep and well drained occurring on upland slopes from calcarous silty, loamy, and gravelly material. Soils can also be formed from weathered limestone and shale. Shortgrass prairies are dominated by blue grama, western wheatgrass buffalograss, galleta, and sand dropseed. Curlycup gumweed, dotted gayfeather, hairy goldaster, and scarlet globemallow are the forbs that make up the plant community. Shrubs that are common on the

Existing Conditions and Issues

shortgrass prairie include broom snakeweed, fourwing saltbrush, plains pricklypear, cholla, soapweed, and winterfat.

Mesas

Grazing is the predominant use on the mesas, and consequently, blue gramma grasses predominate because of the disturbance. Under more ideal conditions, the vegetation should also include western wheat and big and little bluestems.

Canyon Lands

The canyon lands, in general, consist of Piñon pines and juniper, with some oak brush, squaw brush, and mountain mahogany.

The riparian corridor along the Purgatoire River creates another major vegetation association. Cottonwood, alders, and willows are the dominant overstory species in the riparian corridor. Understory species include sedges, cattails, inland saltgrass, and other water-tolerant species. There are other riparian areas dispersed throughout the county, including areas along the Apishipa River watershed.

NATURAL RESOURCES

Natural resources in Las Animas County consist of minerals, water, and timber.

Mineral Resources

Coal and Other Minerals

Mineral resources, including coal, bituminous coal, clay, gypsum, limestone, and sandstone, are found throughout the county. According to the EPA Mineral Availability System from the U.S. Bureau of Mines, in 1992 there were 224 mines in Las Animas County. The majority of the mines in the county are underground mines (168) while the remainder are surface mines (52) or are unknown (4). Due to the historic nature of the mining industry, there are several abandoned and inactive mines within the county.

The Trinidad Coal Field is located in the western part of the county, with the City of Trinidad lying on the eastern edge of the field. The Allen Coal Mine, which at one time employed approximately 450

Environment and Natural Resources

people, has closed and reclamation work is being done on the property.

Natural Gas

According to the Colorado Oil and Gas Conservation Commission, as of January 2000 there were 1,041 oil and gas wells in Las Animas County. Of these, 385 are currently producing, 305 are abandoned, and 26 are awaiting completion. Four of these wells are injecting wells and 295 are identified as permit locations. These figures do not include wells in the Maxwell property, a portion of the county that has not been surveyed.

The production of coal bed methane in the Raton Basin has nearly doubled over the past two years. The Raton Basin is estimated to hold more than 18 trillion cubic feet of coal bed methane, according to a recent U.S. Geological Survey report.

Evergreen Resources, which commenced gas sales in Las Animas County in early 1995, is one of the largest holders of oil and gas leases in the Raton Basin, with approximately 200,000 gross acres. The company's daily gas sales represent more than 75 percent of the gas currently sold from the Raton Basin. Evergreen has drilled more than 200 producing gas wells on its Raton Basin properties, and the company has identified about 800 additional drilling locations on its acreage.

J-W Operating Company is another oil and gas operator in the county.

Water Resources

Watersheds

Las Animas County crosses nine watersheds including the Purgatoire, Apishapa, Huerfano, Upper Arkansas-Lake Meredith, Upper Arkansas-John Martin, Two Butte, Sand Arroyo, Cimmaron Headwaters, and Canadian Headwaters. The majority of the county falls into the Purgatoire Watershed. The Purgatoire Watershed and the Apishapa Watershed are shown below in Figure 1.

Existing Conditions and Issues

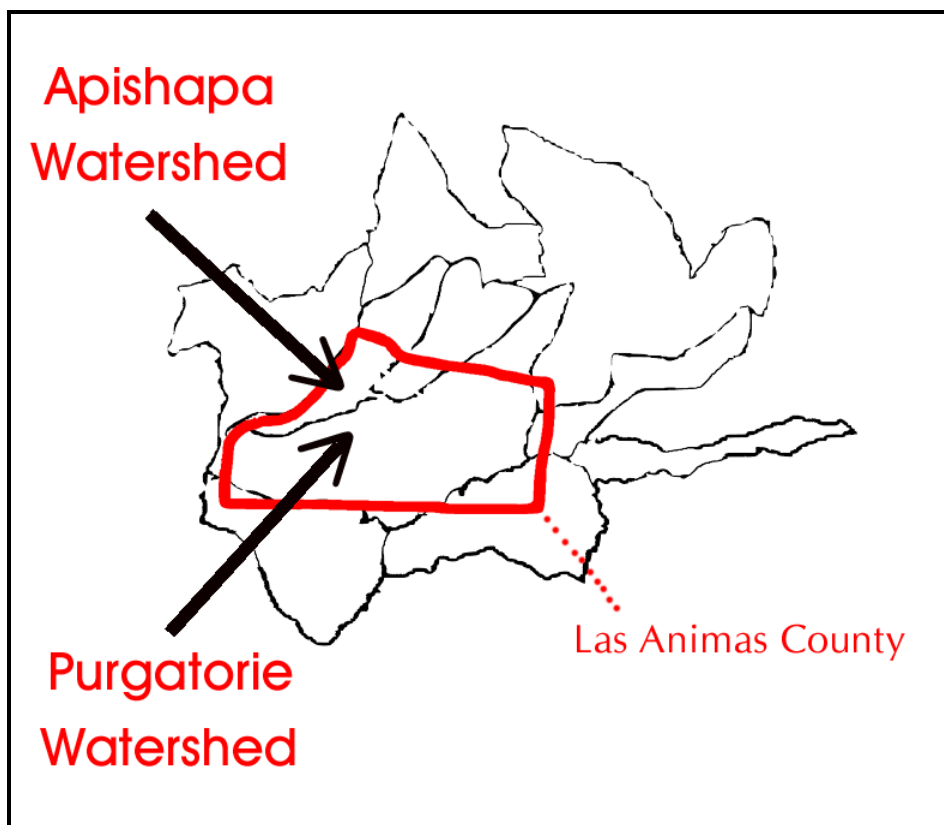


Figure 1. Watersheds in Las Animas County

Source: U.S. Environmental Protection Agency, Surf your Watershed Web Site

Lakes and Reservoirs

Trinidad Lake

The 900-acre Trinidad Lake, located three miles southwest of Trinidad, is a manmade lake built in 1977 by the U.S. Army Corps of Engineers. The 6,610-foot Trinidad Lake Dam, an earth-fill dam across the Purgatoire River, was built for flood control, irrigation, sediment control, and recreation. The dam controls 671 square miles of the Purgatoire River watershed. The lake has 29,600 acre-feet of storage; however, the level of the lake rises and falls depending on irrigation usage and fluctuations in rainfall and snowpack that supply the lake. When the dam was built, the five communities of Sopris, Sopris Plaza, Viola, Piedmont, and St. Thomas had to be relocated, cemeteries and all.

Environment and Natural Resources

Monument Lake

Monument Lake, located approximately 40 miles west of Trinidad, provides raw water storage for the City of Trinidad. Monument Lake is ancillary storage and contains approximately 1,400 acre-feet of water controlled by senior water rights.

North Lake

North Lake, also located approximately 40 miles west of Trinidad and just north of Monument Lake, provides primary raw water storage for the City of Trinidad and contains approximately 1,400 acre-feet of water generated by flows from the North Fork stream, which are governed by senior water rights. Both North and Monument lakes have pipelines that carries water from these reservoirs to the Trinidad Filtration Plant located 10,000 feet east of Monument Lake.

Model Reservoir

Model Reservoir is located approximately 2.5 miles north of Hoehne. At one time the reservoir belonged to the City of Trinidad, but it now belongs to Oxley Farms as the result of litigation. Oxley Farms' water rights are diverted into the reservoir and are used for irrigating the farm.

River Basins

Las Animas County contains two rivers, the Purgatoire and the Apishapa. Water quality of these rivers is generally good. Problems do exist with regard to high salinity and high dissolved and suspended solids, but this is a naturally occurring condition. The Arkansas River basin covers the majority of Las Animas County. The main source of runoff in the Arkansas River basin is snowmelt, with high runoff occurring from early June through July. Heavy rains in the warmer times of the year can also contribute to this flow.

The Purgatoire River flows to the northeast, draining into the Arkansas River downstream of La Junta. The Apishapa River, located north of the Purgatoire River, also flows to the northeast, but it drains into the Arkansas River upstream of La Junta. The nature of both rivers changes drastically as they leave the mountains for the plains.

Existing Conditions and Issues

Water Quality

Purgatoire Watershed

The Index of Watershed Indicators (the IWI or Index) is a compilation of information on the “health” of aquatic resources in the United States. The Purgatory watershed received a score of “3” that indicates “Less Serious Water Quality Problems—Low Vulnerability.” Watersheds with “Less Serious Water Quality Problems” are watersheds with aquatic conditions below state or tribal water quality goals that have problems revealed by other indicators.

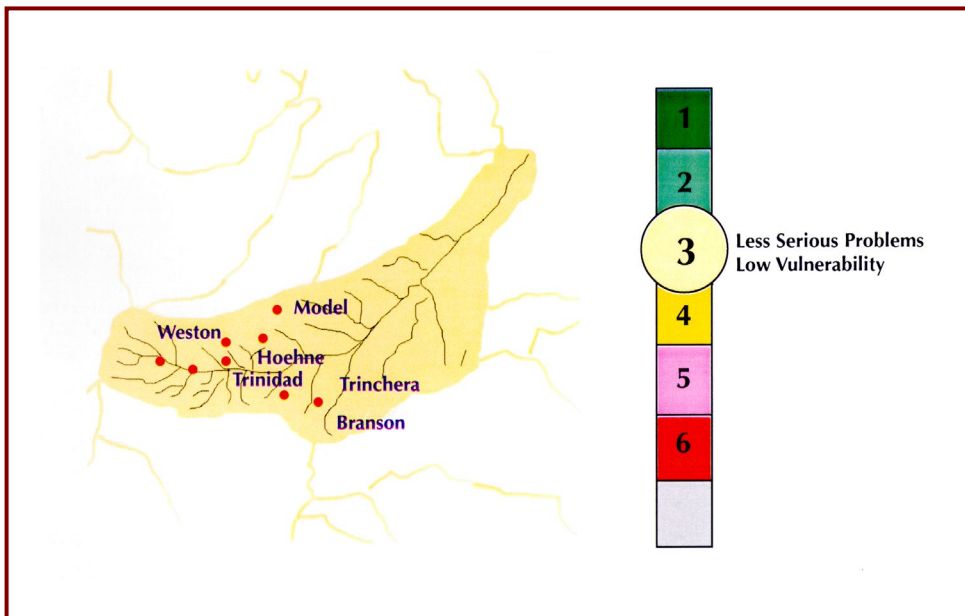


Figure 2. Purgatoire Watershed

Source: U.S. Environmental Protection Agency, Surf your Watershed Web Site

“Lower Vulnerability” indicates lower vulnerability to stressors, such as pollutant loadings. Watersheds with lower vulnerability to stressors are watersheds where data suggest pollutants or other stressors are low, and therefore, there exists a lower potential for future declines in aquatic health. Actions to prevent declines in aquatic conditions in these watersheds are appropriate but at a lower priority than in watersheds with higher vulnerability.

Environment and Natural Resources

The portion of the Purgatoire River upstream of I-25 has been classified by the State of Colorado as a cold-water stream and a source of public water supply. This portion of the river should support

ISSUES

The Oil and Gas Industries' Impacts on Water Quality

There is concern, especially in the western portion of the county, regarding the practices of the oil and gas industries within the county. Past gas production has been linked to contamination of groundwater and domestic wells. New research by the U.S. Bureau of Land Management indicates that current production methods, which involve pumping millions of barrels of water off relatively shallow coal so it releases natural gas, also might be draining aquifers and even surface water. The county needs to seriously investigate and research potential short- and long-term impacts of the oil and gas industries.

The amount of water that is consumed in

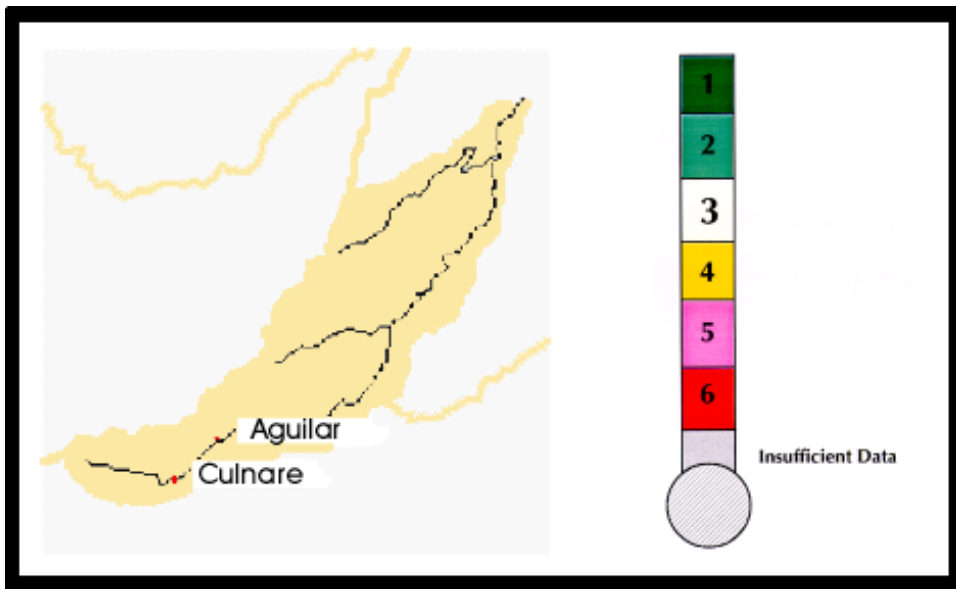
agriculture, class one cold-water aquatic life (trout and other cold-water species), and primary contact recreational uses, such as swimming. The portion east or downstream of I-25 is considered a warm-water stream, and its principal use is agriculture. The state has designated it as a stream that should support agricultural uses, secondary contact recreational uses, such as boating, and class two warm-water aquatic life. Class two aquatic life is considered to be aquatic populations that are limited by factors other than the chemical or physical quality of the water, such as stream flow.

Apishapa Watershed

The overall IWI score for the Apishapa Watershed below indicates that insufficient data exists for the purpose of the Index of Watershed Indicators. The watershed has, however, been identified by the Spanish Peaks-Purgatoire River Soil Conservation District as an area where excessive sheet, rill, and gully erosion are taking place due to over grazed rangeland, poor condition woodlands, and inefficient irrigation systems.

Existing Conditions and Issues

Figure 3. Apishapa Watershed



Septic Tanks

Individual septic tanks are used in all areas of the county except for the City of Trinidad and the Towns of Aguilar and Cokedale.

Trinidad Wastewater Treatment Plant

According to representatives of the Colorado Department of Health, there have been no major, recent violations of water quality standards within the City of Trinidad. The new wastewater treatment plant will address the insufficient capacity of the old plant, which in the past has had periodic permit violations. The highly erodible soils found in the vicinity of Trinidad contributes to relatively high loads of sediment, dissolved solids, and heavy metals in the Purgatoire River, primarily downstream of city limits. High concentrations of sulfate and manganese in the river below Trinidad preclude its use as a drinking water source. Sedimentation in Trinidad Lake was also reported to be an issue in the Colorado Department of Public Health and Environment's 1987 Section 208 water quality management plan.

Timber Resources

Timbering in Las Animas County is conducted on private lands. This is largely because there is not much federal land within the county. The

Environment and Natural Resources

main logging company in the county is Dochter Lumber and Sawmill Company, which is based in Trinidad. Many private landowners also run logging operations on their land.

Timbering is widely considered to be the most under utilized and most poorly managed resource in the county. It has been estimated that there are approximately 500,000 to 750,000 timber acres in Las Animas County. There is major concern, however, regarding the overall health of the forest. Due to fire repression and the fact that much of the forest has not been timbered in many years, the understory has become very dense, making the forest extremely susceptible to fire and disease from insects.

A citizen's group called the Culebra Range Community Partnership recently formed to address these and other timber related issues in the area. The organization brings together people from the lumber industry, private landowners, and other stakeholders to address timber management and economic issues with the hope that the county can begin to better utilize this valuable resource.

Wildlife Resources

Due to its location in two geographic provinces, Las Animas County has a unique set of geographic conditions that create one of the most diverse wildlife populations in the state. The Colorado Division of Wildlife lists 98 species of birds found in Las Animas County and 43 mammal species. Federal threatened or endangered species in the county include the lynx, American peregrine falcon, bald eagle, interior piping plover, least tern, Mexican spotted owl, southwestern willow flycatcher, western snowy plover, and whooping crane. Typical mammal and bird species found within Las Animas County include black bear, mountain lion, mule deer, elk, and Merriam's turkey. Las Animas County has the highest concentration of black bear in the state due to the high-quality habitat. Human conflict with bears is thus a significant problem. The second largest elk herd in the state is found in the high country to the west.

Purgatoire River and Apishapa River Corridor

The riparian corridors along the Purgatoire River, Apishapa River and its side canyons provide diverse and productive wildlife habitat. A wide variety of bird species use these corridors, as do mammals such as mule deer and black bear. Vegetated hillsides, particularly

Existing Conditions and Issues

oakbrush areas, also provide important habitat. Preserving the riparian corridor and as much of the vegetated hillsides as possible will help protect wildlife populations. Preserving the vegetated side canyons is also important, since they function as movement corridors, linking the vegetated hillsides with the Purgatoire riparian corridor.

Comanche National Grassland

The Comanche National Grassland serves as a major flyway zone for birds migrating in the spring and fall. These birds consist of approximately 275 different species that use or live on the grassland, including quail, pheasant, dove, bald eagle, long-billed curlew, lesser prairie chicken, and roadrunner. There are about 40 different species of reptiles, 9 amphibians, 11 fishes, and 60 different species of mammals in the grassland, including lion, deer, antelope, coyote, and bobcat. The primary wildlife habitat management activities on the Comanche National Grasslands are water development, tree planting, and prescribed burning.

Bosque del Oso State Wildlife Area

The Bosque del Oso State Wildlife Area is located in the Sangre de Cristo Mountains 20 miles west of Trinidad adjacent to State Highway 12. The parcel comprises 29,940 acres and is the single largest contiguous tract of land open to the public in Las Animas County. The land was acquired in 1998 through a bargain sale purchase from the Montana Power Company. The Division of Wildlife, in cooperation with the Rocky Mountain Elk Foundation and Great Outdoors Colorado, worked for more than 20 years to protect this area for wildlife and the public. Because of the purchase, the Division of Wildlife will now be able to protect portions of the Purgatoire Basin, which biologists have identified as one of the high-priority conservation areas in the state.

The area contains some of the richest and most biologically significant lands in Colorado, including important riparian habitats. There is a diversity and abundance of other terrestrial game and nongame species in the area, including deer, black bear, Merriam's turkey, Abert squirrel, and mountain lion, and it is also home of the state's second-largest elk population of approximately 24,000 animals. The area supports several declining species, such as the American peregrine falcon, ferruginous hawk, Mexican spotted owl, and flathead chub.

ENVIRONMENTAL CONSTRAINTS

Many environmental conditions pose a constraint to development either in terms of physical features, such as excessive slope, floodplains, or wetlands, or in terms of environmental resource preservation, such as protection of significant wildlife habitat.

The following section contains information about the various environmental constraints found within the county. These constraints are also graphically represented on the Las Animas County Environmental Constraints Map.

Geologic Hazards

The Colorado Geologic Survey defines a geologic hazard as “a geologic phenomenon which is so adverse to past, current or foreseeable construction or land use as to constitute a significant hazard to public health and safety or to property.” Geologic hazards in Las Animas County include avalanches, landslides, rockfalls, mudflows, debris fans, and unstable slopes. These areas are located in the western edge of Las Animas County in the Sangre de Cristo Range. The Raton basin, which consists of interbedded shale, siltstone, coal, and sandstone, consists of poorly bonding clays that have poor permeability rates, slippage, and subsidence that contributes to poor stability and often results in unstable slopes in the form of mudslides. I-25 has had major construction on numerous occasions when continuous precipitation resulted in sloughing of mountain slopes along the interstate. The Pierre shale formation, which is along the front range paralleling the foothills, is very saline, has high shrink-swell potential, and very slow permeable soils.

Mine subsidence is another potential geologic hazard. There is high potential for mine subsidence in the western portions of the county due to the extensive underground coal mining that has occurred there. Development should not occur in any area with existing or historic mine workings due to the potential for subsidence or other safety hazards. More detailed information on mine subsidence is available through the Colorado Mine Subsidence Information Center in Denver.

Existing Conditions and Issues

Steep Slopes

As slope increases, land becomes less suitable for development. Steep slopes generally have the following increased risks: wildfire; unstable soils; problems with road design, construction, and maintenance; and difficulty being accessed by fire protection equipment. Slopes are divided into four categories:

- **Slopes Between 0 Percent and 8 Percent.** Most road design standards and building codes allow construction within this range.
- **Slopes Between 9 Percent and 15 Percent.** Some mitigation may be necessary, with possible structural reinforcement along with undesired cut-and-fill activity.
- **Slopes Between 16 Percent and 33 Percent.** Significant mitigation is necessary, with the need to evaluate proposed construction on a case-by-case basis.
- **Slopes Greater than 33 Percent.** Any mitigation is not recommended due to the potential risk of hazards.

Soil Constraints

Soil constraints mentioned in this section are taken from information obtained from STATSGO and supplied by the Natural Resources Conservation Service. This information is based on the Colorado State General soils map and is not specific information. When the progressive soil survey of Las Animas County has concluded and is published, constraints identified for specific soil types will be considered official. All questions concerning problems associated with soil types should be directed to the published soil survey and the Natural Resources Conservation Service.

For the purposes of this analysis, however, three soil types were identified to have considerable limitations and were classified as a “minor constraint” to development. These include Leadville-Granile-Lakehelen, Mirror-Teewinot-Bross, and Capulin-Torreon-Apache.

The Leadville-Granile-Lakehelen and the Mirror-Teewinot-Bross soil types are soil types that occur on very steep slopes and contain large stones and cobbles.

Environment and Natural Resources

Capulin-Torreón-Apache is considered a minor constraint because it has severe limitations for depth to bedrock (less than 20 inches.) It should be noted that development is possible in areas with depth to bedrock constraints if proper precautions are taken. Drilling into the bedrock to anchor foundations or excavation into the bedrock may be necessary. Precautions also need to be taken to drain water away from structures since bedrock generally does not absorb rainfall. The soils over shale or soft shale would be the most difficult to develop due to potential movement or swelling of the shale.

Another serious constraint to development posed by soils would be the frequently flooded soils in the Purgatoire River floodplain. These soils are considered unsuitable for development due to the high water table and flooding.

Certain soils may pose problems for building foundations and the siting of septic systems. Septic systems may also be constrained in some areas by clay formations with low permeability.

Floodplains

Floodplains are generally located along the Purgatoire and Apishapa rivers. Floodplain mapping, for the purposes of this plan, is very general. Detailed floodplain mapping should be consulted when determining whether a specific area falls within the floodplain. Floodplain mapping for Las Animas County is available from the Federal Emergency Management Agency.

Development in floodplains should be discouraged due to the potential risk to public safety and property damage. The Purgatoire River has flooded six times in the last 100 years, causing extensive damage.

Major Wetlands

The majority of major wetlands in Las Animas County are located within the Piñon Canyon Maneuver Site, a sub-post of the Fort Carson Military Reserve in the central-northern portion of the county. Additional wetlands are located along the Purgatoire River and surrounding Model Reservoir.

Existing Conditions and Issues

Wildfire Hazards

In general, potential threats of wildfire exist on arid, vegetated hillsides. To varying degrees, wildfire hazard areas exist in Las Animas County, primarily west of I-25 in areas that contain both vegetation and subdivision. Hazards east of I-25 exist around Fisher's Peak and in the river bottoms where there is more vegetation, at Piñon Canyon Maneuver site, in the Comanche National Grasslands, and the Conservation Reserve Program (CRP).

ISSUES

Need for Preservation of Wild Game

Many residents feel there is a need for the preservation of wild game species within the county.

In the summer of 2000, two wildfires, the Bosque del Oso fire and the Piñon Canyon fire, covered approximately 4,000 acres at a cost of approximately \$395,000 to the county. Implementing defensible space guidelines can reduce wildfire constraints to development.

There is currently no wildfire hazard mapping available for Las Animas County.

The State Forester is available to work with developers to mitigate fire hazards in new developments. Any new subdivisions should be required to prepare a wildfire mitigation plan to reduce the risk of fire, and new development in existing subdivisions should be encouraged to consider wildfire hazards in their site planning. Mutual aid agreements for fire protection between the county and city would also reduce the potential for major wildfire damage.

Wildlife

Potential Impact on Wildlife

Although not a constraint to development per se, developing wildlife habitat would have a significant impact on Las Animas County's wildlife. The Division of Wildlife mapped 16 wildlife species in Las Animas County and then used a ranking system to prepare a composite map of the potential for wildlife impact in five categories:

- **Low.** Approximately 40 percent of Las Animas County has a low potential for impact from development or human disturbance on wildlife habitat.

Environment and Natural Resources

- **Moderately Low.** Approximately 27 percent of Las Animas County has a moderately low potential for impact from development or human disturbance on wildlife habitat.
- **Moderate.** Approximately 7 percent of Las Animas County has a moderate potential for impact from development or human disturbance on wildlife habitat.
- **High.** Sixty-eight percent of vertebrate wildlife species in Colorado are dependent on riparian areas and wetland habitats. As a result, approximately 16 percent of Las Animas County has a high potential for impact from development or human disturbance on wildlife habitat.
- **Very High.** Examples of species with habitat that would qualify for very high impact potential are those listed as an endangered or threatened species, such as the lynx and the bald eagle. Other areas of very high impact potential include those that have experienced human/wildlife conflicts, such as interaction with black bear. Approximately 10 percent of Las Animas County has a very high potential for impact from development or human disturbance on wildlife habitat.

There have been some conservation easements placed on prime wildlife areas near the town of Weston. Any efforts to preserve wildlife habitat such as conservation easements will benefit the community as a whole by encouraging continued populations of both game and nongame species. This will benefit the tourist economy by allowing continued hunting and wildlife viewing.

Prime Agricultural Land

Existing Conditions and Issues

Although agricultural land is not a constraint to development in the same manner as floodplains, geologic hazards, or steep slopes, agriculture is a significant component of the local economy. Prime agricultural land, irrigated fields, and farmlands of statewide importance are therefore areas where development should be avoided if possible. These areas are identified on maps prepared by the U.S. Department of Agriculture's Natural Resources Conservation Service.

ISSUES

Loss of Agricultural Lands and Productivity

The loss of agricultural lands and an overall decline in agricultural productivity within the county is a significant issue with many residents. There is concern that agricultural lands are being subdivided without any consideration for whether they are prime lands or whether their location provides a visual amenity to the communities they surround.

Need for Predator Control

Residents in the communities of Branson, Aguilar, Primero, and Kim indicated a need for predator control in the county, especially on ranches. Several Branson residents reported a problem with coyotes, mountain lions, and bears. Trapping is permitted only 30 days each year.

CHAPTER THREE

THE PREFERRED PLAN MAP

The Preferred Plan Map was developed after careful consideration of various components of the planning process, including the existing conditions of the county, the issues identified by citizens at the October 2000 community meetings, and the results of the Plan Options Questionnaire that was distributed at the January 2001 community meetings. (The existing conditions of the county and their relevant issues are detailed in Chapter 2 of this document. A listing of issues broken out by town, an original copy of the Plan Options Questionnaire, and the results of the questionnaire are located in the appendixes of this document.)

The Preferred Plan Map establishes four planning areas within Las Animas County: [Established Community Areas \(ECAs\)](#), [Cooperative Planning Areas \(CPAs\)](#), [Rural Resource Areas \(RRAs\)](#), and [Rural Conservation Areas \(RCAs\)](#).

[Established Community Areas](#) are all incorporated cities and towns and all unincorporated towns within Las Animas County. Incorporated cities and towns include Aguilar, Branson, Cokedale, Kim, Starkville, and Trinidad. Unincorporated towns include Hoehne, Primero, Weston, and all other towns in Las Animas County.

[Cooperative Planning Areas](#) are areas adjacent to a city or town that are identified for future urban growth and/or an area where all county development proposals received in that area are referred to the adjacent city or town for review and comment. The actual function of the [CPA](#) shall be established in the individual town or city's [intergovernmental agreement \(IGA\)](#) with the county. [CPAs](#) are divided into development opportunity areas and environmental constraint areas.

The Preferred Plan Map

[Rural Resource Areas](#) in the county include all areas outside the [ECAs](#) and the [CPAs](#) that have *not* been identified as environmentally constrained. [RRAs](#) support agricultural activities, large-lot residential subdivisions, mining, oil and gas operations, and other rural land uses

[Rural Conservation Areas](#) include federal land, public land, areas constrained by steep slopes, floodplains, land subsidence, water bodies, major wetlands, floodplains, and/or areas that if developed would have a “high impact” or “very high impact” on wildlife rating from the Division of Wildlife (see page 66 ff.).

Although the Preferred Plan Map is advisory in nature, it does depict a future land use pattern supported by residents of Las Animas County. The Preferred Plan Map, therefore, should be used in conjunction with the Las Animas County zoning and subdivision codes as well as the Las Animas County Official Zoning Map to guide the appropriate location, character, type, and intensity of new development.



CHAPTER FOUR

CONCEPTS, POLICIES, AND IMPLEMENTATION ACTIONS

INTRODUCTION

The following concepts, policies, and implementation actions were formulated in conjunction with the Preferred Plan Map and are also based on the existing conditions of the county, issues identified by citizens at the October 2000 community meetings, and the results of the Plan Options Questionnaire that was distributed at the January 2001 community meetings.

The concepts, policies, and implementation actions (referred to hereinafter as “actions”) are organized by the four planning areas ([Established Community Areas](#), [Cooperative Planning Areas](#), [Rural Resource Areas](#), and [Rural Conservation Areas](#)) along with a County-Wide category that applies to all planning areas of the county.

The concepts, policies, and implementation actions, in conjunction with the Preferred Plan Map, should be consulted by county staff, the Planning Commission, and the Board of County Commissioners when considering development proposals, updating land use regulations, working on intergovernmental issues, outlining work programs, preparing annual budgets, and evaluating the county’s progress in reaching its goals. These components should also be used to guide residents, landowners, and project applicants concerning land planning and community development objectives within Las Animas County.

COUNTY-WIDE (CW)

Concept 1. Establish Planning Areas to Manage Growth

Policy CW 1

Las Animas County shall manage growth by establishing four planning areas: (1) [Established Community Areas](#), (2) [Cooperative Planning Areas](#), (3) [Rural Resource Areas](#), and (4) [Rural Conservation Areas](#).

Action(s)

- ☐ Consider adoption of a resolution requiring that all county development proposals be in conformance with the Master Plan to gain approval.

Time frame: Short-term

Concept 2. Development Costs are Assumed by Developers

Policy CW 2

Public infrastructure and services shall be available to serve new development with costs fairly apportioned to those benefiting directly from the facilities.

Action(s)

- ☐ Consider adoption of updated zoning, subdivision, and other land use regulations.

Time frame: Short-term

- ☐ In order to ensure [adequate public facilities](#), the county must develop quantifiable standards that can be measured, mapped, and monitored. Note: In many cases, it is appropriate to establish different standards within urban or rural areas. For example, water storage requirements for fire-fighting purposes should be higher in wildfire hazard areas.

Time frame: Mid-term

- ☐ Consider revising development regulations to permit residential development only when located in proximity to adequate infrastructure and public facilities. Consider requiring new developments to provide adequate public facilities necessary to support the proposed density and use or to fund any increased capacity.

Time frame: Long-term

County-Wide (CW)

Action(s)

- ☐ Explore the possibility of assessing [capital expansion fees](#) on new development. Legally, [capital expansion fees](#) must be clearly tied to the impacts of development on public facilities, and must be used to provide or improve facilities that benefit the development in question. Consequently, the county should perform a careful analysis of existing conditions and the public facility needs that are attributable to new development.

Time frame: Long-term

Concept 3. Encourage Economic Development in the County

Policy CW 3

Support economic development in the county through the promotion of tourism and residential, commercial, and industrial growth.

Action(s):

- ☐ Continue to support the Colorado Department of Local Affairs in its development of the Las Animas County Parks, Recreation, and Tourism Master Plan.

Time frame: Short-term

- ☐ Continue to support organizations such as Trinidad–Las Animas County Economic Development, Inc. that promote tourism and commercial and industrial development.

Time frame: Short-term

- ☐ Develop a marketing campaign for the county that includes the development of an Internet website.

Time frame: Short-term

- ☐ Consider adoption of updated zoning, subdivision, and other land use regulations.

Time frame: Short-term

Concepts, Policies, and Implementation Actions

- ☐ Through zoning and other land use authority, provide an adequate supply of both serviced and raw land suitable for residential, commercial, and industrial development in [CPAs](#).

Time frame: Mid-term

Concept 4. Preserve Historic and Archeological Resources

Policy CW 4

Historic and archeological districts, buildings, and other various resources within Las Animas County shall be preserved.

Action(s)

- ☐ Continue to work with and support organizations such as the Hispanic Cultural Landscape of the Purgatoire to identify and protect historic and archeological resources.

Time frame: Short-term

- ☐ Create incentives to protect historic and archeological resources within each community.

Time frame: Mid-term

Concept 5. Maintain and Improve County Roads

Policy CW 5

Public and private county roads shall be built and maintained to county engineering standards.

Action(s)

- ☐ Consider adopting subdivision regulations that require that all new public and private roads meet county engineering specifications regarding road dimensions, grades, turning radius, striping, etc.

Time frame: Short-term

- ☐ Conduct an inventory of existing county roads and identify those that do not currently meet county standards.

Time frame: Mid-term

Policy CW 6

Strive to maintain county roads in a graded gravel condition, where appropriate.

County-Wide (CW)

Action(s)

- ☐ Conduct an inventory of existing county public roads and prioritize them for grading and gravel on a need basis. Drainage improvements should also be prioritized.

Time frame: Mid-term

- ☐ Consider adopting a road impact fee to fund road improvements necessitated by development activities.

Time frame: Mid-term

Concept 6. Improve Emergency Services

Policy CW 7

The county shall update county mapping, road naming, and addressing system to improve emergency response capabilities and general public welfare and work with the appropriate districts and organizations to improve emergency services throughout the county.

Action(s)

- ☐ Work with the Trinidad Ambulance District, county fire departments, the sheriff's department, and other organizations to identify areas in the county that have the greatest needs.

Time frame: Short-term

- ☐ Work with the Trinidad Ambulance District, county fire departments, the sheriff's department, and community representatives to implement the county emergency preparedness plan.

Time frame: Short-term

- ☐ Ensure that the county emergency preparedness plan is well publicized and distributed to all county communities.

Time frame: Short-term

- ☐ Continue to explore the possibility of forming new fire protection districts as well as the possibility of becoming eligible for use of the Emergency Fire Fund.

Time frame: Short-term

Concepts, Policies, and Implementation Actions

Action(s)

- ❑ Establish that correcting the county's current addressing problems is a very high priority.

Time frame: Short-term

- ❑ Work with emergency services, various county departments that frequently drive county roads (e.g., building inspectors), and community representatives to identify places in the county that are in need of road signs, directional signage, school zone signs, speed limit signs, and signs to identify canyons. Consider adding names to county numbered roads, as appropriate for clarification.

Time frame: Short-term

- ❑ Update, digitize, and distribute all appropriate county mapping to county emergency services. Work with the Assessor's Office to compile and digitize information regarding the total number of platted lots in county as well as the number of platted lots that are developed.

Time frame: Mid-term

Policy CW 8

New residential development in Las Animas County shall be platted and developed in a manner that ensures emergency services can be optimized.

Action(s)

- ❑ Consider revising subdivision regulations to require that all new subdivisions provide an adequate (based on the county's definition) water supply and/or storage to supplement potential fire protection needs. Require greater water storage requirements in wildfire hazard areas.

Time frame: Short-term

- ❑ Update the county's "Code of the West" publication for guiding new residents on rural lifestyle to include recommendations regarding emergency services.

Time frame: Short-term

County-Wide (CW)

Concept 7. Plan for New School Sites

Policy CW 9

The county shall take a proactive approach to providing new school sites and meeting the demands of growth on the school system.

Action(s)

- ☑ Work with the county school districts and community school boards to identify current areas of need, and areas that are projected to be in need of new schools.

Time frame: Short-term

- ☑ Consider adopting regulations that require new development to dedicate land for future school sites or provide [fees-in-lieu](#) of land dedication.

Time frame: Short-term

Concept 8. Develop More Recreation Opportunities

Policy CW 10

The county shall pursue the formation of a county-wide recreation district to fund facilities and activities for youth, family, and seniors.

Action(s)

- ☑ Continue to support the Colorado Department of Local Affairs in their development of the Las Animas County Parks, Recreation, and Tourism Master Plan.

Time frame: Short-term

- ☑ Work with the City of Trinidad, the school districts, Trinidad State Junior College and the YMCA to expand active recreational programs in the county.

Time frame: Short-term

- ☑ Work with the City of Trinidad, Great Outdoors Colorado, and other to build a regional trail linking Trinidad, Trinidad Lake, and the Upper Purgatoire River communities, and support other regional trail proposals.

Time frame: Mid-term

Concepts, Policies, and Implementation Actions

Concept 9. Protect County Watersheds

Policy CW 11

Watersheds in the county shall be protected from contamination. Watershed water quality will be monitored using existing federal and state laws and standards used by the Colorado Department of Public Health and Environment (CDPHE).

Action(s)

- ☑ Work with the Colorado Oil and Gas Conservation Commission (COGCC) and the Colorado Department of Public Health and Environment (CDPHE) to obtain Las Animas County water quality monitoring reports submitted by the oil and gas industries.

Time frame: Short-term

- ☑ Consider adopting watershed protection regulations to protect groundwater from contamination.

Time frame: Mid-term

Policy CW 12

The county shall work to ensure there is an adequate water supply for agricultural and domestic purposes in the county.

Concept 10. Protect Surface Water

Policy CW 13

Contamination of surface water in the county shall be minimized. Surface water quality will be monitored using existing federal and state laws and standards used by the CDPHE.

Action(s)

ESTABLISHED COMMUNITY AREAS (ECA)

Policy ECA 1

[Established Community Areas](#) in the county include all cities and towns in the county. This includes the incorporated cities and towns of Aguilar, Branson, Cokedale, Kim, Starkville, and Trinidad and the

Established Community Areas (ECA)

unincorporated towns of Hoehne, Primero, and Weston and all other towns in Las Animas County.

Concept 11. Encourage New Growth in Established Community Areas

Policy ECA 2

All new growth and development in Las Animas County shall be encouraged to infill vacant lands in [Established Community Areas](#).

Action(s)

- ❑ Consider adopting regulations that allow county development proposals that fall within an [ECA](#) to be processed on a fast-track schedule (via a streamlined development review process) and to be given review priority.

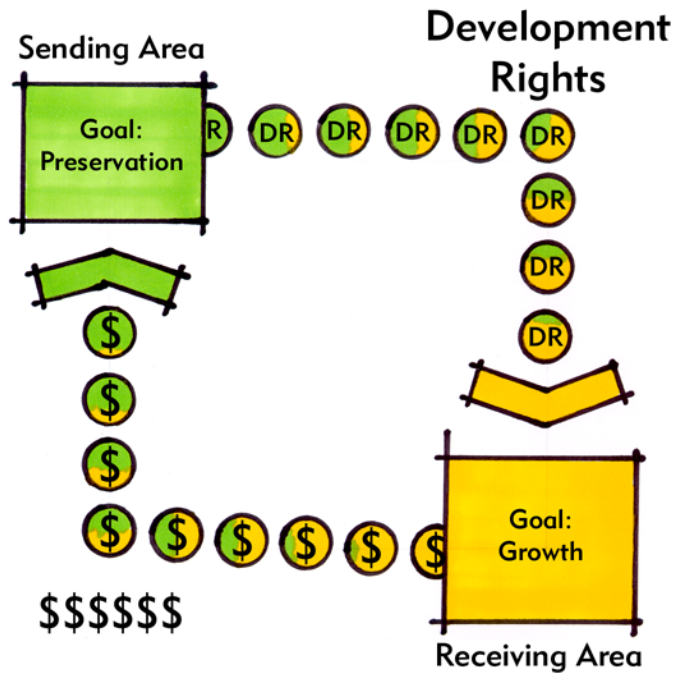
Time frame: Mid-term

- ❑ Develop a [transfer of development rights \(TDR\)](#) (see Figure 4 below) program that allows a property owner to establish their [ECA](#) land as a [receiving area](#) to accept density from an established [sending area](#).

Time frame: Long-term

Concepts, Policies, and Implementation Actions

Figure 4. Transfer of Development Rights



Policy ECA 3

Encourage “cottage industry” and home-based businesses within established communities.

Action(s)

- ☑ Continue to support organizations such as Trinidad-Las Animas County Economic Development, Inc. that foster and promote small business development.

Concept 9. Preserve and Enhance Community Identity and Image

Policy ECA 4

[Established Community Areas](#) that are not in a [CPA](#) shall be involved in the planning and development of their communities and the surrounding areas.

Action(s)

- ☑ County development proposals within a certain radius of the town (to be determined by the county and the town) or proposals that will effect the community’s infrastructure or services will be referred to the community for comment.

Established Community Areas (ECA)

Time frame: Short-term

- ☑ Work with the Towns of Cokedale, Primero, Starkville, Stonewall, Weston and all other interested towns to establish agreements that ensure that growth in and around their communities is consistent with their character.

Time frame: Short-term

Policy ECA 5

Communities in Las Animas County shall maintain their individual identities.

Action(s)

- ☑ Establish a buffer between Trinidad and Hoehne that will provide a distinct separation between the two communities, using zoning, open land conservation, and other land use tools.

Time frame: Mid-term

- ☑ Establish a buffer between other communities in the future, as appropriate, using zoning, open land conservation, and other land use tools.

Time frame: Short-term

Policy ECA 6

Unincorporated towns, except for the Town of Hoehne, shall maintain the current “village center” look and feel with a mix of residential, commercial, and agricultural uses.

Action(s)

- ☑ Consider adoption of design development guidelines for unincorporated towns, allowing a mixing of residential, commercial, industrial, and agricultural uses.

Time frame: Mid-term

- ☑ Work with the Town of Hoehne to develop separate residential, commercial, and industrial zoning districts for its community and [CPA](#).

Time frame: Mid-term

Concepts, Policies, and Implementation Actions

Policy ECA 7

Redevelopment of blighted or under-utilized parcels within established communities shall be encouraged.

Action(s)

- ☐ Explore the possibility of receiving Brownfield Assessment assistance from the Colorado Department of Public Health and Environment (CDPHE).

Time frame: Short-term

- ☐ Work with communities in the county to distribute information from the CDPHE regarding the CDPHE's Voluntary Cleanup Program and certification.

Time frame: Short-term

- ☐ Follow the status of the of the Colorado Brownfield Revolving Loan fund to ensure that the county is aware when sites in the county become available for funding.

Time frame: Short-term

Policy ECA 8

Property maintenance, animal control, noise, and other nuisance programs shall be expanded and enforced in Established Community Areas.

Action(s)

- ☐ Develop strategies to make citizens more knowledgeable of county codes regarding property maintenance, noise, and other nuisances and to make them aware of enforcement procedures.

Time frame: Short-term

- ☐ Budget for a full- or part-time county code enforcement position to enforce property maintenance, animal control, noise control, and other such codes (e.g., predator and weed control).

Time frame: Mid-term

Cooperative Planning Areas (CPA)

- ☑ Coordinate with appropriate state agencies to obtain funding for the enforcement of property maintenance, noise control, and other such codes (e.g. predator and weed control).

Time frame: Mid-term

Concept 10. Promote Tourism in ECAs

Policy ECA 9

Promote tourism development at the Las Animas County Fairgrounds.

Action(s)

- ☑ Continue to work on the Las Animas County Fairgrounds Master Plan and to explore the possibility of building an events center to attract entertainment and tourism revenue.

Time frame: Short-term

COOPERATIVE PLANNING AREAS (CPA)

Policy CPA 1

[Cooperative Planning Areas](#) are areas for potential new growth within the county and exist around the City of Trinidad and the Towns of Aguilar, Hoehne, Branson, and Kim (see the Preferred Plan Map in Chapter 3 for graphic representation.)

Concept 11. Coordinate Planning with CPA Communities

Policy CPA 2

The county shall coordinate its planning activities with towns and cities in [CPA](#) communities. Each [CPA](#) community shall have influence over development within its respective [CPA](#).

Action(s)

- ☑ Coordinate updates of the Las Animas County Master Plan with updates of the City of Trinidad Master Plan.

Time frame: Ongoing

- ☑ Support all incorporated towns in the pursuit of Energy Impact Assistant Grants and other funding to prepare community comprehensive plans.

Time frame: Short-term

Concepts, Policies, and Implementation Actions

- ❑ Establish an intergovernmental agreement with the City of Trinidad to cooperate on land use planning (such as joint development review, transitional zoning density, regional trails and recreation, and regional transportation) and other matters of mutual, regional interest.

Time frame: Short-term

- ❑ Develop [intergovernmental agreements \(IGAs\)](#) with Trinidad, Aguilar, Branson, and Kim and a suitable agreement with the unincorporated town of Hoehne stating that all development applications submitted to the county that fall within the community's [CPA](#) will be referred to the community for review and comment. The county Planning Commission will seriously consider all comments from [CPA](#) communities in making development decisions.

Time frame: Mid-term

- ❑ Work with the [CPA](#) communities to develop subarea plans for their [CPAs](#) that clearly identify and define the community's desired future land use pattern for the [CPA](#) until comprehensive plans can be developed (see action below).

Time frame: Long-term

Concept 12. Encourage Planned, Sensible Growth Patterns in CPAs

Policy CPA 3

[CPAs](#) are divided into development opportunity areas and environmental constraint areas (see the Preferred Plan Map in Chapter 3 for graphic representation). All new development within [CPAs](#) shall be encouraged to occur in development opportunity areas and shall be discouraged from occurring in environmental constraint areas.

Action(s)

- ❑ Consider adopting regulations that allow county development proposals within [CPAs](#) located in development opportunity areas to be processed on a fast-track schedule.

Time frame: Mid-term

Cooperative Planning Areas (CPA)

- ❑ Consider adopting regulations that require all development proposals that fall within or encroach into environmental constraint areas to include an environmentally sensitive areas report with the development application (as defined by the Las Animas County code). (*Note: The intent here is that this report be more intense and thorough than the report that is required for other development proposals.*)

Time frame: Mid-term

- ❑ Develop a [transfer of development rights](#) program (*see Figure 4*) that allows a property owner to establish their [CPA](#) development opportunity areas as a [receiving area](#) to accept density from an established [sending area](#).

Time frame: Long-term

Policy CPA 4

New development in [Cooperative Planning Areas](#) shall occur in development opportunity areas and shall be phased to be contiguous with [Established Community Areas](#).

Action(s)

- ❑ The Planning Commission should consider denying all development proposals within [CPAs](#) that are located in environmental constraint areas.

Time frame: Ongoing

- ❑ The Planning Commission should consider denying all development proposals within [CPAs](#) that are not contiguous with an ECA.

Time frame: Ongoing

- ❑ The Planning Commission should consider denying [urban development](#) proposals that do not fall within an [ECA](#) or a [CPA](#). This can be based on the finding that the proposed development is not in conformance with the Las Animas County Master Plan. (*These all assume the county will adopt a resolution requiring that all development proposals be in conformance with the master plan to gain approval.*)

Time frame: Ongoing

Concepts, Policies, and Implementation Actions

Policy CPA 5

[Flagpole annexations](#) shall be discouraged.

Action(s)

- ☑ Work with the incorporated cities and towns in the county to establish annexation policies that are acceptable to all entities. Strive to include language in the annexation policies that discourage, or do not permit, [flagpole annexations](#).

Time frame: Short-term

Policy CPA 6

Public infrastructure and services shall be extended into [Cooperative Planning Areas](#) from [Established Community Areas](#).

Action(s)

- ☑ Develop a [capital improvements program](#) (CIP) that identifies where within the various [CPAs](#) and when infrastructure should be extended.

Time frame: Mid-term

Concept 13. Encourage New Housing in CPAs

Policy CPA 7

Encourage new residential development in [CPAs](#).

Action(s):

- ☑ Through zoning and other land use authority, provide an adequate supply of both serviced and raw land suitable for residential development in [CPAs](#).

Time frame: Mid-term

Concept 14. Reinforce and Expand Existing Industries in CPAs

Policy CPA 8

Support the expansion of existing business, especially those that pay wages higher than the current county average, and create a more diversified and well-balanced economic base.

Cooperative Planning Areas (CPA)

Policy CPA 9

Promote locally owned businesses.

Policy CPA 10

Attract new industrial park development around the Perry Stokes Airport.

Action(s)

- ☑ Continue to support organizations such as Trinidad–Las Animas County Economic Development, Inc. that foster and encourage existing businesses to remain and expand in the county.

Time frame: Short-term

- ☑ Use economic incentives to retain and expand existing businesses that pay wages higher than the current county average. The economic advantage to the county should be greater than the cost of the incentives.

Time frame: Mid-term

Concept 15. Promote New Industries in CPAs

Policy CPA 11

Create jobs by attracting new industries to Las Animas County.

Action(s)

- ☑ Continue to support organizations such as Trinidad–Las Animas County Economic Development, Inc. that convey a positive image to businesses wishing to locate in Las Animas County.

Time frame: Short-term

- ☑ Through zoning and other land use authority, provide an adequate supply of both serviced and raw land suitable for commercial and industrial development in [Cooperative Planning Areas](#).

Time frame: Mid-term

RURAL RESOURCE AREAS (RRA)

Policy RRA 1

[Rural Resource Areas](#) in the county include all areas outside the [ECAs](#) and the [CPAs](#) that have NOT been identified as environmentally constrained. See the Preferred Plan Map in Chapter 3 for graphic representation.

Concept 19. Encourage Planned, Sensible Growth Patterns in RRAs

Policy RRA 2

[Rural residential](#), agricultural, forestry, and ranching land uses shall be encouraged in [Rural Resource Areas](#). [Urban development](#) shall be discouraged.

Action(s)

- ❑ If the developer decides to pursue a use that is not considered a [rural land use](#), the county planner should recommend denial of the project to the Planning Commission. The Planning Commission should strongly consider denying development proposals in [Rural Resource Areas](#) for land uses that are not considered [rural land uses](#). This can be based on the finding that the proposed development is not in conformance with the Las Animas County Master Plan. *(This assumes the county adopts a resolution requiring that all development proposals be in conformance with the master plan to gain approval.)*

Time frame: Ongoing

- ❑ Create a [Land Preservation Subdivision \(LPS\)](#) incentive for new subdivisions that provides density bonuses in exchange for creative site layouts that preserve agricultural lands, open space, wildlife habitat, sensitive environmental areas, and prominent natural features such as mesas, ridgelines, and bluffs through [cluster development](#).

Time frame: Mid-term

- ❑ Develop a [transfer of development rights](#) program *(please see Figure 4)* that allows a property owner to establish their [RRA](#) land as a [sending area](#) and to then transfer density to an established [receiving area](#) within an [ECA](#) or a [CPA](#).

Time frame: Long-term

Rural Resource Areas (RRA)

Policy RRA 3

The county shall work to reduce wildfire hazards in RRAs.

Action(s)

- ☑ In the development review process, encourage developers to consider wildfire hazard in their site planning.

Time frame: Ongoing

- ☑ The county will work with state agencies and others to prepare wildfire hazard mapping.

Time frame: Short-term

- ☑ Consider adopting defensible space guidelines to reduce wildfire constraints to development.

Time frame: Mid-term

Policy RRA 4

Mining and oil and gas operations shall be permitted in [Rural Resource Areas](#), although impacts shall be mitigated and/or compensated. *Please see Concept 2.*

Policy RRA 4

The county will make efforts to reduce the density of platted subdivisions in [Rural Resource Areas](#).

Action(s)

- ☑ Develop a [transfer of development rights](#) program (*please see Figure 4*) that allows property owners to shift density from existing subdivided lots in [Rural Resource Areas](#) to new subdivisions in [Cooperative Planning Areas](#).

Time frame: Long-term

Concept 20. Preserve Agricultural Lands

Policy RRA 5

Las Animas County shall promote the continuation of responsible agricultural operations, including farming and ranching.

Action(s)

Concepts, Policies, and Implementation Actions

- ❑ Update the county's "Code of the West" publication for guiding new residents on rural lifestyle. Distribute copies to real estate agencies and other locations throughout the county.

Time frame: Short-term

- ❑ Consider expanding and enforcing predator control programs.

Time frame: Short-term

- ❑ Consider expanding noxious weed control programs, and consider subsidizing weed spray for county residents.

Time frame: Short-term

- ❑ Consider adopting a "Right to Farm" resolution stating that residential communities that develop near agricultural or forestry operations will accept and understand the rights and responsibilities of producers, along with the potential impacts that are associated with living near agricultural operations. The resolution should be sensitive to issues associated with industrial, high density livestock operations (e.g. hog or chicken confinement operations), and industrial clear cutting of forests.

Time frame: Mid-term

Policy RRA 6

The county shall preserve rural and agricultural land uses by directing new growth to infill vacant lands in [Established Community Areas](#) and [Cooperative Planning Areas](#).

Action(s)

- ❑ Adopt regulations that allow county development proposals that fall within [ECAs](#) or development opportunity areas of [CPAs](#) (see *Concept 12*) to be processed on a fast-track schedule or given review priority.

Time frame: Mid-term

Policy RRA 7

Las Animas County shall make it more economically feasible for farmers and ranchers to keep their land in production.

Rural Resource Areas (RRA)

Action(s)

- ❑ Establish a permanent Agricultural Advisory Board primarily made up of full-time farmers and members of groups such as the Las Animas County Farm Bureau, Las Animas County Livestock Association and, the Southern Colorado Livestock Association to keep the county informed on agricultural issues. The Agricultural Advisory Board shall develop implementation strategies to protect agricultural land in the county.

Time frame: Mid-term

- ❑ Consider adopting voluntary land-management programs, such as a voluntary agricultural district and conservation easements, with incentives to encourage the conservation of agricultural lands and critical natural resources, such as wetlands and natural drainageways. The voluntary agricultural district is envisioned as working with a package of incentives (e.g., tax incentives, priority lands for transfer of purchasing development rights, and limited development options) to producers who volunteer to participate. In turn, producers might agree to withhold their land from development for a specified period.

Time frame: Mid-term

Concept 21. Reinforce and Expand Existing Industries

Policy RRA 8

Continue to support existing industries such as coal-bed methane extraction to promote high employment in oil and gas and other industries in Rural Resources Areas.

Action(s)

- ❑ Continue to support organizations such as Trinidad–Las Animas County Economic Development, Inc. that foster and encourage existing businesses to remain and expand in the county.

Time frame: Short-term

- ❑ Work with oil and gas industry representatives to determine existing and projected needs.

Time frame: Short-term

Concepts, Policies, and Implementation Actions

Concept 22. Mitigate and/or Compensate Oil and Gas Industry Impacts

Policy RRA 9

Oil and gas uses will be permitted in accordance with state law, but mitigation and/or compensation of undesirable impacts to the natural environment and the community as well as plans for viable potential reuse of the land shall be required, consistent with the county's land use regulatory authority.

Action(s)

- ☐ Consider adopting conditional use permit criteria (suitability, compatibility, access, etc.) and other appropriate regulations for oil and gas operations.

Time frame: Short-term

- ☐ Consider adopting a review fee to fund county staff enforcement of oil and gas conditional use permit conditions.

Time frame: Short-term

- ☐ Create incentives to reduce noise of oil and gas operations (e.g., fuel cells to run pumps).

Time frame: Mid-term

Concept 23. Mitigate and/or Compensate other High-Impact, Region-Serving Uses

Policy RRA 10

[High-impact region-serving](#) uses will be permitted in accordance with state law, but mitigation and/or compensation of undesirable impacts to the natural environment and the community as well as plans for viable potential reuse of the land shall be required

Action(s)

- ☐ Existing and future mining operations shall be required to reclaim lands during and after mining in an effort to create wildlife habitat, restore vegetation, and contribute to flood storage.

Time frame: Ongoing

- ☐ Establish appropriate location and development criteria for power transmission lines, landfills, waste processing, and other similar potentially high-impact regional uses so that any associated environmental and health risks are minimized.

Rural Resource Areas (RRA)

Time frame: Short-term

- ❑ Establish appropriate location and development criteria for microwave towers and other telecommunication and satellite devices so that any associated visual impacts and health risks are minimized.

Time frame: Short-term

Concepts, Policies, and Implementation Actions

- ☐ Strengthen mining and other resource extraction regulations to require the mitigation of impacts to the natural environment and surrounding community.

Time frame: Mid-term

Concept 16. Promote Tourism in RRAs

Policy RRA 11

The county shall promote heritage tourism development along the Highway of Legends (SH 12).

Action(s)

- Continue to support the development of a tourist passenger train service between Jansen and Stonewall.

Time frame: Short-term

- ☐ Continue to support the Colorado Department of Local Affairs in their development of the Las Animas County Parks, Recreation, and Tourism Master Plan.

Time frame: Short-term

- ☐ Continue to support organizations such as Trinidad–Las Animas County Economic Development, Inc. that promote tourism development.

Time frame: Short-term

RURAL CONSERVATION AREAS (RCA)

Policy RCA 1

[Rural Conservation Areas](#) in the county include all areas outside of the [ECAs](#) and [CPAs](#) that have been identified as environmentally constrained. See the Preferred Plan Map in Chapter 3 for graphic representation.

Rural Conservation Areas (RCA)

Concept 17. Allow Only Conservation-Based Activity in RCAs

Policy RCA 2

Development in [Rural Conservation Areas](#) shall be discouraged. When development is unavoidable, the county shall encourage environmentally sensitive development practice.

Action(s)

- ❑ The Planning Commission should strongly consider denying development proposals in [Rural Conservation Areas](#) that are not sensitive to the natural environment. This can be based on the finding that the proposed development is not in conformance with the Las Animas County Master Plan. (*This assumes the county adopts a resolution requiring that all development proposals be in conformance with the master plan to gain approval.*)

Time frame: Ongoing

- ❑ Send large [RCA](#) landowners information packets informing them that their land is located in a [Rural Conservation Areas](#), explaining what that means and why protection of [RCA](#) land is important to the county. Information regarding development options that are sensitive to various environmental conditions ([LPSs](#) and [TDRs](#)) should also be provided.

Time frame: Short-term

- ❑ Create/promote a [Land Preservation Subdivision \(LPS\)](#) incentive for new subdivisions that provides density bonuses in exchange for creative site layouts that preserve agricultural lands, open space, wildlife habitat, sensitive environmental areas, and prominent natural features such as mesas, ridgelines, and bluffs through [cluster development](#).

Time frame: Mid-term

- ❑ Consider adopting regulations that require all development proposals that fall within or encroach into an [RCA](#) to include an environmentally sensitive areas report with the development application (as defined by the Las Animas County code). (*Again, the intent here is that this report be more intense and thorough than the report that is required for other development proposals.*)

Time frame: Mid-term

Concepts, Policies, and Implementation Actions

- ❑ Develop a [transfer of development rights](#) program (see Figure 4) that allows a property owner to establish their [RCA](#) land as a [sending area](#) and to then transfer density to an established [receiving area](#) within an [ECA](#) or a [CPA](#).

Time frame: Long-term

- ❑ Utilize actions in Policy RRA 3 to reduce wildfire hazards in RCAs.

Time frame: See time frames that relate to Policy RRA 3 actions.

- ❑ Utilize actions in Policy RRA 10 to reduce oil and gas impacts in RCAs.

Time frame: Short-term

Concept 18. Minimize the Impact of Approved Development in RCAs

Policy RCA 3

The county shall make efforts to reduce the density of platted subdivisions in [Rural Conservation Areas](#).

Action(s)

- ❑ Develop a [transfer of development rights](#) program (see Figure 4) that allows property owners to shift density from existing subdivided lots in [Rural Conservation Areas](#) to new subdivisions in [Cooperative Planning Areas](#).

Time frame: Long-term

Policy RCA 4

Existing [rural residential](#) subdivisions in [Rural Conservation Areas](#) are encouraged to develop with sensitivity to environmental conditions.

Action(s)

- ❑ Conduct an inventory of all platted lots in the county to identify those that are built-out (have received a certificate of occupancy) and those that are not yet developed.

Time frame: Long-term

- ❑ Send all owners of vacant lots in [RCAs](#) information packets informing them that their land is located in a [Rural](#)

Rural Conservation Areas (RCA)

[Conservation Area](#), explaining what that means and why protection of [RCA](#) land is important to the county. Information regarding development options that are sensitive to various environmental conditions should also be provided.

Time frame: Mid-term

Concept 19. Preserve Open Lands in RCAs

Policy RCA 5

New subdivisions and development in the county shall consider and be sensitive to the natural environment.

Action(s)

- ☑ Consider revising zoning and subdivision regulations to include development of site design standards (e.g., [cluster](#) provision, tree/vegetation protection, stream corridor and wetland setbacks, and ridgeline protection standards). Resource mapping of the development site should occur early in the design process so the undeveloped areas can be used to protect the most critical parts of the development site.

Time frame: Mid-term

Policy RCA 6

Las Animas County will provide and encourage alternatives to the traditional 35-acre subdivision.

Action(s)

- ☑ Create a [Land Preservation Subdivision \(LPS\)](#) incentive for new subdivisions that provides density bonuses in exchange for creative site layouts that preserve agricultural lands, open space, wildlife habitat, sensitive environmental areas, and prominent natural features such as mesas, ridgelines, and bluffs through [cluster development](#).

Time frame: Mid-term

- ☑ Identify large landowners in the county and send them information about the [LPS](#) incentive so they are aware of the option.

Time frame: Mid-term

Concept 20. Protect Prime Agricultural Lands

Policy RCA 7

The development of prime agricultural lands shall be discouraged. When development is unavoidable, encourage land conservation techniques.

Action(s)

- ☐ Work with the Natural Resource Conservation Service (NRCS) to clarify lands identified as prime agricultural lands within the county. Review collected data with the Agricultural Advisory Board (see Policy RRA 7.)

Time frame: Short-term

- ☐ Adopt voluntary land-management programs with incentives to encourage the conservation of prime agricultural lands (see Policy RRA 7.)

Time frame: Short-term

- ☐ Work with the Agricultural Advisory Board (see Policy RRA 7) to develop implementation strategies to preserve and protect prime agricultural land in the county.

Time frame: Short-term

Concept 29. Protect Wildlife in RCAs

Policy RCA 8

Wildlife, one of the great natural resources in Las Animas County, shall be protected and preserved.

Action(s)

- ☐ Areas that have been identified as “high impact” or “very high impact” by Division of Wildlife (see page 66 ff. and the Environmental Constraints Map) should be given special consideration in the development review process. Significant effort should be made to discourage development in these areas **beyond** the promotion of [LPSs](#) and [TDRs](#).

Time frame: Ongoing

Rural Conservation Areas (RCA)

Concept 21. Protect Scenic Views in RCAs

Policy RCA 9

Las Animas County shall make efforts to preserve scenic views of the Culebra Range and the Sangre de Cristo Mountains.

Action(s)

- ☐ Consider establishing minimum building setbacks along State Highways 12, 109, and 389, U.S. Highways 160 and 350, and Interstate Highway 25 to protect scenic views.

Time frame: Short-term

- ☐ Identify prime views along State Highways 12, 109, and 389, U.S. Highways 160 and 350, and Interstate Highway 25 and develop view corridor guidelines to protect these views.

Time frame: Mid-term

Concept 22. Protect Scenic Ridgelines in RCAs

Policy RCA 10

Las Animas County shall make efforts to protect ridgelines visible from major roadways, including State Highways 12, 109, and 389, U.S. Highways 160 and 350, and Interstate Highway 25 (I-25).

Action(s)

- ☐ Consider adopting regulations to protect ridgelines from development.

Time frame: Mid-term

Concept 23. Regulate Development in Environmentally Constrained Areas within RCAs

Policy RCA 11

Development in environmentally constrained or hazardous areas shall be regulated and discouraged whenever possible.

Action(s)

- ☐ Consider adopting regulations that restrict land development in floodplains and wildlife corridors, on steep slopes, and in areas with land subsidence and wildfire hazards.

Concepts, Policies, and Implementation Actions

Time frame: Mid-term



APPENDIX A

LISTING OF ISSUES BY TOWN

INTRODUCTION

In October 2000, community meetings were held in the Towns of Hoehne, Branson, Aguilar, Primero, and Kim. At each meeting, citizens were asked to provide information regarding the various issues they felt their community was facing and to then identify the issues they felt were of the highest priority. The following is a list of issues identified at these meeting.

TOWN OF HOEHNE

High Priority Issues

Water

Lack of water supply. The city and the county need to work together to hold water rights.

Loss of Agricultural Land

The loss of agricultural lands and agricultural productivity. The need for a “right to farm” resolution. Concern regarding what is allowed in the county’s Ranchette zoning district. Should consider the 35-acre subdivision statute and the Land Preservation Subdivision. Also concern about mountain development.

Fire Protection

Lack of fire protection. Currently have a strictly volunteer program set up, not an official district. Two “districts” cover the west side of the county. \$300,000–350,000 spent on two recent fires.

Listing of Issues by Town

Animal Control

There is no animal control for the county. County residents are not allowed to take animals to Trinidad's shelter.

Medium Priority Issues

County Roads

County roads are in poor condition (1,700 miles of road). At current rate, it would take 24 years to gravel all the roads in the county.

Commercial and Industrial

Need to establish a commercial and/or industrial zoning district.

Annexation

Concerns with the City of Trinidad's annexation policies and practices. What can the master plan do?

Special Use Conditions

Need conditions for special use permits for gas compressors and other special uses.

Tourism

Promote for economic development.

Junk Control

Need for county junk control ordinance.

Lower Priority Issues

Airport

Potential economic resource.

Prison

Original contractor was fired, should bring in about 150 jobs. How will this impact Hoehne?

School Sites

Begin planning for new school sites.

Town of Hoehne

Historic Preservation

Would like to see preservation of historic elements. (Existing cemeteries are not fenced in, trampled by cows.)

Recreation

Most recreation is currently in Trinidad. The YMCA and the county recreation program currently sponsor most recreation. The county and CSU are currently conducting a recreation study and are considering establishing a special district to supply the whole county.

Telecommunications

Lack of telecommunication services.

Emergency Services

Dispatch problems (local dispatch calls are going to Pueblo) and poor response times for ambulance.

Law Enforcement

Law enforcement coverage is low (officers have to drive 60 miles to get to the scene).

Game Preservation

Need for game preservation.

Air Quality

Concern about loss of air quality as population continues to grow.

Mosquito Control

Need for mosquito control.

Quality of Life

Want to see rural lifestyle and quality of life preserved.

Listing of Issues by Town

TOWN OF BRANSON

High Priority Issues

Emergency Services

Lack of emergency services (1975 ambulance, no training). Although the town has an ambulance, they only have First Responders who cannot transport patients unless there is an EMT on board.

County Roads

Lack of road maintenance and equipment. (They are removing the gravel with the plows.)

Utility Lines

Overhead utility lines are a health concern and an aesthetic concern.

Recreation

County fair is a big event. County will provide almost \$20,000 in 2001 for fair. Potential events center, want it funded without taxes. Explore possibility of partnership between school and county.

Medium Priority Issues

Economic Development

There is a need for industry and rural economic development. (There has been a decline in the number of students, currently no kindergartners in the school.) Ideas: Cedar (there is an abundance of cedar in the area) and wind power and/or other alternative sources of energy.

Historic Preservation

Need to preserve historic elements, e.g., the Santa Fe Trail.

Government Intervention

There is also, however, a concern that the government will come in and control and/or regulate once historic elements are identified.

Predator Control

Problems with coyotes, mountain lions and bears. Can trap for 30 days/year. County has predator control but not in the canyons.

Town of Branson

Noxious Weeds

Need noxious weed control.

Conservation Easements

Not in favor of conservation easements.

Water

Lack of water supply. Branson is currently fed by six springs, excellent quality.

Lower Priority Issues

Taxes

Will eastern property taxes be affected by western growth?

Law Enforcement

Lack of law enforcement. "Cannot get response" from law enforcement.

Fire

Fire protection is lacking. No district, only volunteer.

Health Care

Need rural health care facility. Potential for a needs study.

Telecommunications

Currently no fiber optics. In one year will have access.

CSU

County Extension and 4H very valued.

Equity Issues

There is a concern that the eastern side of county gets the "leftovers."

Listing of Issues by Town

TOWN OF AGUILAR

High Priority Issues

Energy Company Impacts

There is concern about the impacts of production on water quality, the impacts of drilling rigs on roads and cattle guards, and the impacts of oil and gas drilling and lines on the land.

County Roads

County roads are in poor shape. Many need to be graveled, paved or maintained. Grade is also an issue. (Better road from Aguilar to Weston, Cordova Pass Road needs improvements.) Need to better educate county employees regarding road maintenance.

Fire Protection

Lack of fire protection. Substation location is an issue as well as funding and water sources. Currently not a district but the county wants them to form a district. Concerns about increased taxation with the formation of a district. Wildfire mitigation should be addressed. Suggestion: Provide 3,000-gallon tank with new subdivision to supply water for water replacement.

Noxious Weeds

Need noxious weed control.

Medium Priority Issues

Heritage Signage

Use historic names for county roads.

Communication Improvement

Communication in the county needs improvement at many levels.

Predator Control

Need predator control.

Lower Priority Issues

Private Roads

Energy companies are currently using private roads and not paying for it.

Town of Primero

County Mapping

There are county mapping problems.

Subdivision Roads

Investigate the possibility of regulating new subdivision roads. County can regulate access to new 35-acre subdivisions based on safety issues.

Telecommunications

Lack of telecommunication services.

Emergency Services

Lack of emergency response (the system fails). County budget has eliminated ambulance service in rural areas.

Signage

There is a need for signage in the rural areas of the county.

Dogs at Large

Packs of stray dogs roam the town.

Commissioners

Need commissioner more willing to work with rural residents.

Employment

Energy companies are number one employer in the county (~450 jobs). Should sustain for the next 40–50 years. Current costs to government far exceed the benefits.

TOWN OF PRIMERO

High Priority Issues

Oil and Gas Industry

Need to centralize locations of oil and gas development. Negative noise impacts from oil pumps due to density. County needs to consider alternative energy supply, e.g., solar and electric, to reduce noise (fuel cells). Noise standards too lenient in rural areas, enforcement also a problem. Need wells marked, also pipelines with phone numbers (24-hour). Provide “newcomers” information on

Listing of Issues by Town

water wells. Oil and gas conflicts in new subdivisions. County needs to define where oil wells should be located—near roads. Concern regarding underground coal fires. Need to monitor amount of water needed for oil and gas industry. Need better public input process for oil and gas issues at county level. Water is being re-injected into the ground, which means contamination potential. De-watering coal seams and aquifers. Extracted water is treated as waste. Same-source wells are an issue. Control by COGCC limits what county can do. Citizens request special workshops.

County Roads

Roads need to conform and be maintained to county standards. Roads are deteriorating from trucks and watering of roads. County needs road impact fees for oil and gas industry impacts. Need performance bonds, reclamation guarantees. Overweight trucks are using bridges that they shouldn't be using. Trucks are speeding and there is a lack of speed limit signs. There is dust pollution from the dirt roads. Need to clarify county vs. private roads—companies need to pay for use of private roads.

County Funding

County needs to be accountable for the budget. Target county funding to high impact areas.

Emergency Services

One- to two-hour response times for fire department (volunteer). Need improved telecommunications—a better communication system, better 911 service, and names on roads. An emergency response plan needed locally and needs to be well publicized. Law enforcement response time is also poor. Need fire department training or other trained personnel.

State Highway 12

Need to improve SH 12. Safety concern with rock, debris, narrowness, and speed on SH 12.

Medium Priority Issues

Noxious Weeds

Need noxious weed control.

Town of Primero

Junk Control

Need junk control ordinance.

Open Space

Need for open space and trails. Look into open space dedication and “cluster” subdivisions.

Wildlife

Need protection of wildlife resources.

Economic Development

Locally owned, economic development.

Lower Priority Issues

Predator Control

Predator control a problem on ranches.

Transmission Lines

Impact of electric transmission lines, both aesthetic and electric and magnetic field issues.

Tourism

Train renovation, promote tourism

Historic Preservation

Keep local archaeological artifacts in county. Expose Hispanic cultural preservation.

Code of the West

Need “code of the west” or similar guide to rural living.

Obsolete Subdivisions

[Obsolete subdivisions](#) should be eliminated if possible.

Listing of Issues by Town

TOWN OF KIM

High Priority Issues

Emergency Services

Volunteers are fighting on government land. Volunteer fire departments need help from county.

County Roads

There is a county road equipment and gravel shortage.

Predator Control

Need for predator control. The nearby army base has only exacerbated the problem.

Medium Priority Issues

Communication

Lack of communication is an issue. There is a lack of compatibility.

Playground

The school playground is in need of an upgrade.

Brush Fires

Brush fires are a problem. There were 35 this summer due to drought.

Lower Priority Issues

Water

There is a lack of water.

Noxious Weeds

Need noxious weed control.

Events Center

Would like to see an events center that is both affordable and available to locals.

APPENDIX B

PLAN OPTIONS SURVEY

INTRODUCTION

In January of 2001, another round of community meetings were held in the towns of Hoehne, Branson, Aguilar, Primero, and Kim. Various plan options regarding land use, growth management, infrastructure and services, and the environment were presented at these meetings. Citizens were then asked to fill out a “Plan Options” questionnaire to indicate which options they were in favor of and which options they were against.

THE PLAN OPTIONS QUESTIONNAIRE

The following is a copy of the Plan Options Questionnaire that was distributed at the January community meetings, and it includes the results of the survey as well.

RESULTS OF THE PLAN OPTIONS QUESTIONNAIRE

County-wide, 107 questionnaires were received. Results are shown below.



LAS ANIMAS COUNTY MASTER PLAN OPTIONS QUESTIONNAIRE

Please complete the following questionnaire concerning the Las Animas County Master Plan Options and drop in the box or deliver to: the Las Animas County Planning and Land Use Office, 200 East First Street, Room 104, Trinidad, CO. 81082 no later than January 31, 2001. Your response will assist the preparation of the Las Animas County Master Plan. Additional mapping and information concerning the Las Animas County Master Plan is on display at the Las Animas County Planning and Land Use Office.

Plan Options Survey

PROPOSED PLANNING AREAS:

- 1) Established Communities: The incorporated cities and towns of Aguilar, Branson, Cokedale, Kim, Starkville, and Trinidad, and all unincorporated towns. Unincorporated towns include Hoehne, Primero, and all other towns in Las Animas County.
- 2) Cooperative Planning Areas: Areas for potential new growth surrounding an established community area. Cooperative planning areas are divided into development opportunity areas and environmental constraint areas.
- 3) Rural Resource Areas: Areas outside of established community areas, cooperative planning areas and rural conservation areas that support agricultural activities, large-lot residential subdivisions, mining, oil and gas operations, and other rural land uses.
- 4) Rural Conservation Areas: Federal land, public land and areas constrained by steep slopes, floodplains, land subsidence, water bodies, major wetlands, floodplains, and/or high or very high potential wildlife impacts.

PLEASE CHECK EITHER "Yes" OR "No" FOR EACH OF THE FOLLOWING STATEMENTS:

County-Wide Survey Results	Number			Percentage	
	Yes	No	Total	Yes	No
General: County-Wide					
Establish four planning areas (described above) within Las Animas County.	88	13	101	87.1	12.9
Update zoning and subdivision codes to address development issues within Las Animas County.	92	10	102	90.2	9.8
Keep the status quo (no planning areas, no code updates).	18	84	102	17.6	82.4
Established Communities					
Encourage all new development to "infill" within established communities.	68	34	102	66.7	33.3
Encourage only new residential development to "infill" within established communities.	31	68	99	31.3	68.7
Create separate residential, commercial and industrial zoning districts in unincorporated towns.	51	51	102	50.0	50.0
Retain the existing "village center" character of unincorporated towns, allowing mix of residential, commercial, industrial and agricultural uses.	63	32	95	66.3	33.7
Maintain county roads in a graded gravel condition within unincorporated towns.	85	16	101	84.2	15.8
Improve county roads to a paved condition within unincorporated towns.	46	55	101	45.5	54.5
Encourage "cottage industry" and home-based businesses within established communities.	77	23	100	77.0	23.0
Encourage redevelopment of blighted or under-utilized parcels within established communities.	81	14	95	85.3	14.7
Enforce property maintenance, animal control, noise and other nuisance codes.	73	22	95	76.8	23.2
Promote fire protection, EMT training programs to improve emergency service coverage.	92	7	99	92.9	7.1
Update county mapping, street naming and addressing to improve emergency response capabilities.	95	4	99	96.0	4.0
Prepare a county emergency preparedness plan that includes response strategies, e.g. "reverse 911".	88	9	97	90.7	9.3

Results of the Plan Options Questionnaire

County-Wide Survey Results	Number			Percentage	
	Yes	No	Total	Yes	No
Form new fire protection districts and fund substations and equipment.	78	19	97	80.4	19.6
Form a recreation district and fund facilities and activities for youth, families, and seniors.	58	38	96	60.4	39.6
Cooperative Planning Areas					
Establish a cooperative planning area around Trinidad.	87	9	96	90.6	9.4
Establish a cooperative planning area around Aguilar.	79	16	95	83.2	16.8
Establish a cooperative planning area around all other <i>incorporated</i> communities.	58	34	92	63.0	37.0
Establish a cooperative planning area around Hoehne.	72	22	94	76.6	23.4
Establish a cooperative planning area around all other <i>unincorporated</i> communities.	44	49	93	47.3	52.7
Adopt agreement between Las Animas County and each community to coordinate land use planning.	79	14	93	84.9	15.1
Direct all new development to opportunity areas within a cooperative planning area.	61	34	95	64.2	35.8
Direct only new commercial and industrial development to a cooperative planning area.	41	51	92	44.6	55.4
Maintain county roads in a graded gravel condition in cooperative planning areas.	87	19	103	84.5	18.4
Improve county roads to a paved condition in cooperative planning areas.	43	57	102	42.2	55.9
Prioritize road improvements to occur first in cooperative planning areas, as development incentive.	43	54	99	43.4	54.5
Require new growth in cooperative planning areas to “pay its own way”, with no incentives.	60	42	102	58.8	41.2
Build an events center at the County Fairgrounds to attract entertainment and tourism revenue.	57	42	98	58.2	42.9
Create jobs by attracting new agricultural and rail industries, e.g. cedar packaging and shipping.	82	12	94	87.2	12.8
Create jobs by attracting new industrial park development around the Perry Stokes Airport.	69	33	102	67.6	32.4
Rural Resource Areas					
Adopt a “right to farm” resolution to promote viability of agricultural economy.	96	5	101	95.0	5.0
Expand predator control and noxious weed control programs.	80	21	101	79.2	20.8
Develop “code of the west” publication for guiding new residents on rural lifestyle.	83	21	104	79.8	20.2
Create a “land preservation subdivision” incentive for new subdivisions that “clusters” rural residential development to preserve prime agricultural land and protect natural resources.	89	16	105	84.8	15.2
Adopt a “zero sum” vacant lot policy, placing a moratorium on any new subdivision lots in rural resource areas until existing lots are either built upon, consolidated or vacated.	47	53	100	47.0	53.0
Adopt regulation requiring water supply, storage to supplement fire protection needs.	92	10	102	90.2	9.8
Support oil and gas operations as key component to county economy.	54	43	97	55.7	44.3
Create incentives to reduce noise of oil and gas operations, e.g. fuel cells to run pumps.	84	18	102	82.4	17.6
Adopt special use permit criteria (suitability, compatibility, access, etc.) for oil and gas operations.	83	21	104	79.8	20.2

Plan Options Survey

County-Wide Survey Results	Number			Percentage	
	Yes	No	Total	Yes	No
Adopt a review fee to fund county staff enforcement of oil and gas special use permit conditions.	74	27	101	73.3	26.7
Adopt a road impact fee for all new oil and gas permits to fund road and bridge improvements.	90	12	102	88.2	11.8
Rural Conservation Areas					
Promote heritage tourism development along the Highway of Legends (SH 12).	80	21	101	79.2	20.8
Build a regional trail linking Trinidad, Trinidad Lake, and Upper Purgatoire River communities.	67	31	98	68.4	31.6
Develop a tourist passenger train service between Jansen and Stonewall.	65	30	95	68.4	31.6
Create incentives to protect adobe structures and other historic Hispanic cultural landscape elements.	74	25	99	74.7	25.3
Adopt regulations to protect adobe structures and other historic Hispanic cultural landscape elements.	54	43	97	55.7	44.3
Establish a minimum building setback along SH 12 and I-25 to protect scenic views.	76	26	102	74.5	25.5
Adopt regulations to protect ridgelines from development.	71	31	102	69.6	30.4
Adopt watershed protection regulations to protect groundwater from contamination.	100	6	106	94.3	5.7
Adopt regulations that restrict land development in floodplains and wildlife corridors, on steep slopes, and in areas with land subsidence and wildfire hazards.	90	13	103	87.4	12.6

APPENDIX C

GLOSSARY OF PLANNING TERMS

Adequate public facilities: Facilities and services (including water and sewer systems, fire protection, and roads) that are available and have the capacity to serve new development without reducing levels of service below established minimum standards. Adequate public facilities requirements are a means of preventing premature development in remote areas where major system facilities are inadequate or of controlling the pace of development in areas where facilities are congested.

Capital expansion fees: One-time fees paid by new development for the impact of that development on public facilities (e.g., [fees-in-lieu](#) of school and park land dedication).

Capital improvements program: A schedule and budget for future capital improvements (building or acquisition projects) for roads, utilities, and other capital facilities, to be carried out over a specified period of time.

Cluster; cluster development: Cluster development consists of a development design that concentrates buildings on a portion or portions of the site to leave the remainder undeveloped and used for agriculture, open space, and/or natural resource protection.

Cooperative Planning Area (CPA): An area adjacent to a city or town that is identified for future urban growth and/or an area where all county development proposals received in that area are referred to the adjacent city or town for review and comment. The actual function of the CPA shall be established in the individual town or city's [IGAs](#) with the county. CPAs are divided into development opportunity areas and environmental constraint areas.

Glossary of Planning Terms

Cultural resource: A site or structure that is part of the area's cultural heritage, that is, that typifies a particular stage of human activity in the area. Cultural resources include archeological sites, historic buildings and sites, and undisturbed natural sites that have historic or prehistoric associations, including those with paleontological (fossil) specimens.

Established Community Area (ECA): All incorporated cities and towns and all unincorporated towns within Las Animas County. Incorporated cities and towns include Aguilar, Branson, Cokedale, Kim, Starkville, and Trinidad. Unincorporated towns include Hoehne, Primero, Weston, and all other towns in Las Animas County.

Fee-in-lieu: A fee paid instead of making a land dedication, capital improvement, or other requirement and equivalent to that requirement. An example is a fee-in-lieu of a school site dedication as part of a subdivision approval.

Flagpole Annexation: Flagpole annexations use roads and other narrow strips of land to establish a linkage to the area being annexed. This allows development to occur that otherwise would not be approved by the county, and puts municipal development in places that often split communities, compromises the fabric of neighborhoods and can disenfranchise voters.

High-impact region-serving uses: High-impact region-serving uses include mining, resource extraction, transmission lines, landfills, waste processing, microwave towers, telecommunication and satellite devices and other similar potentially high-impact regional uses.

Intergovernmental agreement (IGA): A contractual agreement between the county and another governmental entity. IGAs with municipalities are the county's primary means of achieving coordinated planning for the areas adjacent to town limits. The agreements define appropriate urban areas (see Cooperative Planning Areas above) and establish standards and procedures for development in these areas.

Land Preservation Subdivision (LPS): An alternative to the traditional 35-acre subdivision. The LPS provides an incentive to the developer of new subdivisions by providing density bonuses in

Glossary of Planning Terms

exchange for creative site layouts that preserve agricultural lands, open space, wildlife habitat, sensitive environmental areas, and prominent natural features such as mesas, ridgelines, and bluffs through cluster development.

Glossary of Planning Terms

Obsolete subdivision: An out-of-date, substandard platted lot.

Receiving area: See [transfer of development rights](#) below.

Rural land uses: Rural land uses include [rural residential](#), agricultural, ranching, forestry, mining, and oil and gas operation land uses.

Rural Conservation Area (RCA): RCAs include federal land, public land, areas constrained by steep slopes, floodplains, land subsidence, water bodies, major wetlands, floodplains, and/or areas that if developed would have a “high impact” or “very high impact” on wildlife rating from the Division of Wildlife (see page 66 ff.).

Rural residential land uses: Rural residential land uses include large-lot subdivisions (minimum lot size of 5 acres), cluster development, and Land Preservation Subdivisions ([LPSs](#)). (Note: Cluster development and [LPSs](#) are preferred and encouraged by the county over traditional large-lot subdivisions.)

Rural Resource Area (RRA): Rural Resource Areas in the county include all areas outside the [ECAs](#) and the [CPAs](#) that have *not* been identified as environmentally constrained. RRAs support agricultural activities, large-lot residential subdivisions, mining, oil and gas operations, and other [rural land uses](#).

Sending area: See [transfer of development rights](#) below.

Transfer of development rights (TDR): Removal of the right to develop or build (usually described in number of dwelling units per acre) from one property (the sending area) and transfer of the right to a suitable property (the receiving area) in order to preserve open space, agricultural land, and/or natural resources on the first property. The value of development rights is commonly based on market value of land. See Figure 4 for graphic.

Urban development: High-density development or any other development that is associated with cities or towns. Any development that requires public services and facilities.

APPENDIX D

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ADOPTION RESOLUTION