

# REGIONAL PARKS, RECREATION, OPEN SPACE & TRAILS MASTER PLAN



PREPARED FOR ARCHULETA COUNTY, COLORADO  
PREPARED BY GREENWAYS INCORPORATED & THE GREENWAY TEAM



FALL 2007



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**ARCHULETA COUNTY:** County road 500 along the San Juan River



# 1. INTRODUCTION AND OVERVIEW

Chapter Outline:

A Overview

B Planning Area

C Methodology and Process

D Project Partners

E Document Description

## A. PROJECT PURPOSE

Archuleta County received a grant from Great Outdoors Colorado to prepare this Regional Parks, Recreation, Open Space and Trails Master Plan. This Master Plan incorporates existing and ongoing town and county planning efforts and other parks, trails, open space and recreation plans, and suggests implementation strategies and short-term and long-term goals. This Plan will be adopted by the local government agencies and used as a tool to help guide development in order to create a sustainable park and trail system and ensure the quality of life in Archuleta County for residents and visitors alike.

To complete this Plan, Archuleta County commissioned Greenways Incorporated of Durham, North Carolina as the prime contractor. Joining the Greenways Inc. team is The Greenway Team, of Littleton, Colorado and the National Park Service Rivers, Trails and Conservation Assistance Program, Denver, Colorado. Together, this team has worked with a specially appointed Technical Review Committee, the Archuleta County Planning Commission, the Archuleta County Board of Commissioners, the School District 50, Joint, and the Pagosa Springs Town Council to develop the recommendations for this Plan.

## B. PLANNING AREA

This Regional Parks, Recreation, Open Space and Trails Master Plan takes into consideration the entire planning jurisdiction of Archuleta County, approximately 1,355 square miles in total size. Of this, approximately one-half of the planning area is currently under federal ownership and management. Another third of the planning area is owned and managed by the Southern Ute Indian Tribe. The remaining third is under private ownership and contains local government publicly owned lands. The major focus and recommendations of this Plan are oriented toward the third of the planning area that is under private and local government ownership and management. The Plan does offer recommendations and guidance to federal agencies and the Southern Ute Tribal Council, but these are merely suggested strategies that will optimize resource conservation and public access management.



The planning process utilized a participatory method involving residents, a specially constituted Technical Review Committee, public open house meetings, and an Internet-based public opinion survey.

### **C. METHODOLOGY AND PROCESS**

The County and consultant utilized a participatory planning methodology that involved residents, a specially constituted Technical Review Committee, public open house meetings, and an Internet-based public opinion survey. Geographic Information System (GIS) mapping was used to evaluate current natural resources, demographics, trends and needs. Field investigations were undertaken to determine the extent and quality of existing parks, trails and open space resources. Prior planning efforts were reviewed and current laws and regulations were studied to understand the framework for conserving greenspace and developing facilities for public access and use. The consultants generated a series of draft plans and conducted public review to solicit feedback. All completed work was posted to Internet web sites so that residents could download, print and review draft and final plans. Finally, the consultant made presentations of draft and final plans to the Archuleta Planning Commission, Board of Commissioners, School District 50, Joint, and Pagosa Springs Town Council.

### **D. PROJECT PARTNERS**

Archuleta County and the Greenways Incorporated team have made significant efforts to involve a wide range of residents, landowners, stakeholders, agencies and organizations in the preparation of this Plan. Project partners include the Town of Pagosa Springs, Archuleta County, Archuleta School District 50, Joint, National Forest Service, Bureau of Land Management, Archuleta Economic Development Association, Pagosa Area Chamber of Commerce, Colorado State Parks, the Southern Ute Indian Tribe, the Southwest Land Alliance, parks and trails user groups, area property owners associations, developers, landowners and the general public. The planning process has been participatory and has provided opportunity for residents to be involved with formulating key recommendations of the Plan.

## E. DOCUMENT DESCRIPTION

This Plan document includes the following major sections:

- An Executive Summary that provides key findings and recommendations of the Plan.
- An Introduction and Overview that describes the purpose, planning methodology and project partners involved in preparing the Plan.
- Inventory of Existing Conditions that profiles prior planning efforts, current location and range of parks, trails and open space and a summary of field investigations.
- Needs Assessment which examines current demographics trends, and markets for parks, open space and trails and defines a level of service for the County.
- Regional System of recommended parks, open space and trails, defining a framework and roster of projects for the County and its partners.
- Operations and Management program that offers recommendations for how the County will care for the different resources and facilities that are developed over time.
- Implementation program that outlines priorities and phasing, budgets, administrative structure and next steps for achieving the goals of the Plan.

Appendices that includes a glossary of terms, summary of public input, toolbox for conserving greenspace, funding sources and definition of benefits derived from parks, open space and trails.







## 2. INVENTORY AND EXISTING RESOURCES

### Chapter Outline:

A Overview

B Review of GIS Information

C Field Investigations

D Review of Existing Plans

### A. OVERVIEW

Archuleta County is a place of abundant resources with diverse and beautiful, world-class landscapes. It is the goal of the Greenways Incorporated (GWI) team to better understand this region through experiential fieldwork, GIS mapping, and background research of existing analysis and planning documents. In order to inform this Master Plan, it is necessary to know where Archuleta County has been, where it is now, and where it is going in the future.

### B REVIEW OF GIS INFORMATION

Geographic Information Systems (GIS) allows the GWI team to examine all parts of Archuleta County, even those inaccessible on the ground. These GIS data, when layered on top of each other, provide meaningful information in decision making. Population density, wildlife corridors, environmental conditions, land ownership, existing parks and trails, and future development sites are just a few of the mapped layers that will guide the GWI Team and Archuleta County in determining areas that need protection. It will also lay the framework for recommending sites and corridors for trail connectivity, open space, and parks.

Mapped information about natural resources and infrastructure was provided to the GWI team by Archuleta County. The County GIS staff also provided contact information for the Colorado Division of Wildlife, US Forest Service, and the Natural Resources Conservation Service. These agencies house multiple data sets concerning natural infrastructure and resources such as wildlife habitat, wetland areas, and soils. The GWI team has assembled the majority of available GIS data and is still in the process of receiving data from these other agencies.

#### Data received from Archuleta County includes:

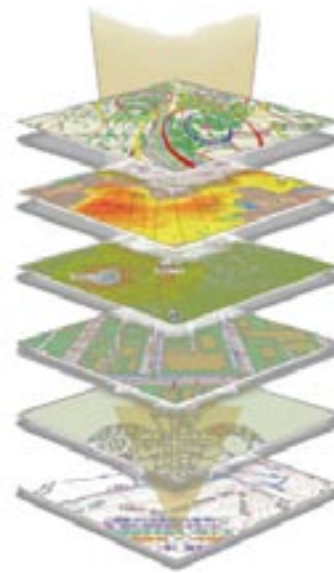
- Town and County boundaries
- Roads
- Waterways (streams, lakes)
- Floodplains
- Watersheds
- Elevation-based data (elevation, slope, aspect, hillshade)

## ARCHULETA COUNTY, COLORADO

- Contours
- Demographics (Census data)
- Parcel ownership
- Public and private lands
- Zoning
- Subdivisions
- Trails and greenbelts (recommendations)
- Bus routes and stops
- Points of interest
- Aerial photography
- Fire risk areas
- Geology

### Data from other sources includes:

- Natural Heritage Program potential conservation areas
- GAP (Gap Analysis Program) vegetation
- NDIS (Natural Diversity Information Source) species activity areas



GIS data is compiled in layers; when combined, they collectively form a map with information from each layer included.

## C FIELD INVESTIGATIONS

The GWI team conducted field investigations during two time periods: April and May 2007. It was the goal of the GWI team to thoroughly examine the representative landscapes of Archuleta County, along with existing parks, trails, and recreational sites. Public lands were visited, such as National Forest lands, to gain a perspective of all landscapes. Particular emphasis was placed on private lands where development has already occurred and where development could potentially occur in the future.

We divided our Consultant team into two field investigation units and visited numerous sites throughout the County, including:

- Pagosa Springs
- Pagosa Lakes
- Forest Service lands
- Southern Ute lands
- Chimney Rock
- Navajo State Park and Arboles
- Roadway corridors (US 160, US 84, CO 500, CO 700)

These areas are described in more detail below.

**The Town of Pagosa Springs** is the County Seat and the only incorporated area in Archuleta County. The Downtown and surrounding areas were examined. Several park and trail areas were identified in and around Pagosa Springs: Town Park, Centennial Park, South Park, River Center Park, Reservoir Hill Mountain Park and Trails, and the Sports Complex Park near the High School which is undergoing expansion. Children of all ages were using all Town parks with their associated fields and playgrounds. Many children were also seen walking and skateboarding to their homes following school.

The Hot Springs area (top) and  
Town Park (bottom) along the  
San Juan River in Downtown  
Pagosa Springs



The *Hot Springs area* and *Centennial Park* are located along the San Juan River corridor in Downtown Pagosa Springs. Both were experiencing high levels of use. These sites provide many gathering and recreation areas with access to a well-designed geothermal springs area, river access for fishing and boating, grassy areas for picnicking, and a bicycle/pedestrian bridge connects the two sides of the river and the San Juan Riverwalk. The San Juan River also has several restoration features within the corridor.

The *Town Park* is also along the San Juan River corridor in Downtown Pagosa Springs, and was also experiencing significant use. This site provides gathering and recreation areas with a gazebo, picnic tables, playground, soccer field, river access, and San Juan Riverwalk access for residents and tourists.

*River Center Park*, just east of the center of Pagosa Springs, is a lovely passive open space with trail, benches, picnic table, and fishing dock. Users were seen taking leisurely walks and taking work breaks. This site also has access by the San Juan Riverwalk trail.

*South Park* contained a temporary skate park which was experiencing heavy use along with a playground, volleyball court, horseshoes, and basketball court. Also, the top soil piles that are on site for future use in other parks were being used as a small BMX track. The heavy use of this site by skaters and BMX riders suggest the need for a dedicated area for such users.

*Reservoir Hill* features a network of trails and provides a nice overlook across Downtown Pagosa Springs and the San Juan Mountain Range.

*The Sports Complex Park*, between the Pagosa Springs High School and San Juan River, contained one ballfield, a multi-use field, and a picnic plaza under construction at the time of this study. This expansion will also contain a trail system, playground, and a concession area. This park also has access by the San Juan Riverwalk trail.



View east from the US 160 highway corridor

The **US 160 highway corridor** was assessed and is the chief spine of residential and commercial development through Archuleta County. There is a significant amount of traffic on this highway because it is the only connector of the Downtown commercial hub to the strip commercial development west of the center of Town. New and future development sites can especially be found west of Town. Opportunities for infill development occur throughout the corridor, especially near the Downtown area. North and East of Town, US 160 provides access to the Wolf Creek Pass area through beautiful valley countryside. Very little development currently exists north of its intersection with US 84. Currently, there are no state or federal funded improvements to US 160 through Archuleta County. There has been some discussion of future widening of the highway to ease traffic congestion.

The *County Rotary Park* is a small park beside US Highway 160, a few miles west of Downtown. It contains interpretive signage and picnic tables and is only accessible by automobile.

The **US 84 highway corridor** provides north-south travel from Pagosa Springs and US 160 southward to New Mexico. Numerous large-lot subdivisions and ranchettes exist toward the New Mexico border with little to no commercial development along the highway. Echo Lake State Park and the Rocky Mountain Wildlife Park can be found on the west side of US 84, about four miles south of the Town of Pagosa Springs. Echo Lake is a large lake with boat access, fishing, and picnic areas.



A State Wildlife Area along the US 84 highway corridor



Rural landscape along a southern portion of US highway 84

A scenic view of Lake Forest in Pagosa Lakes.



A paved sidepath along North Pagosa Blvd



The **Pagosa Lakes/Fairfield** area consists of 26 separate subdivisions, including single family homes and condominiums governed by Pagosa Lakes Property Owner's Association (PLPOA) and timeshares operated by Wyndham. Overall Pagosa Lakes encompasses over 14,000 acres of land just to the west of Pagosa Springs. Pagosa Lakes has experienced significant growth recently, offering a plethora of natural amenities to new residents searching for small town life that is surrounded by scenic beauty. The San Juan National Forest flanks the Pagosa Lakes area; however inadequate and unmarked access points have created a lack of connectivity for the general public who does not know where the trails are located. Several short paved multi-use trails have been constructed in Pagosa Lakes, with more set for implementation. Five man made lakes in Pagosa Lakes provide opportunities for fishing and boating, while a 27 hole golf course surrounds the lower lakes area. Additionally a recreation center offers residents with amenities ranging from an indoor pool and weight room facilities to outdoor picnic shelters and a playground.

**The Southern Ute Reservation** covers approximately 307,100 acres in the southwestern corner of Colorado, about one-third of which lies within the southwestern corner of Archuleta County. The portion of the reservation in Archuleta County features timbered ranges, with flat mesas in the western portions, and is crossed by seven rivers. Land use is divided into 25 percent irrigated farm land, 10 percent dry farm land and 65 percent timber and range land. The reservation was opened years ago to homesteading by non-Indians; thus it is now checker-boarded with Indian and non-Indian landholdings.

**Navajo State Park** is located near the small community of Arboles, within the Southern Ute Reservation. The park features a 15,000 surface-acre reservoir formed in the San Juan River Valley of southwestern Colorado. The Visitor Center has services and



A trailhead at Navajo State Park, in part of the Southern Ute Reservation; More than three and a half miles of newly designated dirt & gravel trails run throughout the park.

features including archeological, geologic, historic and wildlife displays, brochures, bookstore, sale of passes, registrations, fishing licenses, and more. More than three and a half miles of newly designated dirt & gravel trails run throughout the park, including miles of areas to hike along the San Juan River. Mountain bikes are permitted in the park. Horseback riding is permitted only along the Piedra and San Juan Rivers off County Road 500. Other features and facilities include a full service marina, two group picnic shelters, picnic, campgrounds, cabins, a boat ramp (one of the longest in the state), and a wildlife viewing area (for migratory birds, mule deer, river otters, and bald eagles). Pinon-juniper woodland, sagebrush shrubland and western slope grassland communities dominate park uplands.

**Chimney Rock** is a San Juan National Forest Archaeological Area (designated a national historic site in 1970) and covers 4,100 acres of land surrounded by the Southern Ute Indian Reservation. The large stone mound has two spires, which have been named Chimney Rock and Companion Rock. Ancient homes and work camps have been discovered near farming areas. Four sites have been excavated and preserved to give visitors to the area a look at the past. These sites include Great Kiva, Pit House, Ridge House and Great House Pueblo. Chimney Rock visitor facilities include vehicle access and parking, a visitor station, interpretive signage, and toilets to accommodate the 15,000 visitors who come to Chimney Rock each season. Guided tours are conducted daily, consisting of the Great Kiva Trail Loop and the Pueblo Trail and is approximately one mile walking, including a 200-foot climb on the Pueblo Trail. The Great Kiva Trail Loop is paved and barrier free. The Pueblo Trail is not paved, but rather unimproved stone and gravel.



15,000 visitors come to Chimney Rock each season.

A view into Forest Service lands from Piedra Road (County Road 600).



**Forest Service lands** account for about 52% of all lands in Archuleta County, mostly in the San Juan National Forest found in the northern and eastern portions. Numerous dirt access roads lead into the forests and mountains where scenic vistas, trails, and wildlife greet users. Forest Service lands encompass very large tracts of managed, open space with spotty private inholdings. Trails and trailheads are typically poorly marked and generally do not provide visible, public connectivity to surrounding communities and neighborhoods. Thus, many trail-users drive their automobiles into the National Forest to access trails. For example, Piedra Road (County Road 600) leads from the Pagosa Lakes area into National Forest lands, providing the only official entrance in that area---despite the fact that neighborhoods in the Pagosa Lakes area back into Forest lands with unmarked, virtually exclusive trail access for some nearby residents. Regardless, Piedra Road and its attractions were seeing significant use for a weekday afternoon. Many other dirt roads were experiencing very little use as sections were closed at higher elevations due to snow.

**County Roads 500 (Trujillo Road) and 700 (Cat Creek Road)** run north-south from US Highway 160 and the Pagosa Springs area towards the southern end of the County and the small communities of Trujillo and Juanita and Southern Ute lands. Very little population is found along these roads but incredible scenery is commonplace. County Road 500 starts in the Town of Pagosa Springs and follows the San Juan River with potential boat access sites available. Development pressure can be found at the northern ends of both roadways. Near the intersection of 700 and US 160 is the Aspen Springs community with scattered homes on primarily 1 acre lots.

A view of the San Juan River from County Road 500



## D REVIEW OF EXISTING PLANS

Existing planning and research documents provide a springboard into this planning effort. Existing conditions, visions, goals, and recommendations for multiple topics were summarized and will be incorporated into this planning effort. Topics include transportation, recreation, land use, rivers, and community growth. These documents include studies, plans, and regulations for Archuleta County, the Town of Pagosa Springs, and communities within the study area. It is the goal of the GWI team to integrate these previous and ongoing efforts into this planning effort, while also augmenting previous ideas with new recommendations for parks, recreation, open space, and trails.

### Archuleta County Community Plan

The Archuleta County Community Plan was adopted by the Planning Commission and endorsed by the Board of County Commissioners in 2001. The Plan “recognizes a common vision, expressed by county residents at 22 public workshops, to preserve community character and environmental and scenic qualities, while enhancing economic opportunities and creating a more diverse economy.” The vision statement for the plan expresses an interest in preserving the outstanding scenic and natural qualities, while providing opportunities for economic growth and development, including housing, education and recreation. The plan also notes that rural character and small town atmosphere should be preserved.

*Citizens expressed an interest in continuing to preserve and protect the following lands:*

- National Forest Lands – San Juan National Forest stretches along the northern and eastern edges of the county
- Wilderness – One wilderness area, the South San Juan, has been set aside within the National Forest
- Bureau of Land Management – this federal agency manages approx. 9,800 acres
- Bureau of Reclamation/Colorado State Parks – Navajo Lake State Park. 15,000 surface acre reservoir, with 150 miles of shoreline. Located in the SW corner of Archuleta County
- Conservation Easements – 16 conservation easements, containing 6,231 acres, have been set aside to permanently protect private lands from development
- Reservoir Hill & San Juan River – the Town of Pagosa Springs has acquired key open space lands in these areas.

*Land which is currently not preserved includes:*

- Major rivers – 90% of wildlife species depend on riparian areas for survival. Recreation along rivers is increasing each year. Rivers in need of protection include: San Juan, Blanco, Navajo, Piedra



- Wildlife areas – if wildlife populations are to remain healthy, areas that are important to wild life for winter range, calving, migration, and nesting need to be preserved. (See maps 2 and 5 from the Archuleta County Community Plan)

*(Archuleta County Community Plan, adopted by the Planning Commission and Board of County Commissioners, 2001; [www.archuletacounty.org/Planning/commplan.asp](http://www.archuletacounty.org/Planning/commplan.asp))*

### Trails Master Plan for Archuleta County

The Trails Master Plan was created by the Trails Council and adopted by the Town of Pagosa Springs in 2004. According to the Trails Master Plan, there are several criteria the location of trails will meet. They include the following:

- Activity centers, such as parks, public buildings (e.g. Town Hall) or concentrated shopping areas.
- Major residential areas.
- River corridors and floodplains.
- Existing trailheads.
- New links to existing trails, particularly on U.S. Forest Service and BLM land.
- Topography – trails should generally be no steeper than a 10 percent grade.
- Scenic and natural areas, such as overlooks and opportunities to view wildlife.
- Existing highway and town street rights-of-way.
- Opportunities for building new trails in proposed new street rights-of-way and as part of road improvements.
- Opportunities for dedicating new trail rights-of-way as part of the subdivision approval process.
- Former railroad rights-of-way.
- Ideas expressed by public officials and the public.
- Recreational loops of varying lengths.

**Despite the County's 2003 Trails Master Plan, most local trails are actually in the Town of Pagosa Springs.**



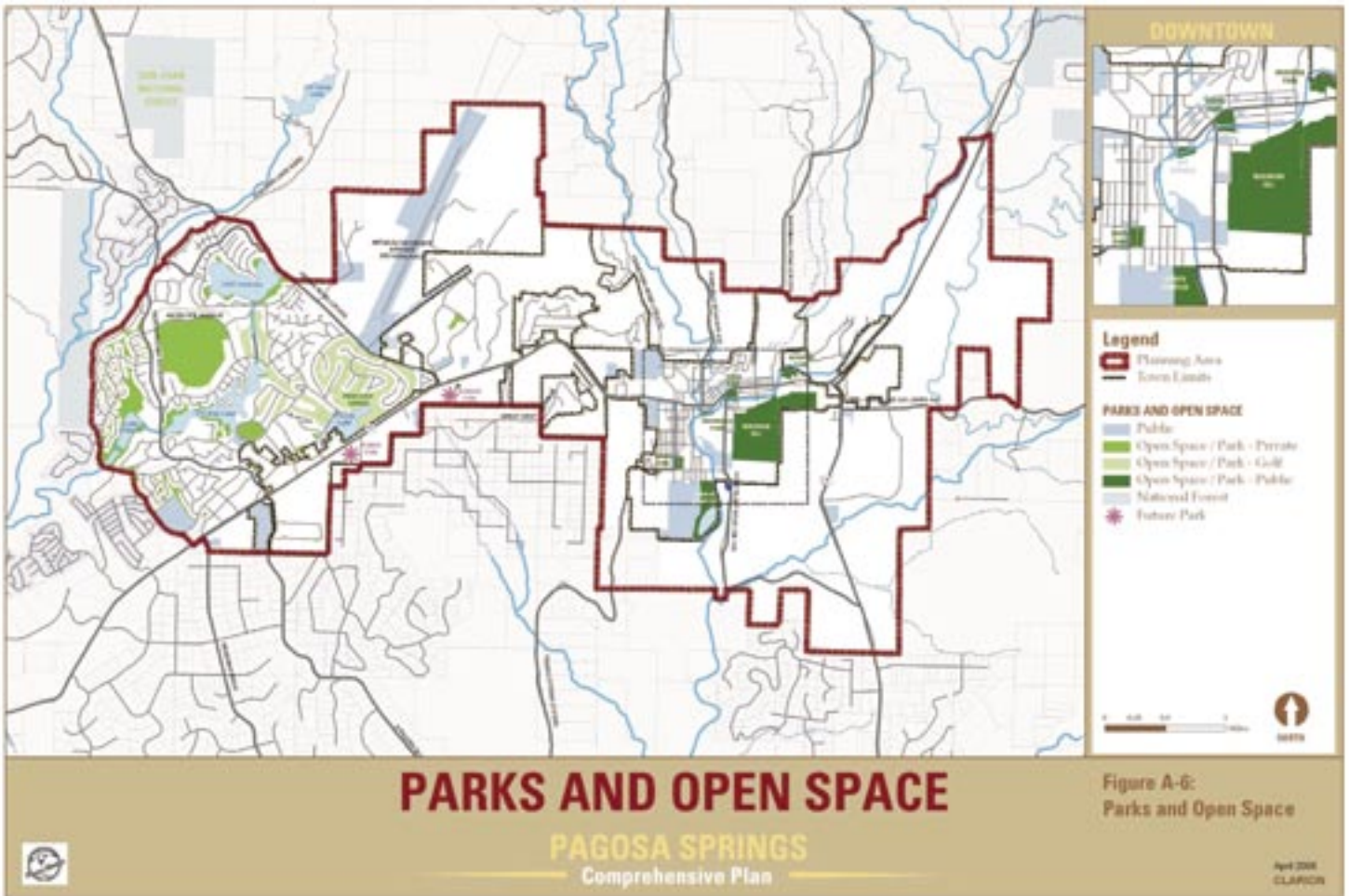
Standard trail sizes and use categories have been established. Commuter bikeways are concrete and 10 feet wide; primary trails are concrete or asphalt and 8 feet wide; all-weather trails are crusher fines or gravel and are 5 feet wide; and natural surface trails are dirt and 3 feet wide. All trails can initially be constructed of dirt or gravel to enable a larger trail system, and improvements can be made as demand increases in certain areas. For more details about trail construction, refer to the *Trails Master Plan for Archuleta County*, completed in 2003 ([www.archuletacounty.org/Special\\_Projects/files/Trails%20Master%20Plan.PDF](http://www.archuletacounty.org/Special_Projects/files/Trails%20Master%20Plan.PDF))

### Town of Pagosa Springs Comprehensive Plan

The Town of Pagosa Springs adopted their Comprehensive Plan in 2006 after an intense public process. Part of the vision of the master plan includes that the town will: “be built around a system of connected and continuous streets, sidewalks, and trails and provide transportation options that are well integrated into the neighborhoods” and will also “support and expand our legacy of parks and open spaces.” The Town of Pagosa Springs Comprehensive Plan sets forth goals for the Town in 10 categories, three of which are related to open spaces and trails. The natural environment goals helped to identify, among other concerns, the following greenspace concerns:

- Habitat and water quality of the San Juan River and other lakes, streams and wetlands will be preserved.

Below: The Parks and Open Space Map from Pagosa Springs’ Comprehensive Plan



- Mature and significant trees will be protected where possible.
- The Pagosa Skyrocket is an endangered species native to Archuleta County, and one of Colorado’s most rare species and should be preserved.
- The scenic beauty of the natural environment, which surrounds Pagosa Springs, will be conserved.
- Open space should be conserved through a variety of means, including acquisition, site planning, and conservation easements.
- Key strategies for natural environmental conservation includes improved protection of the San Juan River, lakes, and wetlands, tree protection, and xeric landscaping.
- The community and new development will peacefully coexist with San Juan wild life. Education programs are important for informing the public about the importance of protecting the San Juan River. (Comprehensive Plan, p.7-1 to 7-7)

*The transportation, trails and mobility goals helped to identify, among other concerns, the following greenspace concerns:*

- “New developments should contain connected streets, sidewalks, and trails...The east-west connector streets are anticipated to include sidewalks and/or trails, with the intent of carrying transit vehicles, bicycles, pedestrians, and private motor vehicles.”
- The town will continue to maintain and build on the existing trails system and expand the system to include trails as shown on the trails plan map, including east-west town connections. (Policy T-3(d))
- Pagosa Springs will support convenient, connected, and efficient transportation for all modes of travel. (Comprehensive Plan, p.11-1 to 11-8)

*The parks, open space and recreation goals helped to identify, among other concerns, the following greenspace concerns:*

- “Pagosa Springs will improve and maintain its existing parks, as future growth occurs, maintain and improve the current level of service for parks to provide a full range of high-quality park and recreation facilities.”
- Town will aim to connect public and private open space.
- New developments should provide for a minimum of 8% of the land for public parks and open space.
- Opportunities for indoor recreation should be provided to promote a healthy and active community. (Comprehensive Plan, p.12-1 to 12-4; Follow ‘Planning’ link from [www.townofpagosasprings.com](http://www.townofpagosasprings.com))

## Vision for the Future: Planning and Analysis

For the purposes of considering future development and marketing, economic and demographic factors that may influence property values can be analyzed. Economic and demographic data were gathered as they related to Archuleta County and were assessed for potential for successful future developments. The following information pertains to greenspace planning:

- The US Forest Service owns 50% of the county, 15% is owned by the Southern Ute Indian Tribe, 35% is privately owned.
- San Jan National Forest is close to 1.9 million acres of public land.

*Recreational opportunities in Archuleta county:*

- Chimney Rock Archeological Area—ancestral Puebloan ruins
- Echo Lake State Park
- Fred Harman Art Museum
- “Pag-Osah” Hot Mineral Springs and Baths
- Rocky Mountain Wildlife Park
- Waterfalls—some of the most spectacular in the state
- River activities
- Downhill skiing

(For further information, see *Vision for the Future: Planning and Analysis—Pagosa Springs, Archuleta County, Regional Analysis*, by the *Pagosa Springs Lodging Association*, May 2004-February 2005; [www.archuletaeconomicdevelopment.org/aedaimages/VisionfortheFuture.pdf](http://www.archuletaeconomicdevelopment.org/aedaimages/VisionfortheFuture.pdf) )

## Archuleta County Community Fire Plan

As a component of the National Fire Plan, the County Community Fire Plan is meant to help coordinate fire readiness efforts between local communities and federal agencies through four major goals.

- 1.) Ensure firefighting resources
- 2.) Rebuild communities and ecosystems damaged by the fires of 2000
- 3.) Thin vegetation in areas that are adjacent to public lands
- 4.) Help local residents to reduce fire risk and improve fire protection.

This plan focuses on private lands throughout Archuleta County. As development continues in the County, the risk to lives, property, and resources correspondingly increases as well. The public lands and Ute lands of Archuleta County all have fire management plans in place.

Currently Archuleta County has one fire district covering 75% of the County with the remaining 25% having no dedicated structural fire protection. During 2001, county commissioners implemented a county-wide planning ordinance requiring real estate developers to thin fire-prone parcels before receiving final plat approval. This Plan continues to expand upon these kind of efforts by forming a comprehensive strategy.

*The goals of this plan include:*

- Identify areas thought to have high or moderate risk of wildfire
- Document and outline strategies for protecting community values such as watersheds, residences, and parks
- Outline planning and design strategies that private landowners can use to reduce wildfire risk
- Improve the fire suppression resources of the community by identifying equipment and training needs.
- Identify public education strategies using information gathered through the development of this plan.

*Wildfire areas were identified and mapped based in part on the following subjective criteria:*

- Remote areas where fire starts would prove to be difficult to access or suppress.
- Developing areas with excessive fuel loading.
- Developing areas that lie outside a fire protection district.
- Developing areas adjacent to public lands which due to terrain and fuel load could pose an increased fire risk. (ie. Home sites situated at the top of heavily wooded canyons etc.)
- Areas where a lack of water sources would hamper fire suppression.
- Areas where pending development may compound fire risk.
- Areas where fire starts could spread to sensitive areas. (community watersheds, archaeological resources, wildlife habitat, oil or gas fields, etc.)

34 areas of private lands along the urban/ wildland interface thought to be at some degree of risk from wildfire were identified and mapped. These areas include the following:

- |                                       |                         |
|---------------------------------------|-------------------------|
| 1. Aspen Springs (Unit 6)             | 18. Cimarron            |
| 2. Log Park                           | 19. Continental Estates |
| 3. Pagosa Lakes                       | 20. Eagle Peak          |
| 4. San Juan River Resort Village      | 21. Alpha               |
| 5. Alpine Lakes Estates               | 22. Ghost Elk Valley    |
| 6. Loma Linda                         | 23. High West           |
| 7. Burns Canyon                       | 24. Holiday Acres       |
| 8. Pagosa Peak Reserve (Design Reg)   | 25. Keyah Grande        |
| 9. Piedra Peak (Design Regulations)   | 26. Lower Blanco        |
| 10. Snow Circle (Design Regulations)  | 27. Navajo River Ranch  |
| 11. Elk Park Meadows (treated area)   | 28. Rito Blanco         |
| 12. Timber Ridge (Design Regulations) | 29. Stevens Canyon      |
| 13. Turkey Springs                    | 30. Tierra del Oro      |
| 14. Alpine Lakes Subdivision          | 31. Twin Creek          |
| 15. Echo Canyon                       | 32. Upper Blanco        |
| 16. Chris Mountain Estates            | 33. Wildflower          |
| 17. Blue Mountain Estates             | 34. Crowley Ranch       |

*Implementation recommendations include:*

- 1) Refine, update, and circulate the wildfire risk map along with developing curing gaps in data such as roadways, parcel data, location of fire hydrants, water line sizes, and inventory of past fire starts.
- 2) Develop and sustain a general public informational campaign and concentrate these efforts in areas identified as high risk.
- 3) Create a mechanism for management of this Fire Plan
- 4) Support and promote private contractors efforts to perform fire safe mitigation work (fuel reduction, extraction of saleable material)
- 5) Use the Land Use Code to maintain momentum of wildfire management strategies on private lands
- 6) Pursue grant monies to build fire-fighting capacity
- 7) Provide a means for residents to dispose of slash accumulated through thinning efforts

([www.southwestcoloradofires.org/prevention/pdf/ArchuletaCountyFirePlan.pdf](http://www.southwestcoloradofires.org/prevention/pdf/ArchuletaCountyFirePlan.pdf))

### **Pagosa Springs Sports Complex Master Plan**

The sports complex is located on the San Juan River one-half mile south of Downtown. Designed program elements include a ball field, a multi-use field, picnic area, playground, loop trail, riverboat access, outdoor classroom and performance plaza/water feature. The Riverwalk is an important feature of Pagosa Springs, and draws residents and tourists alike. A trail will run the length of the park, from the connection to the Riverwalk along the San Juan River.

(For more information about the sports complex, see the *Pagosa Springs Sports Complex Master Plan*, August 2003 proposed by *EDAW*; Follow 'Town Departments/Planning' link from: [www.townofpagosasprings.com](http://www.townofpagosasprings.com))

### **Comprehensive Economic Development Strategy (CEDS)**

This report is designed to document a strategy to retain and create better paying jobs, foster a stable and diversified economy and maintain or even improve the quality of life in Archuleta County. While the population has steadily increased, a low unemployment rate has been maintained in place. Low unemployment rates in Archuleta County are highly dependant on "generally low paying retail and service sector jobs, driven primarily by the tourist and resort industry." In 2003, The Operation Healthy Communities (OHC) calculated that a wage of \$10.36/hour was the baseline livable wage for a single individual renting a one bedroom apartment. Additionally, only about 42% of the population in Archuleta County could afford a median priced home of \$181,000.

#### *Vision Statement*

"Archuleta County will retain, grow and support our local businesses, and encourage a diverse economic base through business attraction and creation to ensure year-round livable wages for the residents of our County."

*Mission Statement*

“To provide business development and support in Archuleta County in order to nurture a diverse, local year-round economy that supports the needs, values and quality of life of our community.”

*Environmental Issues*

- Oil and gas drilling projects in western Archuleta County have provided a new source of county tax revenues. Numerous environmental concerns have developed as a result of these activities, such as threats to natural wildlife habitats and water quality.
- Another potential environmental threat comes from the proposed Village at Wolf Creek. While the site is located in Mineral County, the proximity of such a large scale development will significantly impact Archuleta County. Increased traffic, disruption of wildlife corridors, and disruption of pristine wetlands, wilderness areas and recreation areas are environmental concerns. Additionally Archuleta County faces a potential loss of income to the Village at Wolf Creek during the winter ski season.
- The National Forest Service and the Bureau of Land Management are also evaluating the types of uses that can or should be engaged in on public lands.

*Land Use Issues*

- With over 50% of Archuleta County being state or federal lands, a policy of allowing multiple uses has been accepted. Historically, public lands were used for a variety of uses ranging from timber harvesting to livestock grazing, but today an increasing value is being placed on the national forest as a place to recreate and enjoy the viewshed.
- There is an increased concern on the rapid development that is taking place on the fringes of the national forest. The balance between economic and ecological sustainability is being measured as new policies are adopted and implemented.

*Transportation Issues*

- Growth across Archuleta County has had a significant affect on transportation, especially along the linear Highway 160 corridor through Pagosa Springs.
- According to the 2030 Regional Transportation Plan, approximately 33% of highway surfaces in Archuleta County are rated as poor.
- Roadway widths through Pagosa Springs are limited by development and have little room for expansion.

*Wildfire Issues*

- Archuleta County is served by two fire protection districts and has an adopted Community Fire Plan (CFP), however approximately 90% of the county has no dedicated fire protection.
- The Archuleta County CFP contains a risk map of 34 areas of special concern in the county.

*Infrastructure and Services*

- Recreation facilities in Archuleta County range from softball, baseball and soccer fields to fishing ponds, a community center, river trail and skatepark.

- Educational facilities in Archuleta County include an elementary school, intermediate school, junior high school, high school and Pueblo Community College/Pagosa Springs Campus

*SWOT Analysis*

Identifying and assessing strengths and weaknesses of the community is an essential first step in developing an economic development strategic plan. Once these items are evaluated a sense of how the community relates to their vision will be much more evident. Items relevant to open space, trails, recreation, parks and tourism are listed below.

*Atmosphere/Ambience Strengths*

- Casual, family, healing, equestrian, small town, ranching environment
- Pedestrian friendly downtown

*Physical Attributes*

- Hot springs
- Recreation opportunities
- Vast Public Lands
- San Juan River
- Remote Location
- Climate
- Relatively undeveloped

*Economic Strengths*

- Affordable lodging

*Economic/Marketing Weaknesses*

- Poor marketing of community
- Lack of special event coordination
- Relative geographic isolation of community

*Socio-Cultural Weaknesses*

- Lack of activities/programs for youth

*Facility Weaknesses*

- Lack of performing arts venues

*Leadership/Vision Weaknesses*

- Lack of long-term community vision and leadership
- Fragmentation within community

*Economic Opportunities*

- Tourism development
- More events, especially sports and recreation
- Marketing and development of adventure sports



*Governmental Opportunities*

- Unified government and constituency with mission/vision
- Strengthen land use regulations
- Preservation of healthy downtown core

*Socio-Cultural Opportunities*

- Construction of recreation center

*Threats*

- Local government decision, primarily land use/zoning, sprawl
- Natural resource management
- Infrastructure capacity

*Community Development Action Plan 2006*

Pages 3-41 to 3-56 contain a detailed chart illustrating the Archuleta County Community Development Action Plan. Transportation, education/culture, land use and the parks/recreation sections contain highly relevant elements to the future of trails, open space, parks and recreation in Archuleta County.

(For further information, see *Comprehensive Economic Development Strategy, Archuleta County CEDS Update 2006*; Follow 'Town Departments/Planning' link from: [www.townofpagosasprings.com](http://www.townofpagosasprings.com))

**Economic Development Plan – Pagosa Springs**

The Town of Pagosa Springs developed an Economic Development Plan to respond to growth and development issues that threaten to impact the character and quality of life in the community. The plan focuses on areas that fall under the influence of the Town of Pagosa Springs. A key finding highlighted in this report is the fact that “The Pagosa Springs area has been ‘discovered’ and will experience a substantial growth in retirement and second home development over the next 15 years.” Tourism has steadily increased in Pagosa Springs and contributes heavily to the local economy. Tourism in the Pagosa Springs areas is primarily centered on natural attractions, such as the San Juan National Forest and built attractions, such as spa facilities surrounding the hot springs.

- Seasonal occupancy in area lodging facilities varies significantly seasonally, with highest occupancy rates occurring the peak summer months and lowest levels occurring during the winter ski season.
- Highest occupancy by property presently occurs at hotels operated in conjunction with the hot springs.
- The yearly average of overnight visitors to the Pagosa Springs area is approximately 350,000.
- It is estimated that each visitor spends an average of \$76 per day while in Pagosa Springs.
- Visitors account for roughly 48% of Pagosa Springs’ average annual economy.

Future economic growth in Pagosa Springs heavily depends on the following factors:

- Attracting additional business to existing recreation and tourism locations.
- Development of additional events and attractions.
- Successful marketing and advertising to attract a larger number of visitors.
- Improving existing infrastructure and guest experiences.

(For further information, see *Economic Development Plan for Pagosa Springs, Colorado* by *Economic & Planning Systems, Inc.* May 2005. Follow 'Town Departments/Planning' link from: [www.townofpagosasprings.com](http://www.townofpagosasprings.com))

### Joint Impact Fee Analysis

Archuleta County and the Town of Pagosa Springs have experienced substantial growth over the last 15 years, and is project to continue to experience rapid growth in the next 15 years. To accommodate for the growth, both residential and tourism-related, it is necessary to examine how to maintain existing level of service for residents and businesses and require new development to pay its share. Impact fees are one way to fund growth. Two sections in the Joint Impact Fee Analysis pertain to greenspace planning: park land and trails.

- "Part of the community's vision for the future is to provide a full range of high quality parks and recreation facilities."
- Future level of service for parks is 14 acres/1,000 residents.
- Future population growth (to 2020) is projected at 5,018.
- Total parkland required to accommodate for growth is 70 acres.
- 56 trails are planned, totaling 190.5 miles at an estimated cost of \$15,835,489. The trails range from 3 to 10 feet in width and have surfaces of concrete, asphalt, gravel, and dirt. Of these trails, 14 are considered primary and have the highest priority for building.
- Developers will continue to be required to build sidewalks in adjacent rights-of-way, especially in the downtown area of Pagosa Springs, where the pedestrian traffic is significant.
- The impact fee, if adopted, would pay for the construction of a continuous trail system, and the requirement to construct segments of trails that fall on developers' property would be waived.

(For further information, see *Joint Impact Fee Analysis* prepared for Town of Pagosa Springs, Archuleta County; *Economic & Planning Systems Inc.* May 2006; Follow 'Town Departments/Planning' link from: [www.townofpagosasprings.com](http://www.townofpagosasprings.com))

## Renewed Historic Downtown Pagosa Springs Conceptual Master Plan

The planning area of the Renewed Historic Downtown Pagosa Springs Conceptual Master Plan encompasses downtown Pagosa Springs, which, according to the original town plat of 1883, is 640 acres of land centered on the San Juan River. There has been substantial growth in Archuleta County, and more is predicted in the next 20 years. Due to the increased growth in the area, the Mayor's Council decided to explore various means of improving Downtown Pagosa Springs' physical environment. The Conceptual Master Plan puts priority on "expanding on the system of trails and recreation amenities that serve the growing community."

*Community priorities pertaining to greenspace planning, as determined by a series of public meetings are:*

- Maintain the small town feel of Pagosa Springs
- Respect Pagosa Springs' historic character and identity
- Protect the river corridor
- Acquire more open space
- Assure continuous public access along the San Juan River
- Optimize Reservoir Hill's resources
- Improve access to the San Juan River
- Maintain and expand the paths and walkways

*Existing projects in motion pertaining to greenspace:*

- Hot Springs Boulevard Improvements: continuous, landscaped pedestrian shopping street and an associated riverfront neighborhood. It would connect the Holiday Inn with the Community Center and Town Hall. The project has been temporarily suspended, awaiting completion of the Council's planning process. (Conceptual Master Plan, p.8 and p.36)
- San Juan River Corridor Restoration: addresses the river bed and is designed to create a stretch of 'white water' between Fourth Street and Nevada Street bridges. (Conceptual Master Plan, p.8 and p.34)
- River Trail System: the river restoration project also responds to a concern that the adjacent resorts maintain a level of privacy. The priority is to complete the scenic trails along the San Juan River corridor, connect to the schools with the residential neighborhoods, and to provide better trail access to Reservoir Hill. (Conceptual Master Plan, p.8 and p.29)

- Lewis Street: the section of Lewis Street between Fourth and Fifth Streets is planned for upgrading, including installation of curb and gutter and sidewalks with landscaped areas for more inviting pedestrian experiences. (Conceptual Master Plan, p.9 and p.33)
- Expanding Springs Resort: existing plans suggest that development will be along riverfront property. Options are being explored for the development of the rest of the land. The development along the riverfront will have an impact on adjacent Hot Springs Blvd. and on the nature preserve along the San Juan River. A conceptual plan suggests strategies for reconciling the different uses along the riverfront. (Conceptual Master Plan, p.6 and p.14)
- New County Offices: Archuleta County has expressed interest in relocating the County Courthouse and other administrative office to a site that might reinforce the Town Hall/Community Center complex. (Conceptual Master Plan, p.9 and p.27)
- Planning for Schools: the School District is currently evaluating their needs and options for expansion of the school system, including the idea of a campus system for all levels of schools. (Conceptual Master Plan, p.9 and p.30-32)
- Improved Town Park: the open space across from the Junior High School site has potential to serve the community better in the future. It is recommended that it be treated as a central riverfront park. By including the 60-foot right-of-way on Hermosa Street, the park could stretch from Highway 160 to the river. (Conceptual Master Plan, p.37)
- Traffic Calming Measures Along Highway 160: the highway is a federal highway and any modifications made to it must be approved by the CDOT's District Engineer's Office. The master plan recommends highway improvements to be made into an integral part of the Comprehensive Planning process. Traffic should be slowed to 25 mph while driving through the downtown section of Pagosa Springs. Work toward designating Highway 160 through the Town as a "scenic highway". (Comprehensive Master Plan, p.35)
- Reservoir Hill Recreation Area: this is a 120-acre park on the mesa within Pagosa Springs' city limits. The town plans on acquiring all the vacant property to the east, which would almost double the size of the park. Planners' vision for the space:
  1. Preserve the park's informal character
  2. Provide better access to the park from nearby districts
  3. Improve signage that invites visitors to the park
  4. Create a lookout that provides views of the river valley and community below
  5. Manage the park to assure that it maintains its health and character in the future

(For more information, refer to the *Renewed Historic Downtown Pagosa Springs Conceptual Master Plan*, which was prepared through the collaboration of *The Community Vision Council and Hart Howerton, Urban Planners, Architects, and Landscape Architects* in November 2004. Follow 'Town Departments/Planning' link from: [www.townofpagosasprings.com](http://www.townofpagosasprings.com))

## The Springs Resort Design Charette

The Springs Resort is located in the Town of Pagosa Springs. The expansion of the resort is intended to fit the land and does not compromise the abundant natural resources on the site. The main objectives of the conceptual master plan are to preserve the natural site features and existing amenities, and to integrate public walking trails into the heart of the resort's public places. (For more information, see the original document by *Design Workshop and Zimmer Associates International*; September 2004; Hard copy only. Contact Town of Pagosa Springs, [www.townofpagosasprings.com](http://www.townofpagosasprings.com))

## Four Corners Regional Study: Economies and Issues

This project was intended as a baseline study to ultimately promote economic development and opportunity and balance resources through sound management of development.

In Archuleta County, 34% of lands are in private ownership. Tribal lands compose 14.4% of the County. 51.6% of the County, mostly in the northern and eastern portions are in San Juan National Forest. It ranked 5th in the State between 1990 and 2000 in population growth.

Key issues identified for Archuleta County include a loss of open space and a decline in the agriculture sector along with geographic isolation from trade center, rail lines, and transportation routes. Key opportunities identified were vast public lands and recreational resources, including the potential to enhance hiking and biking trails. Key economic development directions include recruiting new businesses, and increasing visitors to the area by capitalizing on cultural and regional assets and making the Hot Springs a more visible destination attraction.

*A number of strengths were identified for the entire Southwest Colorado region (Region 9) that include:*

- Scenic beauty
- Public lands
- Local cultural and historical assets
- Agricultural lands

*Weaknesses included:*

- Increasing cost of housing
- Infrastructure gaps
- Seasonal nature of many economies

Regional goals were outlined for several categories including tourism, infrastructure, agriculture, and land use. The land use goal was to keep public and private lands viable and economically and ecologically healthy so as to foster improved economies in each county, and adequately plan for the future. Goals also included supporting and assisting the agriculture sector, maintaining, developing, and diversifying the tourism industry, and providing for adequate infrastructure.

(For more information see the *Four Corners Regional Study: Economies and Issues*, commissioned by *San Juan Forum*, in cooperation with the *San Juan Economic Development Service and the Region 9 Economic Development District of Southwest Colorado*; January 2003; [www.fortlewis.edu/community\\_culture/san\\_juan\\_forum/sjf\\_4corners\\_reg\\_study.asp](http://www.fortlewis.edu/community_culture/san_juan_forum/sjf_4corners_reg_study.asp) )

## Region 9 Economic Development District Report

This report presents significant aspects and general trends of the regional economy. Additionally demographic and economic data for each county is summarized. Data was acquired from Colorado Division of Local Government, Colorado Department of Labor, the Bureau of Economic Analysis and the North American Industry Classification System.

A high quality of life is what draws a majority of people to Southwest Colorado, away from bustling urban settings. As a result, communities are seeking to develop economically in ways that encourage and preserve this high quality of life.

- In 2005, Archuleta County had an estimated population of 11,716
- Archuleta County's population is expected to top 30,000 by 2030.
- Archuleta County's economy has been in a steady transition over the last 30 years from traditional timber harvesting and livestock farming to tourism.
- The rise of tourism in the area has transitioned the area from a more traditional rural community to a somewhat small scale urban environment.
- Unemployment rates are low in Archuleta County, due mainly to a strong local economy.
- Approximately 2,271 individuals (38% of Archuleta County's workforce) engages in service based employment, such as food service, accommodation, entertainment, recreation, education, health, and arts. The service industry constitutes the largest percentage of Archuleta County's workforce and accounts for 32% of its earnings.
- Service industry jobs directly support tourism in the area

(For further information, see *Region 9 Economic Development District of Southwest Colorado Report, 2007*; [www.scan.org/REPORT%202007.pdf](http://www.scan.org/REPORT%202007.pdf) )

## Gaining Ground or Shaky Ground?: A Detailed Look at Tourism Employment in the Southwest Colorado Travel Region

This report summarizes the results of a joint effort between the Southwest Colorado Travel Region (SWCTR) and the US Forest Service to gain a better understanding of recreation and tourism activities that provide employment in Southwest Colorado. Tourism is one of the major driving forces behind Colorado's economy.

- In 2000, tourism generated an estimated \$24,159,600 in employment income in Archuleta County.
- Approximately 30% of all employment in Archuleta County pertains to tourism.
- A majority of tourism based employment is based in retail, real estate and construction.

- Resorts account for 46% of tourism employment and of which most is predominantly based in the summer at the Fairfield Resort.
- The summer season accounts for 68% of tourism employment related to outdoor activities, while the fall season employs the balance of 32%. Seasonal data did not include snow skiing.
- “Amenity Migration” was cited as a driving force behind real estate and construction booms in Archuleta County.
- “Amenity Migration” is a term referring to the influx of newcomers buying or building second homes in Archuleta County to take advantage of the high quality of life and immense natural amenities.

(For further information, see *Gaining Ground or Shaky Ground? A Detailed Look at Tourism Employment in the Southwest Colorado Travel Region*, by Information Services December 2002; [www.scan.org/tourism\\_report.pdf](http://www.scan.org/tourism_report.pdf) )

### San Juan River Project

This project encompasses the portion of the San Juan River that flows through the heart of Downtown Pagosa Springs. It includes whitewater and streambank restoration, river access, and an improved trail with signage.

Phase I of the project began in 1992 at the eastern boundary of the Town of Pagosa Springs where public access was most viable for parking and trail/river access. Phase I included the commencement of the Riverwalk trail alongside the San Juan River. Phase II includes an extension of the Riverwalk trail with interpretive signs and benches where the public are able to watch and enjoy the river in its many forms, have access to great fishing and other non-motorized river sport opportunities. The final Phase III of the SJRR project will meet up, by Riverwalk trail and a river take-out, at the planned Pagosa Springs Sports Complex, where an education center has been designed to feature the wetlands and riparian habitat in the surrounding area.

The proposed Phase II of the San Juan River Restoration (SJRR) project enhances fishing, recreation, and education opportunities, accessibility to the river, and the aesthetics of approximately one mile of the San Juan River that flows through the heart of downtown Pagosa Springs, Colorado.

In total, almost three miles of the San Juan River will be restored through the three-phase SJRR project, with full functionality, and aims to provide additional opportunities for anglers, boaters, and nature enthusiasts.

Summary provided by the *Environmental Protection Agency*. The following partners have been involved in the project: *REP - Recreation Engineering and Planning (Town River Engineer)*; *ACOE - Army Corp of Engineers*; *DOW - Division of Wildlife*; *USGS - United States Geological Survey*; *CDPHE - Colorado Department of Public Health and Environment*. (Documents link from [www.townofpagosasprings.com](http://www.townofpagosasprings.com) and [www.epa.gov](http://www.epa.gov) )

## Pagosa Lakes Parks, Open Space, Trails & Recreation Master Plan

This plan was developed to serve as a tool for planning and developing a system of parks, trails, recreation, and open space lands, both in the immediate term and long-term. The study area includes all of Pagosa Lakes and adjacent areas, approximately 23 square miles. Specific names sites for parks, trails, and trailheads were recommended.

The goal for trails was developing a network of trails, sidewalks, and bike lanes that provide for safe and adequate transportation and recreation by non-motorized means. The planned trail system was over 60 miles in length. Objectives included:

- Connecting to activity centers such as shopping, schools, and parks
- Providing service for commuters and recreational users
- Developing loop trails
- Providing 10' wide trails with signage
- Balancing the benefit of a trail system with privacy of individual landowners

The goal for parks was providing parks that adequately meet the long term needs of year-round, seasonal residents, and visitors. Objectives included:

- Develop parks at the neighborhood and community level
- Acquire properties for Meadows Park in Pagosa Meadows and Central Park north of the Ranch community
- Coordinate park and recreational development with other providers such as the school district, Town of Pagosa Springs, Archuleta County, and the Forest Service
- Set aside strategically located properties for Pocket Parks

Long range action planning and implementation strategies were provided to complete this Plan. Funding strategies included creating new fees for a Parks, Trails, and Recreation Fund and annexing to Pagosa Springs. Implementation strategies included creating a task force, coordinating trail construction with infrastructure improvements, requiring trail construction and corridor dedications as part of the development review process, coordinating with the Town of Pagosa Springs and the School District, and expanding the summer youth employment program to include trail construction, revegetation, and signage projects.

(For more information see the *Pagosa Lakes Parks, Open Space, Trails & Recreation Master Plan*, by the Pagosa Lakes Property Owners Association - November 1999; [www.plpoa.com/parks\\_trails.htm](http://www.plpoa.com/parks_trails.htm) )



## Archuleta County Land Use Regulations

The land use regulations of Archuleta County exist for the purpose of protecting the health, safety, and general welfare of present and future inhabitants of Archuleta County with particular emphasis on promoting sound development practices that conserve open space, encourage agricultural land preservation, preserve the rural character of the area, and protect the natural resources of the County.

The document contains land use review, zoning and subdivision regulations, standards, dedications, and floodplain regulations. The regulations are intended to implement the planning policies adopted in the Community Plan for the County and the Town of Pagosa Springs. Where a development proposal would be in substantial conflict with the Community Plan, an amendment to the Community Plan should be required prior to any zoning or subdivision approvals.

Many portions of this document are significant to development and open space and include the following:

*TDR (Transfer of Development Rights) program:* This program is in place to manage growth and encourage the agricultural preservation of large parcels and to encourage infill development and redevelopment within the urban areas.

*Overlay districts:* These are supplemental districts that may be superimposed over any Zoning District. They include floodplain overlay districts, scenic overlay districts, wildlife habitat overlay districts, and watershed overlay districts. These help protect key natural resources.

*PUD (Planned Unit Development):* This is intended to be consistent with High Density Residential land use district in the Community Plan. The purpose of a PUD is to permit and encourage greater flexibility and innovation so that the development is compatible with the site's physical and environmental characteristics. Standards include providing pedestrian walkways, protecting unique habitats, setting aside at least 50% for open space, preserving scenic vistas, providing recreational opportunities, and providing a variety of housing and pricing. A conservation PUD requires increased density and setting aside at least 75% of the area for conservation easement.

*Subdivision regulations* provide a method for proposing subdivisions and take into account all environmental features (including soils, topography, geology, floodplain, wildlife habitat, and hazards) of the proposed landscape. The rural land use process subdivision exists to preserve and protect land such as open space, agricultural land, parks and trails, and unique landscapes. Priority consideration is given to parcels containing areas designated as critical wildlife habitat areas. Density incentives are also provided.

A number of *environmental standards* are provided to preserve natural features and resources such as lakes, rivers, rock formations, trees, and archaeological/cultural/historic resources. Provision recommendations to protect significant vegetation, regulate stormwater discharge, provide water setbacks, and protect wildlife, wetlands,

and scenic views. To mitigate natural hazards, a number of regulations exist. Development cannot occur where slopes are greater than 20%, on geologic hazard sites, on wildfire hazard sites, and within the 100-year floodplain.

*Infrastructure standards* include those for sidewalks and trails to provide adequate flow of non-motorized traffic with the exception of those uses located in more rural areas of the County where sidewalk construction is deemed unnecessary. Public sidewalk and trail construction shall be per the Trails Plan for Archuleta County.

The County requires *dedications* for all residential major subdivisions and PUD's to provide sites, land, or cash-in-lieu of land for mitigation of new growth impacts on parks and trails, roads, schools, and needed open space. All developments should provide sidewalks and trails that provide access. Parks and open space should be linked by walkways. For open space, a minimum of twenty-five (25) percent of the total platted area of a multi-family development should be devoted to open-air recreation or other common open space, available to all owners and residents of the project. For single-family, commercial and industrial developments, the minimum requirement shall be fifteen (15) percent of total platted area.

Finally, *floodplain regulations* provide very detailed provisions and regulations to protect public health, safety, and general welfare and to minimize losses due to flood conditions in specific areas.

(For details, see the *Archuleta County Land Use Regulations*, May 2006; [www.archuletacounty.org/Planning/landuseregs.asp](http://www.archuletacounty.org/Planning/landuseregs.asp) )



## 3. NEEDS IDENTIFICATION

### Chapter Outline:

#### A Overview

#### B The Distinct Markets of Archuleta County

#### C Demographics Analysis

#### D Surveys and Public Comments

#### E Level of Service Assessments

#### F Summary of Needs

#### \*LOS Case Study

### A. OVERVIEW

A key part of the foundation of a successful parks, recreation and open space plan is an analysis of the community's needs and desires, in essence the "market" for park, recreation, and open space amenities. This chapter serves as the foundation, support, and guidance for this plan's goal of conserving open space resources and balancing growth and development in order to ensure a high quality of life for all residents.

Multiple factors come into play in considering community needs. For a plan to be successful, it must reflect the demands of the people in the community as well as the potential resources to finance and manage the desired improvements. Indeed, for the plan to have credibility and win financial and political support it will need a sense of the connection between the proposed improvements and the "user market." This chapter assesses these community needs—of residents, tourists and tourist-related businesses—through the following sources:

- **An understanding of the distinct markets of Archuleta County.** The Archuleta County user "market" is distinct and multi-faceted including diverse stakeholders such as year-round residents, tourists, businesses that cater to tourism, and vacation home owners. For this reason, the needs evaluation is broader than other communities that may not possess this County's unique attributes.
- **A general analysis of community demographics from U.S. Census data and other sources.** This data is important for understanding growth trends and age and gender groups such as families with school age children and seniors. Each of these groups has both shared needs and distinct needs.
- **Recent surveys relative to community desires and priorities.** These include the Pagosa Springs Park and Recreation Mailback Survey prepared by RRC Associates (April, 2006) and the Pagosa Springs Community Research Findings also by RRC Associates that looks at the profile and behavior of summer visitors, downtown development questions and local spending patterns.

- **An on-line community survey** conducted during the fact-finding phase of this plan. (May-July, 2007)
- **Comments and suggestions** at community forums, discussions with individuals and community leaders, and input of staff and the consultant in view of the above findings also helps shape this plan (April-May, 2007).
- **A level of service investigation (LOS)** that calculates the extent of existing and currently planned park types and recreational facilities such as sport fields or miles of trails per person relative to national standards identified by professional in the field as well as comparable communities elsewhere in the region. This might be measured in acres, numbers of actual facilities such as baseball fields, or miles of trails per 1000 population. While this has been a broadly used gauge many experts agree that this is only one of several factors and should not be taken as an absolute.

Each of these sources have importance in the assessment, though it is the combination of factors rather than any single factor that results in a more realistic picture to guide planning and investment in facilities. In addition to identifying potential resources, the plan assesses existing and planned facilities, notes deficiencies, and also considers what the “user market” trends suggest when looking at a reasonable time horizon into the future. For purposes of this plan the planning horizon is ten years or 2017.

## **B. THE DISTINCT MARKETS OF ARCHULETA COUNTY**

Archuleta County presents a mixture of potential beneficiaries unique to communities that attract a broader range of people due to special natural features. An examination of the demographics, observations and discussions with community representatives and staff suggests four distinct groups. While their needs overlap somewhat, each should be considered individually as well. These distinct markets include:

- Year-Round Residents (Working Families and Individuals)
- Year-Round Residents (Retirees)
- “Residential Tourists”
- Tourists

In addition, the jurisdictional structure of the communities of the County suggests distinct groupings as to the way residents and business people perceive themselves. Understanding this perception is important to understanding not only market demand but willingness to fund as well as utilize various recreational and natural resource amenities.

- The Town of Pagosa Springs
- The Homeowner Associations
- The “Unincorporated” County

**Market 1: Year-Round Residents (Working Families and Individuals)**

This group includes families with children, individuals, couples and other household types where the inhabitants generally reside in the community year-round. Most are employed in or around the area. In Archuleta County this segment currently constitutes approximately 9,000 individuals. Trends for this group indicate a much higher number by 2015.

Based on observations and discussions with members of this segment and staff some the leading interests of this group include:

- Recreation Center with Programs
- Community Events and Organized Sports Competitions
- Team Sport Facilities and Active Recreation Parks
- Trails (Mt. Bike, Road Bike, Hike, Equestrian, Nordic, and Mixed-Use)
- On-Road Bicycling
- Passive Open Space
- Safe Walks to Schools, Shopping and Other Destinations
- Views, Vistas and Wildlife
- Fishing, Paddle (Canoe, Kayak and Raft)
- Hunting
- Motocross and Snowmobiling

Typically meeting the recreational needs of this group results in funds expended exceeding revenues received from taxes (property). Currently, however, some of this group’s needs are being met and funded by homeowner associations.

Local residents at Town Park, using passive open space along the San Juan River.



## Market 2: Year-Round Residents (Retirees)

Retirees include couples, individuals, and other household types where the inhabitants are older than 50 years, not working or working part-time and generally reside in the community year-round. This generally includes “active” retirees in the 50 years old to 75 years old group. In some instances these households may have visiting children, grand children or others who might use recreational facilities. Most have a sustainable source of income from pensions, social security, and savings sources. In Archuleta County, this segment constitutes approximately 3,500 individuals.

Based on observations and discussions with members of this segment and staff some the leading interests of this group include:

- Recreation Center with Programs
- Community Events and Organized Sports Competitions
- Gathering Places to Socialize
- Trails (Mt. Bike, Road Bike, Hike, Equestrian, Nordic, and Mixed-Use)
- On-Road Bicycling
- Passive Open Space
- Safe Walks to Shopping and Other Destinations
- Views, Vistas and Wildlife
- Fishing, Paddle (Canoe, Kayak and Raft)
- Hunting

Meeting the recreational needs of this group may result in funds expended exceeding revenues received from taxes (property). The fiscal impact is less, as this group does not utilize the school system. Currently, some of this group’s needs are being met and funded by homeowner associations.



Trails help to meet the recreational needs of all age groups, including retirees.

One leading interest of residential tourists is enjoying views, vistas, and wildlife, which may not be available at their primary residence.



### Market 3: "Residential Tourists"

This group includes second and vacation homeowners and those that rent these properties on a seasonal or shorter-term basis. This segment includes a full range of age groups and interests including individuals, families with children, groups of friends and couples. Estimates differ, but potentially up to 60% of the residential structures in Archuleta County fall into this classification. The Colorado Office of Demography estimates around 2,000 homes but this number may be higher and is definitely increasing. The Region 9 Second Home Study Report indicates that anywhere between 30% - 43% of condos, multi-family homes, and single-family homes are owned by non-locals. This report also says that 75% of locally-owned condos are used as timeshares. Using the smaller percentage estimates, and assuming a household size of two, annual visitors within this segment constitute a minimum of nearly 5,000 individuals. This amount could be higher if condo timeshares and larger percentage estimates are used. Trends indicate that this is a rapidly growing group in Archuleta County with numbers much higher by 2015.

Based on observations and discussions with property managers, developers, owners, and staff some the leading interests of this group include:

- Events
- Trails (Mt. Bike, Road Bike, Hike, Equestrian, Nordic, and Mixed-Use)
- On-Road Bicycling
- Passive Open Space
- Views, Vistas and Wildlife
- Fishing, Paddle (Canoe, Kayak and Raft)
- Hunting

Revenue sources from this group include property taxes, rental taxes and sales taxes from increased expenditures for goods and services. Depending on the taxing structure, revenues from this group could likely better meet the costs associated with their impacts on fiscal costs and services including recreation and open space infrastructure. Currently, some of this group's needs are being met and funded by homeowner associations where some of these properties are located. Maintaining a high quality open space, scenic and outdoor recreation infrastructure is vital to the continuation of revenues from this segment.

#### Market 4: Tourists

The tourist segment includes visitors to the area for short durations ranging from a few hours or less to several days. This group may be just driving through, staying in local hotels, or camping. This segment also includes a full range of age groups and interests including individuals, families with children, groups of friends and couples. Exact tourist numbers are unknown at this time but 30% of all employment in Archuleta County is tourism-based, with tourism increasing. Summer is by far the busiest tourist season.

Based on observations and discussions with tourism business representatives the leading interests of this group include:

- Scenic Driving
- Passive Open Space
- Views, Vistas and Wildlife
- Trails (Mt. Bike, Road Bike, Hike, Equestrian, Nordic, and Mixed-Use)
- Hiking, Backpacking, and Camping
- Walking and Strolling
- Visiting Spas and Hot Spring Resorts
- Shopping and Dining
- Skiing
- On-Road Bicycling
- Sport Competitions
- Special Events and Festivals
- Fishing, Paddle (Canoe, Kayak and Raft)
- Hunting

Revenue sources from this group include lodging taxes and sales taxes. Depending on the taxing structure revenues from this group can likely better meet the costs associated with their impacts on fiscal costs and services including recreation and open space infrastructure. Maintaining a high quality open space, scenic and outdoor recreation infrastructure is vital to the continuation of revenues from this segment



Many tourists who are in the area for short durations enjoy visiting the local spas and hot springs.



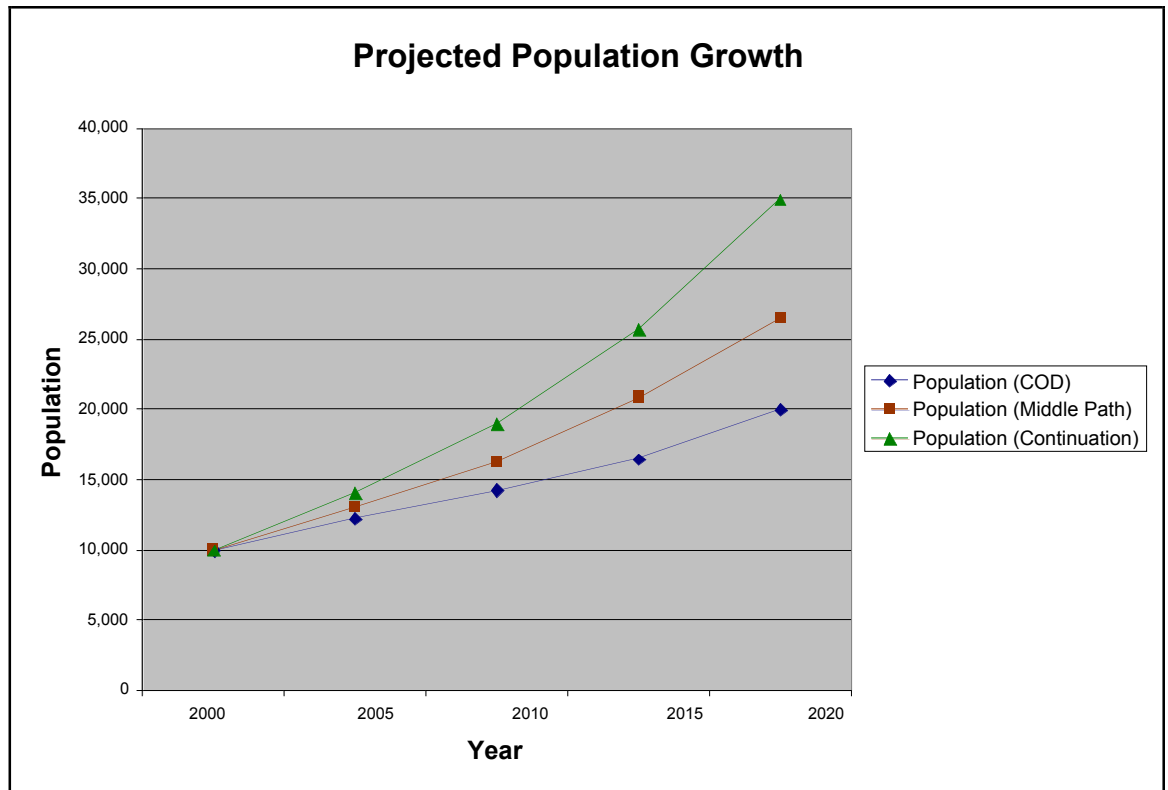
### C. DEMOGRAPHICS ANALYSIS

An analysis of demographics provides a broader perspective of overall trends in Archuleta County. It helps to identify changes within the demographic, social, economic, and lifestyle arenas that have implications for the role and nature of Archuleta County’s parks and recreation services. Overall population growth, population by age group, and second home ownership are very dynamic and revealing demographics to consider for Archuleta County. Data sources are the US Census 1990, 2000 and 2007.

#### Total Population Growth

Population exploded, almost doubling from 1990 to 2000. The current estimated population of Archuleta County is over 12,000 persons. If population continues to grow at the same average annual growth rate, the population of Archuleta County would be 35,000 by 2020. The Colorado State Demography Office estimates over 3% annual growth per year, making the population nearly 17,000 persons by 2015 and 20,000 persons by 2020 (a Region 9 Report utilizes these numbers as well). These ranges and a “middle path” averaging the three are shown below in Figure 3.1—adopted from the Archuleta County Community Plan (2001).

Figure 3.1  
Comparison of  
Projected Population  
Growths



### Population by Age Group

Population by age group, shown in Figures 3.2 and 3.3 below, presents several trends between 1990 and 2000 with implications for the current plan. There was a sharp increase in persons ages 40-60 in the County, making the 45 to 49 year age group the

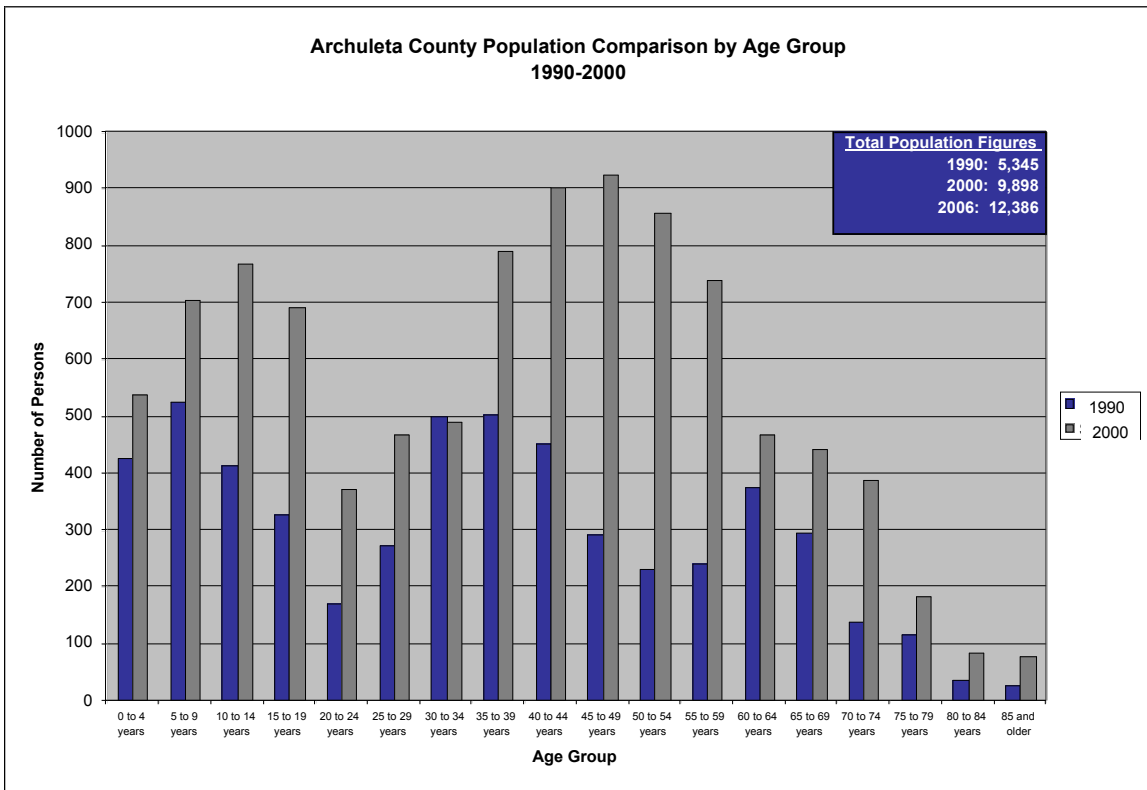


Figure 3.2 Comparison of Populations by Age Group 1990 and 2000

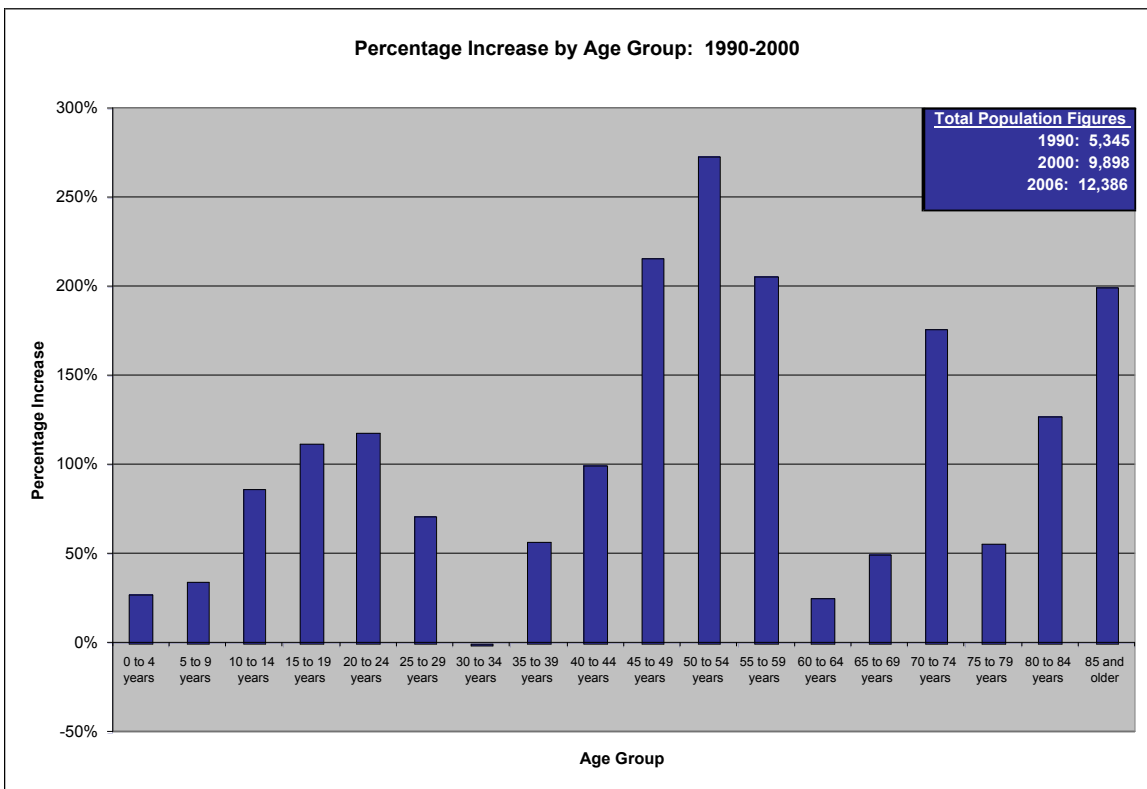


Figure 3.3 Population by Age Group: Percentage Increase between 1990 and 2000

most populous in 2000. Along with this was an increase in children, especially teenagers. By 2000, the age ranges of 5-19 and 35-59 contained the most populous age groups in the County. Coupled together, this means more families moved into the region between 1990-2000, creating an increased need for active recreational activities such as sports fields. These trends can be seen in the charts below.

Detailed population statistics (beyond total population) of the US Census are not currently available for Archuleta County in the years between each ten year period. The American Community Survey, which tallies detailed population tables annually, is not conducted for Archuleta County, making detailed tables of current population unavailable. If population rates by age group have continued to increase at the same rate (as they did from 1990-2000), there would be huge increases in the 5-19 year category and the 35-59 year category.

A 2007 study by Western Demographics (the Archuleta School District 50J Facilities Master Plan Update) took a look at population school enrollment statistics. According to this study, based on School District data and data from the Archuleta Economic Development Association, the age group of 20-29 has grown most rapidly between 2000 and 2005. School-aged children have actually become a smaller portion of the population during the past five years (as opposed to changes between 1990-2000). Contrasted with the total population estimated at a 3.7% growth rate, a current 1.2% annual growth in student enrolment illustrates that the current growth dynamic may not be the family, but instead households mostly without students. Projected trends show increases in student enrollment growth rates by 2010.

To summarize, total population and population by age group have seen significant increases between 1990 and today. While different age group population totals have shown some growth fluctuation between the years, it is certain that an overall increase in all age groups has occurred. These population increases, along with an increase in second home owners, dictate a need for open space, parks, and trails throughout Archuleta County.

**With an overall increase in all age groups, more open space, parks, and trails will be required as development increases to accommodate growth.**



## Second Home Ownership

Another major change is the increase in second-home ownership. Both the Pagosa Springs area and Archuleta County are experiencing a substantial influx of second home owners. A number of studies have suggested that about a quarter to over half of all properties are owned by second home owners. These estimates include:

- 2000 census: 23% of the total housing stock was dedicated to seasonal use.
- The Region 9 Report 2007 and Second Home Study: 38% of single family homes in the County are owned by second homeowners that live outside the County. 43% of condos are owned by non locals (75% of “locally-owned” condos are used as timeshares). 30% of mobiles and modulars are owned by non-locals. 35% of multi-family homes are owned by non-locals.
- The Region 9 Second Home Study: 59% of private land is owned by non-locals. 72% of non-locally owned lands are unimproved or without homes.
- The Colorado Office of Demography (COD): 1,912 residences are owned by seasonal, or part-time residents.
- 2006 property assessment: 60% of area private properties are owned by non-residents.

## Other Demographics Information

The Town of Pagosa Springs represents about 14% of the County’s population, at around 2,000 residents. In addition, a significant portion of the County’s population lives in Pagosa Lakes and surrounding subdivisions that are not within Town limits. Future annexation could raise the population of Pagosa Springs substantially.

Within the entire County, there is a tourism influx in both summer and winter. Tourism is heaviest in the summer months and can increase the actual population through home/cabin rentals, motel rooms, and RV space/camping sites. Assuming a household size of 2 and further assuming that 70% of vacant housing units could be occupied at peak season, a part-time resident population of 2,676 is estimated. Adding this part-time resident figure to approximately 1,100 motel rooms, RV spaces/camping sites, the County’s population at any given time could temporarily increase to over 17,000 (in 2007) with residents and tourists combined.

## D. SURVEYS AND PUBLIC COMMENTS

### RRC 2006 Pagosa Springs Parks and Recreation Mailback Survey

A recent Pagosa Springs Parks and Recreation Mailback survey received over 459 responses from Pagosa Springs and throughout Archuleta County. The results of this survey are described in greater detail in Appendix B. The key findings include:

- A strong desire for community trails within Town and away from Town
- A strong desire for open space protection with development pressure
- Public access and trails along the San Juan River
- Improvement to trail system, including amenities, at Reservoir Hill
- Need for more adequate recreational facilities/programs, especially for children

### RRC (October 2004) Pagosa Springs Community Survey

This survey set out to provide key data to guide policies and decisions in the areas of planning, marketing, and economic development. More detailed results can be found in Appendix B. In summary, it was clear that residents feel very strongly about preserving the small town character and ambience that attracted them to the area. Their vision is to preserve its pristine natural environment while managing growth and development.

#### *Top Objectives Related to Downtown improvements*

- Respecting Pagosa Springs' small town character
- Protecting the river corridor
- Open space acquisitions
- Public access along river
- Expand bike paths/walkways

### On-Line Community Survey (Greenways, Inc. May-July 2007)

The consultant specifically prepared the survey shown in Figure 2.5 for this planning effort. It was distributed in hardcopy format to participants in the First Public Open House Meeting in May 2007 and was made more broadly available online from early May through July of 2007. Over 100 responses have been received as of mid-July 2007 with more coming. The results of this survey are described in greater detail in Appendix B.

### Public Comments and Suggestions

While this input is less broad and scientific in its reach, it is illustrative to cite some of the more frequently heard comments and suggestions many of which are consistent with, or supportive of, the other findings discussed above. There were comments heard by residents at the public meetings and through conversation with intercepted residents and tourists throughout the area in April and May 2007. The main comments and suggestions include more trails, trail improvements, greater connectivity between neighborhoods, trails and open space, etc. All comments and suggestions are listed in Appendix B.

While open dialogue with residents is less broad and scientific in its reach, it does provide an important form of direct feedback for needs identification.



## E. LEVEL OF SERVICE ASSESSMENTS

Over the past several decades, the National Recreation and Park Association (NRPA) has recommended standards for the provision of park and recreation facilities in communities. Using these and other standards, park planning professionals often use the term “level of service” or “LOS” to calibrate how well the needs of a community are being met by existing and planned facilities.

Using NRPA guidelines for LOS can be helpful in measuring how well community needs are met and in defending planned future investment in facilities. However, it should be pointed out that these guidelines have their limitations. First, the standards address only a limited range of classifications of park, recreational and open space amenities. Second, the standards do not differentiate by community, demographics, climate, region of the country, market, growth and development, geography, accessibility, and other factors. For example, there may be recreational activities such as equestrian and snowmobiling in Pagosa Springs that are not enjoyed to the same degree in New York City or Minneapolis. Third, the LOS standards do not offer measurable quantities of several kinds of facilities such as natural resource areas, trails, greenways, and open space.

For this and other reasons, the NRPA has more recently taken the stance that fixed numerical standards may be too limited to be applied across the board as a sole determinant of LOS. Rather, NRPA recommends that the unique, demographic, market preferences, trends and environment factors of each community be considered as well. Therefore, NRPA guidelines and similar LOS standards should be taken as only one benchmark for comparison and a number of other factors should be considered. Some of these include:

- Demographic and leisure activity trends (as described above)
- Opinion surveys (as described above)
- Comments at public forums by user groups and stakeholders (as listed above)
- Input from planning professionals and public officials
- Market reckoning
- Studies on the benefits of open space, natural areas, and trails
- Comparisons to other communities regionally and nationwide

Some communities across the nation have recommended more localized standards for particular geographic areas and different sized communities. A better starting point for Pagosa Springs and Archuleta County than the NRPA is the State of Colorado Small Community Park & Recreation Planning Standards (2003). The standards in this report have been uniquely calibrated to the parks and recreation demands of small community Colorado residents. Extensive survey and other research work has been completed to provide the best numbers and analysis possible. These standards and community comparisons are considered below and compared to Pagosa Springs.

Before standards are considered, it should also be noted that Pagosa Springs and Archuleta County are unique, deserving of special consideration especially in the factors listed above. Some unique traits include:

- Previous surveys have indicated that open space acquisition and protection, bike paths and trails, park expansion, and other specific ideas are the top priorities of area residents.
- Archuleta County is covered with open space and trail networks in its surrounding National Forest lands.
- The majority of County population is found in Pagosa Springs and surrounding subdivisions such as Pagosa Lakes. Existing park facilities are clustered in this area and are of consideration here.

**Table 3.4 Park Types and Standards used in Durango, CO**  
 \*Additional park types utilized for this study, including snowmobile parks and motocross parks.

**Park Types and Standards**

Like most communities, Archuleta County’s and Pagosa Springs’ parks, open space, and trails come in a variety of forms and characteristics. To make this system comprehensible, parks can be divided into several categories as they are below (Currently there is no system of park types in existence for Archuleta County). The size ranges

Park Type	Size Range	Service Area	Key Features	Archuleta County Parks
Pocket	1/4 to 5 acres	1/4 mile radius	Open play area, playground, picnic table	-South Park -Centennial Park
Neighborhood	5 to 15 acres	1/2 mile radius	Open turf area, picnic area, pavilion, playground, walking/jogging path, softball/baseball fields, tennis courts, basketball court	-Town Park -Pagosa Lakes Park
Community	15 to 30 acres	2 mile radius	All of the above plus swimming pool, rest rooms, parking lot, open play fields, tennis court complex, baseball/softball complex, several basketball courts, where possible: water feature, natural area, regional trail connection, recreation center	-Pagosa Springs Sports Complex -Pagosa High School Fields
District	30 + acres	5-10 mile radius	Significant natural areas with natural recreation (hiking/biking trails), large, lighted sports complexes, recreation/community center	
Regional	50-500 acres	25-50 mile radius	Diverse outdoor recreation, hiking, camping, canoeing, fishing, recreation areas (playgrounds, ball fields, etc.)	-Echo Lake State Park -Navajo State Park
Special*	Site Specific	Regional	Dependent on regional interest: motocross, snowmobile, etc.	
Trails/Greenways	Varies	1/2 mile to 1 mile	Recreation and alternative transportation trails (paved, unpaved, equestrian, bicycle, etc.)	-Reservoir Hill Park -River Center Park -San Juan River Trails

and service areas are based on national standards although communities can define these characteristics in unique ways. In Archuleta County, there is not a simple, classic breakdown of existing parks based on all criteria, but parks are classified as best as possible by their size and features and these are considered in the Level of Service (LOS) Assessments. The regional parks listed act like state parks and do not have enough key features and facilities to adequately represent a regional park to be used for the LOS.

**LOS: Parks**

Using the park types described in Table 3.4, the inventory of park types in the Pagosa Springs area is shown in Table 3.5 below. The level-of-service (LOS) for each park type is shown. It is expressed in number of acres per 1,000 people. Because these parks are to be considered in a more regional sense, the total population of 12,386 was used. It should be noted that these parks are categorized as best as possible, mainly by size. They do not fit the exact description in terms of key features and facilities within each park. Those existing features can be seen in the preceding table.

An LOS has not been determined and analyzed for pocket parks in Archuleta County. These parks are typically very small with picnic tables and a playground. Pocket parks can be created and maintained by neighborhood associations and are often for local-

Park Type/Facility	Developed Acres	Undeveloped Acres	Total
<b>NEIGHBORHOOD PARK</b>			
Town Park	4.7 acres		4.7 acres
Pagosa Lakes Park	6.2 acres		6.2 acres
Neighborhood Park Total			10.9 acres
<b>LOS*</b>			<b>0.88</b>
<b>COMMUNITY/SCHOOL PARK</b>			
Pagosa Springs Sports Complex		14.9 acres	14.9 acres
Pagosa High School Fields	23.3 acres		23.3 acres
Community/School Park Total			38.2 acres
<b>LOS*</b>			<b>3.08</b>
<b>DISTRICT PARK</b>			
District Park Total			0 acres
<b>LOS*</b>			<b>0</b>
<b>REGIONAL PARK**</b>			0
Regional Park Total			0 acres
<b>LOS*</b>			<b>0</b>
<b>SPECIAL PARK</b>			
County Rotary Park	0.4 acres		0.4 acres
Special Park Total			0.4 acres
<b>LOS*</b>			<b>0.03</b>
<b>TRAILS - GREENWAYS</b>			
Reservoir Hill Park	80.4 acres		80.4 acres
River Center Park	4.6 acres		4.6 acres
Greenway Total			85 acres
<b>LOS*</b>			<b>6.9</b>

Table 2.3 Pagosa Springs area parks, acreages, and LOS.

\*Approximate Archuleta County population of 12,386 was used. LOS is calculated by Number of Acres/1,000 people

\*\* Navajo State Park and Echo Lake State Park function more as state parks, without the key features and facilities of a regional park and are thus, not included in this LOS.



**Table 2.6 \*Standards are a combination of NRPA and commonly-used local standards. Specifically, these are used in the Surry County Parks and Recreation Comprehensive Master Plan 2005/2015.**

**\*\*The 2015 LOS is derived using the Colorado State Demography Estimate of 17,000 people.**

ized, private use. Pocket parks should be developed and can become a key component of a regulatory approach for County development. Overall, pocket parks should not be as much of a concern for the County in terms of construction and development.

When compared to local and national standards, all size parks ranging from neighborhood to regional are not meeting the needs of the population. This is shown in Table 3.6:

Facility Category	NRPA Standards*	Number of Parks	Existing LOS (acres per 1,000 for current pop.)	Current Need	2015 LOS (acres per 1,000 for projected pop.)**	2015 Projected Need	Additional Parks Needed Now	2015 Additional Parks Needed
Neighborhood Park	2.5 acres per 1,000	2	0.88	Does not meet needs	0.64	Does not meet needs	4	6
Community/School Park	5 acres per 1,000	1	3.08	Does not meet needs	2.25	Does not meet needs	3	5
District Park	5 acres per 1,000	0	0	Does not meet needs	0	Does not meet needs	2	3
Regional Park	10 acres per 1,000	0	0	Does not meet needs	0	Does not meet needs	1	2
Special Park	N/A	1	.06	Expressed Need	Expressed Need	Expressed Need	--	--
Trails - Greenways	N/A	2	12.1	Expressed Need	Expressed Need	Expressed Need	--	--

**LOS: Recreational Facilities**

**Table 3.7 Park Facilities and Demand (from State of Colorado Small Community Park & Recreation Planning Standards) & Measurements for Pagosa Springs area.**

Table 3.7 compares the Colorado small community park standards to existing and future facilities in the Pagosa Springs area. This comparison includes Pagosa Springs and surrounding neighborhoods (including Pagosa Lakes) which totals approximately 7,000 people. It should be noted that the future Pagosa Springs Sports Complex was accounted for here. It is clear that the number of facilities is inadequate for the current population, which, as previously described, is rapidly growing.

\*This number was revised for this report to reflect more common nationwide demand for playgrounds

Facility Category	Parks System Facility Types	# of Facilities Needed per 1,000 Residents (Demand)	# of Facilities/1,000 Residents in Pagosa Springs & Surrounding Neighborhoods
Sports Fields	Soccer/Multi-use	0.95	2/7,000 = 0.29
	Ball Field	0.61	3/7,000 = 0.43
Courts	Tennis Court	0.97	1/7,000 = 0.14
	Basketball Court	0.91	1/7,000 = 0.14
	Volleyball Court	0.13	1/7,000 = 0.14
Outdoor Recreation	Small Skatepark	0.16	1/7,000 = 0.14
	Large Skatepark	0.06	0/7,000 = 0
	BMX Track	0.16	1/7,000 = 0.14
	Paved Multi-use Trail	1.04	3/7,000 = 0.43
Leisure	Playground	1.00*	4/7,000 = 0.57
	Family Picnic Area	6.25	7/7,000 = 1.0
	Group Picnic Area	0.36	1/7,000 = 0.14

Facility Category	Colorado Small Park Standards (# of Facilities Needed per 1,000 Residents (Demand))	Existing Facilities*	Current Demand 7,000**	Current Need	2015 Demand 13,000***	2015 Projected Need
<b>Sports Fields</b>						
Soccer/Multi-use	0.95	2	7	5	13	11
Ball Field (Baseball/softball)	0.61	3	5	2	8	5
<b>Courts</b>						
Tennis Court	0.97	1	7	6	13	12
Basketball Court	0.91	1	7	6	13	12
Volleyball Court	0.13	1	1	0	2	1
<b>Outdoor Recreation</b>						
Small Skatepark	0.16	1	1	0	2	1
Large Skatepark	0.06	0	1	1	1	1
BMX Track	0.16	1	1	0	2	1
Snowmobile Terrain Park	N/A	0	<i>Expressed Need</i>	<i>Expressed Need</i>	<i>Expressed Need</i>	<i>Expressed Need</i>
Moto-Cross Park	N/A	0	<i>Expressed Need</i>	<i>Expressed Need</i>	<i>Expressed Need</i>	<i>Expressed Need</i>
<b>Leisure</b>						
Playground	1.00	4	7	3	13	9
Family Picnic Area Tables	6.25	40	44	4	82	42
Group Picnic Area	0.36	3	3	0	5	2
<b>Open Space &amp; Trails</b>						
<b>Trails****</b>						
Hiking footpath	0.84 miles	0	6	6	11	35
Unpaved multi-use	2.33 miles	0	16	16	30	70
Paved multi-use	1.04 miles	2	7	5	13	35
Mountain bike	0.84 miles	0	6	6	11	35
Snow/Motorized/ATV	0.84 miles	0	6	6	11	35
Equestrian paths	0.84 miles	0	6	6	11	35
On-road bicycle and pedestrian facilities	1.04 miles	3	7	4	13	40
Paddle	0.50 miles	0	6	6	11	16
<b>Open Space</b>						
Community Open Space	N/A	N/A	<i>Expressed Need</i>	<i>Expressed Need</i>	<i>Expressed Need</i>	<i>Expressed Need</i>
Wildlands Open Space	N/A	0 acres	<i>Expressed Need</i>	<i>Expressed Need</i>	<i>Expressed Need</i>	<i>Expressed Need</i>

Table 3.8 Tabulation of Projected Needs by Park Facility Type Through 2015.

\* Existing facilities include the Pagosa Springs Sports Complex currently under construction

\*\*Demand population is a rough estimate for the current population of only the Pagosa Springs area and includes surrounding major subdivisions. These numbers do not take into account seasonal or part-time residents.

\*\*\*2015 Demand population is a rough estimate for only the Pagosa Springs area and includes surrounding major subdivisions and potential future subdivisions. It is only an estimate based on the same continuing rate of growth between 1990-2000. These numbers do not take into account seasonal or part-time residents.

\*\*\*\*Trail demand is shown by number of miles per 1,000 residents. Unpaved multi-use, paved multi-use and on-road bicycle/pedestrian facility numbers were taken from the Small Community Parks Land Standards for the State of Colorado. 0.84 miles is taken from San Diego planning efforts and is utilized for other specialty trails.

Table 3.8 (page 3-16) presents current and projected specific park facility needs. There is current need for most facilities and 2015 projected need for all facilities. Again, this LOS assessment and need table only presents a small piece of the picture. When considered with demographics and population trends, local considerations, resident wishes, and accessibility and connectivity issues, it is clear that there is an overall need for properly located parks, open space, and trails throughout the private lands of Archuleta County.

### **LOS: Open Space and Trails**

Determining needs and level-of-service for open space and trails are a bit more complex. Percentages of land dedicated to open space can vary. The State of Georgia has established a goal of 20% mandatory greenspace conservation. Las Vegas, Nevada and Charleston, SC have determined that in response to rapid development, 30% of the jurisdictional land use should be conserved and protected as “open space.”

At the time of this study, it is unclear exactly how many acres of open space exist in Archuleta County. Because recommendations will focus on private lands (or lands that could be developed), the study area encompasses 297,254 acres of the total 867,528 acres in Archuleta County. Open space exists in the parks listed above but can also be found in dedicated spaces within subdivisions, residential parcels, and in rural agricultural lands. Currently parks total approximately 350 acres which is a minute percentage of the total private lands acreage.

In terms of trails, studies across the United States suggest anywhere between 0.5 miles - 1 mile of trail per 1,000 people within 15 minutes of travel time. While the San Juan National Forest has hundreds of miles of dirt paths, the Pagosa Springs area only has approximately 3 miles of trail, mostly in the form of sidewalk and side-path in the Pagosa Lakes subdivision and Downtown Pagosa Springs. Because there are significant distances between residences and destinations, there is a need for a connected, integrated trail system that provides access. Currently, there are not adequate facilities to provide continuous access for commuters and recreation cyclists and pedestrians in this region.

Because major populations in Pagosa Lakes and Aspen Springs are well over 15 minutes travel time by foot and bicycle to Downtown and each other, it is more likely many more miles of trails would be necessary here. It is also clear in the previous surveys and public comments that a connected system of trails and bike paths are a top priority.

The conceptual diagram on page 3-18 (Figure 3.9) shows the spread of population centers within the Pagosa Springs area and a lack of trail connectivity between them. Also shown is San Juan National Forest which makes up over half the County and surrounds the communities below. For example, the National Forest borders the Pagosa Lakes subdivision but trail connectivity between the two areas is not provided.

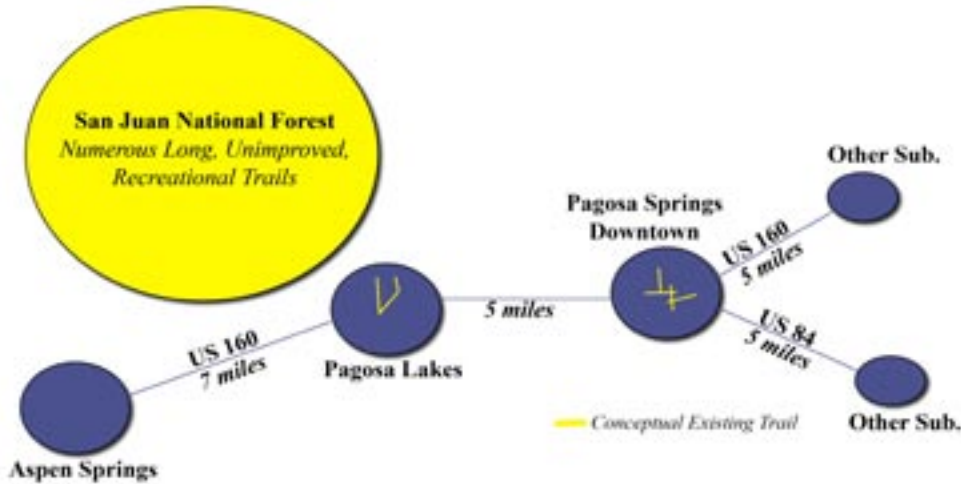


Figure 3.9 Conceptual diagram of major population areas near Pagosa Springs, San Juan National Forest, and lack of trail connectivity.

In addition to a lack of continuous trail system, there is a lack of diversity in the trail system. The trail vocabulary proposed here includes:

- Hiking footpaths
- Unpaved multi-use paths
- Paved multi-use paths
- Mountain bike paths
- Snow and motorized ATV's
- Equestrian paths
- On-road sidewalk and bicycle facilities

Currently in the Pagosa Springs area, only a few official miles of sidewalk and paved multi-use path trail types exist in the Pagosa Lakes subdivision, Downtown Pagosa Springs (sidewalks and along the San Juan River).

### F. SUMMARY OF NEEDS

Based on a compilation of the above-discussed level of service, market, demographic, and community input factors, conclusions are suggested below with respect to future trends and needs for Archuleta County. General conclusions are:

- Population continues to grow, with increases in the number of children, adults, families, and seniors since 1990, suggesting additional park and trail facilities are required to meet the needs of the population.
- Based on State and National standards of Level of Service, the current population's needs are not being met in terms of many park facility types including the recreation center, active fields, courts, active recreation, and trails.
- Based on State and National standards of Level of Service, the current population's needs are not being met in terms of all park types. Furthermore, there is a deficit in many facilities normally found within these parks.

- Beyond Level of Service standards, it is critical to provide parks and facilities in strategic locations that provide access and service to population centers and future development.
- There are four distinctive markets in Archuleta County: Working year-round residents, Retired year-round residents, Residential Tourists, and Tourists. All markets are increasing in number and deserve consideration when planning for parks, trails, and recreation.
- There is a common desire to maintain the rural, open space character of the County.
- There is a common concern among residents that recreational needs of residents are not being met, especially children.
- There is a strong interest in creating a quality system of park and trail facilities that can serve the population's growing needs.
- There is a lack of connectivity and access to trail facilities throughout Archuleta County and especially in higher population areas such as Pagosa Springs.
- Residents want several specific improvements including an improved recreation center and improvements to Downtown trails along the San Juan River.
- Many parks and trails are not easily accessible to population centers.

An integration of market analysis, demographic analysis, geographic analysis, survey results, and LOS assessment provides the following findings and needs for park types and specific recreational facilities, including parks and passive open space.

### **Park Types Findings (Refer to Table 3.6)**

#### *Pocket Park*

As discussed previously, pocket parks are typically small, localized parks with some open space, a playground, and picnic tables. While these are very beneficial to neighborhoods, these are not seen here as a chief concern for County park development. A regulatory approach into development should promote pocket parks as requirements. Typically, these can be built and maintained by the developer and HOA's.

#### *Neighborhood Park*

According to the LOS assessment, population increases, and public input, there is a need for neighborhood parks across the County. These are relatively small parks (5 to 15 acres) but provide critical facilities for children and adults because they can contain walking/jogging paths, softball/baseball fields, tennis courts, etc. Currently Town Park and Pagosa Lakes Park are the closest representatives of neighborhood parks and do not contain these facilities. These should be well-distributed so the average resident of the County has access to these facilities.

*Community/School Park*

According to the LOS assessment and public response, there is a need for community parks across the County. The County and Town have responded by developing a wonderful facility near the High School called Pagosa Springs Sports Complex. Community parks, typically 15 to 30 acres in size, serve a 2 mile radius. The Sports Complex addresses residents who are local to the Town limits but does not serve residents in out-of-town locations such as Pagosa Lakes and Aspen Springs.

*District Park*

Currently no parks fall into this category throughout Archuleta County, identifying a certain need. District parks contain well-constructed, lit, active recreation facilities, but can also contain significant natural areas for hiking and biking.

*Regional Park*

While Navajo State Park and Echo Lake State Park the closest candidates to falling into this category, they are not diverse enough in their facility offerings. Therefore, these acreages were not included in the LOS assessment. There is definite need for one or two strategically-placed regional parks throughout the County.

*Special Park*

Through this planning process, there has been an expressed need for a moto-cross park and a snowmobile park. Moto-cross events have become increasingly popular with a circuit of events throughout the State of Colorado and the southwestern United States. While moto-cross parks bring debate, it is undeniable that events for this area would have a positive economic impact. The location of this park is critical so that a population is served, Town facilities are nearby, but residents are not disturbed by noise pollution.

*Trails-Greenways*

As discussed above, there is a lack of a connected greenway system from National Forest lands, through private lands, and through the Town of Pagosa Springs. There is also high demand by the public for trail facilities. Greenways ranging from sidewalks to dirt paths, to multi-use off-road paved trails should be accessible to denser population areas for alternative transportation, recreation, and healthy living options.



Two existing trails, in Pagosa Lakes (left) and Pagosa Springs (right), could be connected to form a major part of the regional trail system.

Pagosa Lakes  
Recreation Center



### Recreational Facilities Findings (Refer to Table 3.8)

#### *Recreation Centers*

The findings suggest that a recreation center providing more facilities (such as a regulation size indoor swimming pool, indoor running track, etc.) is necessary for the Pagosa Springs area. This was a high priority based on survey results and will provide recreation and exercise options for the growing population groups of children, adults, and seniors.

#### *Park Facilities (Sport Fields, Courts)*

Based on current demographic trends, including projections of school-aged populations, there is a current shortfall of ball fields, soccer fields, basketball courts, and tennis courts. This need is expected to increase with the continued increase of families throughout Archuleta County as shown in Table 2.7. While a significant proportion of this need will be offset by the Pagosa Springs Sports Complex under construction in 2007, there will still remain a need for additional playfields, especially soccer.

#### *Outdoor Recreation*

Skate parks and BMX tracks are currently meeting the needs of residents in Archuleta County according to Colorado standards. Based on local observation, both the existing skate park and BMX Park were receiving heavy use with a large number of children biking and/or skateboarding to and from school. Looking ahead to 2015, a larger skate park and BMX track facility will be necessary.

A motocross park and snowmobile terrain park are specialty parks with no national or state standards associated with them. Both types of parks, especially the motocross park, were consistent items of discussion during the public process (especially at the May 2007 public workshop). There is an increasing interest and population involved in motocross events throughout the State of Colorado. There is specific interest in developing a motocross park in the Pagosa Springs area to attract tourists and racers to the area for a few weekends of the year, creating positive economic impacts. Because of the increasing interest in motocross and winter activities such as snowmobiling, these types of parks will be needed in the near future.

### *Leisure*

Leisure activities such as picnicking and playground use almost have their needs met today. Future population growth will dramatically increase the need for picnic facilities, picnic tables, and playgrounds. Based on local observation, playground use, especially at Town Park and South Park, was heavy. With families moving into the area and increased tourism, it is anticipated that more facilities will be needed.

### **Open Space and Trails**

While these do not fit into the traditional LOS item list, they are nonetheless very important to Archuleta County residents. As mentioned previously in this report, the acquisition and preservation of open space along with the further development of pathways are the top priorities of local residents. While unimproved recreational trails are common and numerous throughout the San Juan National Forest, trails are not adequately serving population centers around Pagosa Springs and the major roadway commercial corridors. Currently, trails are limited in this area to the San Juan River in Downtown Pagosa Springs and within the Pagosa Lakes neighborhood. There is poor access and no connectivity of these facilities. From the standpoint of existing resident demand and tourism/recreation promotion, open space and trails are probably the most important need of the community.

### *Trails*

While residents and visitors enjoy no shortfall of primitive trails in the National Forest (for hiking, horseback, Nordic, etc.), there is a significant gap in the multi-use trail system readily accessible to and serving the residential areas of the County. Going beyond simply the LOS factored needs, creation of a high quality, highly visible extensive multi-use trail system is also very important to the maintaining the competitiveness of Archuleta County with other tourist destinations worldwide, in Colorado and in the Southwest part of the state. There is also an opportunity to expand and enhance paddle facilities—both down river and slalom type rapids—along the San Juan River as well also along a number other creeks and rivers that lend themselves to this kind of activity.

### *Open Space*

There are numerous types of open space ranging from remote wildlands to closer-in passive recreation parks (use limited to picnicking, trails, nature appreciation). An evaluation of two types of open space are addressed here—Community Open Space and Wildlands Open Space. Community Open Space refers to open space parcels readily accessible to community residents such as Reservoir Hill. Wildlands Open space refers primarily to the vast expanses of National Forest lands in and around Archuleta County. With the expanding residential population there is a clear need to set aside and make accessible a quality system of Community Open Spaces. The Wildlands acreage is certainly more than adequate for the current and projected population but nonetheless this open space is vital infrastructure to the future well-being of the County as well as the nation and should be preserved and protected without compromise. Both types of open space are vital infrastructure!



## LEVEL-OF-SERVICE CASE STUDY: *Snyderville Basin Recreation and Trails*

*The Snyderville Basin Special Recreation District is an independent special service district of Summit County, Utah. The District boundaries include the western end of Summit County, excluding the incorporated area of Park City.*

### **History**

The Summit County Board of County Commissioners established the District in 1986 to provide public recreation facilities and services, within the boundaries of the District. In September 1995, District residents approved a \$7.5 million General Obligation Bond to fund community parks and recreation in the Snyderville Basin. In 1996, policies supporting the development of community parks and trails were incorporated into the Snyderville Basin General Plan. These policies were further defined and adopted in the Recreation District's Recreation and Trails Master Plan. This represented the first opportunity for new development to contribute toward recreational needs in the Snyderville Basin. Summit County Commission adopted the Recreation and Trails Master Plan on December 1, 1997.

Initial expenditures funded land acquisition and improvements, allocated \$2 million to begin the implementation of the community-wide trail system master plan, and provided financial assistance in the construction of an enhanced community swimming pool and four playing fields at a middle school. A facilities Lease and Joint Use Agreement, signed in December of 1996, demonstrated the Recreation District's commitment to a long-term relationship with the Park City School District in providing physical fitness and recreation opportunities for all area residents.

In November 2001, voters in the District authorized another \$11 million dollar General Obligation Bond for recreational open space (\$3 million), additional trails (\$2 million), capital facility improvements including an indoor sports center (\$4 million), and a contribution toward building an ice rink in partnership with Park City (\$2 million).

In November 2004, voters in the District authorized \$10 million for passive recreational open space land acquisition, including trails and trailheads. This initiative was placed on the ballot at the request of the Basin Open Space Advisory Committee (BOSAC) whose purpose is to advise and provide input to the Board of County Commissioners (BCC) regarding the creation, preservation and identification of open space within the Snyderville Basin. Following the approval of the open space bond the BCC adopted Summit County Ordinance No. 520, the Revised General Plan for the Snyderville Basin, in which the preservation of open space is the "central premise" of the plan.

Over the course of ten years, residents of the Recreation District funded \$28.5 million through General Obligation Bonds that will be repaid through property tax levies over the twenty-year life of each bond.

In March 2006, the 1997 Recreation and Trails Master Plan was revised to complement the 2004 Snyderville Basin General Plan and Development Code. The amended Master Plan captures an accurate snapshot of community recreation facilities provided today, and anticipates the need for future system improvements based on citizen input and validation of level of service standards adopted by the Recreation District.

### **Recreation Level of Service Standards**

The Snyderville Basin adapted the Mountain Recreation Standards, a Recreation Level of Service (LOS) tool to measure the desired levels of service for park, recreation and trail facilities provided to the community based on population. Demand for parks, recreation and trails facilities will increase as the population grows, as tourism develops, as commercial development occurs, and increases the employment base in the area. The greater Park City area is a residential and second home community and a year-round tourist destination. In tourism-based communities, such as this, demographic analysis and recreational user demand is complicated by the influx of visitors and part-time residents. The Snyderville Basin experienced a 7.6% per year population growth from 1996 to 2005. As of 2005, there were approximately 7,715 dwelling units in the Basin, with an estimated population of 22,374 persons and in 2020, it is anticipated that dwelling units will be 12,328 with a population of 35,754 persons (1).

The 2006 Mountain Recreation Standards were developed and based on research of standards from other comparable communities, periodic evaluations and revisions by the District's Board and staff, a Needs Assessment conducted in 2003 and input from the community. These standards provide a set of tools to establish clear direction and measurement for park, recreation and trail facilities to meet the needs and demand of the growing population.

Measuring the current parks, recreation and trails facility inventory against the recreation standards, the District was deficient in the desired level of service in many areas, even though they had made a significant investment (\$28,664,104) in parks and recreation facilities. The cost of additional facilities, as well as the levels of service desired in 2020 is significant. Rising land prices and increased cost of construction play a major role in higher costs for recreation facilities. The 2006 Snyderville Basin Special Recreation District Capital Facilities Plan establishes project phasing and construction of facilities to the desired service levels for community facilities. According to the Capital Facilities Plan, at a minimum, the Recreation District will need to plan for \$6.2 million in future park and recreation facility costs, roughly \$7.5 million for park land and nearly \$22 million for trails for a total of over \$35 million (2005 costs) plus costs of trailheads and open space. With these projected expenditures, the Recreation District needed to look at various financial options in order to eliminate the existing facility shortage and to keep pace with new development. The plan suggests that one mechanism would be impact fees, which are a logical source to mitigate the demands of new park, recreation and trail facilities by new development.

### **Impact Fee Analysis**

Impact fees are also known as exactions. In its simplest form, the developer is charged an easy to calculate fee. A formula is created to decide the cost that developers will impose on the community. Impact fees are intended to offset the cost of capital facilities needed to meet demand from new development.

In 2006, a Parks, Recreation and Trails Impact Fee Analysis was prepared for Snyderville Basin Special Recreation District to identify the impacts placed on the facilities by development activity and how these impacts are reasonably related to the new development; and to detail all cost components and the methodology used to calculate each impact fee. Demand for park and recreation facilities comes from residents and tourists. Demand for trail facilities comes from not only residents and visitors, but also from commercial development and employees who use the trails. Therefore, impact fees for the District were calculated in two parts: 1) a parks and recreation component based on residential and lodging growth; and 2) a trails component based on residential, lodging and commercial growth (2).

*(Case Study Continued)*

The report calculates the demand for and cost of parks, recreation and trail facilities that are attributable to growth and new development. Open space was not included in the impact fees analysis, the SBSRD indicated that open space will be paid through bonding and other financial methods. A single impact fee was calculated for a districtwide parks, recreation and trails system, with a uniform fee based on residential units, lodging units, or commercial square footage. There were no unique needs based on geographic location within the district boundaries.

The following table, "Summary of Gross Impact Fee" is from the Parks, Recreation and Trails Impact Fee Analysis that presents the two separate components (parks/recreation and trails).

Summary of Gross Impact Fee				
	Parks/Recreation Per Unit	Trails per Unit	Trails per SF	Total per Unit/SF
Residential	3,656.29	483.98	Na	4,140.27
Lodging	460.82	61.00	Na	521.82
Commercial	Na	Na	0.38	0.38

Credits against the gross impact fee for parks, recreation and trails must be made for bond amounts spent on either parks and recreation or the trails portion of the fee. Go to:

[www.basinrecreation.com/pdf\\_bin/Impact\\_Fee\\_Economic\\_Analysis\\_Adopted\\_041906.pdf](http://www.basinrecreation.com/pdf_bin/Impact_Fee_Economic_Analysis_Adopted_041906.pdf)

Appendix D of the Impact Fee Analysis to see several samples of bond credits for different property types, given that there are endless scenarios of credits, based on taxable value and remaining term of the bonds.

The impact fee structure was enacted by the County Commission in April 2006.

In addition to General Obligation Bonds and Impact Fees, the District uses several other financial, regulatory and management mechanisms for parks, recreation and trails. These include dedications for a community trail and/or construction of the trail, property tax levy for operations, public/private partnerships, user and special event fees, shared facilities and grants from the Summit County Restaurant Tax and Recreation, Arts and Parks Tax programs.

The Snyderville Basin residents enjoy their parks, recreation and trails amenities and ultimately these recreational activities enrich their lives. They will continue to be supportive of financial and management measures to enhance the program, provide for diverse recreational needs and build desired parks, recreation and trail facilities.

(1) *Parks, Trails and Recreation Capital Facilities Plan, Snyderville Basin Special Recreation District, Lewis Young Roberston & Burningham, Inc., Salt Lake City, Utah, April 19, 2006.*

(2) *Parks, Recreation and Trails Impact Fee Analysis, Snyderville Basin Special Recreation District, Lewis Young Roberston & Burningham, Inc., Salt Lake City, Utah, April 2006.*

*Snyderville Basin Recreation and Trails Master Plan, The Recreation Element of the Snyderville Basin General Plan, Snyderville Special Recreation District, Park City, Utah, March 22, 2006.*





## 4. REGIONAL PARKS, RECREATION, OPEN SPACE & TRAILS SYSTEM

### Chapter Outline:

- A Overview
- B Visions, Goals, and Objectives
- C Component Landscapes
- D Regional System
- E Recommended Improvements

### A. OVERVIEW

The native mountains and high plains landscapes of Archuleta County are some of the most beautiful settings in the United States. The southern range of the San Juan Mountains offers a visual backdrop and has some of the most varied scenery of the Rocky Mountains. The Archuleta County Regional Parks, Recreation Open Space and Trails System is planned to both protect these landscape assets, and to provide opportunity for residents and tourists to access these lands and waters for health and fitness, recreation and enjoyment. The beauty and accessibility of these lands is a critically important element of the economy in Pagosa Springs and throughout the county.

As detailed in Chapter 3, there are strong needs and desires for open space protection, trails development, and parks. The recommendations of this chapter address the needs expressed in terms of public input, park level of service (LOS), and an increasing population.

For the purposes of this Plan, there are two distinctly different types of greenspace that add value and function for the Archuleta County community. The first is non-programmed native open space, which consists of the San Juan Mountains, native forests, meadows, streams, rivers and lakes. These lands serve to protect the ecology, native plants and animals that inhabit the mountain and high plains landscapes. The second is programmed greenspace, which consists of productive lands (managed forest, ranch and farm lands), parks, trails and recreation areas that the Town of Pagosa Springs, County, homeowners associations, state and federal governments, private landowners and private land conservation organizations own and manage.

The purpose of this Plan is to conserve and properly manage both of these landscape types, which can then be devoted to outdoor access and recreation, the protection of public health, safety and welfare, and conservation of natural resources.

## **B. VISION, GOALS AND OBJECTIVES**

The principal goals of the Archuleta County Regional Parks, Recreation, Open Space and Trails System are to make available land and resources to support recreational use and to balance conservation of natural resources with economic growth and development. The goals for this Plan are articulated in three major areas of concern: 1) park and recreation development, 2) trails development and 3) open space conservation.

### **PARKS AND RECREATION GOALS:**

Goal: Provide a variety of outdoor recreation opportunities, including land and water based recreation, to meet the diverse needs of residents and tourists.

Goal: Utilize innovative strategies and broad based funding to acquire, develop and manage new park and recreation resources throughout the county.

### **TRAILS GOALS:**

Goal: Develop a system of linked land and water-based trails to improve access to outdoor resources, strengthen the local economy, promote health and wellness and enhance community amenities.

Goal: Utilize transportation, utility, river, and abandoned rights-of-ways to develop a network of trails that connects residents and tourists to high activity areas and encourages alternative transportation.

Goal: Provide safe and accessible trails that encourage recreational use.

### **OPEN SPACE GOALS:**

Goal: Protect and preserve important natural features, environmental areas and ecologically sensitive habitat for benefit of residents and tourists.

Goal: Protect and conserve open spaces along river corridors, water supply sources and recharge areas to protect water quality.

Goal: Manage impacts of public and private development on native landscapes and environmental resources.

## **C. COMPONENT LANDSCAPES**

The Regional Parks, Recreation, Open Space and Trails System is made up of several different landscapes that when taken as a whole comprise a “greenprint” for the County. Just as we would not consider building a home without a set of blueprints, we offer the County this greenprint as a way to guide future growth and development, and to ensure that important resources are provided for residents and tourists. The following describes each of these categories or components of the greenprint in more detail.

### ARCHULETA COUNTY PARKS

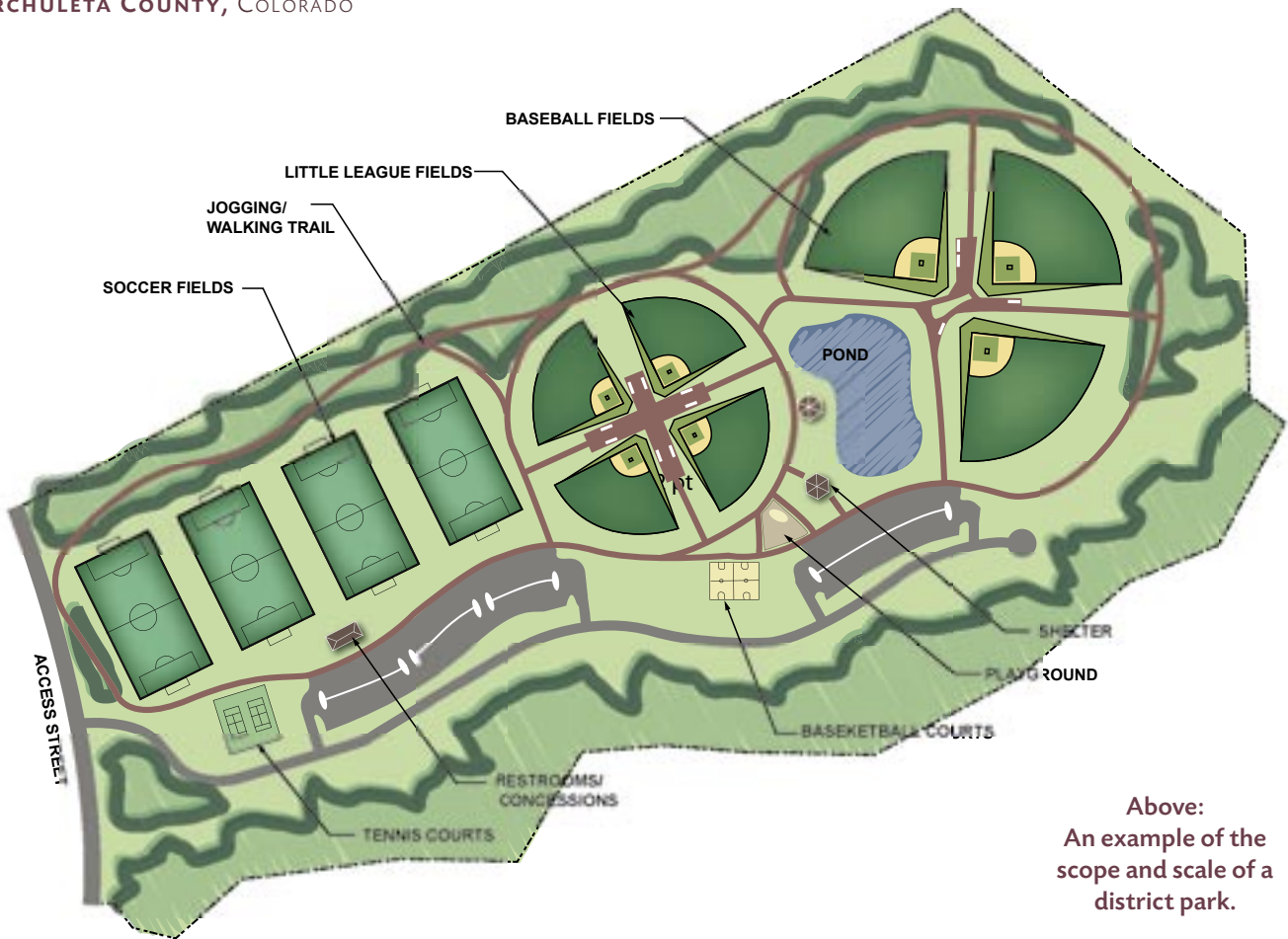
The parks system will contain a variety of different sizes and types of parks to meet the wide range of needs that residents and tourists have throughout the county. A specific level of service was performed and described in Chapter 3 that defined the number of parks recommended under each type. These numbers of park types, estimated to serve the 2015 population, are applied in this section and in the mapping.

#### *Regional Parks (Map 1, Proposed Regional Parks)*

Regional Parks serve the needs of an entire community or region and are greater than 50 acres. These parks not only serve the active and passive recreational needs of the larger community, but also help in the preservation of large open spaces with valuable natural features. Regional Parks have a service area radius of 25 miles. A wide variety of passive and active recreation facilities can be developed within Regional Parks. Matching the needs of the population with the physical restraints of the land will allow for appropriate development of these large park parcels.

Below:  
An example of the scope and scale of a regional park.





Above:  
An example of the  
scope and scale of a  
district park.

*District Parks (Map 2, Proposed District Parks)*

District Parks are recommended to be at least 30 acres in size and include large portions of lands set aside in their natural condition or be restored to a naturalistic character and delineated as Conservation Areas. District Parks should be easily accessible to the whole community via major roadways and have an approximate service radius of 5-10 miles. They are also recommended to serve as central hubs for the County Trail network.

## CHAPTER 4 MAP DISCLAIMER:

*The purpose of the maps displayed in this report (and the GIS data produced in this planning process) is to enhance the ability of local residents and local government in making informed decisions about future parks, recreation, open space, and trails. The information provided is non-binding on the County and its landowners, and should be considered as a starting point for ongoing, detailed analysis of the regional systems presented. Except where new development is proposed, all trail development must respect private property; acquisition of trail rights-of-way assumes a willing seller with equitable negotiation. In the case of new development, trail and open space elements should be a consideration in the development plan, working in partnership with landowners and/or developers.*



*Community Parks (Map 3, Proposed Community Parks)*

Community Parks serve a larger spectrum of the population and range in size from fifteen to thirty acres. The service area for a Community Park is a two mile radius. Park development should not only address active needs, but should also meet the passive needs of the community as well as the protection of natural resources. Adequate public access is important for the use of these parks and adequate buffers should be developed to protect adjacent residential users from perceived park annoyances or to buffer the park from commercial or industrial development. Both active and passive recreation should be addressed within Community Parks and lighted sports facilities should be incorporated into this size park where appropriate.

Below:  
An example of the scope and scale of a community park.





Above:  
An example of the  
scope and scale of a  
neighborhood park.

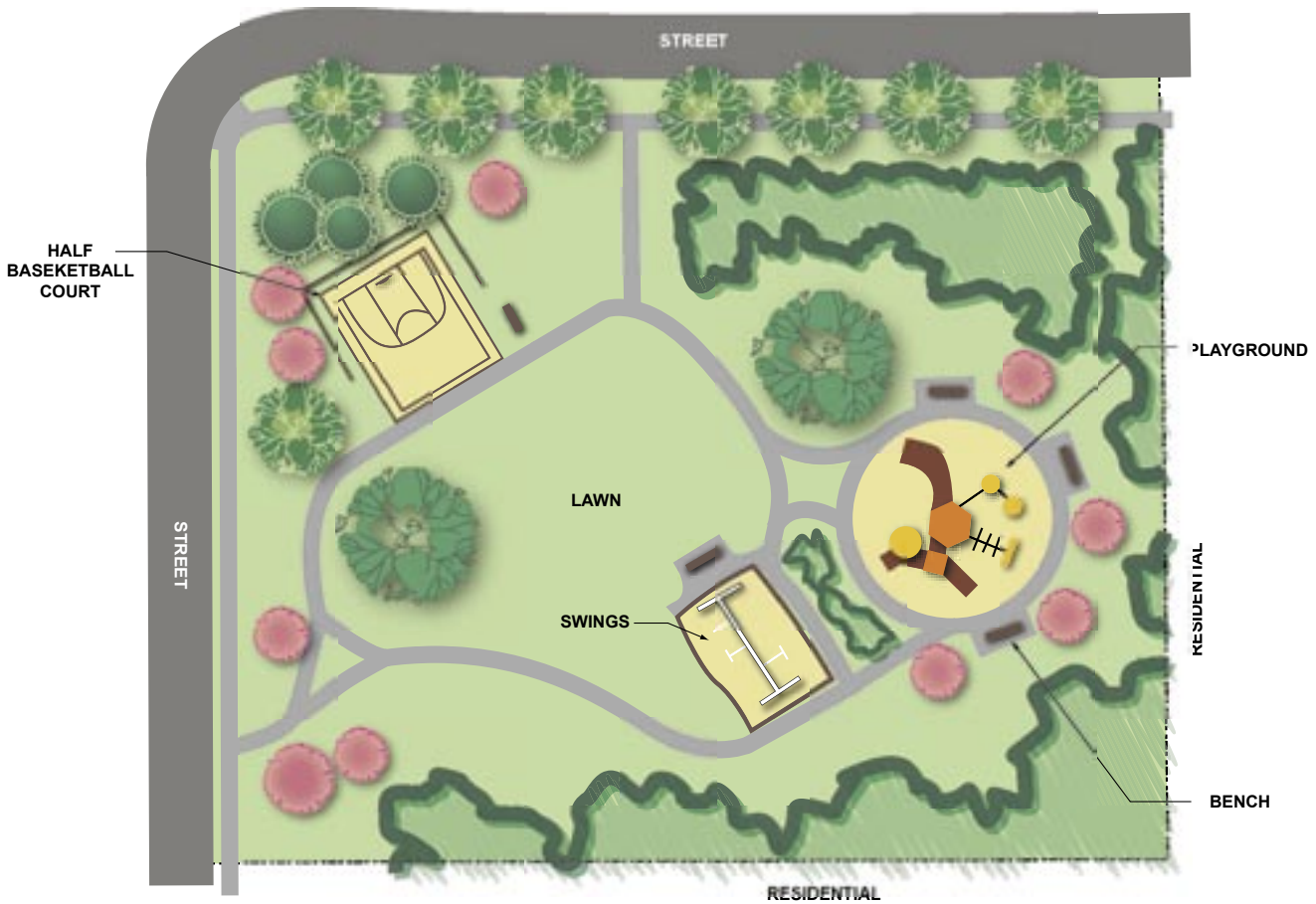
*Neighborhood Parks (Map 4, Proposed Neighborhood Parks)*

Neighborhood Parks serve a wide range of recreational needs within the community and are sized between five and fifteen acres. The service area for a Neighborhood Park is one-half mile radius. These parks serve as the recreational and social links within residential communities. Neighborhood Parks should accommodate a wide variety of recreational needs and ages. These parks can supply both passive and active needs within the community. Neighborhood Parks should provide both pedestrian access as well as vehicular access and the site is sized so that both passive and active recreation can coexist within the park. These parks should be located outside of floodways and drainage easements.

*Pocket Parks*

Pocket Parks are small pieces of parkland that are less than five acres and are meant to serve a residential or business area within a one-quarter mile radius. Due to their limited service potential and maintenance inefficiencies their acquisition and development should be limited. One potential area of importance for the development of Mini-Parks is to create pockets of park development along trails and greenbelt corridors. In general these parks serve a passive need and normally do not require vehicular parking.

**Below:**  
An example of the scope and scale of a pocket park.



*Specialty Parks*

Specialty Parks provide special facilities or take advantage of unique natural, historic, interpretive or scenic attributes and accommodate special recreational activities such as extreme mountain biking, ski jumping, sculpture garden, performing arts or cultural events. A specialty park may serve the entire community, region or even visitors from outside the region. Size varies depending on the character and use of the park ranging from a two-acre public square to a recreational forest park of hundreds of acres.



A recreation center is an example of a specialty park.

*Park Recommendations (Map 5: Proposed Parks Combined)*

The LOS of Chapter 3 determined the number of parks needed for Archuleta County by 2015 by park type. Because of the size of the County and spacing between population densities, the proper placement of these parks is critical. Maps 1 through 5 display conceptual locations for parks based on LOS, population density, and geographic location/spacing of recommended parks. The majority of parks are focused in and near the Pagosa Springs area. As development occurs in the coming years throughout different areas of the County, parks should be constructed as mandatory dedications that can be accessible to new population centers.

## ARCHULETA COUNTY TRAILS

The countywide trail system is viewed as the best option for connecting residents and tourists to the wealth of natural resources and destinations. As with the park system, trails vary in terms of type and function, as described below.

### *Footpaths and Backcountry Trails*

This designation applies to corridors containing environmentally sensitive areas that limit the extent of greenway facility development. The corridor would remain primarily in a natural state, with gravel or dirt trails (4 to 6 feet wide) for use by one or two low impact user groups, such as hikers and/or equestrians. Back Country Trails are natural, soft surface trails designed to accommodate hikers, equestrians (where permitted) and cross-country skiers. They access National Forest designated Wilderness lands and other sensitive lands or open spaces where a wilderness character is desired. They are generally remote from the urbanized areas of the County Trail Head facilities and other amenities (such as signage and picnic tables) would be limited.

**Below:**  
A typical cross section of a natural surface trail.



### Unpaved Multi-use Trails

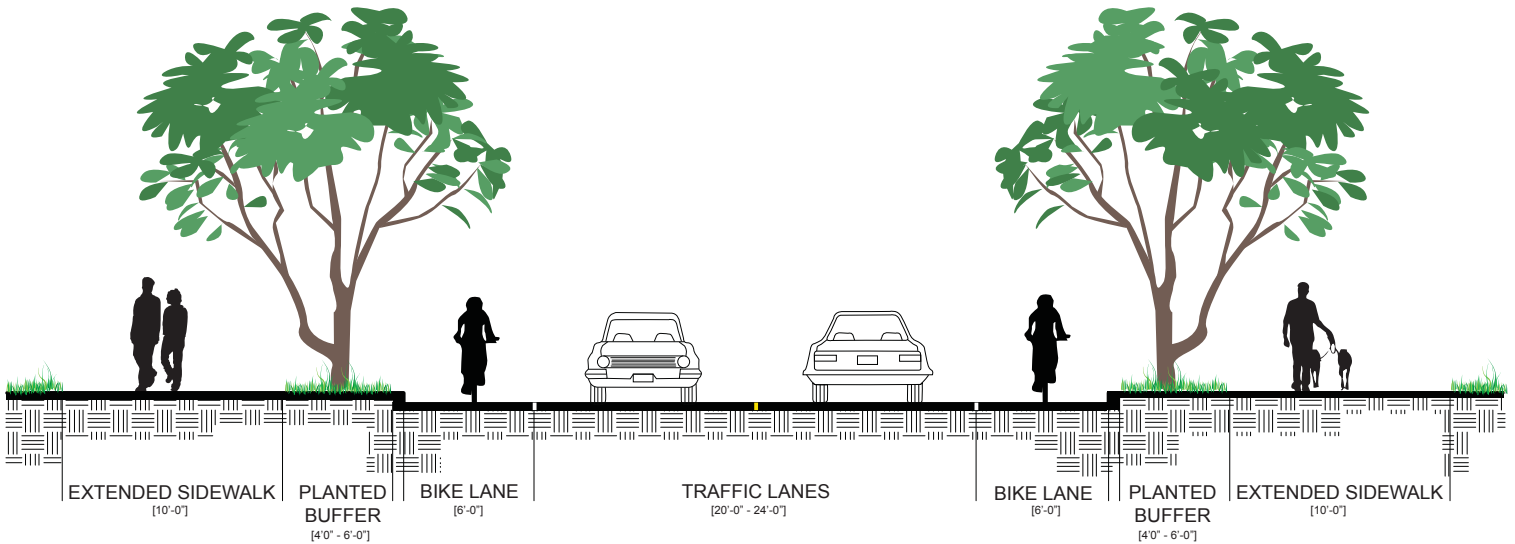
This designation applies to greenway corridors where the adjacent natural areas, rural landscapes or historic sites dictate a more natural facility development objective, corridors located outside of areas which experience frequent flooding, or greenways where use is anticipated to be lower than in other areas and primarily recreational. The unpaved trails could be surfaced with gravel or crushed stone (10 to 12 feet wide) for use by several user groups, such as bicyclists, joggers, and equestrians. Wheelchair users and persons with strollers can use unpaved trails if they are designed to ADA standards and surfaced with compacted crushed stone. Trail Head facilities and other amenities (such as benches, signage and picnic tables) would be developed as needed where appropriate.

### Paved Multi-use Trails

This designation applies to corridors where high use is anticipated; greenways that do not contain environmentally sensitive areas; corridors which will most likely be used as transportation routes; greenways located within frequently flooded areas; or those located in urban settings. Several user groups, such as bicyclists, joggers, wheelchair users, and rollerbladers, need a surface paved with asphalt or concrete (10 to 12 feet wide). Although asphalt is the most common paved surface used for greenway trails, concrete is best for areas experiencing frequent flooding. Trail Head facilities and other amenities (such as lights, benches, and signage) would be developed.

Below:  
A typical cross section  
of a paved trail.





**Above:**  
A typical street cross section with wide sidewalks and bike lanes.

*Roadside Trails and Sidewalks*

This designation applies to corridors in urban areas where an off-road option is not possible, or corridors which function as connections between off-road trails and major origins and destinations. On-road greenways would consist of sidewalks for pedestrian use and multipurpose roadside trails for wheeled and non-wheeled travel. Pedestrian-scale lighting, street trees, benches and other amenities could be developed to encourage sidewalk use.

*Bike Routes and Bike Lanes*

This designation applies to corridors in urban areas where an off-road option is not possible, or corridors which function as connections between off-road trails and major origins and destinations. These are on-road routes including local streets, collector streets, and arterials suitable for bicycle use. They are used for bicycle transportation and may link regional and local trails and trail segments together. On-street routes may have defined bike lanes or “bike route” designation. Note that design requirements for on-street bicycle usage will vary depending on traffic speed and volumes, grades, parking and other factors. Planners and engineers should consult *Guide for the Development of Bicycle Facilities* and *A Policy on Geometric Design of Highways and Streets*, both published by the American Association of State Highway and Transportation Officials (AASHTO). Bikeways can vary from 6-foot wide bicycle lanes (complete with pavement striping and signage) to 4-foot wide paved roadway shoulders to a 14-foot wide curb lane (to be shared by cyclists and motorists).

### *Paddleway Trails*

This designation applies to those rivers and streams that can successfully accommodate and/or which are designated to support canoeing, kayaking and boating. Paddleway trails are waterways made suitable for canoeing, kayaking, and rafting. Improvements include removal or modification of hazardous obstacles such as diversion structures to promote safe water recreation. Boat launch and landing facilities with parking and support facilities are also provided. Other improvements may include white water kayak courses, slalom competition facilities and challenge rocks placed strategically in the river. Designed properly, boating improvements such as dam modifications can benefit aquatic life and fishing by improving water quality and habitat, although boating and fishing may conflict. Water based trails can be designed with features and facilities that make this activity more enjoyable for residents, including signage systems, improved rapids, and safety systems.



A photo example of a paddleway trail.

### *Nordic/Snowshoe Trails*

Nordic/Snowshoe trails are loop trails designed or designated to accommodate Nordic (cross-country) skiing and ski “skating”. Some trails may also accommodate snowshoeing—though skiing and snowshoeing may not always be compatible—such as higher speed skiing or skiing on set track. In many instances facilities may be temporary ski tracks and routes identified by signage and/or maps located on golf courses or other open areas during the winter season. Ideally, there is a pre-set track in the snow and there may even be a number of parallel tracks serving different levels of speed and ability.



A photo example of a Nordic/Snowshoe Trail.



*Motorized Trails*

These are trails that serve a specialized use such as extreme sports, off-highway vehicles and other uses. Typically these are natural, soft surface trails and likely have rough and challenging terrain. The corridor may have rubble, rocks, roots, steep grades and other challenges. Some corridors may be designed primarily to accommodate appropriately engineered mountain bikes and others wanting a challenging course. Generally, this is a single-track course in the case of biking although it may be wider especially if heavily used or if competitions are held. The trail may be linear or configured in a loop or series of loops. Downhill bike trails may have an associated chair lift.

A photo example of a moterized trail user.



*Trail Recommendations (Map 6: Proposed Trail Network)*

These recommendations provide connectivity throughout Archuleta County, focused on the Pagosa Springs area. They include those put forward in the County trails planning effort. The trail type for each segment will be determined locally by environmental constraints and numbers of users. These trails will provide connections to/from Downtown, major subdivisions such as Pagosa Lakes and Aspen Springs, new subdivisions, parks, and schools.

As detailed in Chapter 3, the public is interested in having east-west trail connectors from Pagosa Springs to Pagosa Lakes, San Juan River Trail improvements, trail loops and connectivity to destinations, and better connections to National Forest trails. These are emphasized here as the most important trail routes :

*East-West Connector*

- Connects Aspen Springs, Pagosa Lakes, and Downtown Pagosa Springs
- Provides connections from residential to commercial areas and Downtown
- Provides recreational and alternative transportation options
- Follows Town-to-Lakes alignment
- May utilize Hwy 160 corridor

*San Juan River Trail*

- Provides world-class scenic routing along San Juan River
- Provides north-south routing through Town
- Part of restoration/stream protection/recreation goals for San Juan River
- Should include pocket parks and water access

*Downtown Pagosa Springs Loop*

- Connects South Park, High School, Head Start School, Seeds of Learning School, Pagosa Springs Sports Complex, Recreation Center, Hot Springs area, and Reservoir Hill
- Opportunity to develop a signed Town walking route that provides meaningful connections to schools, parks, and Downtown

*Hwy 160 sidepaths*

- Opportunities for combination of roadside trails, sidewalks, and bicycle lanes/shoulders and routes

*Pagosa Springs Regional Loop*

- Provides a long loop option connecting residential areas
- Connects destinations such as Downtown, Echo Lake State Park, National Forest access, proposed County Regional Park near the airport

*Piedra Road Corridor*

- Provides scenic routing to National Forest
- Connect Pagosa Lakes neighborhood to Hwy 160 and National Forest

Precise trail routing and development should be determined and developed when opportunities arise such as roadway reconstruction or right-of-way introduction. Where possible, trails should be off-road, potentially requiring land acquisition.

## ARCHULETA COUNTY OPEN SPACE

The county open space lands and waters set the standard for quality of life, attractiveness and functional living in southwestern Colorado. The county has prized natural assets. The following defines those assets that are regarded as subcomponents of the county regional park and recreation system. Some of these assets are owned and managed by outside agencies and will require partnership efforts to ensure that they are appropriately conserved for the future.

The results of GIS analysis are represented in maps for each category below. Only private lands are displayed with the assumption that publicly-owned land, mainly National Forest, will remain protected. Data was collected from numerous sources and further developed and/or modeled to create the open space maps below.

These processes and mapping results should be further examined, discussed, and refined by the Archuleta County planning staff and Planning Commission, where applicable. These maps serve as an important starting point for Archuleta County to locate and prioritize areas in need of protection (*see Chapter 4 - Map Disclaimer on page 4-4*).

### *Scenic Mountain Backdrop (Map 8, Open Space: Viewsheds)*

This is a large viewscape including the mountainsides and ridgelines as viewed from roadways, trails, parks, and other landscapes. Most of this backdrop is owned and managed by the federal government, though some lands may be outparcels and owned by private individuals. These lands do not need to be accessible or owned by the public. Most importantly, these lands form the very distinct and beautiful, and possibly vulnerable, backdrop for the county. Archuleta County should do everything within its power to work proactively with the federal government to protect the ecological and aesthetic value of these lands.

Scenic resources were mapped based on a viewshed analysis from the major highway corridors of State Hwy 84 and US Hwy 160. In essence, those areas receiving high visibility are seen from more points along those roadways than anywhere else. It is important to protect these scenic areas if development has not already occurred. Archuleta County should consider this map to become its scenic overlay map to accompany the scenic overlay definition in the land use regulations. Consideration should also be given to developing this map further using any other specific viewpoints or scenic roads through the County.

### *Rivers and Streams (Map 9, Open Space: Riparian Areas)*

Rivers and streams are key components of the health and viability of Archuleta County. Protecting these corridors helps assure supplies of clean water as well as fishing, paddling and other outdoor recreation benefits. In addition, protecting stream corridors and their associated floodplains helps to both protect region's wildlife and reduce the hazards of flooding and erosion. Stream corridors also lend themselves to the creation of *greenways*--linear parks and open space corridors that serve recreational and conservation purposes. Greenway amenities can include multi-use trails, trailheads, paddle craft routes, fishing and possibly other attractions such

as parks, playgrounds and interpretive facilities. Conservation and infrastructure objectives of greenways include preserving wildlife habitat and routes of wildlife circulation, protection of water, air, and scenic qualities, protection of historic and cultural values and public safety from floods. Many greenways serve both conservation and recreational purposes, and may be on both public and private property.

Adequate width and buffer zones to protect desired recreational, aesthetic or wildlife benefits—generally 200' to 400' or more on each side of the water course or sensitive area (such as a wetland) measured from the top of the channel bank or edge of the sensitive area in outlying areas depending on wildlife and aesthetic functions to be protected, and 50' to 150' on each side of the water course or sensitive area measured from the top of the channel bank or sensitive area edge in town core areas. Note that widths may vary depending on site-specific wildlife or aesthetic objectives. A wildlife expert should be consulted.

In order to ensure that river corridors are protected, several GIS data sources were consulted. A 400 foot buffer was placed on all major streams. Wetland and riparian vegetation was taken from the Colorado Vegetation Classification project data. Floodway data, though incomplete, was provided by Archuleta County.

#### *Wildlands and Unique Landscapes (Maps 10, 11, and 12)*

These are primarily the extensive infrastructure of undeveloped National Forest and designated wilderness lands—mostly lands owned by the federal government. These are natural landscapes with unique scenic quality, sensitive lands including wildlife habitat, breeding areas and routes of movement and migration, and possess other visual or cultural significance. These areas are accessible by the public via trails and access roads though access as managed and limited. Some extractive activities such as logging, oil and gas production and mining may take place.

To represent this category, several maps were developed. Using a model developed by the Department of Wildlife for LaPlata County, critical wildlife habitat is represented using a combination of inputs that include deer and elk winter concentration, black bear fall concentration, bald eagle winter concentration and nest sites, important vegetation habitat classes (including riparian, sagebrush, aspen, and pinyon juniper), a buffer extending around public lands, and the size of parcel - *Map 10, Open Space: Critical Habitat*). Archuleta County should consider this map as their wildlife overlay to accompany the wildlife overlay definition in its land use regulations. While this methodology and map serve as a strong starting point for the County, the data collected and created should be discussed and refined by County planning staff, Planning Commission, and other members of the scientific community (including the Colorado Department Wildlife and Southwest Land Alliance) to fit the needs of Archuleta County.

A second map displays areas of biological significance (*Map 11, Open Space: Biological Significance*), developed by the Colorado Natural Heritage Program. Statewide potential conservation areas show ranges of outstanding to general biological significance and may refer to biodiversity and threatened species. The Natural Heritage Program and

Colorado Department of Wildlife house more detailed mapping and information concerning threatened and endangered species that may be purchased and available to Archuleta County as well. It is recommended that this be pursued.

Finally, elevation data was used to portray lands that have a 20% slope or greater (*Map 12, Open Space: >20% Slope*). As described in the Archuleta County land use regulations, lands may not be developed here without further detailed site analysis. These slopes are unique landscapes and should be protected.

#### *Erosion Hazards and Fire Hazards*

While not being the most glamorous category of open space, these are areas that need to be protected for the chief reason of reducing endangerment to human life. These are areas that have soils prone to erosion and have high fire potential.

Data on soil erosion hazard was assembled from the United States Department of Agriculture. Not all of Archuleta County or its private lands have been mapped so this analysis is incomplete. Therefore it was not utilized in this open space overlay assemblage. Archuleta County should utilize this data from the USDA when it is available for the entire county. Fire hazard mapping was provided by Archuleta County (*Map 13, Open Space: Fire Hazard Areas*)

#### *Local Open Spaces*

These are close-in parcels readily accessible from neighborhoods. They may serve as buffers that separate masses of developed land, and as easily available places to recreate.

#### *Heritage and Iconic Working Lands*

These are special landscapes that embody the historic and unique character of Archuleta County, especially the open meadows and “park-like landscapes”. Subcomponents of this landscape include grazing livestock, prime agricultural farmland, historic buildings, barns and other architectural elements that recall the historic occupation of the southwest. Heritage landscapes also may include unique geological features such as rock formations and monuments. Most of this type of information is not mapped. It is recommended that Archuleta County assemble a dataset of these types of locations and landscapes.

Within this analysis, agricultural resources are displayed as prime farmland, utilizing data from the United States Department of Agriculture. Prime farmland has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, etc. In general, these farmlands have an adequate and dependable water supply, few or no rocks, and do need to be irrigated. At the time of this study, prime farmland mapping was considered to be inaccurate by the Archuleta County Planning Commission. It should be a goal of Archuleta County to work with the USDA on improving this important data set.

*Overall Open Space Protection (Map 14, Overall Priority Areas)*

Combining all above categories into a single map of open space protection shows the vast array of important open space resources that should come under closer evaluation before development. A scoring system has been developed here to show which landscapes contain multiple categories. While only a subjective value can be given to each of the above categories, it will be important for the County to set aside open spaces critical to quality of life, viewshed protection, safety, water resources protection, and habitat protection.

## **D. REGIONAL SYSTEM**

Connections to the land are one of the most important tangible products of this Regional Parks, Recreation, Open Space and Trails Master Plan. The physical framework of this Plan is based on a popular national concept known as “hubs and spokes.” From this concept, the future parks are viewed as hubs and the trails network is viewed as spokes. The idea is that all parks and trails are interconnected with each other. More importantly, residential, commercial, retail and institutional lands are also connected within the hubs and spokes framework, thereby linking residents and tourists to the jewels of the system.

The hubs and spokes concept further reinforces that within the Archuleta County regional system landscape, there are areas that serve as either traffic generators and/or destination landscapes. Additionally, there are landscapes the Archuleta residents should appreciate for their ecological, aesthetic and habitat values. These lands need to be conserved and protected as the county grows to ensure that the resource is available for future generations. As an element of the county-wide transportation network, multi-use trails would be aligned along roadways to accommodate non-motorized travel between high traffic areas.

## **E. RECOMMENDED IMPROVEMENTS**

The following is a roster of projects that has been developed [by the consultant] based on input from Archuleta County, Pagosa Springs, the School District and the citizens of the county. The following defines a list of park, open space and trail facilities that should be improved and/or designed and constructed to satisfy the needs of the community.

### **PARK FACILITIES**

*Park 1: Archuleta/Pagosa Springs Community Recreation Center*

Pagosa Springs and Archuleta County should work together to build a community recreation center. This center would be located in Pagosa Springs, east of the downtown, along the San Juan River. The recreation center is regarded as a “special” facility park, that satisfy a unique set of park and recreation needs of the community. The recreation center is modeled after similar facilities in Durango and Cortez. In order to fund further planning, design and construction of the recreation center, the Town of Pagosa Springs is investigating the possibility of putting the recreation center on a ballot question for voters.

*Park 2: Archuleta County Regional Park*

Archuleta County has completed a master plan for a 120-acre regional park at the north end of Cloman Dr. near the Airport. Land for the park is potentially available under the Recreation and Public Purposes Act and will be pursued from the Bureau of Land Management for a minimal fee. A conceptual use design is required by the BLM prior to transfer. The county envisions that this regional park would contain lighted softball and baseball fields, tennis courts, multi-use sports fields, perimeter trails network and a disc golf course in a natural setting. The county will implement a phase one development program for this park.

*Park 3: Work with School District 50, Joint to Build School Parks*

Archuleta County should work closely with School District 50, Joint, to build shared park facilities at new schools. It appears that slowing growth in school-age population may delay the construction of new schools. However, now is the time for the County and School District to make a commitment to solve park needs during the planning, design and construction of future schools. These school parks can range from 1 acre to 5 acres in size and can address the need for playgrounds, restrooms, walking tracks, tennis courts, basketball courts, volleyball courts, sports fields, parking and other appropriate facilities. The service range for a school park is from 1/2 mile to 2 miles.

*Park 4: Build New District Parks*

In accordance with the Needs Analysis, Archuleta County and its partners will need to acquire land and build a minimum of three (3) new district type parks to meet the needs of residents and tourists by the year 2015. System Map 3 illustrates, conceptually, where the three district parks should be located, in essence one in the Aspen Springs vicinity, one in the Pagosa Lakes vicinity and one east of Pagosa Springs. These district parks should be 30 to 50 acres in total size and should service a population within 5 to 10 miles of the park. The mixture of facilities within these parks can vary, and can include sports fields, community and/or recreation centers, playgrounds, trails, parking, restrooms, drinking water and other community facilities.

*Park 5: Build New Community Parks*

In addition to the need for district parks, Archuleta County and its partners will need to acquire land and build a minimum of five (5) new community type parks to meet residents needs by the year 2015. System Map 7 illustrates, conceptually, where these new community parks would be located. One new community park would be located southeast of Pagosa Springs along the Highway 84 corridor. Another community park would be located between Pagosa Springs and Pagosa Lakes along the Highway 160 corridor. A third park is needed north and west of Pagosa Springs, west of the airport. A fourth community park is needed in Aspen Springs. These community parks should be 15 to 30 acres in size and can contain swimming pools, tennis courts, sports fields, basketball courts, volleyball courts, walking trails, restrooms, parking lots and other appropriate facilities. The service radius for a community park is 2 to 5 miles.

*Park 6: Build New Neighborhood Parks*

In addition to the district and community parks, the County will need to acquire land and build six (6) new neighborhood parks. System Map 5 illustrates where these

neighborhood parks should be located in concept. These neighborhood parks would be located north of Pagosa Springs along the Highway 400 corridor, west of Pagosa Springs, south of Pagosa Lakes, near Aspen Springs, north of Echo Lake State Park and north of Pagosa Springs along the Highway 160 corridor. These parks are 5 to 15 acres in size and provide places for playgrounds, picnic, walking paths, tennis courts, basketball courts, and restrooms. The service range for these parks is 1/2 to 2 miles.

*Park 7: Work with Land Developers to Build New Mini Parks*

The County should work closely with land development interests to insure that an adequate supply of mini parks is provided. Mini parks are typically 1/4 to 5 acres in total size and typically contain playgrounds, picnic areas, walking trails, basketball courts, restrooms and other appropriate facilities. Some developers build private “recreation centers” for the residents of a local neighborhood. The County should carefully examine the need for public versus private mini parks. There is no minimum number of mini parks recommended in this plan.

*Improvements to Existing Parks:*

- *The Hot Springs area and Centennial Park: Aside from the trail improvements noted as #1 in the following section, these sites could be improved with the addition of well-designed interpretative and educational signage. These signs could invite visitors to learn about both the geothermal springs and the history of the town. The signs should also display local existing trails and town features, and should be designed in a way that the maps could be updated as new trails and features are developed.*
- *Town Park: Aside from the trail improvements noted as #1 in the following section, improvements to Town Park should be made according to the Pagosa Springs Downtown Master Plan, pp. 3-13 to 3-15. (Visit Planning Department link from [www.townofpagosasprings.com](http://www.townofpagosasprings.com)). The Town should seek to install a bridge over the San Juan River to link the Park to the Reservoir Hill trails network. Also, facilities at this park could one day be retrofitted to support a bike rental station. As the trail system expands, the demand for bicycle rentals will increase, particularly among tourists who are already near Town Park, at the springs. The project could start with matching seed money from bicycle advocacy groups, and the fees collected could sustain the program.*
- *Reservoir Hill: This park has the potential to be one of the single greatest park resources for local residents and visitors alike. A new master plan for the park is recommended to address issues of connectivity from downtown, way-finding within the park, the conservation of site resources, programming, and the possibility of additional acquisition of property. A direct link to the San Juan River Trail could be achieved with the installation of a bridge from Town Park and two high-visibility crosswalks at the intersections of Hot Springs Blvd/San Juan Street, and at Hot Springs Blvd/Spring Street. These connections would provide additional entrances to Reservoir Hill, making a large loop possible that incorporates downtown, the river, the springs, and Reservoir Hill. This plan could be done simply and cooperatively by Town staff, local park stakeholders, and/or by Volunteers for Outdoor Colorado. The following goals*



for this area are identified in the Downton Master Plan for Pagosa Springs (Visit Planning Department link from [www.townofpagosasprings.com](http://www.townofpagosasprings.com)): 1) Preserve the park's informal character; 2) Provide better access to the park from nearby districts; 3) Improve signage that invites visitors to the park; 4) Create a lookout that provides views of the river valley and community below; and, 5) Manage the park to assure that it maintains its health and character in the future.

- *South Park:* As noted in the existing conditions section, the heavy use of this site by skaters and BMX riders (who were riding on the dirt piles stored on the lot) suggests the need for a dedicated area for such users. If such improvements cannot be achieved on this site, then future parks should take into account and accommodate these user types.

- *River Center Park:* The main recommendations for this park involve connectivity and strategically placed landscaping improvements. The backsides of nearby commercial buildings flank this park. Therefore, there are many opportunities to use landscaping to screen utilities and serve as a buffer to the parking areas. Also, there is a sidewalk that runs from the front of the nearby shops to towards the rear of the buildings. This sidewalk should be tied into the trail system by installing a crosswalk and paving a small portion of trail to make the connection complete (see photo rendering). A simple sign on the trail could direct users to the nearby shops, and to Town Park, which is just down the river.

Minor improvements to existing parks can provide significant enhancements for minimal investment. Existing conditions at River Center Park (right); and recommended improvements for connectivity (below).



## TRAIL FACILITIES

### *Trail 1: Improvements to San Juan River Trail*

The existing San Juan River Trail through downtown Pagosa Springs needs to be upgraded to a higher quality trail experience. The town has been working to extend the trail from the downtown east and will link the trail to the new community park on the east end of town. Logical next steps include widening and resurfacing the existing river trail, providing more seating and shade opportunities along the trail, and improving overall functionality so that it becomes more of an asset to the community at-large.

### *Trail 2: Design and Build Highway 160 Trail*

The Highway 160 corridor is the most important economic corridor in the county. It is also the most important transportation corridor in the County. This corridor would benefit tremendously from a parallel off-road trail. The trail should be paved, a minimum of 10 feet wide and be designed to link residents to commercial centers, downtown Pagosa Springs and residential areas along the corridor. This high-visibility project will promote community support for future trail projects.

### *Trail 3: Design and Build Town-to-Lakes Trail*

A proposed "Town-to-Lakes" trail would link Pagosa Springs to Pagosa Lakes. This project is important from both a resident and tourist point of view. For residents, this trail offers a convenient non-motorized link between the two most important activity centers. The corridor for this trail is ready to receive trail development, however there are land acquisition and right-of-way issues to resolve. This is an early action project for the County. This trail is envisioned to be a minimum 10-foot wide paved trail, and (if possible within the right-or-way) a parallel gravel track could be used by local equestrians.

### *Trail 4: Design and Build Regional Loop Trail*

A new proposal within this Plan is the future development of a regional loop trail that encircles the Pagosa Springs and Pagosa Lakes area, linking residents and tourists along the periphery of the developed portions of the County. This loop trail could be either paved or unpaved, and could be a combination of both surfaces depending on where it is located. The minimum width of this trail would be 10 feet. The first step will be to prepare a comprehensive master plan and design for this facility. Linking residents and tourists with this loop trail is an appropriate next step to enhance livability and economic conditions in the County.

### *Trail 5: Design and Build Piedra Road Trail – Phase 1*

Piedra Road is an important corridor west of Pagosa Springs, linking residents of Pagosa Lakes to commercial areas along Highway 160. Also, in the future, this corridor will provide access to the new County regional park near the airport. Residents and tourists will benefit from the future development of a trail adjacent to this road corridor. A ten foot wide paved trail should be developed adjacent to this road corridor.

### *Trail 6: Design and Build San Juan River Trail*

The San Juan River corridor is one of the great natural assets within the County. Developing both a land-based and water-based trail along this corridor would enable residents and tourists to enjoy the benefits of the river. The County should prepare a master plan for the river corridor that defines points of access, trailheads and a future trail network.

## OPEN SPACE FACILITIES

### *Open Space 1: Work with Southwest Land Alliance to Acquire Open Space Easements*

The most important facility goal for Archuleta County will be to strengthen its relationship with project partners to conserve open space and build new park and trail facilities. A key partner for the County is the Southwest Land Alliance. The County should work closely with the Alliance to identify critical need areas for open space conservation.

### *Open Space 2: Conserve Floodprone Lands Along San Juan River Corridor*

For lands that are within the control of the County, the most important resource is the San Juan River. A concerted effort should be made to conserve and protect the lands that are immediately adjacent to the river, in particular the floodprone lands.





## 5. OPERATIONS AND MANAGEMENT

### Chapter Outline:

A Overview

B Operations and Management Functions

C Administering Operations and Management

D Costs and Funding

\* Operations and Maintenance Case Study

### A. OVERVIEW

Key to the success of any public improvement endeavor is long-term operations and management of the improvements. Parks, recreation, open space and trails improvements represent very substantial investments for the communities of Archuleta County. To assure the credibility of the current and planned improvements and the protection of the public's investment in these facilities, they must be properly maintained through an affordable, well-managed program. This program must be sustainable with a clear delineation of the necessary management functions identifying who is responsible for what and where the funding will come from now and in the future.

It should also be pointed out that good maintenance begins with good planning and design—followed by quality construction. To that end, an initial investment in quality design, construction materials and components (including avoiding exotic or hard to repair elements) will pay off multi-fold over the long term. In addition to good planning and design and there should be a mechanism for monitoring the system, receiving and responding to public feedback and good documentation and record keeping with respect to both maintenance and safety needs.

### Guiding principles for a quality O&M program include:

- Good Maintenance begins with Sound Planning and Design.
- Foremost, Protect Life, Property and the Environment.
- Promote and Maintain a Quality Recreation Experience.
- Maintain Quality Control and Standards and Conduct Regular Inspections.
- Maintain an Effective and Responsive Public Feedback System and Promote Public Participation.
- Be a Good Neighbor to Adjacent Properties.
- Operate a Cost-Effective Program with Sustainable Funding Sources.

For the Archuleta County region, an optimal operations and management program is especially challenging because there is a relatively large existing and proposed recreational infrastructure of lands and amenities under the stewardship of a relatively small population base. In addition, the jurisdictional structure of the community is

multi-faceted with a mixture of entities including: the County; the Town of Pagosa Springs; home owner associations, metro districts; the U.S. Forest Services and others such as land conservation non-profits. Each has their own challenges and potentials when it comes to funding and administering a concerted O&M effort. Nonetheless, it is generally agreed that a quality parks, recreation, open space and trails infrastructure is vital to the long term economic health of Archuleta County. Therefore a commitment to quality O&M is crucial.

To that end this plan addresses three key areas of consideration:

- Anticipated O&M Functions
- Effective Administration of O&M
- Anticipated Costs and Potential Funding Sources

## **B. OPERATIONS AND MANAGEMENT FUNCTIONS**

### **Planning Considerations**

An effective O&M plan should consider the following areas:

- Maintenance of Facilities
- User Safety/Risk Management  
(including law enforcement, rescue and record keeping)
- Stewardship/Enhancement  
(long term protection, care of improvements)
- Respect of Adjacent Property Interests  
(minimizing conflicts, complaints, etc.)

Overall both routine and remedial maintenance should be taken into account. Routine maintenance refers to the day-to-day regime of activities, such as mowing, weed control, trash removal, trail sweeping, and minor repairs. Remedial maintenance refers to correcting significant defects as well as repairing, replacing or restoring major components over the life of the improvements, such as a pedestrian bridge wash-out. Remedial maintenance should be incorporated into long term capital planning. Facilities to be maintained group into four categories, each with its own special functions and requirements, including: the Recreation Center , Active Parks, Trails, and Open Space.

The text that follows outlines typical functional activities for each category. While the descriptions below should not be taken as a detailed O&M plan, they do overview the key activities that should be considered. Note that in addition to the activities outlined below, each category also includes: regular inspection; quality control; accident/crime monitoring; patrol; security; toilet facility needs; pest/invasive species management and user feedback.

#### **Recreation Center:**

- Utilities (Water, Electric, Heating, Trash)
- Service and Maintenance of Pool and Water Recreation Facilities

- Routine Building Maintenance and Janitorial
- Supplies
- Snow Removal/Parking Lot Sweeping
- Administrative Staff/Program Staff
- Publications and Events

**Active Parks:**

- Watering (includes cost of water supply for irrigation)
- Irrigation System Maintenance
- Mowing
- Snow Removal
- Weed and Exotic Vegetation Control
- Debris and Litter Clean-Up
- Tree and Shrub Care/Trimming
- Fertilizing
- Repair/Repainting of Fixtures and Furnishings
- Maintenance of Lighting
- Special Facilities Maintenance (i.e. skate park)
- Floral Plantings
- Special Events

**Trails:**

*Shared Use Paths (Paved and Crushed Gravel)*

- Trail Surface Maintenance
- Sweeping
- Vegetation Management
- Litter and Trash Removal
- Repair Trail Structures
- Fencing and Signage
- Trailheads/Parking Areas/Rest Areas
- Remedy "Social Trails" (such as shortcuts)
- Address Detours/Disruptions
- Detours/Disruptions

*Natural Surfaces*

- Surface Repair (Erosion, ruts, braiding)
- Vegetation Management/Invasive Species Management
- Litter and Trash Removal
- Repair Structures
- Fencing and Signage
- Trailheads/Parking Areas/Rest Areas
- Remedy Social Trails
- Detours/Disruptions

*On-Road Bicycle Facilities*

- Street Surface Upkeep and Repair
- Street Sweeping and Snow Plowing

- Repaving and Pavement Overlays
- Signage, Striping and Lighting
- Vegetation Management
- Education and Enforcement
- Detours/Disruptions

*Paddleways*

- Inspection
- Repair/replace washed out structures
- Portages and signage
- Remove hazardous obstructions/strainers
- Litter and debris removal
- Restroom facilities
- Launch Areas

**Open Space:**

A number of both public and private entities (such as the U.S. Forest Service or ranchers) may have jurisdiction over significant portions of the open space system in Archuleta County. In these instances the County or Town may have monitoring and advocacy functions rather than direct responsibility for operations and management.

*Infrastructure/Scenic Backdrop*

- Monitor and respond to concerns
- Deeds, Zoning and Easement Compliance

*Heritage/Iconic Landscapes*

- Monitor and respond to concerns
- Deeds, Zoning and Easement Compliance

*River/Stream Corridors*

- Debris and litter removal/Dangerous Snags
- Trash Removal from Access Points
- Flood and erosion hazard reduction
- Aquatic habitat (fish, amphibians, etc.)/Fish Stocking
- In-Stream Flow Monitoring
- Vegetation Management/Restoration
- Prevent filling, straightening, encroachment (Sec. 404 Compliance)
- Dam and weir safety compliance (no dangerous hydraulics created)
- Maintain Portage/Fishing Trails/Remedy Social Trails
- Deeds, Zoning, Water Quality, Dredge/Fill and Easement Compliance

*Local Open Spaces (Natural Parks)*

- Trailhead/Access Point Maintenance
- Vegetation Management including Weeds and Invasive Plants
- Fencing and Signage
- Monitor Dumping and Filling
- Fire Prevention/Control
- Litter and Trash Removal



- Deeds and Easement Compliance  
*Wildlands (Typically under jurisdiction of F U.S. Forest Service or So. Ute Tribe)*
- Monitor and respond to concerns
- Promote protection of views, habitat and game resources
- Maintain trails, trailheads, access points and camping areas (others or cooperative)
- Minimize use conflicts such as hunting vs. trail use

## C. ADMINISTERING OPERATIONS AND MANAGEMENT

### Administration and Jurisdictional Responsibilities

The park, trail and open space infrastructure of Archuleta County extends through at least nine different jurisdictions including:

- Archuleta County
- Town of Pagosa Springs
- School District
- Multiple Home Owner and Metro District Jurisdictions
- U.S. Forest Service Lands
- Southern Ute Tribal Lands
- CDOT Rights of Way
- Private Lands and Business entities (with an interest in resource management)
- Non-Profit Land Trusts

A key objective of this plan is for these entities to work effectively together in a multi-objective program. This will call for coordination, advocacy and leadership. There are several potential governance models that could work. These include:

- Management by a County Agency
- Management by Town of Pagosa Springs
- Management by a Special District
- Cooperative Management by Stakeholders (Including Partnering with the School District)
- Management by a Non-Profit in Cooperation with Public Entities
- Combinations of the Above

### Management by County Agency

Archuleta County could create a maintenance department and fund operations through County revenues, user fees, contributions by the Town and homeowner organizations or some combination of these sources. Note that the County does not currently have a parks department and that maintenance would likely fall under the auspice of the Public Works Department. Presumably, the Sheriffs department would also play a role in the form of patrol.

This might involve the creation of a special county open space and parks agency based on a designated tax (sales tax increment or real estate tax). This model has

worked very successfully in a number of Colorado counties including Jefferson, Summit, Adams and Arapahoe Counties. Other entities, Eagle County for example, have combined transportation and trail elements. This approach would need to include Pagosa Springs in the tax base to assure a feasible level of funding.

*Advantages*

The County may have some of the staffing and equipment capability in place. The County covers the entire geographic area. The County—including Pagosa Springs—potentially has the revenue generating capability (with some substantial changes to the fiscal structure). Creation of a new special entity (as demonstrated by the Jefferson County and Summit County open space programs) could offer a vital level of management professionalism to the program.

*Disadvantages*

This would impose a new cost on the County and require either the creation of a new department or significant modification of an existing department. Taxation to raise revenues may not be politically feasible.

**Management by Town of Pagosa Springs**

This would be similar to the above-described County model but the Town would take on principal management responsibility for the improvements and conservation lands both within and outside the Town limits. This would suggest intergovernmental agreements and contractual arrangements among the Town, the County, HOA's and other participants.

*Advantages*

The Town might be in better position to generate revenue especially from sales taxes and the Town already has an operating Parks Department.

*Disadvantages*

A way would have to be found to have residents and businesses in the County equitably contribute to the costs of managing the system. This may also create challenges under the Tax Payer's Bill of Rights (TABOR) Amendment.

**Management by a Special District**

Through an election, a special district with taxing authority would be created to maintain the resources countywide.

*Advantages*

The district could more efficiently cover the entire county. May also be an opportunity to consolidate a number of local park maintenance requirements. This model has been very successful in other locations such as the South Suburban Park and Recreation District in the Littleton, CO area.

*Disadvantages*

Until a countywide need for park and open space facilities is widely recognized as a priority, it may be difficult to win voter support. The special district might be perceived as an additional layer of government and as a loss of local autonomy by the local entities.

### **Cooperative Management by Stakeholders**

Under this scenario each of entities (County, Town, School District, HOA's etc.) assumes management responsibility for its respective portions of the park, trail, and open space system. The entities agree to cooperate and coordinate informally.

#### *Advantages*

This may be one of easier scenarios to implement using existing staff and equipment in each jurisdiction. No new taxing district would be needed. Each jurisdiction would have more of a sense of local control and "pride of ownership" over its segment.

#### *Disadvantages*

May be less efficient use of equipment and personnel. May not have a uniform standard of maintenance quality. May impose an inequitable burden on the smaller communities.

### **Management by a Private Non-Profit in Cooperation with Public Entities**

A non-profit organization is created that takes on the long-term development and management role. This might apply to some elements (i.e. trails and open space) but not likely all elements of the parks, trails and open space program. The Yakima River Greenway in Washington State is one of the best examples of this model. Initially this may be a coordinating and advocacy role, which ultimately, as its capability evolves would take on an increasing portion of operations and maintenance responsibilities, perhaps on a contractual basis with the key agencies. This approach might involve working with or partnering with an existing organization such as the Southwest Land Alliance. Adequate funding for staffing of a non-profit would be important both in the initial coordinating role and in the later expanded role.

#### *Advantages*

Offers a way to effectively coordinate local, County, and HOA jurisdictions as well as private landowners and promote the long-term advocacy of the open space and trail system. May also be possible to create an endowment to help assure long-term funding of corridor management

#### *Disadvantages*

May be difficult to raise adequate funding to support long-term management costs. Many donors prefer not to fund operations and maintenance. Important to have a public side commitment to management, should a non-profit face financial difficulties.

### **Combinations of the Above Models**

Some combination of the above models might be the most realistic scenario. For example, the County and Town would maintain their respective amenities, the County might assist with patrol and maintenance of on-street routes, and there may be a coordinating entity such as "Friends of County Parks and Open Space" that can offer a portion of the oversight, advocacy and some maintenance function such as a bicycle-mounted trail ranger patrol and helping to raise money for maintenance equipment. A good example of a "friends" program is the Friends of the Little Tennessee River

Greenway in Macon County, NC. They offer support in a number of ways including: assisting management and development of improvements; acquisition, restoration, protection, and enhancement of resources; integration of scenic, historical, and cultural facilities with compatible commercial and agricultural interests adjoining open spaces; disseminating information and educational materials; and assisting local government in fund raising.

#### *Advantages*

May be the easiest to implement with each jurisdiction and agency contributing a portion of the required resources. Keeps all of the participating entities engaged in the long-term management process.

#### *Disadvantages*

Will require advocacy and coordination. May not be the most cost efficient way to manage the system.

### **Planning for Management Coordination and Implementation**

Regardless of the management model selected it is important to plan management functions now and identify who will be responsible for what activities. It will also be important to secure the necessary commitments, intergovernmental agreements and long-term funding sources to be sure the quality and integrity of the system is maintained. To that end the following key steps are recommended:

1. A Parks, Recreation, Open Space and Trails Committee should be officially designated by the County, the Town and the HOA's that can initially oversee and coordinate the next steps;
2. Identify a long term entity to provide on-going oversight, coordination and leadership for operations, maintenance and stewardship;
3. Identify and pursue O&M funding sources including working with the County, the Town, the School District, the HOA's and other stakeholders to secure cooperative agreements and funding commitments.
4. Based on this plan, pursue development of management manuals and training programs and incorporated procedures for each specific component (i.e. active parks, trails, natural open space, etc.) This could include appropriate certifications and statewide and national management trainings for staff, contractors and others working on the facilities.
5. Establish a public education, citizen participation program and a feedback phone number and Web address. Agree to and institute an agency response and quality control process.
6. Refine an annual O&M budget and pursue the various funding sources as identified.

## D. COSTS AND FUNDING

### Anticipated Operations and Management Costs

Depending on myriad factors, costs can vary significantly for operations and maintenance of recreation, park, trail and open space facilities. Considerations include types of facilities offered, size, cost of utilities such as irrigation water and other factors. However, as a planning benchmark, typical unit costs can be helpful in planning. To that end, table 5.1 below offers cost information based on a survey of costs in Colorado and nation-wide. It is important to stress that these numbers should be taken only as an order of magnitude measure. More exact project-specific costs should be calculated when budgeting for each improvement.

**Table 5.1: Typical Annual O&M Cost Factors**

Amenity	Typical Unit Cost Per Year Range	Comment
Recreation Center	\$600,000 to \$1.2 Million	May be offset 60% or more by user fees
Active Park	\$4,000 to \$6,000/ac	
Shared Use Path	\$4,000 to \$7,000/mile	
Natural Surface Path	\$200 to \$1,800/mile	Depending on level of use and development
Greenway with Trail	\$7,000 to \$12,000/mile	Depending on level of development
On-Road Bicycle	\$0-\$250/mile	Part of street maintenance; depends on improvements
Iconic Landscape	\$0-\$350/ac	Ideally, mostly by private and federal owners
H2O Trails/Corridors	\$0-\$ 2,500/mile	Higher end for urban high use area
Open Space/Park	\$250-\$350/ac	Reservoir Hill is a good example
Wildlands	\$0-\$150/ac	Mostly by others (i.e. U.S.F.S.)

Below: trail maintenance.  
Right: instalation of park/trail kiosk.



**Table 5.2: Examples of Costs in Other Jurisdictions**

Entity	Facilities Mix	Acreage	Annual O&M Budget
Jefferson County Open Space (Golden, CO)	Mostly natural open space with all-terrain trails, trailheads and minimal amenities. (450,000 residents in jurisdiction/2 million annual visits)	51,000	\$ 6 million (1/2 cent sales tax)
South Suburban Parks and Recreation District (Littleton, CO)	Mix of Parks, paved and crusher fine trails (111 miles), open spaces. Metro Denver (160,000 residents in district)	3,200	\$5 million (property tax)
City of Albuquerque Open Space Program	Mostly natural open space (mountains, arroyos, river bottomlands w/ trails and minimal amenities) 450,000 residents in jurisdiction. Includes administration, resource management, law enforcement and visitor services.	28,000	\$ 3.5 million (1/4 cent gross receipts tax)

### **Funding the O&M Program (Also refer to Appendix D Funding Sources)**

Several types of funding sources can be identified and it is likely that a combination will offer the best solution. Following are potential funding sources:

#### *Budget Allocations*

These funds come directly from annual budget allocations by the respective managing entities—the County, Town, School District and HOA's. Typically, this is the most reliable revenue source for project management, operations and maintenance. Pitkin, Eagle and Summit Counties, Colorado Springs and others fund programs through a property tax and/or sales tax levies. Summit County has raised \$7 million with an open space mill levy and is poised to raise \$3 million per year through 2009. Eagle County raises \$250,000 to \$400,000 annually for its trails with a transportation sales tax increment. Note that many private donors or other potential partners will want to see a strong long-term public side commitment to management as a condition of awarding grants for capital trail improvements and management programs.

#### *Multi-Objective Partnerships*

Some the elements of the program serve multiple public and private benefits including access for floodway and bank upkeep, promotion of local businesses, utility access, school facilities, road maintenance and enhancement of adjacent private properties. This may provide a number of opportunities for task sharing and cost sharing among the various beneficiaries. These options should be vigorously and creatively explored.

#### *Dedicated Tax and Special District Funds*

To implement such a program it will be important to have a specific visionary plan in place and build broad based public support and partnerships with park, recreation and open space advocacy groups. Pursuing this process should begin with an examination of the potential property, sales, lodging and perhaps extractive excise tax bases.

#### *Creating an Endowment*

An endowment is a set-side account held strictly to generate revenue from investment earnings. The endowment could be held by a non-profit. Funding of the endowment could come from a percent of capital grants and from an endowment campaign. Endowment funds might also come from a development impact fee or excise tax on new development (particularly second homes) in the County. The endowment could also be funded by bequests and deferred giving such as donations of present or future interests in stock or real estate. To have an effective impact the endowment should have several million dollars in its "corpus" (asset holdings). This endowment could be built up gradually in tandem with project development.

#### *Earned Income and User Fees*

This is a revenue stream created by the use of the amenities such as revenue from events or user fees for teams using playfields. At some point the County may want to issue a user permit for trails and open space facilities. This might be an annual pass that can be purchased on the Internet or at grocery stores, etc. Funding of this type

has a history in other areas, such as hunting licenses and outboard motor fuel taxes that fund game and fishing programs. Colorado State Parks raises approximately \$680,000 annually along the Upper Arkansas River through sale of a \$2 user permit and a 5% fee assessed against outfitter and guide revenues.

Some private organizations such as the Yakima River Greenway Foundation in Washington earn funds through bingo and special events. Cannon Falls, MN raises funds through a “Wheel Pass ” program where users 18 and older must purchase a user permit providing funds for trails maintenance. Another community near Saratoga, NY, a \$35/year membership fee subsidizes trail maintenance. Another option would be leasing trail rights-of-way for fiber-optic and other utility corridors. The Niagara River trail (Canadian side) and the W&OD Trail Corridor in Virginia (Northern Virginia Regional Park Authority) receive several hundred thousand dollars annually in lease revenue for telecommunications cable license fees.

In most cases, however, earned income revenue streams are not likely to fund more than a fraction of the total management costs, though the fraction could be substantial. Note that these programs have an administrative cost. Furthermore, it is also important to avoid compromising or commercializing the quality of the trail.

#### *Outside Contributions*

Outside contributions include outside public and private sector grants that can be applied toward management including routine and remedial maintenance. For example, some special areas in addition to Navajo Lake might be managed as a State Park facility to secure outside funding though this might not be a very likely solution.

Another statewide program is the Colorado Natural Areas Program (CNAP)—through the Colorado Division of Wildlife, this program helps private landowners and public land agencies identify and protect land with special wildlife habitat values. Protection is through voluntary cooperative agreements. Small grants are sometimes available. The Division of Wildlife can also acquire wildlife conservation easements.

The recently passed 2002 Farm Conservation Bill might offer some direct and indirect financial opportunities for the upkeep of agricultural lands, rangeland, riparian and wetland stewardship lands held by private owners, land trusts and public agencies. Contact the U.S. Natural Resources Conservation Program (NCRS) or the U.S. Department of Agriculture.

Private contributors might help fund seasonal youth “trail ranger” programs or purchase equipment such as a sweeper. Creation of a trail advocacy/land conservancy non-profit might offer a way to raise money through “membership” donations. Note, however, that with the exception of remedial projects, generally private donors are not interested in funding operations and maintenance. Many forms of outside funding may be unpredictable year after year and therefore is “uncontrollable income”. State park agency management means relinquishing some local control and State funds may be scarce as well.



*In-Kind Services*

Management services might be supported and enhanced by available non-cash resources such as volunteers, youth, student labor, user groups (such as angler, waterfowl hunting and bicyclist associations), correctional services and seniors. In-kind support may also include donations of materials and equipment. Consider also adopt-a-trail programs. Services clubs might be encouraged to “adopt” a park or a trail and hold annual fundraisers. The corridor might also be eligible for youth programs such as AmeriCorps.

Note, however, that volunteer and in-kind participation will likely meet only a fraction of the operations and maintenance needs and funding of these programs may be sporadic. The management program will still need a base of trained professionals and proper equipment. These programs require staff time to coordinate.

*Operations and Management References and Resources:*

Willamalane Park and Recreation District. 20-Year Park and Recreation Comprehensive Plan. MIG Consultants. Springfield, OR, 2004. Excellent assessment of O&M considerations with typical unit cost calculations for park, open space and trail amenities in the appendix. See Chap. 5. [http://www.willamalane.org/pdfs/compplan03-2004/main/fp\\_chapter5.pdf](http://www.willamalane.org/pdfs/compplan03-2004/main/fp_chapter5.pdf) and Appendix B: [http://www.willamalane.org/pdfs/compplan03-2004/appendices/fp\\_appendix\\_b.pdf](http://www.willamalane.org/pdfs/compplan03-2004/appendices/fp_appendix_b.pdf)

For trail maintenance information visit: <http://www.americantrails.org/resources/Manage-Maintain/index.html>

Flink, C and Searns, R. Northwest Open Space Plan. City of Las Vegas. Las Vegas, NV. 2005. Chap. 5: Stewardship. Outlines typical ) O&M tasks and costs. [http://www.lasvegasopenspace.com/NWOSP\\_composite.pdf](http://www.lasvegasopenspace.com/NWOSP_composite.pdf)

Searns, R, Silverthorne Parks Trails and Open Space Master Plan, Chap. 2: Definitions and Standards, Town of Silverthorne, 2001. Provides definitions and management guidelines for parks, trails and open space in a Colorado Mountain community.

Minnesota Department of Natural Resources, Trail Planning, Design and Development Guidelines, State of Minnesota, Trails and Waterways Division, St. Paul, MN. Paul, MN

Flink, C, Greensboro, NC Bicycle, Pedestrian and Greenway Plan, Chap. 6: Operations and Management. Durhan, NC, 2004. Provides a detailed delineation of trail and greenway O&M  
[http://www.greensboro-nc.gov/NR/rdonlyres/1064A4FE-4CC3-4210-9306-2E5F0FF5C2D5/0/07\\_Chapter6OperationsManagement.pdf](http://www.greensboro-nc.gov/NR/rdonlyres/1064A4FE-4CC3-4210-9306-2E5F0FF5C2D5/0/07_Chapter6OperationsManagement.pdf)

# OPERATIONS AND MANAGEMENT CASE STUDY:

## *Ogden Valley Pathways*

### **Background**

Ogden Valley is nestled on the eastern side of the Wasatch Mountains, ten miles east of Ogden, Utah, in Weber County. It is a land of open spaces, mountains, historic features, sagebrush hills, forests, scenic vistas, rivers, lakes and pastoral landscapes. The valley has one incorporated town and four unincorporated towns with approximately 5,400 residents who live in about 3,000 homes, with one-third of these being second homes. Over 1.5 million visitors come to the Ogden Valley to recreate each year. Residents and visitors enjoy a range of recreational activities including biking, hiking, horseback riding, fishing, boating, skiing and wildlife viewing. Public lands in Ogden Valley cover about one-third of the valley's 325 square miles, which includes USDA National Forest, State of Utah and Weber County lands.

Ogden Valley is experiencing rapid growth that is changing the valley and threatens to put an end to the rural lifestyle that residents have enjoyed. Highways where one could once ride a horse or bicycle have now become unsafe due to large volumes of traffic. Development threatens to cut off access to some of the open space, public lands and recreational opportunities in the valley. People want to be able to walk to the post office or grocery store, or take their horses on a trail near home and children want to ride their bikes safely to school. They wanted the opportunity to live in a walkable community. The Ogden Valley Pathways Master Plan was developed to ensure that children, local citizens and visitors could travel safely by way of a network of non-motorized pathways. The Master Plan illustrates pathway connections to residential areas, schools, libraries, recreation facilities, and commercial areas. The plan also shows pathways to amenities such as community parks, national forests, recreational resorts, open spaces, Pineview Reservoir and existing trailheads. The protection of wildlife habitat, natural and historic resources, open space and private lands is an essential component of the plan and an important value to the residents.

### **Creating a Private Non-Profit**

Local citizens created Ogden Valley Pathways (OVP) as a chapter of the established organization, Weber Pathways, in 1999. The OVP developed the essential pathways master plan, a grass roots community effort, to ensure that access to water, wilderness, historic trails and open space was preserved. The Ogden Valley Pathways Master Plan was designed to encourage the preservation of historic trails, to promote the creation of pathways that celebrate the unique character of Ogden Valley, to connect communities, and to prevent new development from cutting off non-motorized access to traditional recreation areas. The Master Plan was adopted by the Weber County Commission in 2002. To advance the master plan implementation strategies and to manage the operational program, the Ogden Valley Pathways became an independent non-profit organization in 2006. It is a volunteer organization dedicated to turn the plan into reality. They have been successful in many projects, such as creating promotional and fundraising campaigns, partnering with Weber County to carry out trail ordinances for new subdivision projects, working with students and teachers to produce educational booklets, constructing pathways and setting up volunteer maintenance programs.

### **Building Pathways**

Ogden Valley Pathways raised pathway funds from generous private and community donations and various government and corporate grants. It combined with services from Utah Department of Transportation, Weber County and numerous volunteers to construct about 3.5 miles of trail connecting community amenities. The

*(Case Study Continued)*

county implemented a Recreation, Arts, Museums and Parks tax (0.10% sales tax) which provides grants for projects. OVP and the USDA National Forest received a joint grant to construct more pathways in the valley and improve beach access to Pineview Reservoir. In addition, the county adopted OVP ordinances establishing requirements for pathways and pathway programs in new development and roadway projects in Ogden Valley. An OVP board member reviews all subdivision proposals for compliance and makes a recommendation to the county. Subdivision development and resort master planning has accelerated and the ordinances are driving tens of miles of trails within the subdivisions and resorts. The challenge now is to figure out a way to create connecting trails between new developments and other community facilities. Another challenge is to secure continuous funding for organization management, pathway planning and construction and maintenance. They are exploring several funding options and are continuing to participate in the Weber County RAMP tax to optimize their pathway vision in the valley.

Ogden Valley Pathways embarked on a trail maintenance program in 2004. Volunteers work hundreds of hours to clear downed trees and brush, improve trail surfaces, correct erosion problems, repair fencing and signs, trim branches and bushes and collect trash. In addition, an Adopt-A-Trail program was created for families, businesses and various groups to take charge of regular trail maintenance, including keeping the trail clear and trash free.

Ogden Valley Pathways effectively coordinates with local, county and state authorities as well as subdivision and resort developers. The USDA Forest Service is also an active player and community neighbor collaborating with OVP to help develop a pathway network and to access public land for the enjoyment of residents and visitors to the Ogden Valley.

*Ogden Valley General Plan Recreation Element, BIO-WEST, Inc., Logan, Utah, October 2005.*

*Ogden Valley Pathways Plan, Weber Pathways, Ogden, Utah, 2002.*





## 6. IMPLEMENTATION

### Chapter Outline:

A Overview

B Priorities and Phasing

C Funding the Parks, Open Space and Trails Program

D Administrative Structure

E Next Steps

\* Implementation Case Studies

### A. OVERVIEW

Implementing the recommendations within this Regional Parks, Recreation, Open Space and Trails Master Plan will require leadership on the part of Archuleta County, a dedication to stewardship of critically important natural resources, a recurring source of revenue, and a partnership between the public and private sectors throughout County. Archuleta County will need to work closely with its partners, especially the Town of Pagosa Springs, to define an appropriate structure for managing the emerging parks, open space and trails program. It will also be necessary for the County to work in collaboration with state and federal agencies and non-governmental organizations to implement this program. The County and its partners will need to establish a stable and recurring source of funding for parks, open space and trails. The County will not be able to accomplish the recommendations of this Plan acting alone; success will be realized through the partnership efforts already begun with private sector land conservation organizations, landowners and businesses.

### B. PRIORITIES AND PHASING

Given the present day economic challenges faced by Archuleta County, it is difficult, at best, to develop an accurate implementation program for the Regional Parks, Recreation, Open Space and Trails program. The county has just recently gone through a painful process of scaling back the size of its operations, eliminating personnel, selling assets and reducing the cost of operations. In effect, this Plan represents an expansion of County government at a time when that appears to be impossible. This Plan is however a vision and a guide to the future. This Plan seeks to forecast what the County should do, in partnership with other agencies, private landowners and residents to conserve natural resources and make parks, open space and trails available for use and enjoyment. With this charge firmly in mind, the following text defines a vision and framework for implementing a regional parks, open space and trails program for Archuleta County.

**Phase One Development – Fiscal Years 2008-2010**

The first phase of park, open space and trail development offers a sensible approach to meeting the needs of residents. Phase One recommends the development of the County’s first regional park near the airport, future development of a community recreation center in Pagosa Springs, the acquisition of land and development of a new community park and neighborhood park, improvements to the San Juan River trail and the design of the Town to Lakes Trail. In the next three years, a total of \$1.45 million is earmarked for open space conservation, with a million set aside for non-parkland acquisition. The largest dollar item in this phase is the development of the community recreation center in downtown Pagosa Springs. Although it is listed here as a County project, the source of revenue for this project is projected to be bonds issued by the Town. These bonds are listed in the revenue chart as the source of income for the project. The following chart forecasts budgets for each of these projects, and is followed by a revenue sources chart that lists where money could be raised to support project development.

<b>Table 6.1: Phase One Development Program – Fiscal Years 2008-2010</b>			
<b>Parks</b>	<b>Unit</b>	<b>Budget per Unit</b>	<b>Total Budget</b>
Land Acquisition for Community Park	1	\$ 300,000.00	\$ 300,000.00
Land Acquisition for Neighborhood Park	1	\$ 150,000.00	\$ 150,000.00
Pagosa Springs Sports Complex	1	\$ 250,000.00	\$ 250,000.00
Town Park	1	\$ 50,000.00	\$ 50,000.00
Reservoir Hill Park	1	\$ 150,000.00	\$ 150,000.00
Regional Park	1	\$ 2,000,000.00	\$ 2,000,000.00
Recreation Center **** (paid for by bonds)	1	\$16,000,000	\$ 16,000,000.00
District Parks	0	\$ 3,200,000.00	\$ -
Community Parks	1	\$ 1,650,000.00	\$ 1,650,000.00
Neighborhood Parks	1	\$ 715,000.00	\$ 715,000.00
<b>Budget for Parks</b>			<b>\$ 21,265,000.00</b>
<b>Trails</b>			
San Juan River Trail Improvements	1	\$ 500,000.00	\$ 500,000.00
Town to Lakes Trail Design	1	\$ 50,000.00	\$ 50,000.00
<b>Budget for Trails</b>			<b>\$ 550,000.00</b>
<b>Open Space</b>			
Open Space Conservation Allocation	1	\$ 1,000,000.00	\$ 1,000,000.00
<b>Budget for Open Space</b>			<b>\$ 1,000,000.00</b>
<b>Total Budget Phase 1</b>			<b>\$ 22,815,000.00</b>

**Table 6.2: Phase One Possible Sources of Revenue**

		<b>Funding Appendix</b>
<b>Parks</b>	<b>Revenue Goal</b>	<b>Page #</b>
Archuleta County	\$ 523,800.00	D-2
Town of Pagosa Springs	\$ 523,800.00	D-2
Bonds for Recreation Center	\$ 16,000,000.00	D-3
Great Outdoors Colorado	\$ 2,619,000.00	D-6
Other State of Colorado	\$ 523,800.00	D-6
Federal Grants	\$ 436,500.00	D-11
Foundation Grants	\$ 283,725.00	D-17
Private Contributions	\$ 354,438.00	D-17
<b>Possible Sources Parks</b>	<b>\$ 21,265,063.00</b>	
<b>Trails</b>		
Archuleta County	\$ 55,000.00	D-2
Town of Pagosa Springs	\$ 38,500.00	D-2
Great Outdoors Colorado	\$ 165,000.00	D-6
Colorado DOT Grants	\$ 220,000.00	D-9 / D-11
Other State of Colorado	\$ 38,500.00	D-6
Federal Grants	\$ 11,000.00	D-11
Foundation Grants	\$ 11,000.00	D-17
Private Contributions	\$ 11,000.00	D-17
<b>Possible Sources Trails</b>	<b>\$ 550,000.00</b>	
<b>Open Space</b>		
Archuleta County	\$ 72,500.00	D-2
Town of Pagosa Springs	\$ 72,500.00	D-2
Great Outdoors Colorado	\$ 507,500.00	D-6
Other State of Colorado	\$ 174,000.00	D-6
Federal Grants	\$ 72,500.00	D-11
Open Space Trust Fund	\$ 101,500.00	D-5
<b>Possible Sources Open Space</b>	<b>\$ 1,000,500.00</b>	

**Phase Two Development – Fiscal Years 2011-2015**

The second phase of park, open space and trail development is a bit more ambitious. Hopefully, the County and its partners have a stronger economic platform to work from and the task of meeting park, recreation, outdoor access, health and wellness needs remains in the forefront of community interests. Under the second phase of development, it is envisioned and projected that the County and its partners would acquire land and build one new district park, two community parks and two neighborhood parks. The County would continue efforts to support the improvements of the San Juan River Trail, build the Town-to-Lakes Trail and begin design and construction of a regional loop trail. For open space, monies are earmarked for parkland acquisition and the budget for open space acquisition is increased. At the conclusion of phase two development, it is recommended that this master plan be brought up to date and a new plan is developed to forecast future needs and resources.

<b>Table 6.3: Phase Two Development Program – Fiscal Years 2011-2015</b>			
<b>Parks</b>	<b>Unit</b>	<b>Budget per Unit</b>	<b>Total Budget</b>
Land Acquisition for Community Park	2	\$ 450,000.00	\$ 900,000.00
Land Acquisition for Neighborhood Park	2	\$ 225,000.00	\$ 450,000.00
Regional Park	0	\$ 2,000,000.00	\$ -
District Parks	1	\$ 3,200,000.00	\$ 3,200,000.00
Community Parks	2	\$ 1,650,000.00	\$ 3,300,000.00
Neighborhood Parks	2	\$ 715,000.00	\$ 1,430,000.00
<b>Budget for Parks</b>			<b>\$ 9,280,000.00</b>
<b>Trails</b>			
San Juan River Trail Improvements	1	\$ 500,000.00	\$ 500,000.00
Build Town to Lakes Trail	1	\$ 1,500,000.00	\$ 1,500,000.00
Design/Build Phase 1 Regional Loop Trail	1	\$ 1,500,000.00	\$ 1,500,000.00
<b>Budget for Trails</b>			<b>\$ 3,500,000.00</b>
<b>Open Space</b>			
Open Space Conservation Allocation	1	\$ 1,500,000.00	\$ 1,500,000.00
<b>Budget for Open Space</b>			<b>\$ 1,500,000.00</b>
<b>Total Budget Phase 2</b>			<b>\$ 14,280,000.00</b>



**Table 6.4: Phase Two Possible Sources of Revenue**

		<b>Funding Appendix</b>
<b>Parks</b>	<b>Revenue Goal</b>	<b>Page #</b>
Archuleta County	\$ 928,000.00	D-2
Town of Pagosa Springs	\$ 649,600.00	D-2
Great Outdoors Colorado	\$ 5,568,000.00	D-6
Other State of Colorado	\$ 928,000.00	D-6
Federal Grants	\$ 649,600.00	D-11
Foundation Grants	\$ 278,400.00	D-17
Private Contributions	\$ 278,400.00	D-17
<b>Possible Sources Parks</b>	<b>\$ 9,280,000.00</b>	
<b>Trails</b>		
Archuleta County	\$ 350,000.00	D-2
Town of Pagosa Springs	\$ 245,000.00	D-2
Great Outdoors Colorado	\$ 1,050,000.00	D-6
Colorado DOT Grants	\$ 1,400,000.00	D-9 / D-11
Other State of Colorado	\$ 245,000.00	D-6
Federal Grants	\$ 70,000.00	D-11
Foundation Grants	\$ 70,000.00	D-17
Private Contributions	\$ 70,000.00	D-17
<b>Possible Sources Trails</b>	<b>\$ 3,500,000.00</b>	
<b>Open Space</b>		
Archuleta County	\$ 150,000.00	D-2
Town of Pagosa Springs	\$ 150,000.00	D-2
Great Outdoors Colorado	\$ 600,000.00	D-6
Other State of Colorado	\$ 225,000.00	D-6
Federal Grants	\$ 75,000.00	D-11
Open Space Trust Fund	\$ 300,000.00	D-5
<b>Possible Sources Open Space</b>	<b>\$ 1,500,000.00</b>	

### Phase Three Development – Fiscal Years 2015 and Beyond

The third phase of park, open space and trail development is mostly visionary, and extremely ambitious. It is quite possible that upon completion of the revised master plan in 2013 that this phase of development would be completely revised. The current projection has the County and its partners acquiring land and building two new district parks, two community parks and three neighborhood parks. The County trails program would also be expanded to include the design and construction of the Piedra Road corridor trail, Highway 160 corridor trail, phase 2 of the regional loop trail and expansion of the San Juan River trail. Open space allocation is increased in this phase of program implementation.

**Table 6.5: Phase Three Development Program – Fiscal Years 2015 and Beyond**

<b>Parks</b>	<b>Unit</b>	<b>Budget per Unit</b>	<b>Total Budget</b>
Land Acquisition for Community Park	2	\$ 600,000.00	\$ 1,200,000.00
Land Acquisition for Neighborhood Park	3	\$ 300,000.00	\$ 900,000.00
Regional Park	0	\$ 2,000,000.00	\$ -
District Parks	2	\$ 3,200,000.00	\$ 6,400,000.00
Community Parks	2	\$ 1,650,000.00	\$ 3,300,000.00
Neighborhood Parks	3	\$ 715,000.00	\$ 2,145,000.00
<b>Budget for Parks</b>			<b>\$ 13,945,000.00</b>
<b>Trails</b>			
Design/Build Piedra Road Trail Phase 1	1	\$ 500,000.00	\$ 500,000.00
Design/Build San Juan River Trail	1	\$ 2,000,000.00	\$ 2,000,000.00
Design/Build Highway 160 Trail	1	\$ 2,000,000.00	\$ 2,000,000.00
Design/Build Phase 2 Regional Loop Trail	1	\$ 2,500,000.00	\$ 2,500,000.00
<b>Budget for Trails</b>			<b>\$ 7,000,000.00</b>
<b>Open Space</b>			
Open Space Conservation Allocation	1	\$ 2,000,000.00	\$ 2,000,000.00
<b>Budget for Open Space</b>			<b>\$ 2,000,000.00</b>
<b>Total Budget Phase 2</b>			<b>\$ 22,945,000.00</b>

**Table 6.6: Phase Three Possible Sources of Revenue**

		<b>Funding Appendix</b>
<b>Parks</b>	<b>Revenue Goal</b>	<b>Page #</b>
Archuleta County	\$ 1,394,500.00	D-2
Town of Pagosa Springs	\$ 976,150.00	D-2
Great Outdoors Colorado	\$ 8,367,000.00	D-6
Other State of Colorado	\$ 1,394,500.00	D-6
Federal Grants	\$ 976,150.00	D-11
Foundation Grants	\$ 418,350.00	D-17
Private Contributions	\$ 418,350.00	D-17
<b>Possible Sources Parks</b>	<b>\$ 13,945,000.00</b>	
<b>Trails</b>		
Archuleta County	\$ 700,000.00	D-2
Town of Pagosa Springs	\$ 490,000.00	D-2
Great Outdoors Colorado	\$ 2,100,000.00	D-6
Colorado DOT Grants	\$ 2,800,000.00	D-9 / D-11
Other State of Colorado	\$ 490,000.00	D-6
Federal Grants	\$ 140,000.00	D-11
Foundation Grants	\$ 140,000.00	D-17
Private Contributions	\$ 140,000.00	D-17
<b>Possible Sources Trails</b>	<b>\$ 7,000,000.00</b>	
<b>Open Space</b>		
Archuleta County	\$ 200,000.00	D-2
Town of Pagosa Springs	\$ 200,000.00	D-2
Great Outdoors Colorado	\$ 800,000.00	D-6
Other State of Colorado	\$ 300,000.00	D-6
Federal Grants	\$ 100,000.00	D-11
Open Space Trust Fund	\$ 400,000.00	D-5
<b>Possible Sources Open Space</b>	<b>\$ 2,000,000.00</b>	

### **C. FUNDING THE PARKS, OPEN SPACE AND TRAILS PROGRAM**

Achieving the vision that is defined within this Plan will require, among other things, a stable and recurring source of funding. Colorado communities that have successfully engaged in parks, open space, and trail programs have increasingly relied on multiple funding sources to achieve their programmatic goals. The same will be required within Archuleta County. No single source of funding will meet the goals and objectives defined for the County program. Instead, the county will need to work cooperatively with the Town of Pagosa Springs, state and federal partners to generate funds sufficient to implement the program.

A stable and recurring source of revenue is needed to generate funding that can then be used to leverage grants dollars from state, federal and private sources. The ability of the County to generate a source of funding for parks, open space and trails depends on a variety of factors, such as taxing capacity, budgetary resources, voter preferences, and political will. It is very important that Archuleta County explore the ability to establish a stable and recurring source of revenue for parks, open space and trails.

Archuleta County may want to engage a financing strategist and polling firm (such as the Trust for Public Land) to further explore the feasibility, public acceptability, and potential real returns before implementing a specific funding mechanism or strategy. Careful consideration should be given to the implementation of financing techniques that require voter approval. To implement most voter-approved taxing/borrowing options, a three-step approach is recommended: feasibility research, public opinion polling, and measure design. First, the County's financing capacity and the potential revenues that could be raised via different financing options will need to be determined. This research will help local leaders estimate how much revenue different options would raise and the potential impact on residents. Scientific public opinion polling should be conducted to assess voter preferences (their willingness to fund open space and greenways in relation to other public needs) and how much they are willing to spend. Polling will gauge the public's local conservation priorities and help determine the preferred type and size of financing measure. If the research and polling indicates a favorable response, a ballot measure can then be designed to reflect public priorities and a community's conservation needs.

A list of funding sources that can be tapped for the Regional Parks, Recreation, Open Space and Trails program is provided in *Appendix D* of this Plan.

### **D. ADMINISTRATIVE STRUCTURE**

The Regional Parks, Recreation, Open Space and Trails Program is envisioned as a County operated program. As defined earlier, given current constraints of Archuleta County government it can be difficult to understand how such a program is possible. Nevertheless, this Plan offers a vision and options for consideration. The administrative structure for the program is defined in the following text.

*Role of County Commission*

Archuleta County Commissioners are the ultimate decision makers for every aspect of implementation involving the Regional Parks, Recreation, Open Space and Trails Program. The Commission shall adopt annually and prior to the beginning of each fiscal year a budget for expenditures of funding that supports the parks, open space and trails program. In the preparation of the annual budget, the County Commission may require any reports, estimates, and statistics from any county agency or department as may be necessary to perform its duties as the responsible fiscal body of the County. The County should also work closely with its partners, especially the Town of Pagosa Springs, in formulating a program of action for the parks, open space and trails program.

*Role of the Town of Pagosa Springs*

Pagosa Springs will be a strong, if not equal partner in the implementation of the parks, open space and trails program. Pagosa Springs has a department of the city that focuses on parks, recreation and leisure services. The Town has an appointed Advisory Commission that advises the Town Council on new policies, ordinances, administrative procedures and other means to expand park and recreation opportunities, coordination and efficiencies, and the overall policy and direction of the Town's park and recreation programs. The Town employs staff that are dedicated to operating the Town's park and recreation facilities. With respect to the implementation of this regional parks, open space and trails program, the Town is viewed as an important asset and partner.

*Role of the School District 50, Joint*

With respect to this Regional Parks, Recreation, Open Space and Trails Master Plan, the Archuleta County School District 50, Joint can and should play a supportive role in three areas: facility development, recreation/fitness programming and educational programming. Clearly, the primary role of the School District is the development and operation of the primary and secondary schools in the service area. The School District agreed to become part of this Master Plan for mutually beneficial purposes. Benefits to the School District can be summarized as follows:

**Facility Development:** The School District has already signed a cooperative agreement with Pagosa Springs that governs the use and operation of facilities and grounds that are owned, independently, by both parties. The advantage of such an agreement is the maximization and use of publicly funded facilities and the share management of these resources. This is an excellent model that focuses on efficiency and joint use. The consultant recommends that the School District, Town and Archuleta County continue to explore ways in which future facilities can be jointly used and managed, for the benefit of residents and taxpayers.

**Recreation Fitness and Programming:** The Town of Pagosa Springs has an actively managed parks and recreation program. The School District operates physical education programs for students. There may be opportunities for cooperative programming. One example of this could occur when the Pagosa Springs Recreation Center is built and open for business. Unique facility offering in the Recreation Center, such

as aquatics, a climbing wall and after-school recreation and fitness programs could be jointly operated.

**Educational Programming:** The School District can also benefit from a curriculum that makes use outdoor classrooms for hands-on instruction. The Regional Parks, Recreation, Open Space and Trails program will offer the District with access to urban, suburban and rural landscapes and waters that can be used for science and other classroom projects. The expansion of the curriculum can be coordinated with the Town, County and other partners (public and private sector). These outdoor classrooms may also impact the way in which the School District expands and/or develops campus buildings and landscapes.

Finally, the opportunity to combine future school development with park facility development should remain a high priority for the community.

*Role of County Staff*

The Archuleta County Administrator shall establish the annual work program for the County as related to the implementation of this Regional Parks, Recreation, Open Space and Trails program. County staff will also provide information and materials to the Administrator for the full implementation of the program. Finally, County staff will also continue to work with partners to implement the program.

*Role of Town of Pagosa Springs Staff*

The Pagosa Springs Town Manager shall work in partnership with the County Administrator to establish an appropriate annual work program for the Regional Parks, Recreation, Open Space and Trails program. The Town Manager will provide information and materials to the Administrator that will aid in the full implementation of the program. Town staff will continue to work with the County, under the direction of the Town Manager, to contribute to program implementation.

*Role of Private Sector*

Archuleta County has established a good working relationship with land conservation organizations that have accomplished significant land and water protection strategies. Private civic and non-profit organizations can help to educate residents about the goals and objectives of this Plan, as well as help to organize open space and park management activities. Local civic groups, including the Southwest Youth Corps, Boy Scouts, Girl Scouts, garden clubs, Sierra Club chapters, and retired volunteers can also be participants in the program. They can help to build trail facilities, public waterway access areas, and promote land conservation strategies. Private organizations may apply, either on behalf of others or on their own behalf, for grants funds to supplement funding from the County and its partners.

### **Implementation Option A: Work in Partnership with Town of Pagosa Springs**

In the short term, it may be best to allow the Town of Pagosa Springs, through a term-limited service agreement with Archuleta County, to administer the implementation program for the Regional Parks, Recreation, Open Space and Trails program. As such, the County and Town could work to empower the current Parks and Recreation Advisory Commission to champion this Master Plan, and work with Town and County staff to implement the goals and objectives of this Plan. Under this scenario, the County Administrator and Town Manager would cooperatively develop a work program that would be reviewed and approved by the County Commission and Town Council. This work program would define the capital and operating elements for the parks, open space and trails program, commit staff resources and describe funding needs. Under this scenario, this Master Plan has an immediate opportunity to begin implementation.

### **Implementation Option B: Establish a Regional Parks, Recreation, Open Space and Trails Advisory Commission**

A second option for consideration would be for the County to establish a parks, recreation, open space and trails advisory commission, with members appointed by the Commission. The role of the commission would be as follows:

- Champion for implementing open space, recreation, open space and trails program
- Advise the County on development of program
- Facilitate cooperation among jurisdictions for implementation of program
- Define and recommend sources of funding for program
- Implement uniform standards for open space and greenway facilities
- Coordinate efforts to create a unified open space and greenway system

The County could also establish a Friends of Archuleta County Parks, Open Space and Trails. This would be a not-for-profit organization that could raise interest and awareness in parks and trails. The specific duties of this organization would be as follows:

- Membership organization
- Advocate, promote, encourage development of open space and greenways
- Educate citizens as to benefits of open space and greenways
- Assist authority in raising money for implementation
- Help to organize volunteers to assist with implementation and management
- Sponsor or co-sponsor open space and greenway events

## E. NEXT STEPS

The next steps that Archuleta County should take to implement the recommendations contained within this Regional Parks, Recreation, Open Space and Trails Plan are defined as follows:

- 1) **Adopt Master Plan:** based on a recommendation from the Planning Commission, the County Commission would endorse this plan as an element of the County Comprehensive Plan.
- 2) **Establish Implementation Structure:** the County Commission would select an appropriate implementation structure for this Plan and empower that structure with resources, goals and objectives as defined in this Plan.
- 3) **Apply for Grant Funding:** the County will work with its partners to apply for specific grants that support full implementation of the phase one development recommendations in this Plan.
- 4) **Support Bond Referendum for Recreation Center:** the County would work with the Town of Pagosa Springs to support a bond referendum for the community recreation center.
- 5) **Acquire land for County Parks:** the County will work with landowners and land conservation organizations to support the acquisition of land for new district, community and neighborhood parks, as defined in this Plan.
- 6) **Build Park and Trail Facilities:** the County will carry out the full design and development of the parks and trails defined within each phase, as defined by this Plan.
- 7) **Operate Park and Trail Facilities:** the County will commit resources and funds necessary to operate the proposed regional parks, recreation, open space and trail resources defined in this Plan.
- 8) **Programming of Parks and Trails:** the County will commit funds and resources necessary to program parks and trails for recreation, entertainment, health, wellness and tourism.



2008-2010 Roster of Projects Summary Sheet					
Project	Location	Budget Estimate (\$000.s)	Lead Entity	Notes/Key Steps	
<b>I Priority 2008-2010</b>					
<b>Parks</b>					
1	Pagosa Springs Sports Complex Park	South Fifth Street across from High School	\$250,000.00	Town of Pagosa Springs	Under Construction
2	Town Park	Hermosa & Hot Springs Blvd	\$50,000.00	Town of Pagosa Springs	Make Improvements to Park
3	Reservoir Hill Park	Reservoir Hill, Pagosa Springs	\$150,000.00	Town of Pagosa Springs	Complete Master Plan and make park improvements
4	Pagosa Springs Recreation Center	To be determined	\$16,000,000.00	Town of Pagosa Springs	1. Put Referendum on Ballot for Voter Approval 2. Complete Master Plan
5	Archuleta County Regional Park	Cloman Boulevard near airport	\$2,000,000.00	Archuleta County	Complete Phased Construction
6	Acquire land for new District Park	Aspen Springs (to be determined)	\$300,000.00	Archuleta County	Work with SW Land Trust Alliance
7	Acquire land for new Community Park	Pagosa Lakes (to be determined)	\$150,000.00	Archuleta County	Work with SW Land Trust Alliance
<b>Sub-Total Parks</b>			<b>\$ 18,450,000</b>		
<b>Trails</b>					
1	San Juan River Trail	Downtown area	\$ 500,000	Town of Pagosa Springs	
2	Town to Lakes Trail Master Plan	Hwy 160 Town to Pagosa Lakes	\$ 50,000	Town of Pagosa Springs and Archuleta County	1. Form Trails Coalition 2. Apply for GOCO Planning Grant 3. Prepare Master Plan
<b>Sub-Total Trails</b>			<b>\$ 550,000</b>		
<b>Open Space</b>					
1	Acquire open space land	To be determined	\$ 1,000,000	Partnership between County, Town and SW Land Trust Alliance	
3	Review regs. & policies at town and County level.	County-wde	\$ -	Town of Pagosa Springs and Archuleta County	1. Establish Joint Gov't Committee 2 Retain Ord. Writing Consultant
<b>Sub-Total Open Space</b>			<b>\$ 1,000,000</b>		
<b>Total Phase I</b>			<b>\$ 19,250,000</b>		
<b>Administrative</b>					
1	Adopt Master Plan	Archuleta County, Pagosa Springs, School District 50, Joint	\$ -	Archuleta County	Archuleta Planning Commission to endorse, Pagosa Springs Parks and Recreation Commission to endorse
2	Establish Implementation Structure	Archuleta County and Pagosa Springs	\$ -	Archuleta County and Pagosa Springs	Execute MOU
3	Apply for Grant Funding	Archuleta County	\$ -	Archuleta County and Pagosa Springs	Coordinate with other entities
4	Support Bond Referendum	Pagosa Springs	\$ -	Pagosa Springs	Work with Trust for Public Land to poll residents
5	Establish Operating Program for Parks and Trails	Archuleta County and Pagosa Springs	\$ -	Pagosa Springs Parks and Recreation Commission	See consultant recommendations in O&M chapter
6	Establish Programming for Parks and Trails	Pagosa Springs	\$ -	Pagosa Springs Parks and Recreation Commission	Town has already established successful programs that can be built upon.

2011-2015 Roster of Projects Summary Sheet				
Project	Location	Budget Estimate (\$000.s)	Lead Entity	
<b>II Mid Range 2011-2015</b>				
<b>Parks</b>				
1	Build new District Park	Aspen Springs (to be determined)	\$3,200,000.00	Archuleta County
2	Build new Community Park	Pagosa Lakes (to be determined)	\$1,650,000.00	Archuleta County
3	Acquire land for new Community Park	To be determined	\$450,000.00	Archuleta County
4	Acquire land for two new Neighborhood Parks	To be determined	\$450,000.00	Archuleta County
5	Build new Community Park	To be determined	\$1,650,000.00	Archuleta County
6	Build two new Neighborhood Parks	To be determined	\$1,430,000.00	Archuleta County
<b>Sub-Total Parks</b>			<b>\$ 8,830,000</b>	
<b>Trails</b>				
1	San Juan River Trail	River Center Park to Sports Complex Park	\$ 500,000	Town of Pagosa Springs
2	Town to Lakes Trail Construction	Pagosa Springs to Pagosa Lakes	\$ 1,500,000	Archuleta County and Town of Pagosa Springs
3	Design and Build Phase 1 of Regional Loop Trail		\$ 1,500,000	Archuleta County and Town of Pagosa Springs
<b>Sub-Total Trails</b>			<b>\$ 3,500,000</b>	
<b>Open Space</b>				
1	Acquire open space land	To be determined	\$ 1,500,000	Partnership between County, Town and SW Land Trust Alliance
<b>Sub-Total Open Space</b>			<b>\$ 1,500,000</b>	
<b>Total Phase II</b>			<b>\$ 13,830,000</b>	

2015+ Roster of Projects Summary Sheet				
Project	Location	Budget Estimate (\$000.s)	Lead Entity	
<b>III Longer Range 2015+</b>				
<b>Parks</b>				
1	Acquire land for two new District Parks	To be determined	\$ 2,000,000	Archuleta County
2	Acquire land for two new Community Parks	To be determined	\$ 1,200,000	Archuleta County
3	Acquire land for three new Neighborhood Parks	To be determined	\$ 900,000	Archuleta County
4	Build two new District Parks	To be determined	\$ 6,400,000	Archuleta County
5	Build two new Community Parks	To be determined	\$ 3,300,000	Archuleta County
6	Build three new Neighborhood Parks	To be determined	\$ 2,145,000	Archuleta County
<b>Sub-Total Parks</b>			<b>\$ 15,945,000</b>	
<b>Trails</b>				
1	Design and Build Piedra Road Trail Phase 1		\$ 500,000	Archuleta County
2	Design and Build Highway 160 Trail		\$ 2,000,000	Archuleta County
3	Design and Build Regional Loop Trail Phase 2		\$ 2,000,000	Archuleta County
<b>Sub-Total Trails</b>			<b>\$ 4,500,000</b>	
<b>Open Space</b>				
1	Acquire open space land	To be determined	\$ 2,000,000	Partnership between County, Town and SW Land Trust Alliance
<b>Sub-Total Open Space</b>			<b>\$ 2,000,000</b>	
<b>Total Phase III</b>			<b>\$ 22,445,000</b>	

## IMPLEMENTATION CASE STUDY 1:

### *Pitkin County Open Space and Trails Program*

#### **Background**

The Pitkin County Open Space and Trails Program was created by a popular vote in 1990, and was extended an additional 10 years by the election on November 2, 1999. Strong public support for the program was reflected in the 69% voter approval of the reauthorization. The mission of the Open Space and Trails Program is “to acquire, preserve, maintain and manage open space properties for multiple purposes, including, but not limited to, recreational, wildlife, agricultural, scenic and access purposes; and to acquire, preserve, develop, maintain and manage trails for similar purposes.” The lands acquired are legally protected by a restriction in the Pitkin County Charter that prohibits any sale or conversion of an open space property unless approved by a majority of the electorate and replacement with real property interest of equivalent monetary value and value to the program.

#### **Stewardship**

As of May 1 of 2005, the Open Space and Trails Program purchases have protected approximately 10,000 acres of open space lands, and over 20 miles of trails. Protected lands include high visibility scenic areas, critical elk and deer winter range habitat, important recreational trails and lands including the Rio Grande Trail and the Hummingbird Lode, as well as thousands of acres of operational ranchlands. In addition, the program has assumed responsibility to restore and maintain another 491 acres of County Open Space and 15.04 miles of Pitkin County trails acquired before the program started (such as the Rio Grande Trail). In total, the program’s stewardship includes 14,900 acres and 40 miles of trails.

#### **Program Funding**

The acquisition and stewardship program is funded through a special mill levy on property taxes, pegged at 3.75 mills from 2001-2010. This translates into roughly \$6-7 million annually. The program is also authorized to incur additional general obligation indebtedness up to \$18,000,000. In 2007, this revenue was allocated with 70 percent available for open space acquisition, 25 percent for trails construction, and 10 percent for maintenance.

#### **Partnerships**

Pitkin County joins forces with other government entities and organizations to foster conservation success and provide recreational opportunities for the county and community residents and visitors. One example is the partnership with the City of Aspen and Snowmass Village to operate and maintain the Aspen/Snowmass Nordic Trail System. The trail system, 60 kilometers, is the largest free groomed cross-country skis system in North America. Aspen Valley Land Trust and Roaring Fork Conservancy work in partnership with Pitkin County to preserve properties and riparian habitat through tools such as conservation easements and educational programs.

#### **Open Space and Trails Team**

A full time Director and Coordinator identify and negotiate acquisitions. The Open Space and Trails Land Steward oversees the management of these properties and trails. One full time and one seasonal ranger patrol the trails to ensure safe and proper public use. Program purchases must be approved by a volunteer Board of Open Space Trustees and the Pitkin County Board of County Commissioners.

*Pitkin County Open Space and Trails, Aspen, Colorado:* <http://www.aspenpitkin.com/depts/21/facts.cfm>

## IMPLEMENTATION CASE STUDY 2:

### *City of Bozeman, Gallatin County and Gallatin Valley Land Trust, Montana*

#### **About Gallatin County**

Located in a sweeping valley in the heart of the Rocky Mountains, Gallatin County is the most populated and fastest growing county in scenic southwest Montana. The County Seat of Bozeman at large encompasses over 50,000 people, yet has a small town feel. Located in a breathtaking Rocky Mountain setting, it is close to excellent downhill skiing, blue ribbon trout streams, Yellowstone National Park and a multitude of other outdoor activities in the pristine nearby wilderness areas.

Gallatin County covers over 2,500 square miles of mountain lands varying in topography and climate from temperate river valleys to snow-capped peaks and open ranch lands. Nearly half of all the land in Gallatin County is under public ownership by the Gallatin National Forest, State of Montana, Bureau of Land Management or the National Park Service.

#### **Partnerships, Tools and Leadership**

##### **Gallatin Valley Land Trust**

Gallatin Valley Land Trust (GVLT) is a non-profit membership organization dedicated to the conservation of open space, agricultural land, wildlife habitat, and the creation of public trails in southwestern Montana. GVLT is the leader in trails and believes building trails, builds community. For 16 years, GVLT's Community Trails Program has worked on a trail system that connects Bozeman's Main Street to the mountains to the north and south of town and recently has broadened the vision to connect neighborhoods and the surrounding communities.

GVLT takes the lead in securing funding and coordinating permitting, design, contracting and construction of many new trails, as well as major trail amenities such as bridges, information kiosks and benches. These projects are developed in close partnership with the City and County. GVLT negotiates trail easements with willing private landowners to create key connections to the trail system. Once the trail is constructed over the permanent right-of-way, GVLT transfers the easement to the City or County and the new trail becomes part of the public non-motorized trail system. Staff and volunteers collaborate with Bozeman and the Montana Conservation Corps on a wide range of maintenance projects and informational signage.

Every proposed development is reviewed by the city, county and associated boards, along with the Land Trust to ensure that the trail and park system expands as the community grows. GVLT also participates in many significant community planning efforts and special projects to guarantee land conservation and to create public trails.

The Gallatin Valley Land Trust plays a key role in the community and leads the charge for the trail network vision and realization.

*(Case Study Continued)***City of Bozeman**

The City of Bozeman actively acquires trails and parks through new development land dedications. Montana State Law (Section 76-3-621, Montana Code Annotated) requires subdividers to dedicate to the governing body a cash or land donation equal to certain criteria. The City requires the developer to level the land, plant turf and install an irrigation system for the park. The city has minimal funds for maintaining parks and trails and so in the past four-five years the Home Owners Associations are responsible for maintenance. Park Improvement Grants are available for community organizations to improve parks and trails, but the maintenance needs are tremendous. Together, the City crews, volunteer groups, adopt-a-trails programs and the Gallatin Valley Land Trust work together to get the job done.

The City planning department is currently updating its Transportation Plan, 20/20 Community Plan, neighborhood and subarea plans, comprehensive plan and the Parks, Recreation, Open Space and Trails Plan. All these plans are interrelated and require hard work of many concerned groups and planners to help plan for the future of parks, recreation, open space and trails.

The Bozeman Recreation and Parks Advisory Board is responsible for developing, evaluating and updating plans for the parks, recreational programs and facilities, open spaces and trails in the City of Bozeman. They are also responsible for reviewing development proposals, assist in preparing individual park plans with developers, for supporting all groups who help with parks and recreation and making recommendations to the City Commission on all recreation, park, trail and open space interests.

The City does not have enough funds to operate and maintain their recreation, parks, trails and open space facilities and programs. They are exploring funding ideas such as a park and open space bond, park impact fees, an aquatic center bond and creating a community foundation. They need to research these ideas further and ensure community support before moving forward.

**Gallatin County**

In June of 1997, the Gallatin County Commissioners formed the Gallatin County Open Space Task Force. This fifteen-member task force was given the responsibility to develop a range of methods that the county could use to protect open space. The method or tools were to be used to protect the rural areas from the worst forms of unsightly sprawl while at the same time encouraging the type of growth and development that is consistent with preserving the quality of life. The County Commissioners knew there was a strong case for urgency in preserving our open space due to the rapid loss of farm and ranch lands that were converted to non-agricultural production and the tremendous population increase in the County. Another underlying factor, which contributed to the sense of urgency, is that virtually all the land is private, most of it is in agricultural production, and thousands of acres may soon pass to the next generation subject to estate and inheritance taxes. This led to the conclusion that one of the most effective ways to preserve open space in the County is to take maximum advantage of the limited ways in which the county can make it easier for agricultural producers to stay in business.

As one tool for conservation, the Task Force recommended an open space bond program. A survey determined the voters would be willing to pay an increase in property tax for the preservation of open space. A ten million dollar bond was placed on the ballot for the November 7, 2000 general election. The bond passed with close to

*(Case Study Continued)*

a 60% approval. Voters approved another ten million dollar general obligation bond overwhelmingly in 2004. In the 2001 State Legislative session, SB 303 passed, which exempts property taxes assessed agriculture producers for open space bonds in the State of Montana.

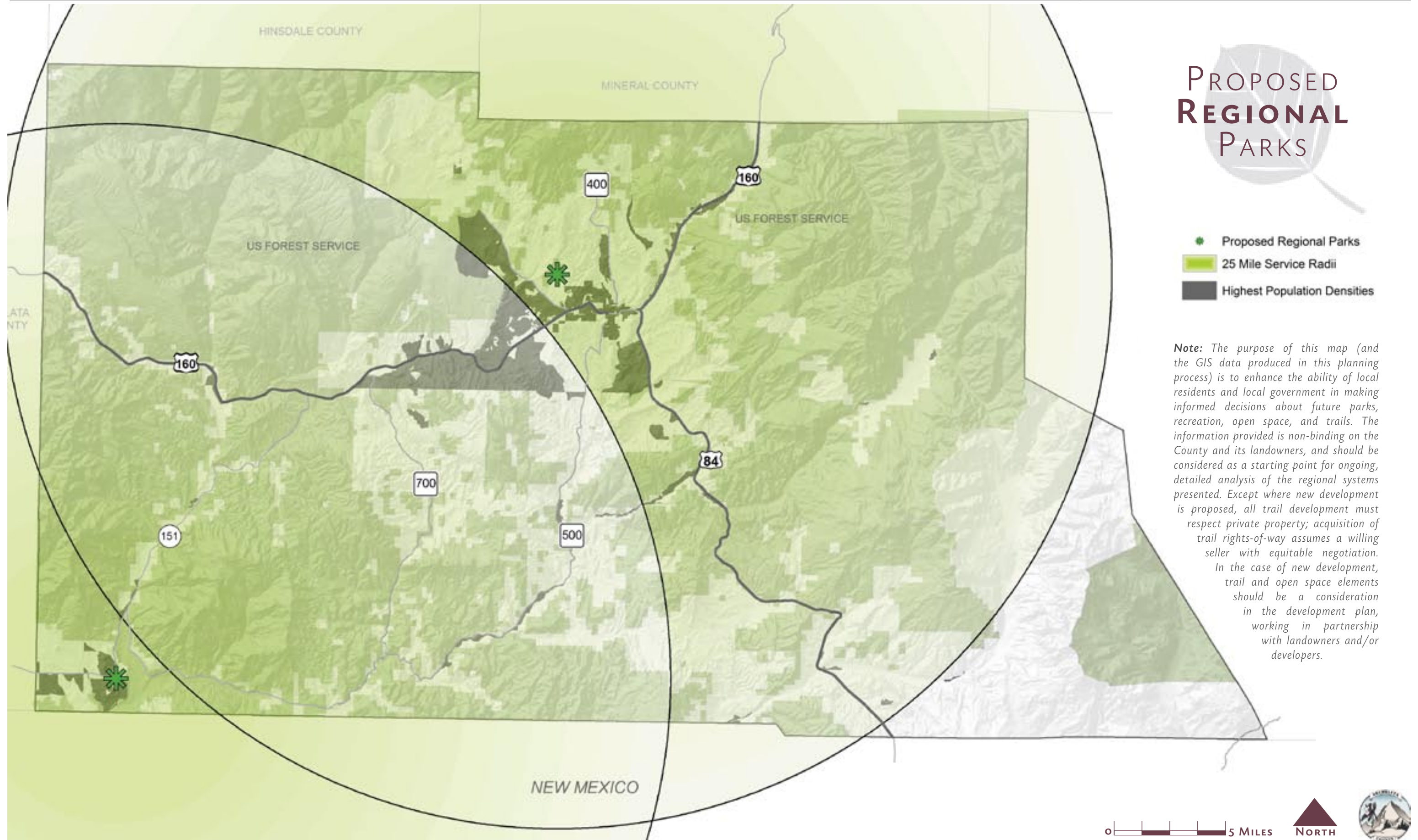
The Gallatin County Open Lands Board oversees the grant program, reviews all applications and makes project-funding recommendations to the County Commission who have the authority to spend the bond money. The Board's goals are to preserve open spaces, agriculture lands, riparian areas, water quality, recreational parks, trails and wildlife corridors. As of 2006, bond funds were used to protect over 40 square miles under conservation easement; and purchased a 100-acre regional park and two other parks. As part of the Open Space Program, the County was successful in receiving revenues generated by the sale of an open land license plate. These funds pay for the operational costs associated with the program.

In 2005, the County Board of Park Commissioners was created to plan and administer parks and recreation in Gallatin County. The Park Board is a decision-making entity with seven members and represents each community in the County. They oversee the planning and administration of the regional park and other park and recreation activities in the County. Expenditures from the Open Space Bond Fund will be budgeted and used to complete a master plan for parks and recreation in 2008.

Getting the job accomplished is a cooperative effort involving the Gallatin Valley Land Trust, City of Bozeman, Gallatin County, Montana Conservation Corp, service clubs and many volunteers.



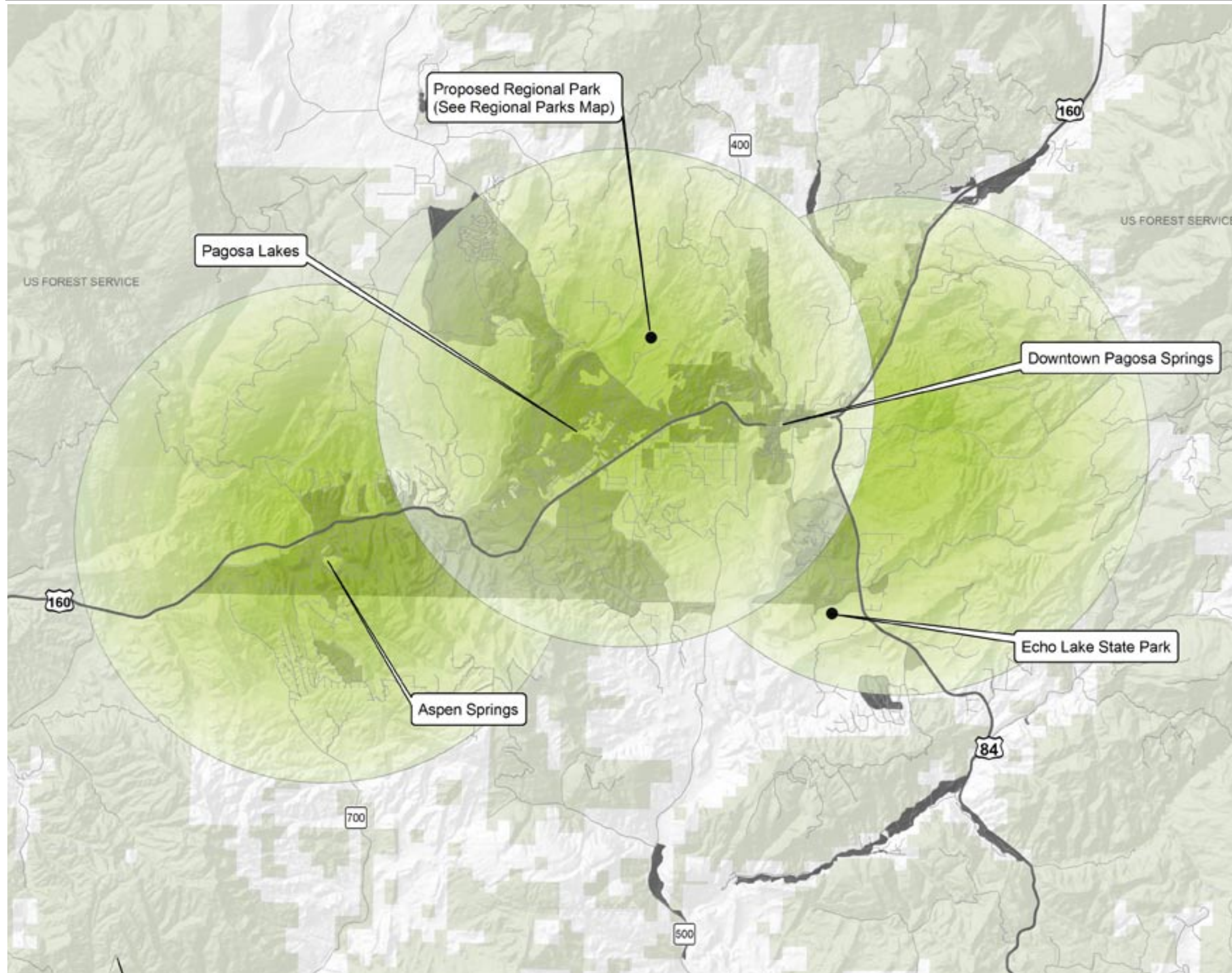




# PROPOSED REGIONAL PARKS

- ★ Proposed Regional Parks
- 25 Mile Service Radii
- Highest Population Densities

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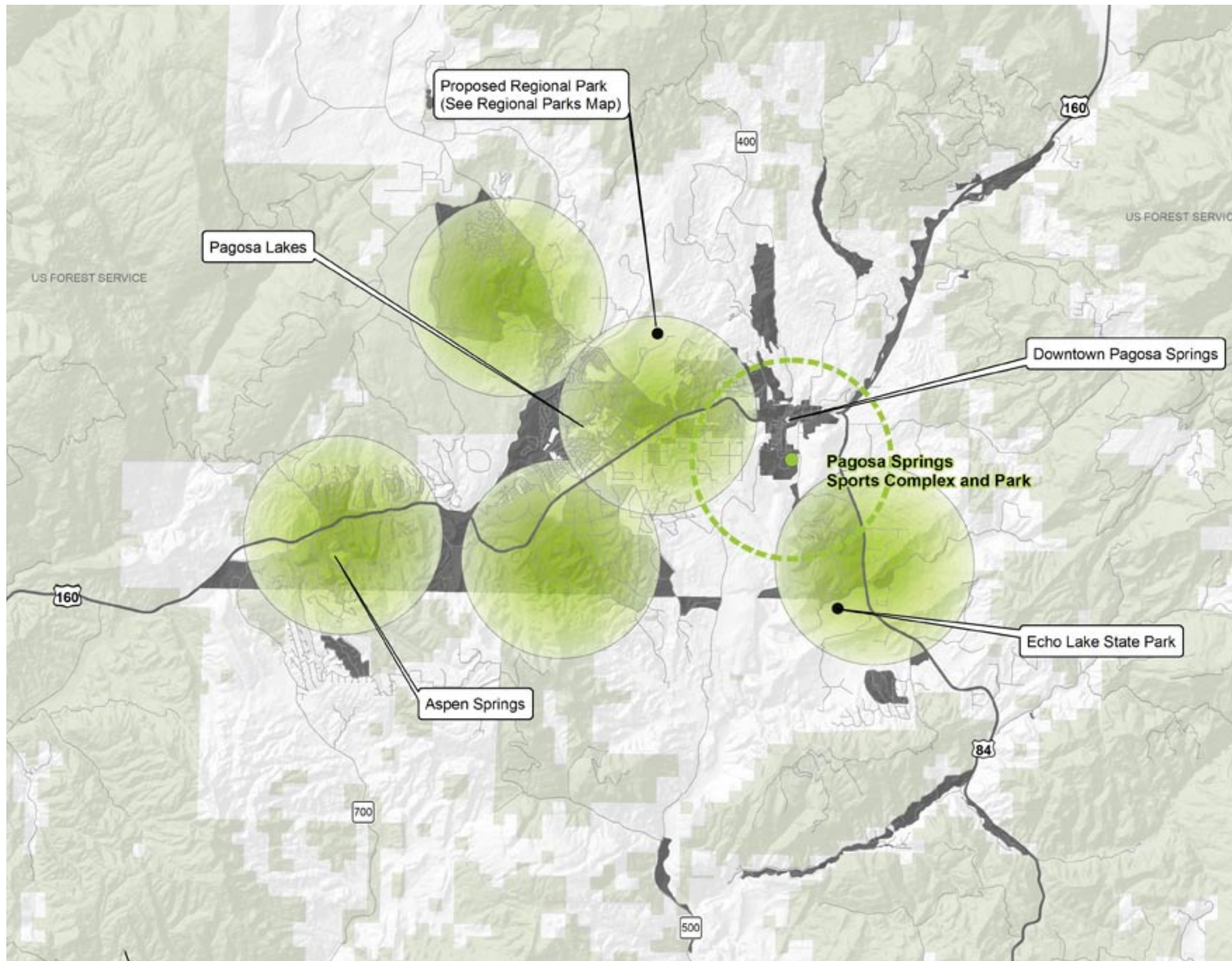
# PROPOSED DISTRICT PARKS

(PAGOSA SPRINGS FOCUS AREA)

- Proposed District Park 5 Mile Service Radii
- Highest Population Densities

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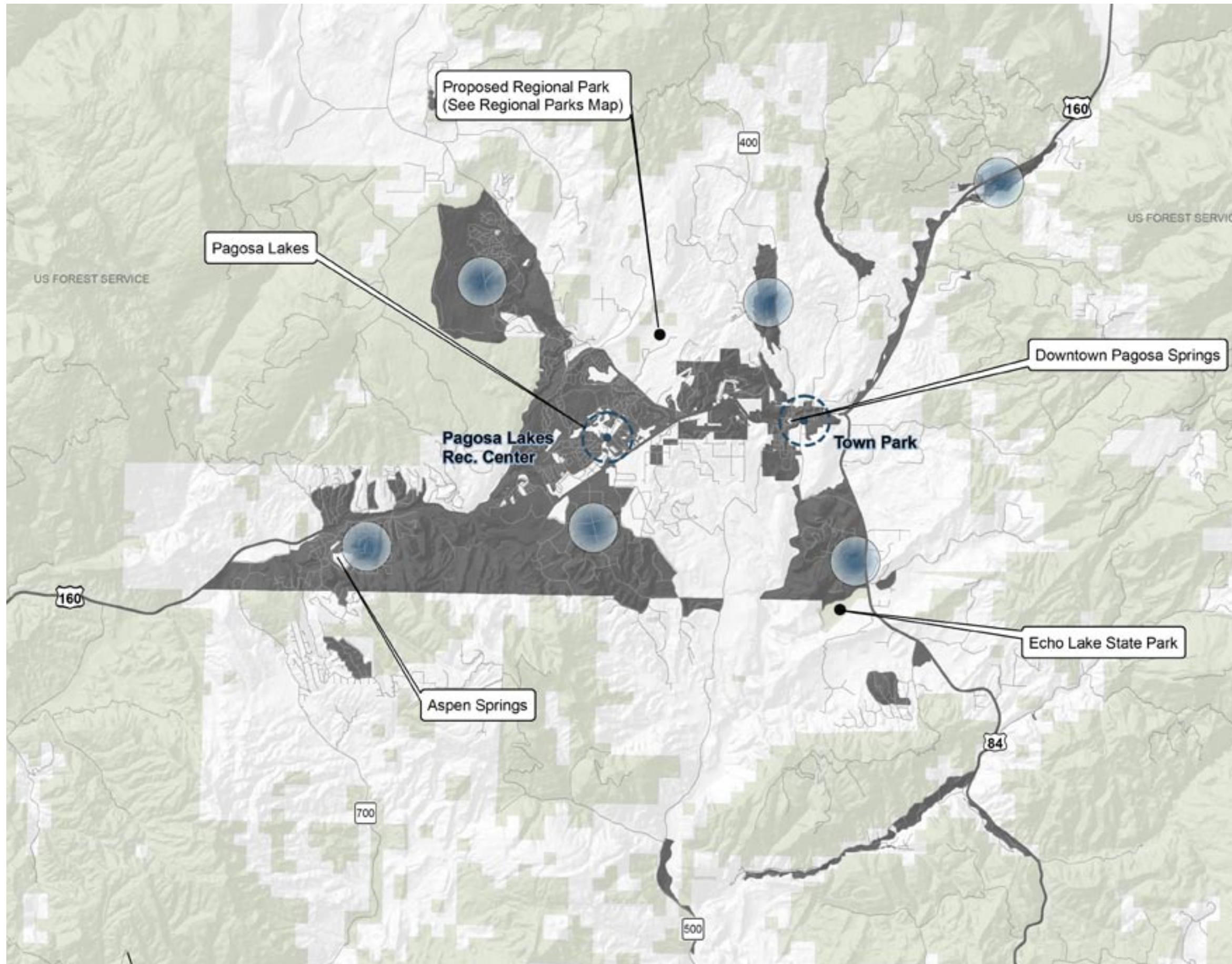
# PROPOSED COMMUNITY PARKS

(PAGOSA SPRINGS FOCUS AREA)

- Existing Community Parks
- Existing Community Park 2 Mile Service Radius
- Proposed Community Parks 2 Mile Service Radii
- Highest Population Densities

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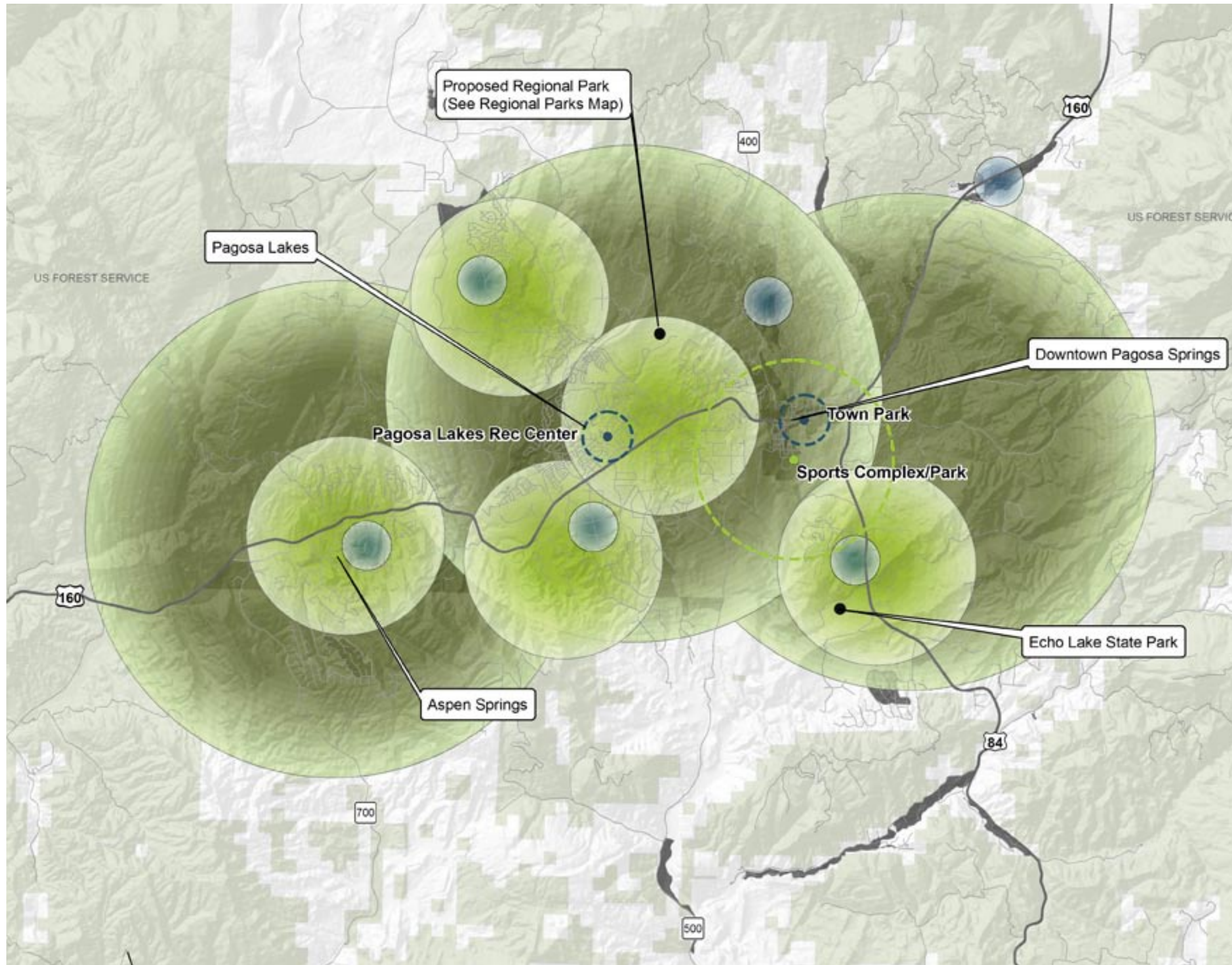
# PROPOSED NEIGHBORHOOD PARKS

(PAGOSA SPRINGS FOCUS AREA)

- Existing Neighborhood Parks
- Existing 0.5 Mile Service Radii
- Proposed 0.5 Mile Service Radii
- Highest Population Densities

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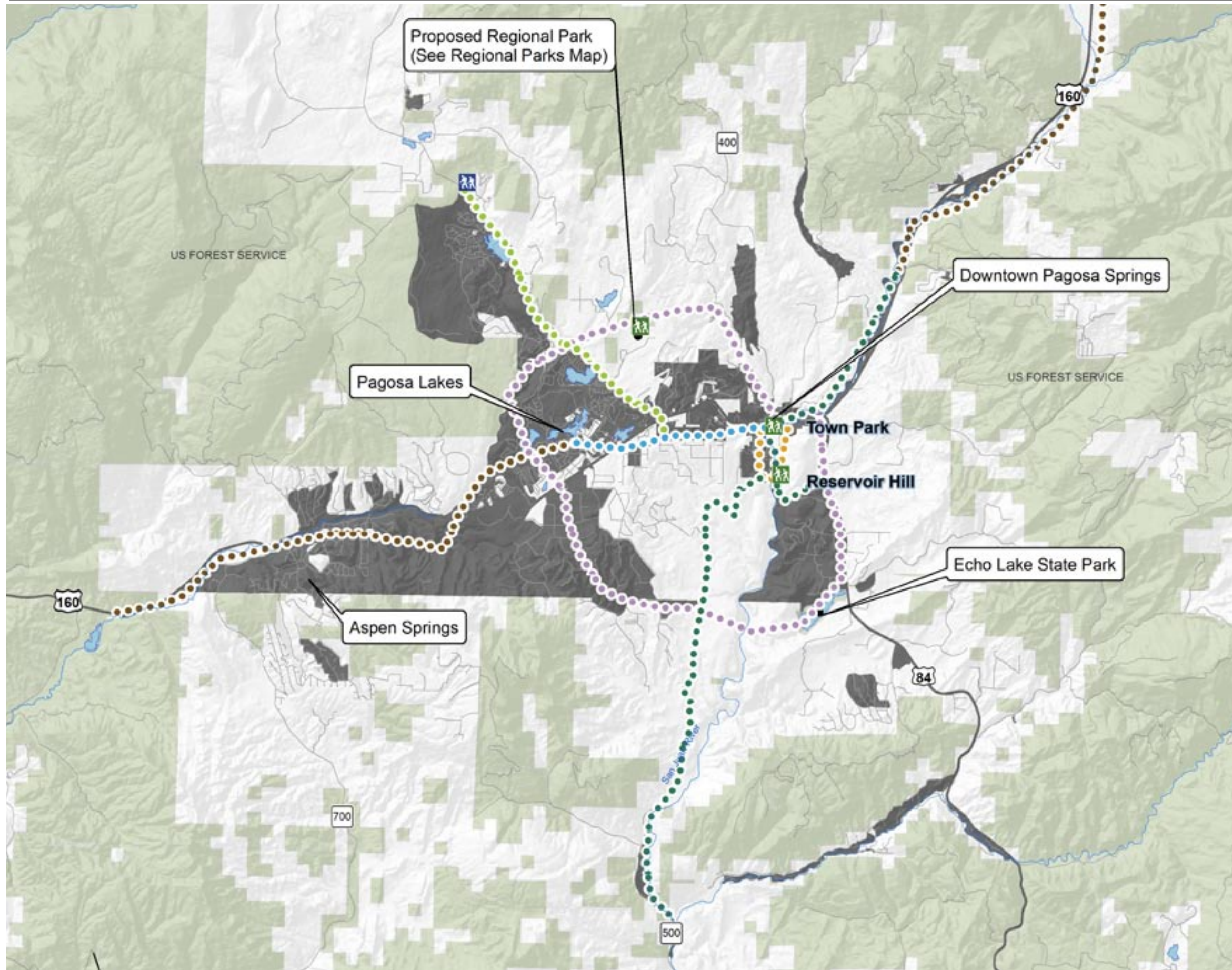
# PROPOSED PARKS COMBINED

(PAGOSA SPRINGS FOCUS AREA)

- Existing Neighborhood Parks
- Existing 0.5 Mile Service Radii
- Proposed 0.5 Mile Service Radii
- Existing Community Park
- Existing Community Park 2 Mile Service Radius
- Proposed Community Parks 2 Mile Service Radii
- Proposed District Parks 5 Mile Service Radii

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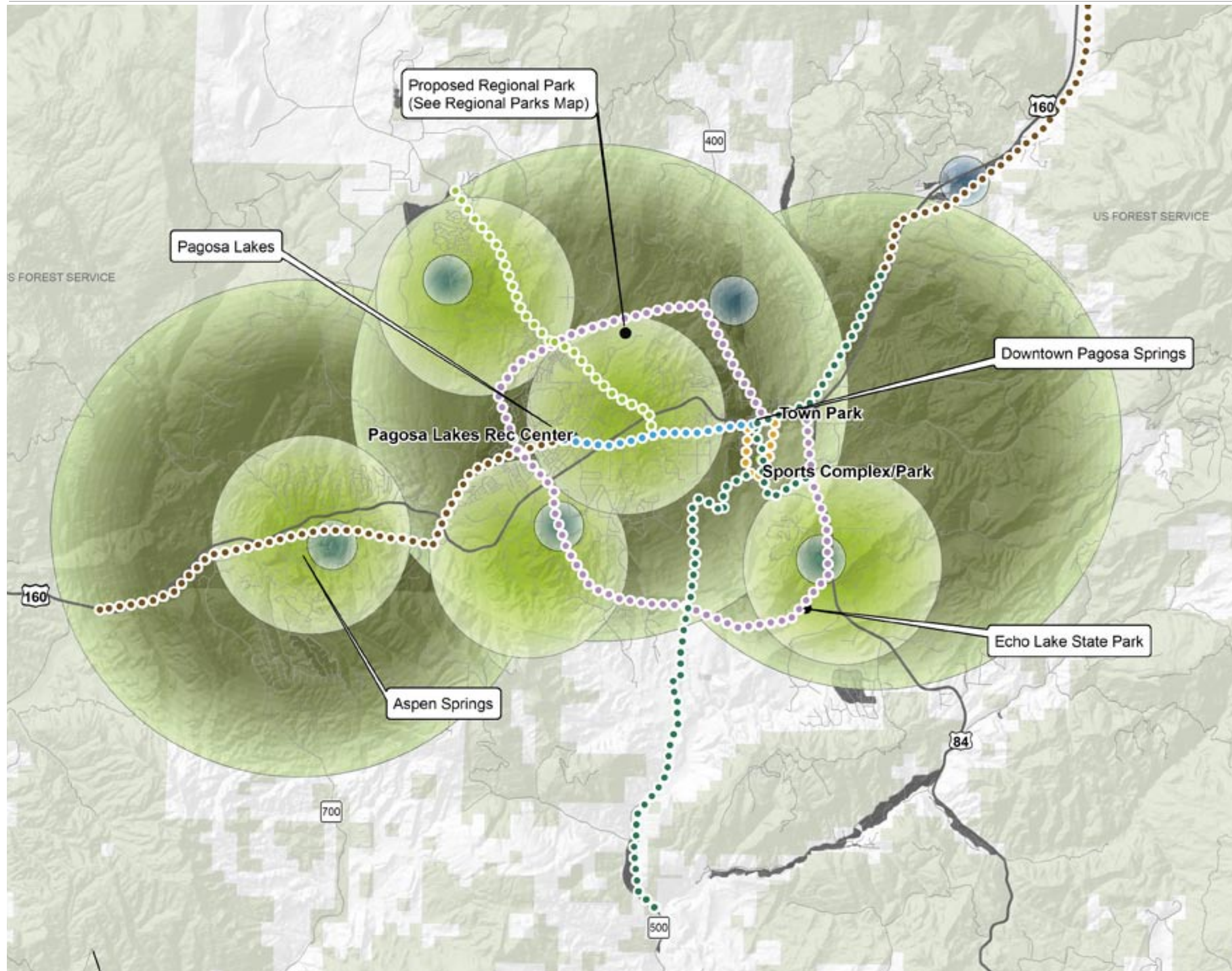
# PROPOSED TRAIL NETWORK

(PAGOSA SPRINGS FOCUS AREA)

- Town to Lakes Trail
- San Juan River Trail
- Downtown Pagosa Springs Loop
- Pagosa Springs Regional Loop
- Piedra Road Corridor
- Hwy 160 Corridor
- USFS Trailheads
- Recommended Trailheads
- Higher Population Densities
- Public Lands
- Private Lands

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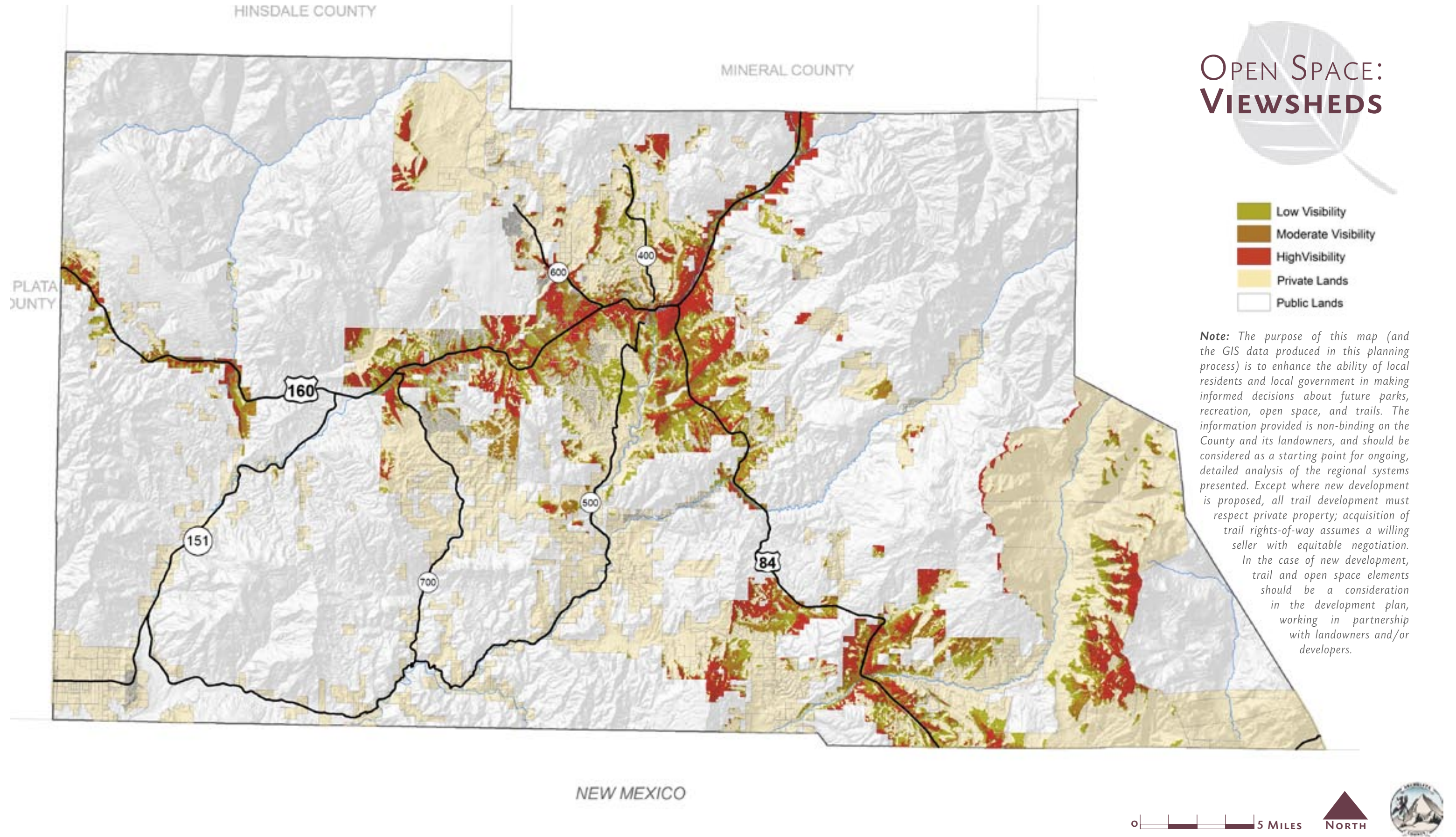
# OVERALL PROPOSED PARKS AND TRAILS

(PAGOSA SPRINGS FOCUS AREA)

- Proposed 0.5 Mile Service Radii
- Proposed Community Parks 2 Mile Service Radii
- Proposed District Parks 5 Mile Service Radii
- ⋯ Town to Lakes Trail
- ⋯ San Juan River Trail
- ⋯ Downtown Pagosa Springs Loop
- ⋯ Pagosa Springs Regional Loop
- ⋯ Piedra Road Corridor
- ⋯ Hwy 160 Corridor

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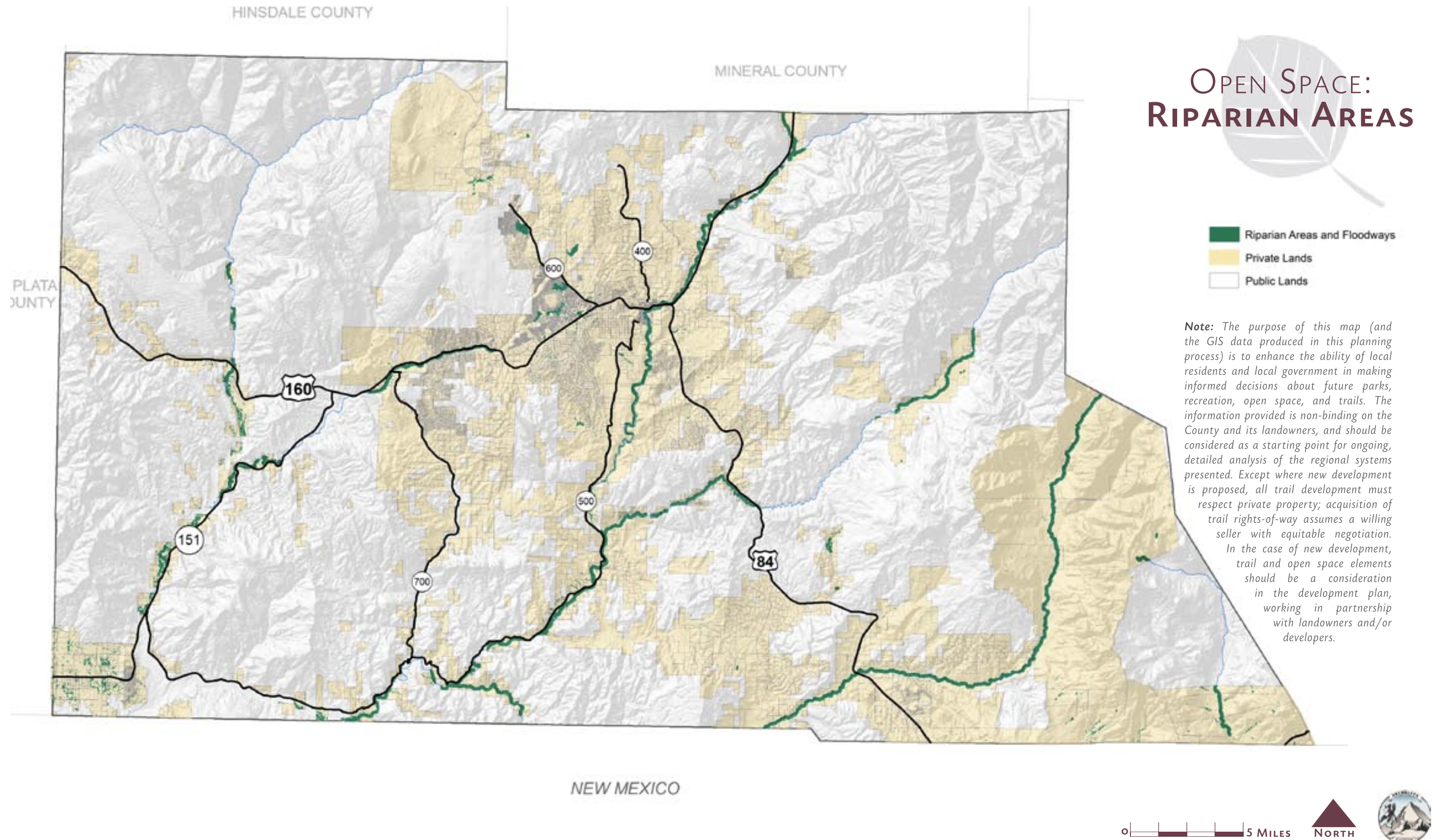


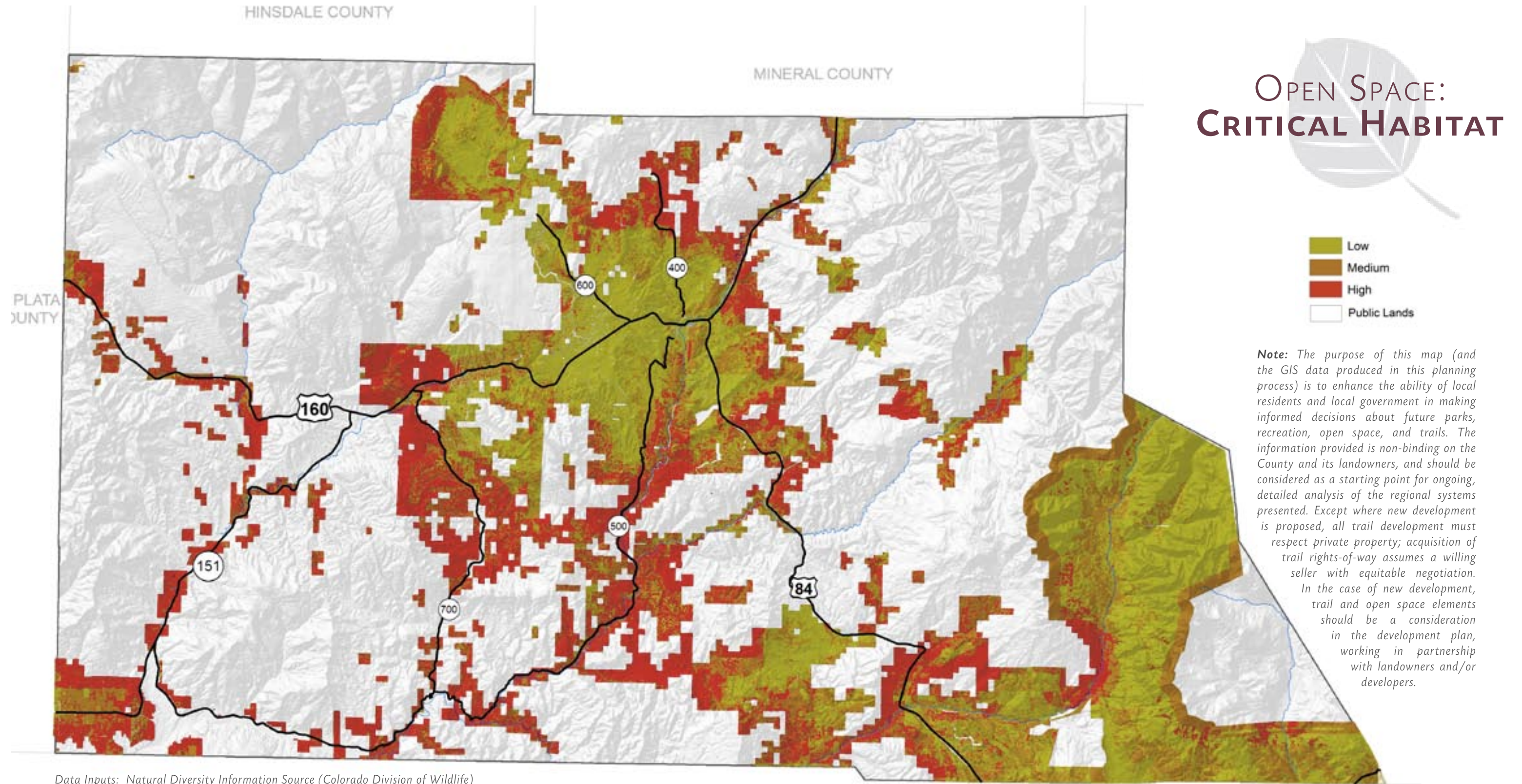


# OPEN SPACE: VIEWSHEDS

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# OPEN SPACE: CRITICAL HABITAT

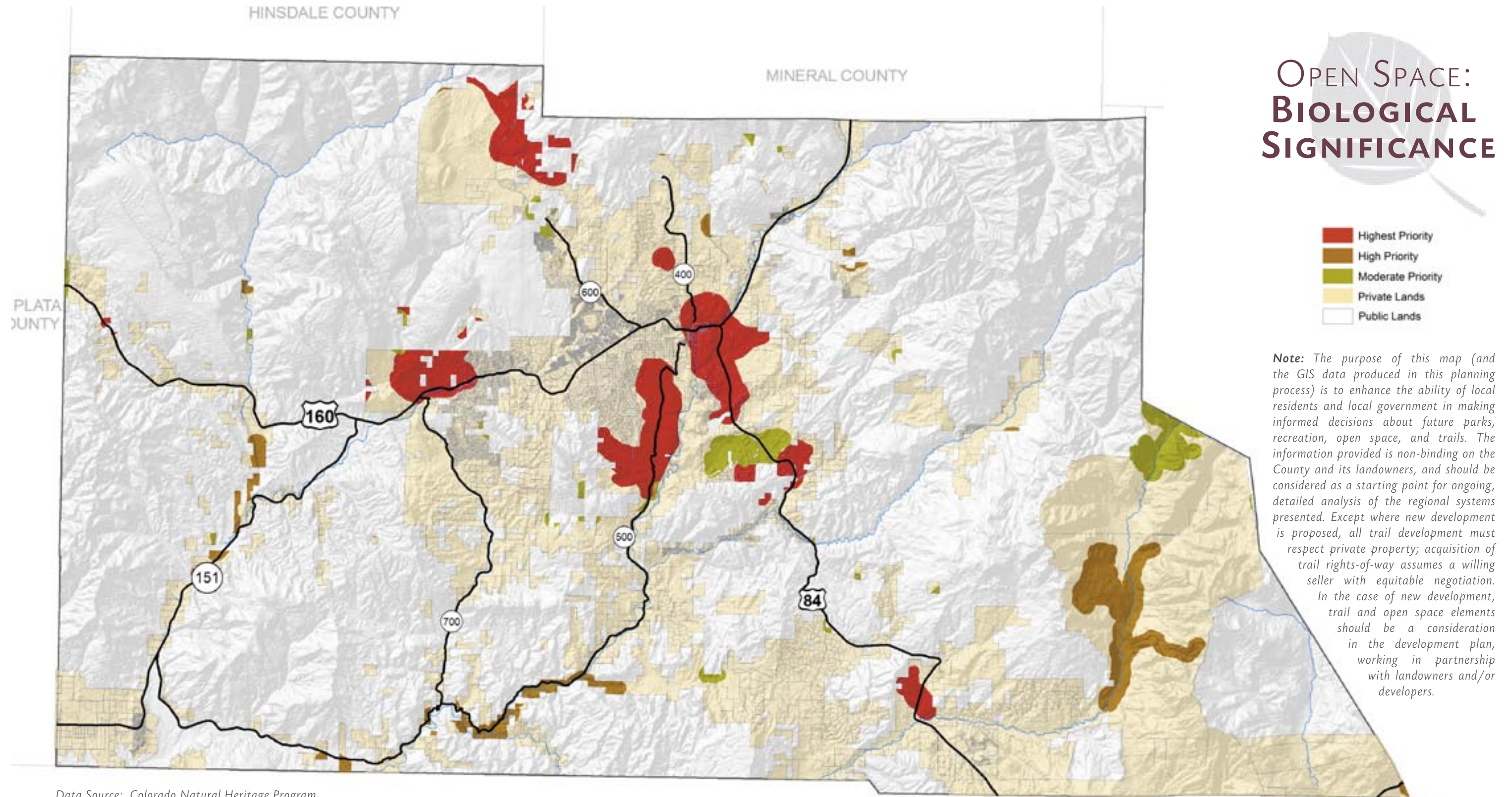
- Low
- Medium
- High
- Public Lands

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Data Inputs: Natural Diversity Information Source (Colorado Division of Wildlife)

NEW MEXICO



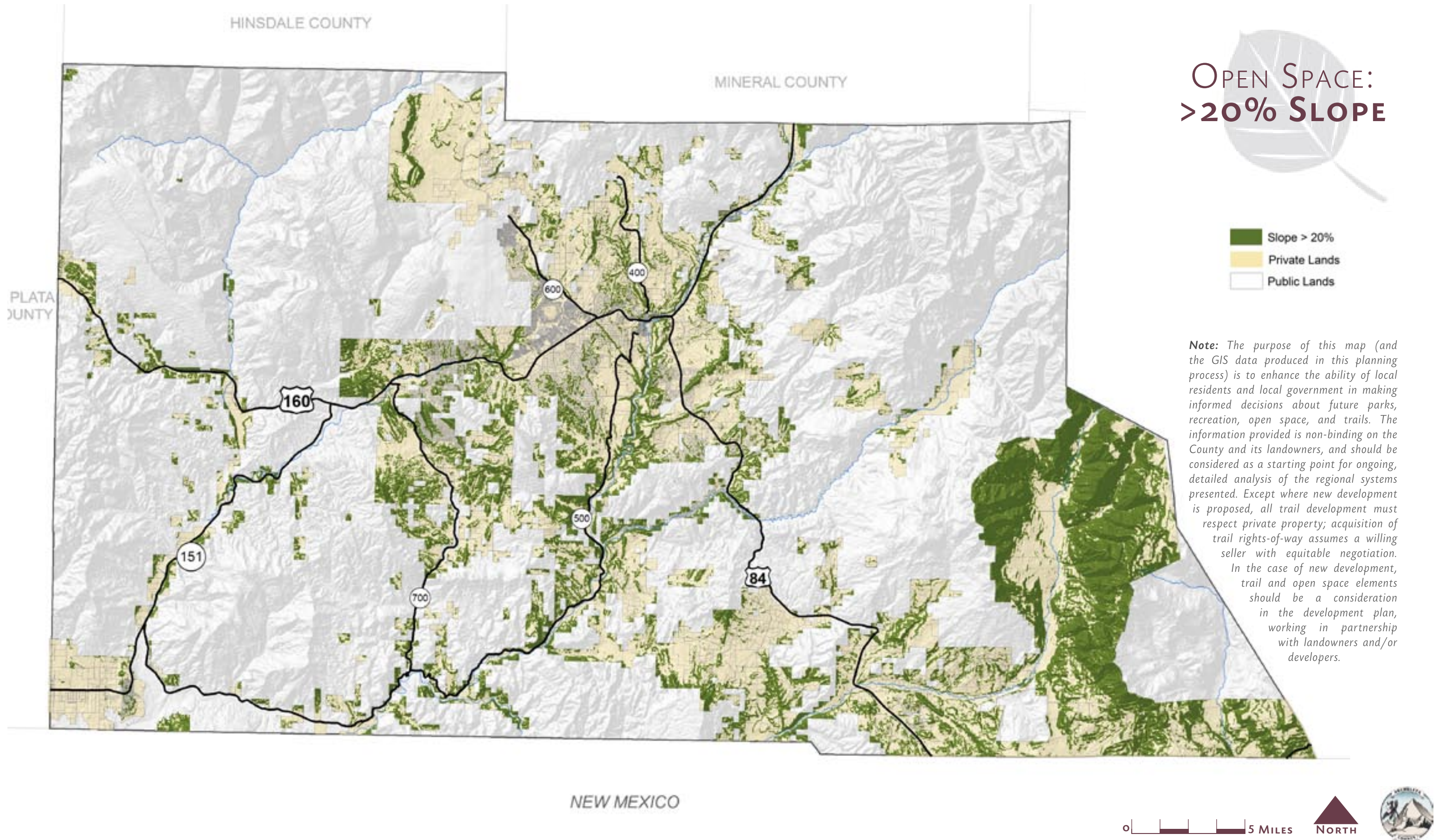


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Data Source: Colorado Natural Heritage Program

NEW MEXICO

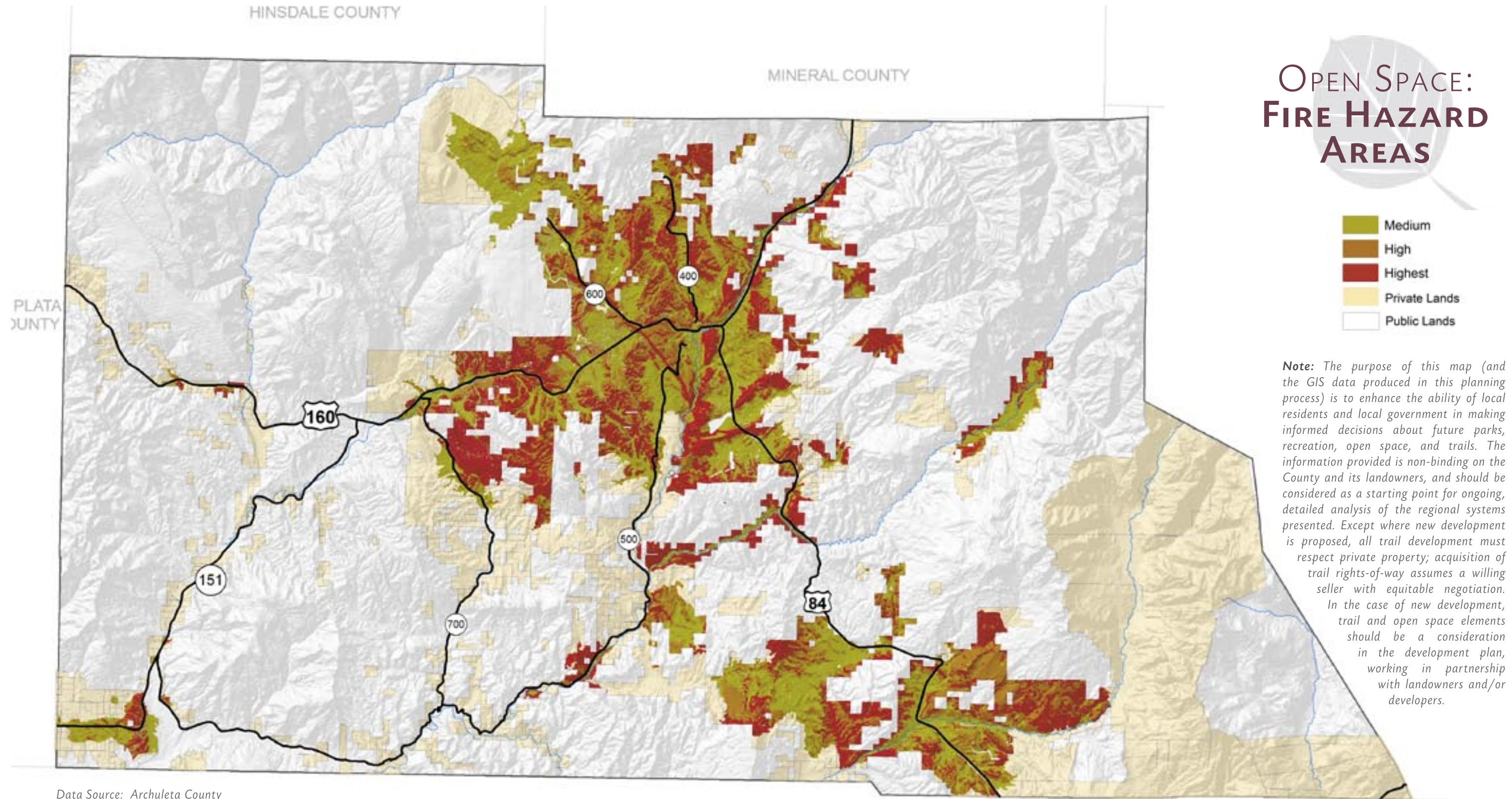




## OPEN SPACE: >20% SLOPE

- Slope > 20%
- Private Lands
- Public Lands

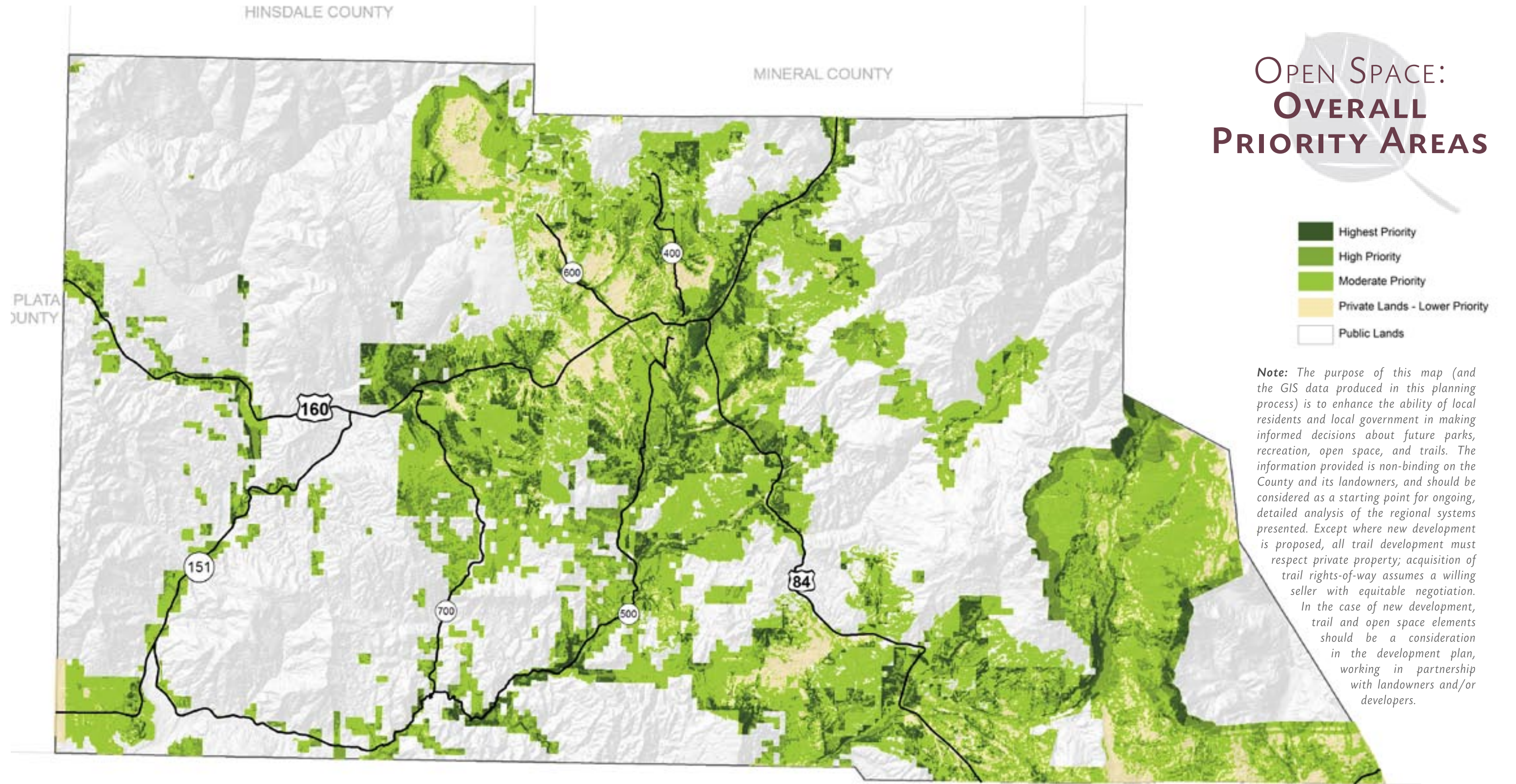
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Data Source: Archuleta County

NEW MEXICO





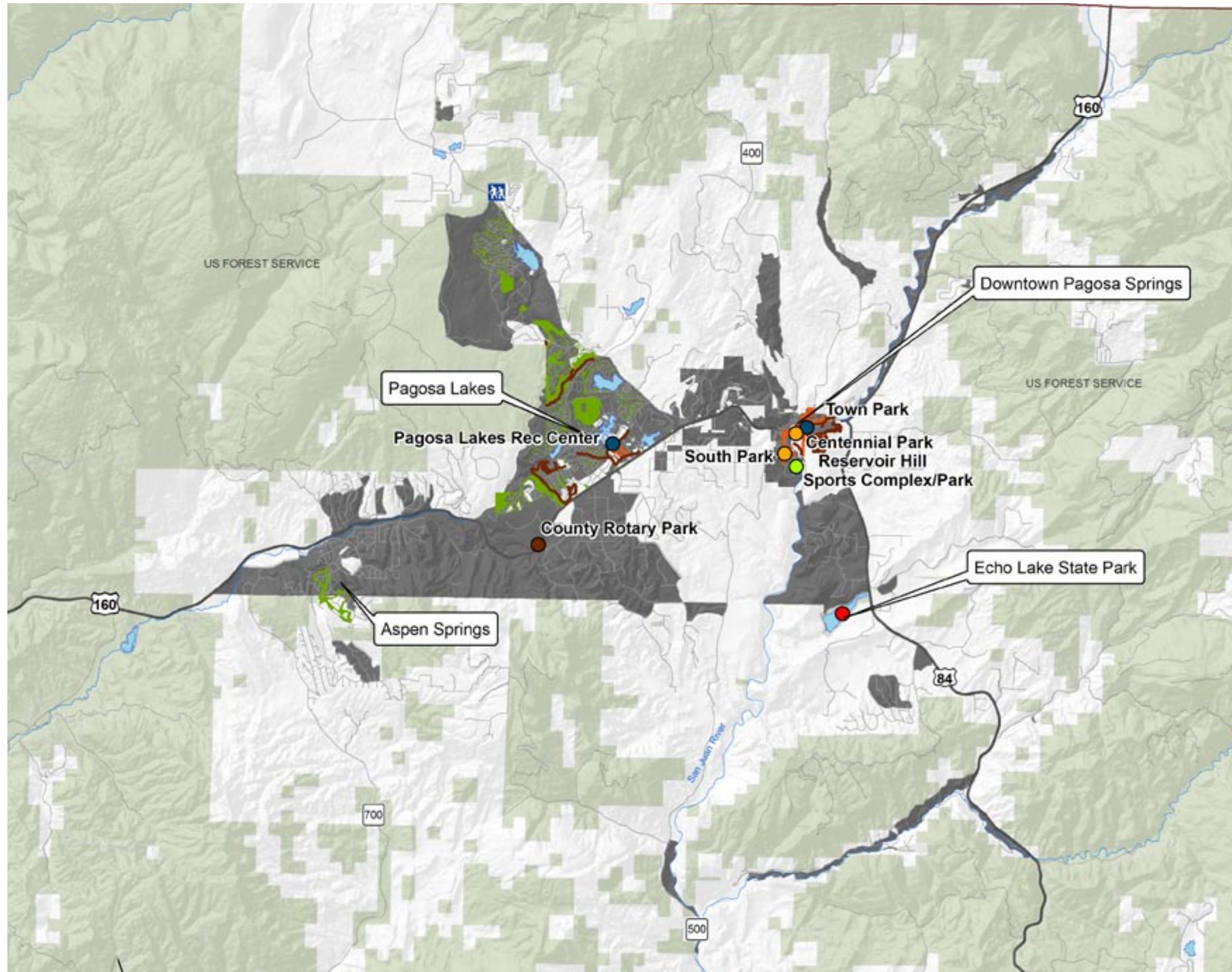
# OPEN SPACE: OVERALL PRIORITY AREAS

- Highest Priority
- High Priority
- Moderate Priority
- Private Lands - Lower Priority
- Public Lands

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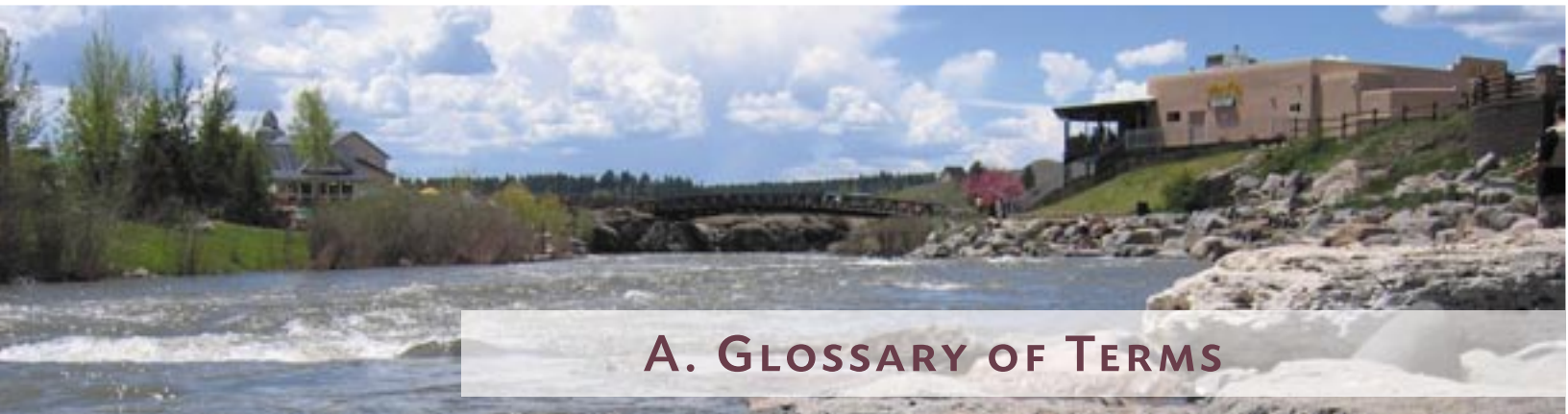
NEW MEXICO

0 5 MILES  NORTH



# EXISTING CONDITIONS: OPEN SPACE, PARKS & TRAILS

(PAGOSA SPRINGS FOCUS AREA)



## A. GLOSSARY OF TERMS

Chapter Outline:

A Overview

B Abbreviations

C Glossary of Terms

### A. OVERVIEW

The purpose of this appendix is to provide a better understanding of some of the planning-, conservation-, and recreation-related terms used throughout this document. These definitions were derived from several sources, including but not limited to: *Greenways: A Guide to Planning, Design, and Development*, the *Environmental Protection Agency*, and the *2006 Archuleta County Land Use Regulations*.

### B. ABBREVIATIONS

ADA:	American Disabilities Act
ATV:	All Terrain Vehicle
BOA:	Board of Adjustment
CDOT:	Colorado Department of Transportation
CDOW:	Colorado Division of Wildlife
CDPHE:	Colorado Department of Public Health and Environment
cfs:	Cubic Feet per Second
COGCC:	Colorado Oil & Gas Conservation Commission
EPA:	Environmental Protection Agency
FBFM:	Flood Boundary-Floodway Map
FEMA:	Federal Emergency Management Agency
FHA:	Federal Housing Administration
FIRM:	Flood Insurance Rate Map
GIS:	Geographic Information Systems
GWI:	Greenways Incorporated
HUD:	Department of Housing and Urban Development
ISTEA:	Intermodal Surface Transportation Efficiency Act of 1991
LOS:	Level of Service
NRPA:	National Recreation and Park Association
NRCS:	Natural Resource Conservation Service
PDR:	Purchase of Development Rights
PUD:	Planned Unit Development
SAFETEA:	Safe, Accountable, Flexible and Efficient Transportation Equity Act
SAFETEA LU:	Safe, Accountable, Flexible and Efficient, Transportation Equity Act: A Legacy for Users



SR2S: Safe Routes to School Program  
TEA-21: The Transportation Equity Act for the 21st Century  
WQCD: Water Quality Control Division

## C. GLOSSARY OF TERMS

**Acre:** A unit of area used in the measurement of land equal to one hundred sixty (160) square rods, four thousand and eight hundred forty (4,840) square yards, or forty three thousand and five hundred sixty (43,560) square feet.

**Access:** Means the way or means by which pedestrians and vehicles enter and leave property.

**Adjacent:** Meeting or touching at some point, or separated from a lot or parcel by one of the following: a street, alley, or other right-of-way, lake, stream or open space.

**Adjacent Property Owner:** An owner of record of any estate, right or interest in real property, abutting and/or within five hundred (500) feet of the subject property.

**Agriculture:** The science, art, and business of cultivating soil, producing crops, and raising livestock; farming.

**Agricultural Uses:** Those farm or ranch uses which primarily involve raising, harvesting, producing or keeping plants or animals, including agricultural structures which house farm or ranch implements, hay, grain, poultry, livestock or other horticultural products.

**Alternative Transportation:** This term is used to describe modes of travel other than private cars, such as walking, bicycling, rollerblading, carpooling and transit. The term is sometimes used in reference to technology such as electric and hybrid cars and cars that run on biodiesel.

**Amendment:** Means a change in the wording, context or substance of an official ordinance or other publication, including related maps, illustrations, concepts, or plans.

**Archeological Resource, Cultural Resource, or Historical Resource:** Those resources that have been designated by the County or are recognized or historically known to the County, or that are on the National Register of Historic Places (National Register), and/or that may be considered under the National Historic Preservation Act.

**Area of Special Flood Hazard:** The land in a floodplain subject to a one (1) percent or greater chance of flooding in any given year. See "base flood".

**Base Flood:** A flood having one (1) percent chance of being equaled or exceeded in any year. The term is used interchangeably with the intermediate regional flood, the one hundred (100) year flood, and the one (1) percent flood.

**Beautification:** The process of making visual improvements in a town or city, typically to an urban area. This most often involves planting trees, shrubbery, and other greenery, but frequently also includes adding decorative or historic-style streetscape improvements.

**Board or Board of County Commissioners:** The Board of County Commissioners of Archuleta County, Colorado.

**Buffer:** Means a land area or physical barrier such as a wall, hedge, fence, waterway, or other feature that has been established for the purpose of reducing or mitigating the adverse effects of a land use upon another land use.

**Buffer/Screening:** Land, berm, or planted vegetated area and/or naturally vegetated area used to visibly separate one use from another. This area is landscaped and maintained as open space in order to eliminate or minimize conflicts between such development and adjacent land uses.

**Brownfield:** An abandoned, idled, or under-used property where past actions have resulted in actual or perceived contamination and where there is an active potential for redevelopment. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment.

**Cash-in-lieu:** The payment of money instead of land dedication in those cases where the dedication of land is not the preferred alternative.

**Common Open Space:** Parcels of land, areas of water, improvements and other facilities, or a combination of these within the site designated for a subdivision or PUD, and designed and intended primarily for the use or enjoyment of all residents, occupants, and owners of the subdivision or PUD.

**Community Plan:** The Archuleta County Community Plan, adopted in 2001, as amended, serving as the County master plan per C.R.S. 30-28-106.

**Community Gardens:** Gardens on small plots of land allocated to groups of people by some organization that holds title or lease to the land, sometimes for rent, sometimes simply as a grant of land. Most are run by non-profit organizations, such as a community gardening association, a church, or other landowner; a city's parks department, a school or a university, can also run them.

**Conservation Area:** A tract of land that has been awarded protected status in order to ensure that natural features, cultural heritage or biota are safeguarded. A conservation area may be a nature reserve, a park, a land reclamation project, or other area.

**Conservation Easement:** A right of the owner of the easement to prohibit certain acts with respect to the property in order to maintain the property in a manner that will preserve its value for recreation, education, habitat, open space, or historical importance. (NOTE: For a conservation easement to create tax benefits for the donor at the federal or state level, it must meet either or both of the Internal Revenue Service or State of Colorado definitions).

**Conservation Subdivision Design (CSD)** is a development strategy that can help communities preserve open space and natural areas in residential housing developments. By reformulating the approach to conventional subdivision design, CSD strategically concentrates home construction on the development site in order to protect sensitive and valuable open space, habitat, and other environmental resources.

**Cluster Development:** A development design technique that concentrates buildings in specific areas within a project to allow remaining land to be used for recreation, common open space, or for the preservation of historically or environmentally sensitive features. (Archuleta County Community Plan, 2001)

**Cultural & Historical Landscapes:** Areas that have an outstanding assemblage of natural, historic, or cultural resources that together represent distinctive aspects of regional heritage worthy of recognition, conservation, interpretation, and continuing use. The areas reflect traditions, customs, beliefs, and folk life that are a valuable part of the regional story.

**Dedication:** Any grant by the owner of a right to use land for the public in general, involving a transfer of property rights, and an acceptance of the dedicated property by the appropriate public agency.

**Developer:** Any person, firm, partnership, joint venture, limited liability company, association or corporation who participates as owner, promoter, developer, seller or agent in the planning, platting, development, promotion, sale or lease of a development.

**Development:** Any man-made change to improved or unimproved real estate that requires a permit or approval other than a building permit from the Town of Pagosa Springs or Archuleta County; including but not limited to the construction, reconstruction, conversion, or enlargement of any structure; and any mining, dredging, filling, excavation or drilling operation; with the exception of agricultural operations. (Archuleta County Community Plan, 2001)

**Development Plan:** The written and graphical documents that detail the provisions for development of a PUD development. These provisions may include, and need not be limited to, easements, covenants and restrictions relating to use; location and bulk of buildings and other structures; intensity of use or density of development; utilities, private and public streets, ways, roads, pedestrians, areas, and parking facilities; common open space, and other public facilities.

**District:** Means a portion of the total area within the boundaries of Archuleta County within which specific sections of the ordinance codified in this title apply; For example, the R-1, residential single-family district.

**Dude Ranch or Wilderness Lodging:** A centrally managed facility which provides full service lodging, dining or cooking facilities, and onsite recreational activities for overnight guests or members. A dude ranch or wilderness lodge shall include an organized program of activities such as hunting, fishing, nature study, arts and crafts, nordic skiing, snowmobiling, boating, rafting, horseback riding, hiking and pack trips. A dude ranch or wilderness lodge may also include corporate or religious retreats or conference facilities. Activities shall be provided onsite to the extent possible. Adjacent public lands and waterways may be used to supplement onsite activities, but shall not be the point of origin or primary location for such activities. Motels and hotels are not considered dude ranches or wilderness lodges.

**Ecological Footprint:** The phrase “ecological footprint” is a metaphor used to depict the amount of land and area a human population would hypothetically need to provide the resources required to support itself and to absorb its wastes, given prevailing technology. The image to the left shows the ecological footprint of different areas of the world in hectares per person. It is measured by looking at resources needed to provide raw materials plus land on which to build and absorb CO<sub>2</sub> from burning fossil fuels.

**Easement:** A right to land generally established in a real estate deed or on a recorded plat to permit the use of land by the public, a corporation or particular persons for specified uses.

**Environmentally Sensitive Areas:** Aquifer recharge areas, significant wildlife habitat and migration corridors, unique vegetation and critical plant communities, and ridge lines.

**Flood:** A general and temporary condition of partial or complete inundation of normally dry land areas from (a) the overflow of streams, river, or other inland water, or (b) the unusual and rapid accumulation or runoff of surface waters from any source.

**Flood Fringe:** That area of the floodplain exclusive of the floodway area; plus that portion of the floodplain that could be completely obstructed without increasing the water surface elevation of the base flood more than one (1) foot at any point.

**Flood Hazard Area:** Areas subject to being flooded by a base flood as identified by the Federal Insurance Administration report entitled “Flood Insurance Study, Town of Pagosa Springs, and Unincorporated Areas of Archuleta County, Colorado” dated July 1978, as amended, with accompanying FIRM and FBFM maps dated January 3, 1979 as amended, and May 2, 1991 as amended.

**Flood Insurance Rate Map (FIRM):** The official map on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zone applicable to the community.

**Floodplain:** An area adjacent to a stream, which area is subject to flooding as the result of the occurrence of a base flood and which area thus 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.

**Floodway:** That area of the floodplain exclusive of the flood fringe, in which channel of the watercourse and those portions of the adjoining floodplain which must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot at any point.

**Green Infrastructure:** Includes stormwater management techniques and approaches to protect water quality -- including rooftop gardens, more absorbent concrete, street planters that intercept rainwater, vegetated swales, pocket wetlands, vegetated median strips, rainwater collection, reforestation, and the protection and enhancement of riparian buffers and floodplains.

**Greenspace:** A general term for natural areas, open space, trails, parks and greenways that function for both wildlife and people; a term used to describe a variety of landscapes that community residents feel are worthy of conservation and protection.

**Greenways:** A linear open space established along a natural corridor, such as a river, stream, ridgeline, rail-trail, canal, or other route for conservation and recreation purposes. Because greenways often include trails, the term greenway is sometimes used to refer to the trail it contains.

**Improvements:** Anything done to, erected, or placed on land which did not naturally exist thereon.

**Infill Development:** Refers to development that occurs in existing urban settings, taking pressure off the development of raw land.

**Interpretive Parks:** Parks with guides and/or concentrated informational posts to explain associated views, natural flora and fauna, and other features.

**Landscaping:** Any combination of living plants such as trees, shrubs, plants, vegetative ground cover or turf grasses, and may include structural features such as walkways, fences, benches, works of art, reflective pools, fountains or the like. Landscaping shall also include irrigation systems, mulches, topsoil use, soil preparation, revegetation or the preservation, protection and replacement of existing trees.

**Land Trust:** A community or conservation land trust is an organization established to hold land and to administer use of the land according to the charter of the organization.

**Limited Outdoor Recreation Facility:** A place with outdoor activities including but not limited to miniature golf, batting cages, water slides, skateboard parks, driving ranges, and go-cart tracks.

**Low Impact Development:** A comprehensive land planning and engineering design approach with a goal of maintaining and enhancing the pre-development hydrologic regime of urban and developing watersheds.

**Maintain:** Means to cause or allow to continue in existence. When the context indicates, the word means “to preserve and care for a structure, improvement, condition or area to such an extent that it remains attractive, safe and presentable and carries out the purpose for which it was installed, constructed or required.”

**Mixed Use Development:** The development of a lot, building, or structure with two (2) or more different uses including but not limited to, residential, office, manufacturing, retail, public, or entertainment.

**Natural Areas:** Floodplains and flood ways, natural drainage and water ways, significant native trees and vegetation, wildlife travel corridors, special habitat features such as raptor nest sites, key nesting, breeding or feeding areas for birds; fox and coyote dens, and any wetland greater than one-quarter (1/4) acre in size.

**Neighborhood Commercial Center:** A shopping center which contains businesses that are intended to provide goods and services to the immediate neighborhood (within a one-quarter [1/4] mile radius).

**New Urbanism:** A movement in the field of design and development that supports the following principles: neighborhoods should be diverse in use and population; communities should be designed for the pedestrian and transit as well as the car; cities and towns should be shaped by physically defined and universally accessible public spaces and community institutions; urban places should be framed by architecture and landscape design that celebrate local history, climate, ecology, and building practice.

**Open Space:** Areas of natural quality, either publicly or privately owned, designated for protection of natural resources, nature oriented outdoor recreation, and trail-related activities.

**Parcel:** A tract or plot of land outside of a recorded subdivision which was deeded separately and has continuously had a separate deed, with the same legal description, prior to the effective date of Senate Bill 35; also, a lot or tract delineated as part of a recorded subdivision plat.

**Park:** An area open to the general public and reserved for recreational, educational or scenic purposes.

**Planned Unit Development (PUD):** A project of a single owner or a group of owners acting jointly, involving a related group of residences, businesses, or industries and associated uses. Planned as a single entity, the project is subject to development and regulations as one (1) land-use unit rather than as an aggregation of individual buildings located on separate lots. The planned unit development includes usable, functional open space for the mutual benefit of the entire tract; and is designed to provide variety and diversity through the variation of normal zoning and subdivision standards so that maximum long-range benefits can be gained, and the unique features of the development or site preserved and enhanced while still being in harmony with the surrounding neighborhood. Approval of a planned unit development does not eliminate the requirements of subdividing and recording a plat.

**Planning Commission:** The duly appointed Planning Commission for Archuleta County, Colorado.

**Plat:** A map of certain described land prepared as an instrument for recording of real estate interests with the Archuleta County Clerk and Recorder.

**Public Use:** Uses which are owned by and operated for the public by Pagosa Springs, Archuleta County, state or federal governments or by school districts.

**Public Utility:** A common carrier supplying electricity, wire telephone service, natural gas, water, wastewater or storm water service or similar public services, but shall not include railroads or other forms of rail mass transit or depots or terminals supporting the same, or wireless telecommunication facilities.

**Rail-Trail:** A trail that either runs alongside an existing railway (rail-with-trail), or a trail that runs along an abandoned rail corridor (rails-to-trails). A railroad right-of-way includes the tracks and a specified portion of land on either side of the tracks (generally 100 feet wide).

**Rain Garden:** A rain garden is a shallow depression in the ground that captures runoff from driveways and roofs and allows it to soak into the ground, rather than running across roads, capturing pollutants, and delivering them to a stream. Besides helping water quality and reducing flooding, rain garden plants provide habitat for beneficial insects and wildlife.

**Recreational Facility:** A facility used for a pastime, diversion, exercise, or other resource affording relaxation and enjoyment to restore or refresh one's physical or mental being.

**Right-of-Way:** An area of land legally designated for public use including streets, walkways, utility lines, access ways, railroad, road, electric transmission line, oil or gas pipeline, water main, sanitary or storm sewer main or for another special use. The usage of the term "right-of-way" for land platting purposes shall mean that every right-of-way established and shown on a final plat is to be separate and distinct from the lots or parcels adjoining such right-of-way and not included within the dimen-

sions of such lots or parcels. Rights-of-way intended for streets, crosswalks, water mains, sanitary sewers, storm drains or any other use involving maintenance by a public agency shall be dedicated to public use on the plat on which such right-of-way is established.

**Riparian Zones:** The land and vegetation immediately adjacent to a body of water, such as a creek, lake, or other perpetual natural watercourse.

**Scenic Roadways:** Similar to cultural and historic landscapes, scenic roadways provide a sense of place with their natural, historic, or cultural significance.

**Sidewalk:** The hard surface path within the street right-of-way for use by pedestrians and/or bicyclists.

**Significant Wildlife Habitat and Migration Corridors:** Areas designated by the Colorado Division of Wildlife and/or the Colorado Natural Diversity Information Source ([www.ndis.nrel.colostate.edu](http://www.ndis.nrel.colostate.edu)) as areas of landscape that provide food, cover and water sufficient to meet the needs of a given species to survive and reproduce.

**Site Plan:** A scale drawing of a lot, showing the actual measurements, the size and location of any existing or proposed buildings, the location of the lot in relation to abutting streets, and other details such as parking areas, access points, landscaped area, building areas, setbacks from lot lines, building heights, floor areas, densities, utility locations and easements.

**Smart Growth:** An urban planning and transportation theory that concentrates growth in the center of a city to avoid urban sprawl and promote the protection of open space; Smart Growth advocates for compact, transit-oriented, walkable, bicycle-friendly land use, including mixed-use development with a range of housing choices.

**Special Site Planning Criteria:** The comprehensive evaluation of a development and its impact on the natural environment, neighboring properties and the community as a whole, such as site and landscape design, materials, colors, lighting, and signs, in accordance with an established set of adopted criteria and standards. (Archuleta County Community Plan, 2001)

**Sustainable and/or Restoration Forest Practices:** To practice sustainable forestry to meet the needs of the present without compromising the ability of future generations to meet their own needs by practicing a land stewardship ethic that integrates reforestation and the managing, growing, nurturing, and harvesting of trees for useful products with the conservation of soil, air and water quality, biological diversity, wildlife and aquatic habitat, recreation and aesthetics.

**Sustainability:** A sustainable region is one that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability relates to the continuity of economic, social and environmental aspects of society.



**Trails:** Linear routes on land or water with protected status and public access for recreation or transportation purposes. Multi-use paths are an increasingly popular form of trail, which is typically paved, allowing for a greater variety of users (such as cyclists, roller bladders, wheel chairs, baby-strollers, etc.).

**Useable Public Open Space:** An open area developed and designed for use by the occupants of the development, or by others for uses including, but not limited to, recreation, courts, gardens, parks, playgrounds and walkways. The term shall not include space devoted to streets, parking, loading areas and accessory structures.

**Vegetation:** Plants growing in a place, including, but not limited to trees, shrubs, vines, grasses and groundcover.

**Walkway:** A right-of-way dedicated to public use that is not within a street right-of-way, to facilitate pedestrian access through a subdivision block by means of a hard surface path, or any portion of a parking area restricted to the exclusive use of pedestrian travel.

**Water Body:** A perennial or intermittent river, stream, lake, reservoir, or pond, whether natural or artificial, but does not include irrigation or roadway drainage ditches, or artificial lakes or ponds which are created and used for the primary purpose of agricultural activities. A “perennial” river, stream, lake, reservoir, or pond is one that normally holds water or flows continuously during all of the calendar year as a result of ground-water discharge or surface runoff. An “intermittent” river, stream, lake, reservoir, or pond is one that normally holds water or flows continuously for at least sixty (60) days of the calendar year as a result of ground-water discharge or surface runoff.

**Watershed:** Refers to the entire area of land that flows into a stream or river. Rain falling on any part of a watershed will slowly make its way down into streams, and then into rivers, until it flows to the sea. Development anywhere in a watershed can have an impact on the water that flows through it, and consequently, the water body into which it flows.

**Water Trails:** (Also known as water-based trails, paddle trails, blueways or blue trails) Water trails typically consist of signed or marked portions of the waterway that support canoeing and kayaking. The location of portage facilities and/or water access is a critical element of water trail development.

**Zoning District:** A zoning district of Archuleta County as established in Section 3 of these Regulations, unless the term is used in a context that clearly indicates that the term is meant to include both the zoning district(s) of Archuleta County and the zoning district(s) of an adjoining governmental jurisdiction.

**Zoning Map:** The official zoning map adopted by Archuleta County, as amended.



## B. SUMMARY OF PUBLIC INPUT

Chapter Outline:

A Overview

B Previous Surveys

C Public Open House Meetings

D Comment Forms

### A. OVERVIEW

In order to gain local knowledge and input, a public outreach component was included as an integral part of planning efforts for the Archuleta County Regional Parks, Recreation, Open Space and Trails Master Plan. Public input was gathered through several different means with the chief efforts being Technical Review Committee meetings, three public open house meetings, a comment form, and previous related surveys. Two newsletters were also developed throughout the planning process to overview and update citizens on the project. Flyers were also distributed to encourage attendance at public open house meetings. This diverse assortment of public information and input offered the representatives and citizens of Archuleta County opportunity to contribute to the Plan's development.

Technical review meetings were held throughout the planning process with representatives from the County, Town of Pagosa Springs, County School District, County Parks Committee, and National Park Service. These took place to establish visions and goals for this effort, solicit feedback and input on completed work, and define actions and strategies for future work. Committee members also identified key opportunities and strategies for the parks, open space, and trails system.

Previous surveys, public open house meetings, and comment form results are summarized in the following sections. These inputs were also described in Chapter 3: Needs Identification and helped support and drive system recommendations found in Chapter 4.

### B. PREVIOUS SURVEYS

Two previous surveys conducted in 2004 and 2006, in Pagosa Springs, offer additional perspective into the needs and desires of the community for parks, open space, and trails. The RRC 2006 Pagosa Springs Parks and Recreation Mailback Survey provides the most directly-related topics with specific questions about open space and trails. The 2004 RRC Pagosa Springs Community Survey was more focused on economic development but had some related questions. The relevant information is summarized in the following pages.

## B.1 RRC PAGOSA SPRINGS PARKS & RECREATION MAILBACK SURVEY

A 2006 Pagosa Springs Parks and Recreation Mailback survey received over 459 responses from Pagosa Springs and throughout Archuleta County. A key finding was resident’s strong enthusiasm for the community’s parks, trails, and open space. Residents are active users of the Downtown assets and would like an expansion of walking paths, biking trails and parks. “Open space acquisition” and “trails” were top priorities for capital projects with 84% and 74% respectively ranking them as important or very important.

Data and comments also suggest that in addition to the desire for “open space acquisition,” residents would like more integration of public open spaces interspersed throughout the community, through neighborhood parks and trails. Residents are concerned about urban sprawl and support dedicated open space preservation, buffers, and wildlife corridors.

Most respondents recognized the need to address the issue of providing more adequate recreational programs and facilities, especially for children. Many feel that the recreational needs of children, particularly of middle and high-school age are underserved. A recent survey of students indicates that two-thirds of students felt that activities and recreational facilities for youth are “inadequate.” A multi-purpose recreation center was the most popular idea along with a desire for larger parks and a skateboarding/in-line skate park.

In terms of usage trends, families were by far the strongest users of all parks, programs, and facilities and were also the strongest supporters of trails and picnic areas. Those who live Downtown are more active users of parks and recreation programs and facilities, probably because of their proximity to the facilities.

### The Top Ten Priorities for Improvements:

<i>Improvement</i>	<i>Percentage</i>
Open space acquisition and preservation	84%
Trail/bike path: downtown to “uptown”	79%
Expansion of large parks for general park use	76%
More trails and bike paths within town	74%
Better aesthetics/improved gateway	68%
Outdoor venue for performing arts	65%
Multi - purpose recreation center	64%
More small neighborhood parks	62%
Enhancements to Reservoir Hill	60%
Public hot springs facility	56%

When asked what the “single most important” priority was, respondents chose open space acquisition and preservation, followed by a multi-purpose recreation center, trail/bike path from downtown to “uptown,” and more trails and bike paths within Town. In terms of programming, residents chose a wide variety of offerings.

Open space acquisition and preservation is at the top of the list for priority improvements.

(Right: View of open space along a southern prortion of US Highway 84.)



**The Top Ten Priorities for Recreational Programs:**

<i>Program</i>	<i>Percentage</i>
More special events, concerts	62%
Cultural/performing arts programs	62%
Fitness classes and weight lifting	60%
More youth programs/activities	59%
More adult programs/activities	58%
Day hikes and backpack trips	58%
Life skills programs	56%
Winter snowshoeing day trips	55%
Year-round swim lessons	53%
Winter cross country ski trips	53%

**Other Suggested Improvements:**

*San Juan River*

- Improved public access to San Juan River
- Shore habitat improvements
- Parking access to river
- Improved river trail system
- Tubing areas

*Reservoir Hill*

- Expand trail system
- More display information
- Improved parking, restrooms, picnic tables, and water fountains



Protecting the river corridor and respecting Pagosa Springs' small town character are at the top of the list for the Pagosa Springs Community Survey.

(Left: A couple and their dog play along the San Juan River in Downtown Pagosa Springs)

## B.2 RRC PAGOSA SPRINGS COMMUNITY SURVEY

This 2004 survey set out to provide key data to guide policies and decisions in the areas of planning, marketing, and economic development. An effort was made to gather opinions from both residents and visitors.

In summary, it was clear that residents feel very strongly about preserving the small town character and ambience that attracted them to the area. Their vision is to preserve its pristine natural environment while managing growth and development. Residents would like to see locally; independently owned businesses thrive rather than franchise and chain restaurants and retail stores. Related to Downtown improvements, there was significant interest in the following top objectives.

### Top Objectives for Downtown Improvements:

<i>Program</i>	<i>Percentage</i>
Respecting Pagosa Springs' small town character	88%
Protecting the river corridor	85%
Open space acquisitions	81%
Assure public access along river	76%
Expand bike paths/walkways	71%
Optimize recreational resources of Reservoir Hill	71%
Make Downtown more pedestrian friendly	69%
Beautify Downtown	68%

### C. PUBLIC OPEN HOUSE MEETINGS

Three meetings were held throughout the course of this planning process. The first meeting, held on May 14, 2007, provided the general public with the scope of the project, along with goals and objectives of the work program. Maps of the study area along with display boards containing definitions, goals, and objectives were displayed. Public input was taken in the form of map markups and discussions between citizens, consultant staff from the Greenways Incorporated Team, and Archuleta County staff. Participants identified key issues of need, concern, opportunities, and constraints for parks, trails, and open space implementation through discussion and map markup. Comment forms were also made available for hand written responses.

Images from the first public workshop in May 2007.





Image from the first public workshop in May 2007.

Some of the more frequently heard comments and suggestions at the first public meeting are cited below. Also included are comments heard through conversation with intercepted residents and tourists throughout the area in April and May 2007.

#### **Common Ideas, Comments, Concerns, and Suggestions:**

- More trails and bike paths in general
- Create trail loops
- Trail connections from Town to Pagosa Lakes
- Improve San Juan River Trail, including trail access, water access, and trail surface
- Need National Forest access from adjoining neighborhoods - more accessibility and trailheads
- Establish greater connectivity between Pagosa Lakes and San Juan National Forest lands
- On-road bicycle facilities (shoulders) needed especially along US 160 and US 84
- Protect viewsheds
- Open space acquisition and preservation
- Concerns about motocross - need for a proper, designated area where noise pollution will not be excessive
- Motocross course advocates - economic boost for a few weekend events throughout the year
- Need more sports fields
- Enlarge or construct new action sports park (BMX, skateboard, free-ride mountain bike)
- Concern about development; Determine sites that need protection and most adequate sites for development

*[Summaries of the second and third public meetings will be provided in the next draft.]*

### D. COMMENT FORMS

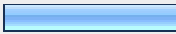






A comment form was developed for Archuleta County during this planning process and made available in both hardcopy and in digital format, available online for over three months. The web address was distributed at public meetings, to local interest groups, in newsletters, and on flyers throughout the County. Input from the public comment forms helped to shape the recommendations and direction of this plan. Responses from both the online and written comment forms were tabulated and the results are illustrated on the following pages.

*Responses*

The results of the hardcopy comment form (filled out at the 1st public workshop).

1) Where do you live?												
Pagosa Lakes	1	0	1	0	0	1	0	1	1	1	1	11
Pagosa Springs	0	0	0	0	0	1	0	0	0	0	1	3
East County	0	1	0	0	1	0	0	0	0	0	0	3
Aspen Springs	0	0	0	1	0	0	0	0	0	0	0	2
North County	0	0	0	0	0	0	0	0	0	1	0	1
South County	0	1	0	0	0	0	0	0	0	0	0	1
West County	0	0	0	0	0	0	0	0	0	0	0	0
2) What types of parks and recreational facilities are you most interested in seeing further developed? (rank your top 3 choices)												
Archuleta/Pagosa Springs Recreation Center	3	3	3	2	0	3	0	1	1	3	0	35
Community parks (15-30 acres, service radius 2 miles)	1	2	2	1	3	0	1	0	3	1	2	22
Neighborhood parks (5-15 acres, service radius 0.5 miles)	0	0	1	3	1	2	3	0	0	3	1	22
Regional parks (Over 50 acres, service radius 25 Miles). Example: Archuleta Regional Park	0	0	0	0	0	0	3	0	2	0	0	10
District parks (30-50 acres, service radius 5 miles)	0	1	0	0	2	0	2	0	0	1	3	10
School parks	0	0	0	0	0	2	0	0	0	0	0	9
Pocket parks (<5 acres, service radius 0.25 miles)	0	0	0	0	0	0	0	0	0	0	1	5
Other	0	0	0	0	0	1	0	2	0	0	0	5
Specialty parks (ranging in size, usually for special recreational activities such as ski jumping or extreme mountain biking)	2	0	0	0	0	0	0	0	0	0	0	2
3) What types of trails are you most interested in seeing developed? (rank your top 3 choices)												
Roadside trails and sidewalks	3	0	2	2	2	0	2	2	1	1	2	29
Bicycle routes and bicycle lanes	1	0	3	1	0	2	3	0	0	3	2	26
Unpaved multi-use trails	0	3	0	3	3	0	1	1	3	0	0	23
Paved multi-use trails	2	0	1	0	0	3	0	3	2	2	0	21
Footpaths and backcountry trails	0	2	0	0	1	1	0	0	0	3	1	12
Paddleway trails	0	0	0	0	0	0	0	0	0	0	0	1
Motorized trails	0	1	0	0	0	0	0	0	0	0	0	1
Nordic and snowshoe trails	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
4) Which trails are you most interested in seeing developed or further developed? (rank your top 3 choices)												
Town to Lakes Trail (Pagosa Springs Downtown to Pagosa Lakes)	0	2	0	0	3	3	2	3	3	2	1	41
San Juan River Trail	0	0	2	2	2	0	1	2	0	0	3	29
Sidepaths/Bicycle lanes along Hwy 84/160	3	0	3	0	0	0	0	1	1	1	0	14
Piedra Road Corridor	2	0	3	0	1	0	0	2	0	0	0	14
Pagosa Springs Regional Loop	1	1	0	0	1	3	0	1	2	0	0	9
Downtown Pagosa Springs Loop	0	3	0	0	0	1	0	0	0	0	0	8
Trails to Reservoir Hill	0	0	0	0	0	0	0	0	0	3	0	3
Other	0	0	0	0	0	0	0	0	0	0	0	0
5) What types of open space are you most interested in seeing protected? (rank your top 3 choices)												
Natural scenic views	0	2	2	1	0	3	1	3	2	3	0	35
Wildlife habitat	2	3	0	3	3	1	2	0	0	1	0	23
River/Riparian corridors	0	0	3	2	0	0	0	3	0	0	2	18
Areas of Biological significance or containing endangered and threatened species	3	0	0	0	0	0	0	3	0	3	0	14
Heritage Landscapes	1	0	0	0	2	2	0	1	0	0	0	7
Prime farmland	0	1	0	0	0	3	0	0	1	0	0	6
Local, passive open space	0	0	0	0	1	0	2	0	0	2	0	5
Sloped lands	0	0	0	0	0	0	0	0	0	3	0	3
Areas of fire or soil erosion hazard	0	0	0	0	0	1	0	0	0	2	0	3
Other	0	0	0	0	0	0	0	0	0	1	0	1
6) What types of funding options are you in favor of for the Archuleta/Pagosa Springs Recreation Center? (rank your top 3 choices)												
Grants	2	1	3	3	2	3	2	0	3	3	2	44
Local bonds	1	2	1	2	1	0	3	3	1	2	0	32
Development impact fees	0	3	2	0	3	0	1	0	2	0	2	20
User fees and service charges	3	0	0	1	0	2	0	1	0	2	1	15
Increased local taxes	0	0	0	0	1	1	0	2	0	0	0	4
Other	0	0	0	0	0	0	0	0	0	0	0	0
7) Who should manage and operate the parks, open space and trail system? (rank your top 3 choices)												
Combination of Town and County	1	1	2	2	3	0	1	2	3	0	3	33
Regional Authority	2	0	3	3	2	1	2	3	2	0	0	33
Town of Pagosa Springs	3	0	0	0	1	3	3	0	1	3	2	23
Private Organization	0	0	0	1	0	2	0	0	0	0	2	12
Archuleta County	0	0	0	0	0	0	1	0	0	1	0	5









1. Where do you live?			Response Percent	Response Count
Pagosa Springs			24.7%	24
<b>Pagosa Lakes</b>			<b>46.4%</b>	<b>45</b>
Aspen Springs			7.2%	7
North County			4.1%	4
West County			3.1%	3
South County			11.3%	11
East County			3.1%	3
			<b>answered question</b>	<b>97</b>
			<b>skipped question</b>	<b>0</b>

2. Which of these do you feel is important to be part of the Master Plan? (Rank 1 to 8; 1 being the most important)										
	#1	#2	#3	#4	#5	#6	#7	#8	Rating Average	Response Count
Community Recreation Center	<b>20.3%</b> (14)	17.4% (12)	17.4% (12)	5.8% (4)	10.1% (7)	10.1% (7)	13.0% (9)	5.8% (4)	3.80	69
Countywide Trails	<b>35.7%</b> (25)	30.0% (21)	12.9% (9)	5.7% (4)	4.3% (3)	4.3% (3)	5.7% (4)	1.4% (1)	2.56	70
Neighborhood Parks	6.0% (4)	20.9% (14)	14.9% (10)	11.9% (8)	<b>25.4%</b> (17)	10.4% (7)	10.4% (7)	0.0% (0)	4.03	67
Regional Parks	5.8% (4)	5.8% (4)	21.7% (15)	23.2% (16)	8.7% (6)	<b>29.0%</b> (20)	5.8% (4)	0.0% (0)	4.33	69
School Parks	3.0% (2)	4.5% (3)	7.5% (5)	17.9% (12)	17.9% (12)	17.9% (12)	<b>26.9%</b> (18)	4.5% (3)	5.27	67
Natural Resource Protection	<b>22.9%</b> (16)	18.6% (13)	14.3% (10)	11.4% (8)	11.4% (8)	8.6% (6)	11.4% (8)	1.4% (1)	3.49	70
Enhance Existing Park Facilities	11.1% (8)	8.3% (6)	11.1% (8)	<b>23.6%</b> (17)	13.9% (10)	15.3% (11)	12.5% (9)	4.2% (3)	4.38	72
Other	2.1% (1)	0.0% (0)	8.3% (4)	4.2% (2)	2.1% (1)	2.1% (1)	10.4% (5)	<b>70.8%</b> (34)	7.06	48
									<b>answered question</b>	<b>76</b>
									<b>skipped question</b>	<b>21</b>

3. How would you like to use parks and greenspace? (Rank 1 to 7; 1 being the most important)									
	#1	#2	#3	#4	#5	#6	#7	Rating Average	Response Count
Walking and Bicycling	<b>65.8%</b> (48)	15.1% (11)	8.2% (6)	2.7% (2)	2.7% (2)	2.7% (2)	2.7% (2)	1.81	73
Educational/Interpretive Parks	1.6% (1)	<b>23.4%</b> (15)	20.3% (13)	15.6% (10)	17.2% (11)	18.8% (12)	3.1% (2)	3.92	64
Informal Field Sports	6.0% (4)	10.4% (7)	9.0% (6)	23.9% (16)	20.9% (14)	<b>25.4%</b> (17)	4.5% (3)	4.37	67
Adult Exercise/Lifestyle Activities	6.1% (4)	21.2% (14)	<b>27.3%</b> (18)	19.7% (13)	15.2% (10)	10.6% (7)	0.0% (0)	3.48	66
Youth/Teen Activities	15.2% (10)	19.7% (13)	<b>21.2%</b> (14)	15.2% (10)	12.1% (8)	13.6% (9)	3.0% (2)	3.42	66
Picnicking	2.9% (2)	13.0% (9)	17.4% (12)	17.4% (12)	<b>26.1%</b> (18)	17.4% (12)	5.8% (4)	4.26	69
Other	6.7% (3)	4.4% (2)	4.4% (2)	6.7% (3)	4.4% (2)	8.9% (4)	<b>64.4%</b> (29)	5.82	45
	<i>answered question</i>								<b>75</b>
	<i>skipped question</i>								<b>22</b>

**4. If an additional \$100 were available for funding parks, trails, and recreation facilities, how would you allocate the funds among the categories of funding listed below? (Please be sure your total adds up to \$100)**

		Response Percent	Response Count
Acquisition of new park land and open space		71.0%	49
Improvements/maintenance of existing parks, playgrounds, and outdoor recreation facilities		75.4%	52
<b>Development of new trail systems (i.e. walking, biking, equestrian, mountain, etc.)</b>		<b>85.5%</b>	59
Development of new outdoor recreation facilities (i.e. sports fields, pools, extreme sports, etc.)		66.7%	46
Development of a Community Recreation Center		73.9%	51
Other		20.3%	14
		<b>answered question</b>	<b>69</b>
		<b>skipped question</b>	<b>28</b>

6. How would you like to use future trails? (Rank 1 to 10; 1 being the most important).											
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	Rating Average
Walking/hiking	<b>50.0%</b> (33)	19.7% (13)	16.7% (11)	10.6% (7)	0.0% (0)	0.0% (0)	1.5% (1)	0.0% (0)	1.5% (1)	0.0% (0)	2.06
Running	7.4% (4)	11.1% (6)	16.7% (9)	<b>18.5%</b> (10)	<b>18.5%</b> (10)	16.7% (9)	5.6% (3)	1.9% (1)	0.0% (0)	3.7% (2)	4.37
Bicycling	14.3% (9)	<b>20.6%</b> (13)	15.9% (10)	<b>20.6%</b> (13)	7.9% (5)	11.1% (7)	3.2% (2)	4.8% (3)	1.6% (1)	0.0% (0)	3.67
Mountain Biking	14.3% (9)	14.3% (9)	14.3% (9)	7.9% (5)	<b>25.4%</b> (16)	7.9% (5)	7.9% (5)	3.2% (2)	3.2% (2)	1.6% (1)	4.17
Rollerblading	0.0% (0)	3.8% (2)	9.6% (5)	3.8% (2)	9.6% (5)	11.5% (6)	11.5% (6)	<b>21.2%</b> (11)	15.4% (8)	13.5% (7)	6.92
Horseback Riding	0.0% (0)	2.0% (1)	2.0% (1)	0.0% (0)	0.0% (0)	5.9% (3)	<b>25.5%</b> (13)	17.6% (9)	23.5% (12)	23.5% (12)	8.12
Wildlife Viewing (birdwatching)	0.0% (0)	13.6% (8)	8.5% (5)	8.5% (5)	6.8% (4)	10.2% (6)	15.3% (9)	<b>22.0%</b> (13)	15.3% (9)	0.0% (0)	6.02
Cross Country Skiing/Snowshoeing	0.0% (0)	10.9% (7)	15.6% (10)	<b>17.2%</b> (11)	<b>17.2%</b> (11)	<b>17.2%</b> (11)	10.9% (7)	7.8% (5)	1.6% (1)	1.6% (1)	4.95
Commuting to Work or School	<b>13.6%</b> (8)	11.9% (7)	10.2% (6)	11.9% (7)	10.2% (6)	10.2% (6)	5.1% (3)	8.5% (5)	<b>13.6%</b> (8)	5.1% (3)	5.03
Other	8.3% (3)	0.0% (0)	0.0% (0)	0.0% (0)	5.6% (2)	8.3% (3)	5.6% (2)	8.3% (3)	19.4% (7)	<b>44.4%</b> (16)	8.11
	<i>answered question</i>										
	<i>skipped question</i>										

**7. In your opinion, what is the most important benefit of protecting open space and building trails? (Rank 1 to 6; 1 being the most important).**

	#1	#2	#3	#4	#5	#6	Rating Average	Response Count
Creating value and generating economic activity	<b>23.8% (15)</b>	9.5% (6)	14.3% (9)	19.0% (12)	9.5% (6)	<b>23.8% (15)</b>	3.52	63
Bicycle and pedestrian transportation	26.6% (17)	<b>31.3% (20)</b>	15.6% (10)	9.4% (6)	10.9% (7)	6.3% (4)	2.66	64
Improving the health of residents through active living	25.8% (17)	<b>27.3% (18)</b>	15.2% (10)	12.1% (8)	9.1% (6)	10.6% (7)	2.83	66
Plant and wildlife protection	16.4% (10)	11.5% (7)	14.8% (9)	24.6% (15)	<b>26.2% (16)</b>	6.6% (4)	3.52	61
Water resource protection	1.6% (1)	19.4% (12)	19.4% (12)	12.9% (8)	17.7% (11)	<b>29.0% (18)</b>	4.13	62
Enhancing cultural awareness and community identity	11.3% (7)	4.8% (3)	21.0% (13)	17.7% (11)	<b>24.2% (15)</b>	21.0% (13)	4.02	62
	<b>answered question</b>							<b>67</b>
	<b>skipped question</b>							<b>30</b>

This toolbox has been created to provide Archuleta County and the Town of Pagosa Springs with a quick reference of land conservation strategies. Many of the tools defined can be used in combination, or separately to conserve greenspace throughout the County. This toolbox is divided into several distinct sections: regulatory, acquisition, land donation and management strategies. For each strategy, advantages and disadvantages of each is listed to help define the most appropriate strategy for a given opportunity.

**REGULATORY MECHANISMS**

There are inherent disadvantages to preserving greenspace through regulatory mechanisms. First, regulations normally apply when the land development process begins. The adverse impacts of land clearing, road building and other development activities (including fragmenting of habitat) often result in resource loss, essentially making greenspace ‘protection through regulation’ an after the fact exercise. Another disadvantage is that regulations are subject to change. Just as a governing body can adopt stricter regulations, a future governing body could relax or not enforce those rules. The following is a listing of regulatory strategies that have been used throughout the United States to conserve greenspace.

**DESCRIPTION OF STRATEGY**

**Development Impact Fee:** Impact fees are also known as exactions. In its simplest form, the developer is charged an easy to calculate fee. A formula may be created to decide the cost that development will impose on the community. The formula can account for the area of land affected, the number of units built, the expected market value of those units, the distance from the fire and police stations, costs of building roads, and the expected population growth resulting from the construction. The exaction can come in forms other than money. The developer can be required to provide streets, sewers, street lights, parks, or other infrastructure or amenities. The developer might also be required not to develop some portion of the land. In some cases, builders of expensive homes have been required to build some proportional number of low cost homes. The town or county can develop a comprehensive system or formula or exactions can be formulated on a case by case basis from more general criteria.

**Transfer of Development Rights:** In some cases, a local government may want to steer development toward areas where it is more appropriate and easier to serve. Generally, the intent is to steer development away from rural areas, agricultural preservation zones, and environmentally sensitive areas and guide it towards existing cities and towns. Transferable Development Rights (TDR) programs are one way to do that. In a voluntary TDR program, the county would designate certain parts of its territory as “sending zones” and other areas as “receiving zones.” Landowners in the sending zones can sell their rights to develop houses or commercial uses to other landowners in the receiving zones, or to a third party who will eventually buy land in the receiving zone. Or, landowners in the receiving zone can buy additional development rights from someone in the selling zone.

**Right To Farm:** Since the 1970s, all fifty states have enacted “Right to Farm” laws to help protect existing agricultural operations from suits brought by people who move nearby, then claim the neighboring farm is a nuisance. Common complaints revolve around odor, noise, dust, flies, application of agricultural chemicals and slow moving machinery. Most statutes have exemptions that do not protect farms and ranches that 1) begin operation after other neighboring land uses already exist; and/or 2) are out of compliance with local, state or federal regulations. Most statutes have not been challenged in court.

**BENEFITS**

A “pay-as-you-grow” program that really has been proven to help cities keep pace with rapid land development. A particularly useful tool for Archuleta County, due to its fast pace of growth and rate of change.

Potentially an effective growth management tool. Resources can be protected without huge capital expenditures. Large tracts of protected land can be created in “sending” areas. Model programs: Montgomery County, Maryland and City of Austin, TX. Local Example: Boulder County, Colorado; Boulder County Land Use Department

Good program for protecting farm land in rapidly growing communities. Encourages farmers to continue their operations and offers legal protection for these land uses.

**DRAWBACKS**

Can be difficult to implement, as it must meet Supreme Court rulings on “essential nexus,” fair and equitable implementation. Politically challenging because impact fees are generally not favored by the development community.

Complicated program to establish and administer. High administrative overhead; requires professional staff assigned to program. Landowner resistance to downzoning in “sending” or higher densities in “receiving” areas. An unproven technique. Requires state enabling legislation.

Depends on farmers to continue their operations, so it is not a method for long term protection of this greenspace resource.

REGULATORY MECHANISMS (CONTINUED)

**Urban Growth Boundary:** Demarcation of the limit of urban infrastructure (water and sewer extensions). UGB usually identifies a 10-20 year 'land supply' of buildable land.

**Cluster Development:** Cluster development allows land developers to develop in a compact form at higher densities, thereby preserving greenspace within the same tract that would not be developed.

**Mandatory Dedication of Greenspace:** Developers are required to dedicate a portion of subdivided property (1/35 acre per dwelling unit) or pay fee for open space, greenway, or parkland.

**Performance Zoning:** Zoning categories are based on permissible impacts to natural or historic resources, instead of a list of permitted uses. Requires impact assessment of proposed development projects.

**Bonus/Incentive Zoning:** Provides density bonuses; i.e., developers can build additional units in exchange for preserving designated resource lands. Technique usually applied to cluster developments and transfer of development rights programs.

**Conservation Overlay Zoning:** Additional or stricter development standards and criteria are established to protect particular features of an existing zone, such as historic districts, landscape features, scenic views, agricultural areas, or watersheds. Local Historic District designation is commonly used form of overlay zoning.

**Voluntary Agricultural District:** Special districts established to promote continuation of agricultural and forestry activities.

Limits sprawl and encourages more compact development. Allows integration with a TDR program to preserve greenspace. Example: Portland, Oregon

Allows for flexibility in design to protect natural resource areas located on the parcel. Construction and infrastructure costs for land developers are reduced. Example: Montgomery Farm in Allen, TX: www.montgomeryfarm.com

Greenspace is protected, and recreation lands are acquired at little cost to the public.

The local land use plan directs the location of development to resource-compatible areas. Provides flexibility in types and designs of projects – many uses may be permitted in a single zone.

Encourages sensitive site design to protect resources. Helps maintain greenspace and rural character, particularly for residential developments on the urban fringe.

Standards and criteria are developed to meet needs of specific resources within the zoning district. Effective in protecting specific resources from development pressures. Used widely to create historic districts.

Maintains land in agricultural and forestry use. Provides some protection from nuisance lawsuits against agricultural operations.

Requires strong countywide cooperation. Can be controversial; downzoning required outside of UGB. Raises land and housing costs inside boundary.

Voluntary. If not implemented correctly, protected lands are often scattered and non-contiguous. Clustering may not be a preferred option for Archuleta County developers. Long-term management of common greenspace may become problematic for homeowner association.

Applies only to residential subdivision and PUD's. Limited effectiveness in preserving large tracts or corridors.

Effectiveness is based on knowledge of resources and the effects of impacts. Requires a detailed land use plan and staff to administer the program.

Requires careful infrastructure planning to prevent sprawl and 'leapfrog' development. Dependence on wells and onsite septic systems in fringe areas. Conservation value limited if high number of units permitted.

Standards must be defined clearly to ensure that greenspace can be protected. Zoning regulations can be changed. Does not address resource preservation outside the zoning district. Not often used for greenspace.

Voluntary participation. Minimum acreage criteria. Does not provide long-term protection. Most effective when several contiguous farms participate in areas with development pressure.

ACQUISITION OF GREENSPACE

Acquisition and management of resource lands can be combined with regulatory measures to broaden the effectiveness of a conservation program. If land regulation is temporal, then acquisition of greenspace is permanent. For conserving green spaces and their functions, acquisition is the strongest and surest means of protection. Acquisition methods can be divided into two strategic categories: those methods where landowners retain ownership of the land and preserve a resource through an easement or other mutual agreement, and those methods involving a transfer of title from the owner to a conservation agency. (Note: conservation agency refers to a local government, Southwest Land Trust Alliance, or other conservation organization that holds easement or title on the land and is involved in its conservation management.)

DESCRIPTION OF STRATEGY

**Purchase of Development Rights (PDR):** The owner's rights to develop a parcel of land are sold to the local government or to a land trust. Most PDR programs are voluntary and offer a viable financial option to interested landowners.

**Purchase of Rights and Other Easements:** In addition to purchasing development rights, other rights, such as the right to timber or extract minerals, could also be purchased. Other 'customized' easements could be developed as needed depending upon the resource in question.

BENEFITS

A proven technique for local communities with strong support to acquire lands for preservation. Owners who sell development rights receive an income and continue to use their land while retaining all other right Property taxes should be reduced.

For protection of scenic viewshed or forested buffer. Less expensive than fee-simple acquisition or PDR. Provides desired income to owner while keeping resource intact.

DRAWBACKS

Purchasing development rights can be expensive. Rarely protects enough land to relieve development pressure on resource land. Funding may not meet demand for easement purchases. Voluntary program means some resource areas may be lost.

Mineral rights or timber rights management issues must be resolved. Limited applicability for protecting greenspace.

ACQUISITION OF GREENSPACE (CONTINUED)

**Conservation Easement:** A legal agreement between a landowner and a qualified conservation organization or government agency to voluntarily restrict the use and development of the property. Easement grantee (i.e. local government) would hold a partial interest or some specified right in a parcel of land. A conservation, historic preservation, greenspace, or scenic easement is designed to protect a specific sensitive natural, historic, or cultural resource. An easement may be in effect for a specified period of time but is usually perpetual.

**Lease:** An agreement between an agency and landowner to rent the land in order to protect and manage a sensitive resource.

**Fee Simple Acquisition:** Usually the sale of land at full market value. Ownership and responsibilities are transferred completely to the buyer.

**Bargain Sale:** Land is purchased at less than fair market value. The difference between the bargain sale price and the land's fair market value becomes a donation.

**Installment Sale:** A percentage of purchase price is deferred and paid over successive years.

**Right of First Refusal:** Agreement giving conservation agency the option to match an offer and acquire the property if the landowner is approached by another buyer.

**Undivided Interest:** Several parties share ownership in a parcel of land, with each owner's interest extending over the entire parcel.

**Land Banking:** Land is purchased and reserved for later use or development. Land could be leased for immediate use (i.e. agriculture or athletic field) or held for eventual resale with restrictions. Local government functions as a land trust. Many programs are funded through real estate transfer taxes.

**Acquisition & Saleback or Leaseback:** Agency or private organization acquires land, places protective restrictions or covenants on the land, then resells or leases land.

Can be effective in preserving greenspace if it meets mutual goals of landowner and agency. Easement provisions are tailored to needs of landowner and site preservation goals. Landowner retains ownership and use of the land. Potential property, income, and estate tax benefits for donation or bargain sale of an easement. Easements run with the land, despite changes in ownership. Reduces costs for site protection when easements are acquired at less than fair market value for the protected area. GOCO Open Space Acquisition Grant Program is a possible source of funding for this initiative.

Low cost approach to site protection. Landowner receives income and retains control of property. An alternative for preservation minded landowners not ready to commit to sale of easement. Restrictions can be included in the lease to direct the activities of the conservation agency on the land.

The most straight forward acquisition method. Provides agency with full control over future of property. GOCO Open Space Acquisition Grant Program is a possible source of funding for this initiative.

Reduced acquisition costs. Seller may qualify for tax benefits for charitable donation. May offset capital gains.

Possible capital gains tax advantages for seller.

Agency can gain extra time to acquire funds for purchase.

Changes to property cannot be made unless all owners agree.

Local government proactively identifies and purchases resource land. Lowers future preservation costs by working as a defense against future increases in land prices, speculation, and inappropriate development.

Proceeds from sale or lease can offset acquisition costs. Land may be more attractive to buyer due to lower sale price resulting from restrictions. Management responsibilities assumed by new owner or tenant.

Baseline survey required to identify the extent of natural, historic, or cultural resources within the easement. Less protection than outright acquisition. Easement purchases may be costly. Terms must be carefully and clearly outlined. Management intensive: easements must be monitored and enforced; grantee agency must work closely with landowners. Easement grantee must possess technical expertise and financial wherewithal to monitor and enforce easement. Easement restrictions may limit property resale opportunities. Tax benefits may not be sufficient motivation for landowner to donate or sell easement.

Short-term protection strategy. Leases are not permanent.

Most expensive. Buyer assumes full responsibility for care and management of property. Loss of revenue when land is removed from tax rolls. Capital gains issues for seller.

Difficult and time-consuming to negotiate. May still be costly to acquire land.

Complicates budgeting and financing of acquisitions.

Resource may be lost if offer can't be matched by conservation agency. Some landowners are unwilling to enter into this kind of binding agreement.

Property management can be complicated.

Expensive. Requires large upfront expenditures. Public agency must have staff to handle land trust functions of acquisition, management, lease, or resale. Real estate transfer tax for land acquisition would require local enabling legislation.

Complicated procedure. Owner retains responsibility for the land but may have less control over the property. Leases may not be suitable on some protected lands.

DONATION OF GREENSPACE

DESCRIPTION OF STRATEGY

**Outright Donation:** Owner grants full title and ownership to conservation agency.

**Donation via Bequest:** Land is donated to a conservation agency at the owner's death through a will.

**Donation with Reserved Life Estate:** Owner retains rights to use all or part of the donated land for his or her remaining lifetime and the lifetimes of designated family members.

BENEFITS

Resources acquired at very low costs to the agency. Agency may receive endowment for long-term land stewardship. Donor may qualify for income tax deductions, estate tax relief, and property tax breaks.

Reduces estate taxes and may benefit heirs with reduced inheritance taxes. Allows owner to retain full use and control over land while alive; ensure its protection after death.

Allows owner to continue living on and using the property during his or her lifetime while ensuring the land's protection. Allows designation of family members to remain on land.

DRAWBACKS

Landowner loses potential income from sale of land. Receiving agency must accept responsibility and long-term costs of land management. Stewardship endowments may make donations cost prohibitive for landowner.

No income tax deduction for donation of land through a will. Requires careful estate planning by the landowner.

Tax benefits may be limited; some types of open space may not qualify. May delay transfer of title to the conservation agency for a long period of time.



MANAGEMENT AGREEMENTS FOR GREENSPACE

DESCRIPTION OF STRATEGY

**Intergovernmental Partnership:** Federal, state, and local agencies form joint partnerships to own and manage land.

**Agency Transfer:** Government transfers excess land to another agency that can assume resource protection and management responsibilities.

**Land Exchange:** Land may be exchanged for another parcel that is more desirable for resource protection.

**Nonprofit Acquisition and Conveyance to Public Agency:** Nonprofit organization (such as land trust) buys a parcel of land and resells it to a local government or other public agency.

**Joint Venture Partnership:** Strategy used by public agencies and private organizations to accomplish projects serving mutual goals. For example, some government grant programs could be matched with both private contributions and public funds.

**Management Agreement:** Agreement between landowner and conservation agency to manage property to achieve resource conservation goals.

**Mutual Covenants:** Agreement between adjoining landowners to control future land uses through mutually agreed upon restrictions.

**Colorado Conservation Tax Income Credit:** A Colorado income tax credit is available to Colorado taxpayers making a qualified donation of a conservation easement. The credit is in an amount equal to the value of the conservation easement donation up to \$100,000 per donation. For any donation claimed above \$100,000, 40% of the donation can be claimed as a credit, up to a maximum tax credit of \$260,000. This credit may be used by the donor to offset their own Colorado income tax obligations, it may be sold or transferred to another Colorado income taxpayer, or, in years of a State budget surplus, a cash payment may be available from the State. A Colorado Conservation Easement Income Tax Credit is available to qualified donors of conservation easements. Colorado law (H.B. 99-1155; C.R.S. §39-22-522(4)(a)), established a Colorado income tax credit of up to \$260,000 for the donation of a conservation easement. The law further provides that this Credit may be used by the donor to: Offset the donor's Colorado State income tax obligation, transfer to another Colorado taxpayer for credit against their income tax obligation, or, entitle them to a cash refund from the State in years of a budget surplus. An easement donor may qualify for only one conservation easement tax credit per year, and may not claim a second credit until the first credit has been used or waived. In 2006, the credit is calculated at a 1:1 rate on the first \$100,000 in easement value, and at 40% of the easement value up to a maximum \$500,000 in donated value. Therefore, the donor of an easement with a value of \$500,000 can claim a Colorado income tax credit of \$260,000:

BENEFITS

Sharing the responsibilities and costs of acquisition and management can protect larger or more expensive properties. Can foster countywide cooperation to preserve greenspace.

Resource protection and management with little additional expenditures.

Lower acquisition costs. Scattered properties can be exchanged for a single, larger parcel.

Nonprofits can often move more quickly to purchase and hold land until the public agency is able to buy it. Could reduce acquisition costs for public agency.

Partners share benefits, responsibilities, and costs of acquisition and management. Creates a coalition of support for protecting diverse resources. Brings diverse sources of knowledge and expertise to solve resource protection issues.

Owner may be eligible for direct payments, cost-share assistance, or other technical assistance from the agency. Management plan is developed based on owner's preservation aims.

Permanent: covenants can be enforced by any of the landowners or future landowners of the involved properties. Significant incentive to comply with restrictions, since all parties are aware of use controls. Can reduce property taxes.

Tremendous benefit to landowners that want to participate in County sponsored parks, open space and trails program. Flexible enough to respond to an individual landowner/taxpayer need. One of the most effective conservation based measures in Archuleta County.

DRAWBACKS

Partners must agree on management strategies in order to reduce potential for conflict. Agency budgets and acquisition criteria may restrict acquisitions. Slower response time: acquisition opportunities may be lost due to agency procedures. May remove land from tax base.

Excess property may not be suitable for resource protection. Obtaining fair market value for the property may be agency's priority.

Complicated process; not widely known and rarely used. Subject to IRS regulations. Property owners must be willing to participate, and properties must be of equal value.

Local government must be willing to purchase land and assume management responsibilities.

More complicated property management and decisionmaking. Conflicts in acquisition criteria and funding priorities must be resolved.

Mutual agreement is more easily terminated than a lease. Agreements are not permanent.

Loss in market value from mutual covenants does not qualify as a charitable deduction for income tax purposes.

Requires a close working relationship with conservation organization and tax accountant to take full advantage of program. May not apply to all types of land conditions. Subject to acceptance by local government.



## D. FUNDING SOURCES

### Chapter Outline:

A Overview

B Local Sources

C State of Colorado Sources

D Federal Sources

E Private Foundations/  
Philanthropic Sources

### A. OVERVIEW

The purpose of this report is to evaluate the current financial state of affairs in Archuleta County and the Town of Pagosa Springs, and define opportunities, constraints and a range of funding programs at the local, state and federal level that can be used to support the development and operation of a regional park, recreation, open space and trails program. This is principally an analysis report; it does not yet offer the consultant's recommendations for specific use of funds or any funding strategies for the project.

In preparing this report, the consultant utilized a wealth of data from a variety of economic studies and reports, including: Archuleta County CEDS Update 2006; Joint Impact Fee Analysis for Pagosa Springs and Archuleta County, 2006; the Pagosa Springs 2005 Adopted Budget and the Archuleta County 2005 Adopted Budget.

### Archuleta County Financial Snapshot

Archuleta County finds itself in a very challenging financial predicament. Spending during the past eight years has outpaced revenues resulting in a current financial shortfall of \$2.6 million. The County is taking steps to rectify its budget problems, and expects to have a stable financial condition within 18 months. A forensic audit is underway and a core financial crisis team has been formed to determine what measures need to be undertaken to correct the current financial condition.

Archuleta County has been concerned for some time about its financial condition. Rapid growth and development, inflation, lack of revenues and other financial constraints have hampered the County's ability to meet the ever-expanding service needs of its growing population. This is a common concern and problem among rapidly growing communities throughout the United States. The County's primary revenue streams are property taxes, sales taxes, permit fees from construction, fees from oil and gas leases and other sources. The County has also relied on state and federal grants to fund capital improvements. The County's largest annual expenditures are in general administration services, public safety, road and bridge maintenance and roadway capital improvements. The County's current annual budget is approximately \$15 million.

The County does not operate a parks and recreation program and there are no annual funds committed specifically for parks, open space and trail acquisition, development or operation. Instead, the County relies on partnerships with the Town of Pagosa Springs, State of Colorado and federal land managers to meet the needs of parks, open space and trail needs of County residents. In September 2006, the County Commission did commit, in a letter to residents, to spend 20% of Property Tax Stabilization Funds in 2008 toward the development of a regional parks and recreation program.

With respect to its current deficit recovery program, the County does intend to sell property with the hope of raising approximately \$1.3 million in proceeds to offset the \$2.6 million financial shortfall. So, in essence, the County is looking to sell assets in the form of real estate to help resolve its current deficit.

### **Pagosa Springs Financial Snapshot**

Pagosa Springs is a financially healthy community. Based on 2005 budget figures, the Town operates under a balanced budget and has more than \$1.3 million in reserves. The Town's primary revenue streams are from taxes and intergovernmental revenue, with sales tax comprising the bulk of the revenue stream. The Town's largest expenditures are in administration, parks and recreation, public works and public safety. The Town is Home Rule and has the flexibility to make adjustments in its revenue base to better match needed services.

The Town does operate a parks and recreation program, with seven (7) park facilities in the system. The Town employs a parks director, recreation supervisor, and other staff. The budget for this department in 2005 was \$786,327, which included capital improvements for the new Sports Complex.

### **Local, Regional, State and Federal Funding Sources**

The following pages offer a comprehensive description of funding sources that can be used to support the acquisition of land, development of park and trail facilities and operation of a regional parks, open space and greenway program for Archuleta County. The sources are organized and defined by local, state and federal resources and agencies.

## **B. LOCAL SOURCES**

Archuleta County and Pagosa Springs have in place a number of local resources required to finance a parks, open space and trails program. It is important that a local, dedicated source of revenue be established and utilized to attract state and federal funding. The County and Town have explored a range of joint funding strategies, including a joint impact fee program. Below are listed other possible sources of local revenue for the parks, open space and trails program.

### **Sales and Use Taxes**

Both the County and Town rely on local taxes to comprise the bulk of their annual revenues.

*Sales Tax*

Sales tax in Archuleta County comprises one quarter of the revenue stream (\$2,964,904 in 2005), and in Pagosa Springs it represents 90% of the revenue stream (\$2,625,000 in 2005). Within the County it appears that the only opportunity to grow the sales tax percentage would come from SB 078-98 (see page 6) which requires approval of voters. Pagosa Springs is Home Rule and has the ability to increase its sales tax in order to generate more revenues. A sales tax increase is one option being considered for future development of a recreation center.

*Property Tax*

For Archuleta County, property taxes comprise the bulk of the revenue stream and make up a quarter of the income stream. In Pagosa Springs, property taxes are a very small part of the revenue stream. Typically, property taxes support a significant portion of a local government activities. The revenues from property taxes can also be used to pay debt service on general obligation bonds issued to finance open space system acquisitions. For locally funded open space, park and trail programs, property taxes can provide a steady stream of financing while broadly distributing the tax burden. In other parts of the country, property taxes have been popular method to pay for park and open space projects with voters as long as the increase is restricted to parks and open space.

*Excise Taxes*

Excise taxes are taxes on specific goods and services. Examples include lodging, food, and beverage taxes that generate funds for promotion of tourism, and the gas tax that generates revenues for transportation related activities. Both Archuleta County and the Town of Pagosa Springs use excise taxes to generate additional revenues. Since the County and Town rely on tourism revenues to supplement their income stream, excise taxes remain a viable source for funding a future regional parks, open space and trails program.

**Bonds/Loans**

Bonds have been a very popular way for communities across the country to finance their open space, parks and trails projects. A number of bond options are listed below. Since bonds rely on the support of the voting population, an education and awareness program should be implemented prior to any vote.

*Revenue Bonds*

Revenue bonds are bonds that are secured by a pledge of the revenues from a certain local government activity. The entity issuing bonds, pledges to generate sufficient revenue annually to cover the program's operating costs, plus meet the annual debt service requirements (principal and interest payment). Revenue bonds are not constrained by the debt ceilings of general obligation bonds, but they are generally more expensive than general obligation bonds.

*General Obligation Bonds*

Local governments generally are able to issue general obligation (G.O.) bonds that are secured by the full faith and credit of the entity. In this case, the local govern-

ment issuing the bonds pledges to raise its property taxes, or use any other sources of revenue, to generate sufficient revenues to make the debt service payments on the bonds. A general obligation pledge is stronger than a revenue pledge, and thus may carry a lower interest rate than a revenue bond. Frequently, when local governments issue G.O. bonds for public enterprise improvements, the public enterprise will make the debt service payments on the G.O. bonds with revenues generated through the public enterprise's rates and charges. However, if those rate revenues are insufficient to make the debt payment, the local government is obligated to raise taxes or use other sources of revenue to make the payments. G.O. bonds distribute the costs of open space acquisition and make funds available for immediate purchases. Voter approval is required.

#### *Special Assessment Bonds*

Special assessment bonds are secured by a lien on property that benefits by the improvements funded with the special assessment bond proceeds. Debt service payments on these bonds are funded through annual assessments to the property owners in the assessment area.

#### **Fees and Service Charges**

Both Archuleta County and Pagosa Springs have implemented fees and services charges to generate revenues. Pagosa Springs currently utilizes the following fee structure:

- Park and Recreation User Fees
- Geothermal System Fees
- Land Use Fees
- Impact Fees (from new development)
- Sign Permit Fees
- Business Regulation Fees
- Building Department Fees

#### *Impact Fees*

The Town currently assesses impact fees on new development. In May 2007, the County began the process of collecting an impact fee to address future road construction and improvements. The Town and County had a joint impact fee analysis prepared by Economic and Planning Systems, Inc in January 2006 to consider options for assigning and collecting fees.

#### *In-Lieu-Of Fees*

As an alternative to requiring developers to dedicate on-site open space that would serve their development, some communities provide a choice of paying a front-end charge for off-site open space protection. Payment is generally a condition of development approval and recovers the cost of the off-site greenway land acquisition or the development's proportionate share of the cost of a regional parcel serving a larger area. Some communities prefer in-lieu-of fees. This alternative allows community staff to purchase land worthy of protection rather than accept marginal land that

meets the quantitative requirements of a developer dedication but falls a bit short of qualitative interests.

### Other Local Options

#### *Local Park, Open Space and Trail Sponsors*

A sponsorship program for trail amenities allows smaller donations to be received from both individuals and businesses. Cash donations could be placed into a trust fund to be accessed for certain construction or acquisition projects associated with the greenways and open space system. Some recognition of the donors is appropriate and can be accomplished through the placement of a plaque, the naming of a trail segment, and/or special recognition at an opening ceremony. Types of gifts other than cash could include donations of services, equipment, labor, or reduced costs for supplies.

#### *Volunteer Work*

It is expected that many citizens will be excited about the development of a greenway corridor or a new park or canoe access point. Individual volunteers from the community can be brought together with groups of volunteers from church groups, civic groups, scout troops and environmental groups to work on greenway development on special community workdays. Volunteers can also be used for fund-raising, maintenance, and programming needs.

#### *Trust Fund*

Archuleta County and the Town of Pagosa Springs should work in partnership to establish a Parks, Open Space and Trails Trust Fund. This Trust Fund would be a dedicated source of funding that supports the operation and management of portions of the greenway system. The County and Town can work with a private financial institution to set up an investment account or work with a local foundation to establish the endowment. Contributions to the fund would be solicited from parks, open space and trail advocates, businesses, civic groups, and other foundations. The goal would be to establish a capital account that would earn interest and use the interest monies to support greenway maintenance and operations. Special events could be held whose sole purpose is to raise capital money for the Trust Fund. A trust fund can also be used in the acquisition of high-priority properties that may be lost if not acquired by private sector initiative.

A trust fund example is the Mountains-to-Sound Greenway Legacy Fund in Washington. The Mountains to Sound Greenway Legacy Fund is an endowment fund managed by The Seattle Foundation. Its purpose is the protection of the Mountains to Sound Greenway, for the public good, in perpetuity. It will be used to support restoration, enhancement, education and advocacy programs of the Mountains to Sound Greenway Trust. Currently we have a goal of raising \$1 million for the Greenway Legacy Fund by July 2006. This will kick off a multi-year endowment fund campaign with a goal to raise \$5 million.

## C. STATE OF COLORADO SOURCES

### Colorado SB 078-98 (Fitz-Gerald/White Act)

Archuleta County has a unique opportunity to protect water quality, natural areas, working farms and ranches, wildlife habitat and create new parks for outdoor recreation. SB 07-98, otherwise known as the Fitz-Gerald/White Act, allows the County to ask its voters to approve up to a half-cent sales and use tax to fund an open space program that can most accurately reflect local priorities for acquisition and management.

In accordance with TABOR, Archuleta County could only exceed the sales and use tax cap for the purpose of open space and parks after subjecting the measure to a vote. SB-98 is designed to be a new resource for financially constrained county governments interested in creating dedicated revenues for land conservation. A local dedicated funding source is vital to attracting matching funds from state and federal sources and for purposes of pursuing land conservation projects with interested and willing sellers.

In Colorado, 45 of 64 counties are currently at their statutory sales tax maximum on voter-approved sales and use tax authority. Archuleta County is one of these counties. SB-98 allows voters to decide for themselves whether to dedicate funds solely to fund open space protection.

### The Colorado Lottery for Conservation and Great Outdoors Colorado

Approved on the ballot by voters in 1980 and passed by the General Assembly in 1982, SB 119 established a state-sponsored lottery which began in January of 1983. As voted on, some of the proceeds of this lottery go to land conservation. Originally, 40 percent of the proceeds went to the Conservation Trust Fund, 10 percent to Colorado State Parks, and 50 percent to the Capital Construction Fund for state buildings and prisons. However, in 1992 a petition put a measure on the ballot to create a Great Outdoors Colorado (GOCO) Trust Fund and the measure was approved with 58 percent in favor. Between 1993 and 1998, GOCO received 15 percent of the proceeds and in 1999 received 50 percent. From the creation of the lottery through FY 2000, \$1.1 billion have been made available for state programs, \$98.5 million in FY 2000 alone. In 1998, legislation was enacted extending the Colorado Lottery to 2009. In 2000, a ballot measure passed that authorizes the state to participate in Powerball, a multi-state lottery, starting August 2, 2001. The game's expected proceeds are \$12 million in its first year, which will be divided among GOCO, CTF, and State Parks. The programs below are all funded by the lottery:

### Great Outdoors Colorado (GOCO)

In 1992, voters placed on the ballot and approved the creation of the Great Outdoors Colorado Trust Fund. GOCO is funded by the proceeds of the Colorado Lottery, receiving 50 percent with a \$35 million cap, adjusted for inflation (proceeds

above that return to the State General Fund). The GOCO Trust Fund is administered by a 15-member Board of Trustees and is used to fund outdoor recreation, wildlife protection, and open space acquisition. State and local government agencies, including special districts, and nonprofit land conservation organizations are eligible to apply for grants, and 25-50 percent matching funds are required.

Between 1994 and 2001, GOCO distributed \$240.9 million to 1,419 projects. More than \$28 million went to fund 99 Open Space Projects, conserving 156,000 acres. Another \$108.2 million was awarded to fund 24 Legacy Projects that “place strong emphasis on the preservation of land.” For example, in 1997, \$4.46 million was granted to the Colorado Wetlands Initiative, a program that has conserved over 99,000 acres between 1997 and 2000. GOCO has also helped the State Parks Department purchase 15,259 acres of new parkland and aided the Division of Wildlife purchase land for a 30,000-acre State Wildlife Area. Forty-eight projects by local governments were funded for new park and land acquisition projects. In recent years, available funding has met the \$35 million cap and is expected to do so again in FY 2001. The new Powerball game will help ensure that the cap is met in future years.

### **Conservation Trust Fund (CTF)**

Over 400 cities, towns, counties, and special districts are eligible to receive CTF grants, distributed by the Colorado Department of Local Affairs. The funds may be used to acquire open space and to purchase, maintain, or restore local facilities, equipment, and parks. In FY 2000, CTF received \$35.8 million from lottery proceeds.

### **Colorado Division of Parks and Outdoor Recreation (State Parks)**

Colorado has 40 state parks, and lottery money is used to fund land acquisition, trail systems, park facilities, and equipment. In FY 2000, \$9.4 million of the \$17.7 Capital Budget was funded by lottery proceeds with an additional \$5.3 million contribution from GOCO. Seventeen percent of the Division’s 2000 Capital Construction Budget is allocated for land and water acquisitions.

### **Conservation Easement Tax Credit**

On May 28, 1999, Governor Bill Owens signed House Bill 1155, a law that grants an income tax credit to individuals or corporations for the donation of conservation easements to governmental entities or non-profits. The original maximum tax credit was \$100,000 and could be used over a period of up to 20 years. An act signed on June 1, 2001 raised that maximum to \$260,000 (100 percent of the first \$100,000 of the donated value and 40 percent of the remaining value, up to that cap) and set the maximum credit that could be used each year at \$50,000. This law is expected to cost the state \$1.5 million in FY 2003, \$4.5 in FY 2004, and \$7.5 in FY 2005.

### **Colorado Council on the Arts**

The Colorado Council on the Arts (CCA) provides grants in two subsets: grants to artists and organizations and youth development grants. The grants to artists and organizations are designed to leverage local support for arts and cultural activities in support of CCA’s goals, including activities that support and promote the state’s



cultural heritage. Artists, cultural organizations and community groups are eligible to apply. [www.colorarts.state.co.us](http://www.colorarts.state.co.us)

### **Colorado Tourism Office – Marketing Matching Grant Program**

The Colorado Tourism Office (CTO) administers the Statewide Marketing Matching Grant Program (which assists organizations with promotion of the state as a whole) and the Regional Matching Grant Program (which assists organizations with the promotion of specific regions in Colorado). Within the context of marketing projects, the funds may be spent on promotion, product packaging, networking and communication and education. Not-for-profit organizations are eligible to apply. For every \$1 the organization allocates to the program, the CTO will provide \$2 in matching funds. [www.colorado.com/static.php?file=industry\\_partners](http://www.colorado.com/static.php?file=industry_partners)

### **State Historical Fund**

The Colorado Historical Society's State Historical Fund awards grants for preservation projects, education projects (including heritage tourism) and survey and planning projects. All projects must focus on the built historical environment including, but not limited to, buildings, landscapes and individuals involved in the building industry. Only not-for-profit and public entities are eligible to apply. A 25 percent match is requested. The State Historical Fund assists in the writing and administration of grants through its Public Outreach Unit that reads drafts, visits sites and conducts grant workshops. Approximately 65 percent of applications receive funding. [www.coloradohistory-oahp.org/programareas/shf/shfindex.htm](http://www.coloradohistory-oahp.org/programareas/shf/shfindex.htm)

### **Tourism Cares**

Tourism Cares supports the efforts of tourism to "preserve, conserve and promote" the things that are our cultural and historic assets through its worldwide grant program. Grants provide money for capital improvements on important sites as well as the education of local communities and the traveling public about conservation and preservation. Only 501(3)(c) not-for-profit corporations are eligible. Grant applications that leverage other sources of funding, are endorsed by the local, state, or regional tourism office and have strong support from the local community have a better chance of being funded. [www.tourismcares.org](http://www.tourismcares.org).

### **Colorado Brownfields Foundation**

Through its Environmental Due Diligence Technical Assistance Grant Program, the Colorado Brownfields Foundation provides money that can be used to conduct a Phase 1 Environmental Assessment to cover environmental due diligence requirements and identify potential liabilities associated with the re-use of historic properties. Adaptive use planning is also provided. While the property can be either publicly or privately owned, the grant must be applied for by a government agency. A match is not required. [www.coloradobrownfieldsfoundation.org/edd2006.html](http://www.coloradobrownfieldsfoundation.org/edd2006.html)

### **Colorado Division of Wildlife**

The Colorado Division of Wildlife provides funds to preserve, protect and create natural habitats and landscapes. The Cooperative Habitat Improvement Program (CHIP) provides financial and technical assistance to landowners for the creation and en-

hancement of habitat. The Pheasant Habitat Improvement Program provides funding and technical assistance for habitat restoration. The Colorado Wetlands Partnership (CWP) provides funding for wetland restoration and creation, and for the purchase of conservation easements and fee-titles. Private landowners, public entities and non-profits are eligible. CHIP requires a 15-percent match in cash or in kind services by the landowner who is responsible for maintenance. CWP requires funds from other sources to be used, but sets no specific match. [wildlife.state.co.us](http://wildlife.state.co.us)

### **Colorado State Parks – State Trails Program Grant Process**

Through its State Trails Program grant process, the Colorado State Parks provides funds for the acquisition of land or water to be used for recreational purposes or for the construction or redevelopment of outdoor recreational facilities. Only if the project is done with the Colorado State Parks can the funds be used for planning projects. Municipalities, counties and special districts are eligible to apply. The grant process is competitive and requires a 50/50 fund match. Projects should attempt to be in line with the Statewide Comprehensive Outdoor Recreation Plan. [www.parks.state.co.us/default.asp?action=park&parkID=111](http://www.parks.state.co.us/default.asp?action=park&parkID=111)

### **Department of Local Affairs – Energy and Mineral Impact Assistance**

Energy and Mineral Impact Grants administered by the Department of Local Affairs (DOLA) assist communities affected by the growth and decline of extractive industries. The applicability of these funds to cultural heritage tourism lies mostly in their ability to fund improvements to public facilities and local government planning efforts where cultural heritage tourism-related goals can be furthered through economic development initiatives. Municipalities, counties, school districts, special districts and state agencies are eligible for the funds. Because these grants require matching funds, applications with higher matches receive more favor as they highlight community support. [www.dola.state.co.us/LGS/FA/emia.htm](http://www.dola.state.co.us/LGS/FA/emia.htm)

### **Department of Local Affairs – Heritage Grants Through the Smart Growth Initiative**

Administered by the Department of Local Affairs, heritage grants awarded through the Smart Growth Initiative are intended to address the impacts of growth. These grants have been frequently used to fund planning efforts, including those that end or mitigate the loss of agriculture and working landscapes. Towns, cities, counties and special districts can apply for the grants. Since these grants require matching funds, applications with a higher match are favored because they demonstrate community support. [www.dola.state.co.us/SmartGrowth/chpg.htm](http://www.dola.state.co.us/SmartGrowth/chpg.htm)

### **Colorado Department of Transportation / TEA-21**

The Colorado Department of Transportation will accept Transportation Enhancement applications from federal, tribal, state, county or municipal governmental agencies. The applicant restriction was adopted because of project development and financial administration requirements associated with this federally funded program. CDOT recognizes that many private, non-profit, and civic organizations have a strong interest in, and support for, using these funds. These groups must partner with government agencies to develop project applications and sponsorships.

*Eligible Activities.* There are twelve (12) eligible activities described in TEA-21. These activities fall within the project categories listed below. Only these activities qualify as Transportation Enhancement activities. The 12 eligible activities as paraphrased below are:

1. Pedestrian and bicycle facilities.
2. Pedestrian and bicycle safety and education activities.
3. Acquisition of scenic easements and scenic or historic sites.
4. Scenic or historic highway programs, including tourist and welcome centers.
5. Landscaping and scenic beautification.
6. Historic preservation.
7. Rehabilitation/operation of historic transportation buildings, structures, or facilities.
8. Conversion of abandoned railway corridors to trails.
9. Control and removal of outdoor advertising.
10. Archaeological planning and research.
11. Environmental mitigation of water pollution due to highway runoff, and provision of wildlife connectivity.
12. Establishment of transportation museums.

*Project Categories.* This list is intended to be exclusive, not illustrative. For simplicity purposes, CDOT has further defined these activities into four project categories. Transportation Enhancement projects must fall into one of the following project categories:

1. Pedestrian and Bicycle Facilities
2. Historic Preservation
3. Transportation Aesthetics
4. Environmental Mitigation

*Evaluation Process.* CDOT uses a two-step evaluation method to determine if projects qualify under the Transportation Enhancement Program. Applications must first meet all of the following threshold criteria:

- The applicant is a governmental entity or a partnership in which one or more governmental entities are involved in a lead role and have the authority to enter into a contract with the State.
- Projects located within a Metropolitan Planning Organization's (MPO) planning area are approved, prioritized and submitted by the MPO; certifying that the proposed project is included in their 20-year plan and 6-year Transportation Improvement Program (TIP). Contact the local MPO to determine how to get your project considered for their 20-year plan.
- The application package includes all required attachments.
- The application is received by CDOT or the agency designated by your CDOT Region prior to the application deadline.
- The applicant demonstrates how the project is one or more of the 12 eligible Transportation Enhancement activities or a sub-component of an eligible activity.

- Must demonstrate a relationship to surface transportation.
- The application demonstrates that the required 20% minimum local match is available to support the project.
- Written permission and/or support from property owners whose land or property is required to complete the project.
- The application includes a commitment for long-term maintenance of the completed project.
- The completed project is open to the general public and meets the accessibility standards of the Americans with Disabilities Act.
- The completed project meets applicable federal, state, and local requirements.
- The application demonstrates that the completed project fulfills a public need or benefit related to the State's transportation system.

Project sponsors are encouraged to submit their applications as soon as possible. Early application submission allows for the expeditious completion of the application evaluation process and provides an opportunity for the Region to resolve any issues discovered during their review.

Applicants must also meet the criteria specific to the CDOT Region in which your project is located. It is imperative you work directly with the Transportation Enhancement Program Manager within the Region. For example: 1) CDOT Region 6 requires applicants to work directly with the Denver Regional Council of Governments (DRCOG), and 2) Some projects may encompass two or more CDOT Regions. These projects are typically considered statewide projects and are coordinated through the Transportation Enhancement Program Manager at CDOT Headquarters.

#### **D. FEDERAL SOURCES**

Most federal programs provide block grants directly to states through funding formulas. For example, if a Colorado community wants funding to support a transportation initiative, they would contact the Colorado Department of Transportation and not the US Department of Transportation to obtain a grant. Despite the fact that it is rare for a local community to obtain a funding grant directly from a federal agency, it is relevant to list the current status of federal programs and the amount of funding that is available to Archuleta County through these programs.

#### **Surface Transportation Act (SAFETEA LU) (Accessed through CDOT)**

For the past 15 years, the Surface Transportation Act has been the largest single source of funding for the development of bicycle, pedestrian, trail and greenway projects. Prior to 1990, the nation, as a whole, spent approximately \$25 million on building community-based bicycle and pedestrian projects, with the vast majority of this money spent in one state. Since the passage of ISTEA, funding has been increased dramatically for bicycle, pedestrian and greenway projects, with total spending north of \$5 billion. SAFETEA-LU will more than double the total amount of funding for

bicycle/pedestrian/trail projects as compared to its predecessor TEA-21, with approximately \$800 million available each year.

There are many programs within SAFETEA-LU that deserve mention. The authorizing legislation is complicated and robust. The following provides a summary of how this federal funding can be used to support the Archuleta County Regional Parks, Open Space and Trails Master Plan. *All of the funding within these programs would be accessed through the Colorado Department of Transportation.*

1) *Surface Transportation Program (STP)*

This is the largest single program within the legislation from a funding point of view, with \$32.5 billion committed over the next five years. Of particular interest to greenway enthusiasts, 10 percent of the funding within this program is set aside for Transportation Enhancements (TE) activities. Historically, a little more than half of the TE funds have been used nationally to support bicycle/pedestrian/trail projects. So nationally, it is projected that \$1.625 billion will be spent on these projects under SAFETEA-LU.

2) *Congestion Mitigation and Air Quality (CMAQ)*

Under SAFETEA-LU, approximately \$8.6 billion has been set aside. Historically, about five percent of these funds have been used to support bicycle/pedestrian/trail projects. This would equal about \$430 million under SAFETEA-LU.

3) *Highway Safety Improvement Program (HSIP)*

SAFETEA-LU funds this program at \$5 billion over four years. Historically, bicycle and pedestrian projects have accounted for one percent of this program, or about \$50 million under SAFETEA-LU. Some of the eligible uses of these funds would include traffic calming, bicycle and pedestrian safety improvements, and installation of crossing signs. This is not a huge source of funding, but one that could be used to fund elements of a project.

4) *Recreational Trails Program (RTP)*

The Recreational Trails Program is specifically set up to fund both motorized and non-motorized trail development. Under SAFETEA-LU funding is established at \$370 million for the five-year term of the legislation. At least 30% of these funds must be spent on non-motorized trails, or \$110 million. The Colorado State Trails Grant Program funds projects for trail planning and design, construction, maintenance, equipment, and special projects. The Colorado State Trails Committee is responsible for the review process for the trail grant applications and makes recommendations to the Colorado State Parks Board about funding for grants. This process may change every year when grant categories and policies are updated. For more information go to <http://parks.state.co.us/Trails/Grants>.

5) *Scenic Byways*

The National Scenic Byway program has not traditionally been a good source of funding for bicycle/pedestrian/trail projects. Colorado has one of the better scenic byway programs in the nation. The total amount of funding available nationally is \$175

million under SAFETA-LU. Historically only 2 percent of these funds have been used to support bicycle and pedestrian improvements. Applications are only accepted by CDOT from established scenic byways groups, but historically, byways groups have advanced proposals in partnership with other organizations – including cultural heritage tourism groups – in support of the byways' goals. The grants are limited to \$100,000. [www.coloradobyways.org](http://www.coloradobyways.org), [sally.pearce@dot.state.co.us](mailto:sally.pearce@dot.state.co.us)

#### 6) *Safe Routes to School Program (SR2S)*

A new program under SAFETEA-LU is the Safe Routes to School (SR2S) program, with \$612 million in funding during the term of the legislation. This is an excellent new program to increase funding for access to the outdoors for children. Each state will receive no less than \$1 million in funding, with 10% to 30% of the funds allocated to non-infrastructure activities. The SR2S Program was established in August 2005 as part of the most recent federal transportation re-authorization legislation--SAFETEA-LU. This law provides multi-year funding for the surface transportation programs that guide spending of federal gas tax revenue. Section 1404 of this legislation provides funding (for the first time) for State Departments of Transportation to create and administer SR2S programs which allow communities to compete for funding for local SR2S projects.

The administration of section 1404 has been assigned to FHWA's Office of Safety, which is working in collaboration with FHWA's Offices of Planning and Environment (Bicycle and Pedestrian Program) and the National Highway Traffic Safety Administration (NHTSA) to establish and guide the program.

#### 7) *High Priority Projects*

Under SAFETEA-LU more than 5,091 transportation projects were earmarked by Congress for development, with a total value in excess of \$3 billion.

#### **Land and Water Conservation Fund (LWCF)**

The Land and Water Conservation Fund is the largest source of federal money for park, wildlife, and open space land acquisition. The program's funding comes primarily from offshore oil and gas drilling receipts, with an authorized expenditure of \$900 million each year. However, Congress generally appropriates only a fraction of this amount. The program provides up to 50 percent of the cost of a project, with the balance of the funds paid by states or municipalities. These funds can be used for outdoor recreation projects, including acquisition, renovation, and development. Projects require a 50 percent match. This program is administered by the Colorado State Parks. <http://parks.state.co.us/Trails/LWCF/LWCFGrants>.

### **Environmental Protection Agency (EPA)**

The EPA funds a program that enables communities to clean up polluted properties. Funding for these programs is available directly from the EPA and is administered in the form of grants to localities.

#### *Brownfields Revitalization Assessment and Cleanup Grant Funding*

- Needy communities fare better in competition
- High unemployment rates, high poverty rates, loss of jobs/population, minority or other sensitive populations. Include demographic statistics.
- Mention any unusually high health concerns in the area. Can any of these be tied to the site(s)?
- Present the environmental, economic, social and health impacts of brownfields on the community
- Environmental Justice concerns
- Focus on the environmental and health impacts of your project.

### **Community Block Development Grant Program (HUD-CBDG)**

The U.S. Department of Housing and Urban Development (HUD) offers financial grants to communities for neighborhood revitalization, economic development, and improvements to community facilities and services, especially in low and moderate-income areas. Administered by the Department of Local Affairs, Community Development Block Grants can be spent on a wide variety of projects, including property acquisition, public or private building rehabilitation, construction of public works, public services, planning activities, assistance to nonprofit organizations and assistance to private, for-profit entities to carry out economic development. At least 70 percent of the funds must go to benefit low and moderate-income populations. The funds must go to a local government unit for disbursement. A detailed citizen participation plan is required. [www.hud.gov/offices/cpd/communitydevelopment/programs/index](http://www.hud.gov/offices/cpd/communitydevelopment/programs/index) and <http://dola.colorado.gov/dlg/fa/cdbg/index.html>

### **Economic Development Administration**

Funding is available through this federal program in the form of several different grants. Two grants that may be applicable to cultural heritage tourism are the Economic Adjustment Assistance Grant (which helps communities develop comprehensive redevelopment efforts that could include cultural heritage tourism programs) and the Planning Program Grant (which helps planning organizations create comprehensive development strategies). Only governmental units are eligible. [www.eda.gov](http://www.eda.gov)

### **Farm Service Administration**

Two Farm Service Administration (FSA) programs help to preserve sensitive farmland and grassland. The Conservation Reserve Enhancement Program is a land retirement program for ecologically sensitive land. The Grassland Reserve Program supports working grazing operations to maintain the land's grassland appearance and ecological function. The funds are available to private farmers and ranchers, although local governments, tribes and private groups can also solicit them. These funds are intended to be combined with other funding, but there is no set match requirement. [www.fsa.usda.gov](http://www.fsa.usda.gov)

### **National Trust for Historic Preservation**

This endowment funds 14 different grants. The Preservation Funds Matching Grants and Intervention Funds assist nonprofit and public agencies with planning and educational projects or preservation emergencies, respectively. The Johanna Favrot Fund for Historic Preservation provides matching grants for nonprofit and public organizations whose projects contribute to preservation and/or recapturing an authentic sense of place. The Cynthia Woods Mitchell Fund for Historic Interiors provides grants for professional expertise, communications, materials and education programs. Individuals and for-profit groups may apply. The latter two grants only apply to National Historic Landmark sites. [www.nthp.org/funding](http://www.nthp.org/funding)

### **National Endowment for the Arts**

The National Endowment for the Arts organizes its grants around artistic disciplines and fields such as “folk and traditional arts,” “local arts agencies,” “state and regional” and “museums.” Within these categories, the applicable grants are listed. The grants provide funding for artistic endeavors, interpretation, marketing and planning. Not-for-profit 501(c)(3) organizations and units of state or local government, or a recognized tribal community are eligible. An organization must have a three-year history of programming prior to the application deadline. [www.nea.gov](http://www.nea.gov)

### **National Endowment For The Humanities**

The National Endowment for the Humanities is a federal program that issues grants to fund high-quality humanities projects. Some grant categories that may be well suited to cultural heritage tourism are: grants to preserve and create access to humanities collections, interpreting America’s historic places implementation and planning grants, museums and historical organizations implementation grants and preservation and access research and development projects grants. The grants go to organizations such as museums, libraries, archives, colleges, universities, public television, radio stations and to individual scholars. Matches are required and can consist of cash, in-kind gifts or donated services. [www.neh.gov](http://www.neh.gov)

### **Preserve America**

The Preserve America grants program funds “activities related to heritage tourism and innovative approaches to the use of historic properties as educational and economic assets.” Its five categories are: research and documentation, interpretation and education, planning, marketing, and training. The grant does not fund “bricks and mortar” rehabilitation or restoration. This grant is available to State Historic Preservation Officers (SHPOs), Tribal Historic Preservation Officers (THPOs), designated Preserve America communities and Certified Local Governments (CLGs) applying for designation as Preserve America Communities. Grants require a dollar-for-dollar nonfederal match in the form of cash or donated services. [www.preserveamerica.gov/federalsupport.html](http://www.preserveamerica.gov/federalsupport.html)



### **Small Business Administration**

Many cultural heritage tourism businesses are small businesses. The Small Business Administration (SBA) does not itself loan money, but guarantees loans from banks or from specially chosen small business investment companies. These loans can be used for business expenses ranging from start-up costs to real estate purchases. Rural business investment companies target their funds toward companies located in rural areas. Eligible companies must be defined as “small” by the SBA. [www.sba.gov](http://www.sba.gov)

### **USDA Community Facilities Grant Program**

The purpose of USDA Community Facilities Grants is to “... assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population.” These funds can be used for facilities that house “... health care, public safety and community and public services.” As an example, New Athens, Ohio, used the funding to restore a museum. Grants are available to public entities such as municipalities, counties and special-purpose districts, as well as nonprofit corporations and tribal governments. [www.rurdev.usda.gov](http://www.rurdev.usda.gov)

### **USDA Rural Development Co-Operative Service Grants**

These grants can be used to develop new co-ops and provide assistance to existing co-ops with the broad goal of improving rural economic conditions. The funds must be used for something co-op related, which limits their applicability to cultural heritage tourism, but as an example, a co-op farmer’s market was able to use these funds. Eligible recipients are not-for-profit 501(c)(3) corporations and institutes of higher education. Public bodies are not eligible. A 25-percent match is required. [www.rurdev.usda.gov](http://www.rurdev.usda.gov)

### **USDA Farm and Ranch Lands Protection Program**

This USDA program is administered by the Natural Resource Conservation Service and provides funds for the purchase of conservation easements on working lands. It requires that a management plan be produced and that the land stay in use. The funds can go to landowners, government agencies and local non-government organizations such as land trusts. A 50 percent match is required. [www.nrcs.usda.gov/programs/frpp](http://www.nrcs.usda.gov/programs/frpp).

### **U.S. Fish & Wildlife Service**

The U.S. Fish & Wildlife Service has a long list of grant programs that benefit the conservation or restoration of habitats. These include grants for private landowners to assist in protecting endangered species, grants to restore the sport fish population and grants for habitat conservation planning and land acquisition. The amount, matching requirements and eligibility for each grant vary. The website also provides practical information about successful projects and conserving specific habitats [www.fws.gov/grants](http://www.fws.gov/grants).

## E. PRIVATE FOUNDATIONS/PHILANTHROPIC SOURCES

### American Greenways Eastman Kodak Awards

The Conservation Fund's American Greenways Program has teamed with the Eastman Kodak Corporation and the National Geographic Society to award small grants (\$250 to \$2,000) to stimulate the planning, design and development of greenways. These grants can be used for activities such as mapping, conducting ecological assessments, surveying land, holding conferences, developing brochures, producing interpretive displays, incorporating land trusts, and building trails. Grants cannot be used for academic research, institutional support, lobbying or political activities. For more information visit the Conservation Fund website at [www.conservationfund.org](http://www.conservationfund.org).

### El Pomar Foundation

The El Pomar Foundation supports Colorado projects related to health, human services, education, arts and humanities, and civic and community initiatives. Generally, El Pomar does not fund seasonal activities, travel or media projects, but their funding has supported other aspects of cultural heritage tourism, including regional planning and development. Recipients must be not-for-profit 501(c)(3) organizations. [www.elpomar.org](http://www.elpomar.org).

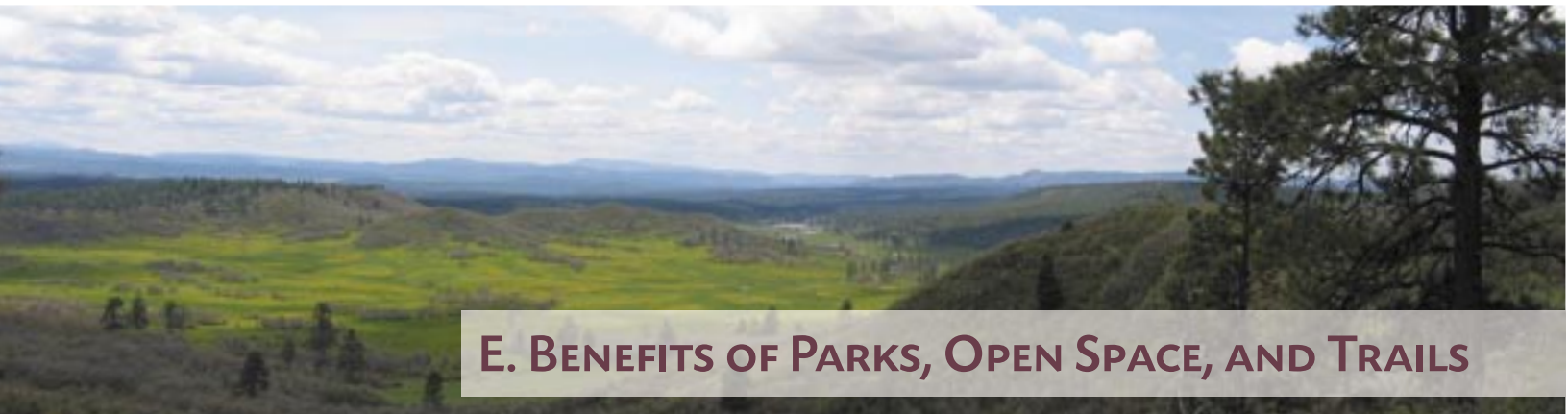
### Save America's Treasures

The Save America's Treasures (SAT) Historic Preservation Grant funds preservation and conservation of nationally significant intellectual and cultural artifacts and historic structures and sites. Those eligible include federal agencies funded by the Department of the Interior, nonprofit 501(c) organizations, units of state or local government, recognized Indian tribes and active religious organizations that meet all other criteria. These grants require a dollar-for-dollar nonfederal match, which may be cash, services or equipment. Recipients must meet standards set out by SAT. [www.saveamericastreasures.org](http://www.saveamericastreasures.org).

### W. K. Kellogg Foundation

The Kellogg Foundation provides grants in four interest areas. The Rural Development Interest Area is the most applicable to cultural heritage tourism. Grants in this area are to "... fund collaborative comprehensive and inclusive approaches to rural economic development." Many organizations are eligible, but the process is highly competitive. The process starts with the submission of a pre-proposal. Full proposals are then solicited. It is imperative that the grant proposal fall within the foundation's programmatic interests and guidelines. [www.wkkf.org](http://www.wkkf.org).





## E. BENEFITS OF PARKS, OPEN SPACE, AND TRAILS

### Chapter Outline:

A Overview

B Creating Value and Generating Economic Activity

C Greater Opportunities for Bicycle and Pedestrian Transportation

D Improving Health through Active Living

E Clear Skies, Clean Rivers, and Protected Wildlife

F Protecting People and Property from Flood & Fire Damage

G Enhancing Cultural Awareness and Community Identity

### A. OVERVIEW

Parks, open space, and trails provide a variety of benefits that ultimately affect the sustainability of a region’s economic, environmental, and social health. Numerous studies have made the positive link between greenspace and its benefits abundantly clear. The degree to which a particular type of benefit is realized depends largely upon the type of resource being protected and/or created.

### B. CREATING VALUE AND GENERATING ECONOMIC ACTIVITY

There are many examples, both nationally and locally, that affirm the positive connection between greenspace and property values (1). Residential properties will realize a greater gain in value the closer they are located to trails and greenspace. According to a 2002 survey of recent homebuyers by the *National Association of Home Realtors* and the *National Association of Home Builders*, trails ranked as the second most important community amenity out of a list of eighteen choices (2). Additionally, the study found that ‘trail availability’ outranked sixteen other options including security, ball fields, golf courses, parks, and access to shopping or business centers. Findings from the *Trust for Public Land’s Economic Benefits of Parks and Open Space*, and the *Rails-to-Trails Conservancy’s Economic Benefits of Trails and Greenways* illustrate how this value is realized in property value across the country.

#### Greenspace Increases Real Property Values Across the U.S.

- Apex, NC: The Shepard’s Vineyard housing development added \$5,000 to the price of 40 homes adjacent to the regional greenway---and those homes were still the first to sell (3).
- Front Royal, VA: A developer who donated a 50-foot-wide, seven-mile-long easement along a popular trail sold all 50 parcels bordering the trail in only four months.
- Salem, OR: Land adjacent to a greenbelt was found to be worth about \$1,200 an acre more than land only 1000 feet away.

- Oakland, CA: A three-mile greenbelt around Lake Merritt, near the city center, was found to add \$41 million to surrounding property values.
- Seattle, WA: Homes bordering the 12-mile Burke-Gilman trail sold for six percent more than other houses of comparable size.
- Brown County, WI: Lots adjacent to the Mountain Bay Trail sold faster for an average of nine percent more than similar property not located next to the trail.
- Dayton, OH: Five percent of the selling price of homes near the Cox Arboretum and park was attributable to the proximity of that openspace.

### **Greenway Tourism Creates Economic Impacts**

Tourism and recreation-related revenues from parks, open space, and trails come in several forms. They create opportunities in construction and maintenance, recreation rentals (such as bicycles, kayaks, and canoes), recreation services (such as shuttle buses and guided tours), historic preservation, restaurants and lodging.

- Leadville, CO: In the months following the opening of the Mineral Belt Trail, the city reported a 19 percent increase in sales tax revenues.
- The Outer Banks, NC: Bicycling is estimated to have an annual economic impact of \$60 million and 1,407 jobs supported from the 40,800 visitors for whom bicycling was an important reason for choosing to vacation in the area. The annual return on bicycle facility development in the Outer Banks is approximately nine times higher than the initial investment (4).
- Damascus, VA: At the Virginia Creeper Trail, a 34-mile trail in southwestern Virginia, locals and non-locals spend approximately \$2.5 million annually related to their recreation visits. Of this amount, non-local visitors spend about \$1.2 million directly in the Washington and Grayson County economies (5).
- Morgantown, WV: The 45-mile Mon River trail system is credited by the Convention and Visitors Bureau for revitalizing an entire district of the city, with a reported \$200 million in private investment as a direct result of the trail (6).
- Tallahassee, FL: The Florida Department of Environmental Protection Office of Greenways & Trails estimate an economic benefit of \$2.2 million annually from the 16-mile St. Marks Trail (8).
- San Antonio, TX: Riverwalk Park, created for \$425,000, has surpassed the Alamo as the most popular attraction for the city's \$3.5-billion tourism industry (7).
- Pittsburgh, PA: Mayor Tom Murphy credits trail construction for contributing significantly to a dramatic downtown revitalization.

- Allegheny Passage, PA: The direct economic impact of the trail exceeded \$14 million a year, encouraging the development of several new businesses and a rise in property values in the first trailhead town.
- Leadville, CO: In the months following the opening of the Mineral Belt Trail, the city reported a 19 percent increase in sales tax revenues.
- Dallas, TX: The 20-mile Mineral Wells to Weatherford Trail attracts 300,000 people annually and generates local revenues of \$2 million.

**C. GREATER OPPORTUNITIES FOR BICYCLE AND PEDESTRIAN TRANSPORTATION**

The sprawling nature of many land development patterns often leaves residents and visitors with no choice but to drive, even for short trips. In fact, two-thirds of all car trips made in the U.S. are for a distance of five miles or less. Surveys by the *Federal Highway Administration* show that Americans are willing to walk as far as two miles to a destination and bicycle as far as five miles. A complete trail network, as part of the local transportation system, will offer effective transportation alternatives by connecting homes, workplaces, schools, parks, downtown, and cultural attractions.

Greenways can provide alternative transportation links that are currently unavailable. Residents who live in subdivisions outside of downtown areas are able to walk or bike downtown for work, or simply for recreation. Residents are able to circulate through urban areas in a safe, efficient, and fun way: walking or biking. Residents are able to move freely along trail corridors without paying increasingly high gas prices and sitting in ever-growing automobile traffic. Last but not least, regional connectivity through alternative transportation could be achieved once adjacent trail networks are completed and combined.

Americans are willing to walk as far as two miles to a destination and bicycle as far as five miles.



## D. IMPROVING HEALTH THROUGH ACTIVE LIVING

A network of parks, open space, and trails will contribute to the overall health of residents by offering people attractive, safe, accessible places to bike, walk, hike, jog, skate, and enjoy water-based trails. In short, parks, open space, and trails create better opportunities for active lifestyles. The design of our communities—including towns, subdivisions, transportation systems, parks, trails, and other public recreational facilities—affects people’s ability to reach the recommended 30 minutes each day of moderately intense physical activity (60 minutes for youth). According to the *Centers for Disease Control and Prevention* (CDC), “Physical inactivity causes numerous physical and mental health problems, is responsible for an estimated 200,000 deaths per year, and contributes to the obesity epidemic” (9).

In identifying a solution, the CDC determined that by creating and improving places in our communities to be physically active, there could be a 25 percent increase in the percentage of people who exercise at least three times a week (10). This is significant considering that for people who are inactive, even small increases in physical activity can bring measurable health benefits (11). Additionally, as people become more physically active outdoors, they make connections with their neighbors that contribute to the health of their community.



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Many public agencies are teaming up with foundations, universities, and private companies to launch a new kind of health campaign that focuses on improving people’s options instead of reforming their behavior. A 2005 *Newsweek Magazine* feature, *Designing Heart-Healthy Communities*, cites the goals of such programs: “The goals range from updating restaurant menus to restoring mass transit, but the most visible efforts focus on making the built environment more conducive to walking and cycling.” (italics added) (12) Clearly, the connection between health and trails is becoming common knowledge. The Rails-to-Trails Conservancy puts it simply: “Individuals must choose to exercise, but communities can make that choice easier.”

Parks, open space, and trails protect and link fragmented habitat and provide opportunities for protecting plant and animal species.



### **E. CLEAR SKIES, CLEAN RIVERS, AND PROTECTED WILDLIFE**

There are a multitude of environmental benefits from parks, open space, and trails that help to protect the essential functions performed by natural ecosystems. They protect and link fragmented habitat and provide opportunities for protecting plant and animal species. Trails and greenways reduce air pollution by two significant means: first, they provide enjoyable and safe alternatives to the automobile, which reduces the burning of fossil fuels; second, they protect large areas of plants that create oxygen and filter air pollutants such as ozone, sulfur dioxide, carbon monoxide and airborne particles of heavy metal. Greenways improve water quality by creating a natural buffer zone that protects streams, rivers and lakes, preventing soil erosion and filtering pollution caused by agricultural and road runoff.

As an educational tool, park and trail signage can be designed to inform trail-users about water quality issues particular to each watershed. Such signs could also include tips on how to improve water quality. Similarly, a greenway can serve as a hands-on environmental classroom for people of all ages to experience natural landscapes, furthering environmental awareness.

### **F. PROTECTING PEOPLE AND PROPERTY FROM FLOOD AND FIRE DAMAGE**

Land conservation, including open spaces associated with trail and greenway development, often protects natural floodplains along rivers and streams. According to the *Federal Emergency Management Agency* (FEMA), the implementation of floodplain ordinances is estimated to prevent \$1.1 billion in flood damages annually. By restoring developed floodplains to their natural state and protecting them as greenways, many riverside communities are preventing potential flood damages and related costs (13). Similarly, open space can offer the opportunity to buffer communities from naturally occurring cycles of fire, which presents greater risks to people and property as communities grow and expand into surrounding natural landscapes.



## H. ENHANCING CULTURAL AWARENESS AND COMMUNITY IDENTITY

Parks, trails, and open space can serve as connections to local heritage by preserving historic places and by providing access to them. They provide a sense of place and an understanding of past events by drawing the public to historic and cultural sites. Trails often provide access to historic features such as battlegrounds, bridges, buildings, and canals that otherwise would be difficult to access or interpret. Archuleta County has its own unique history, its own features and destinations, and its own beautiful landscapes. By recognizing, honoring, and connecting these features, the combined result could serve as major attraction for those outside of the region. Being aware of the historical and cultural context when naming parks and trails and designing features will further enhance the overall trail- and park-user experience.

### *'Benefits' Footnotes:*

- 1 American Planning Association. (2002). How Cities Use Parks for Economic Development.
- 2 National Association of Realtors and National Association of Home Builders. (2002). Consumer's Survey on Smart Choices for Home Buyers.
- 3 Rails to Trails Conservancy. (2005). Economic Benefits of Trails and Greenways.
- 4 NCDOT and ITRE. (2006). Bikeways to Prosperity: Assessing the Economic Impact of Bicycle Facilities.
- 5 Virginia Department of Conservation. (2004). The Virginia Creeper Trail: An Assessment of User Demographics, Preferences, and Economics.
- 6 Rails to Trails. (Danzer, 2006). Trails and Tourism.
- 7 American Planning Association. (2002). How Cities Use Parks for Economic Development.
- 8 Rails to Trails. (Danzer, 2006). Trails and Tourism.
- 9 U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (1996). Physical Activity and Health: A Report of the Surgeon General.
- 10 U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (2002). Guide to Community Preventive Services.
- 11 Rails-to-Trails Conservancy. (2006) Health and Wellness Benefits.
- 12 Newsweek Magazine. (10/3/2005). Designing Heart-Healthy Communities.
- 13 Federal Emergency Management Agency. (2005) Building Stronger: State and Local Mitigation Planning.



## F. GIS DATA SUMMARY

### Chapter Outline:

A. GIS Data Liability Statement

B. GIS Data

C. Open Space Model

*\*Habitat Ranking Model*

### A. GEOGRAPHIC INFORMATION SYSTEMS (GIS)

#### DATA LIABILITY STATEMENT (Adapted from National Park Service)

Greenways Incorporated and Archuleta County shall not be held liable for improper or incorrect use of the data described and/or contained herein. These data and related graphics are not legal documents and are not intended to be used as such.

The information contained in these data is dynamic and may change over time. It is the responsibility of the data user to use the data appropriately and consistent within the limitations of geospatial data in general and these data in particular.

Greenways Incorporated and Archuleta County give no warranty, expressed or implied, as to the accuracy, reliability, or completeness of these data. It is strongly recommended that these data are directly acquired from the below sources and not indirectly through other sources which may have changed the data in some way. Although these data have been processed successfully on a computer system at Archuleta County and Greenways Incorporated, no warranty expressed or implied is made regarding the utility of the data on another system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data.

### B. GIS DATA

GIS data was collected from various sources and further developed by Greenways Incorporated. The data was used for mapping and analysis purposes. All data collected and developed is listed below.

#### GIS Files Received from Archuleta County

- Airport runway
- Archuleta County boundary
- Contours
- Digital Elevation Model (grid)
- Existing Sidewalks
- Existing Trails
- Fire Hazards
- Floodways

### GIS Files Received from Archuleta County *(continued)*

- Hillshade (grid)
- Lakes
- Land use
- Open spaces within Aspen Springs and Pagosa Lakes
- Parcel ownership
- Points of Interest
- Roads
- Slope (grid)
- Streams
- Subdivisions
- Town to Lakes Trail (Recommendation)
- Watersheds
- Zoning

### GIS Files Received from Colorado Natural Heritage Program

Link: <http://www.cnhp.colostate.edu/gis.html>

- Statewide Potential Conservation Areas

### GIS Files Received from Natural Diversity Information Source (Colorado Division of Wildlife)

Link: <http://ndis.nrel.colostate.edu/ftp/index.html>

- Bald Eagle Concentration
- Black Bear Concentration
- Colorado Vegetation Classification Project (grid)
- Elk Winter Concentration
- Mule Deer Winter Concentration

### GIS Files Received from USDA

- Prime Farmland
- Soils

### GIS Files Developed by Greenways Incorporated

- Critical Habitat (based on Department of Wildlife Model) (grid)
- Recommended Overall Open Space Protection Overlay (grid)
- Recommended Parks
- Recommended Trails
- Recommended Trailheads
- Slope > 20% (grid)
- Viewshed from US Highways 160 and 84 (grid)

### C. OPEN SPACE MODEL

The open space protection map (Chapter 4 - Map 14) is meant to enhance the ability of local residents and local government in making informed decisions about future open space. It is non-binding on the County and its landowners and should be considered as a starting point for ongoing, detailed analysis of the regional systems presented (See Chapter 4 Map Disclaimer, pg 4-4).

The overall open space protection developed by Greenways Incorporated is the result of overlaying a series of open space layers. These layers are:

- Areas of Biological Significance (Colorado Natural Heritage Program)
- Critical Habitat (Department of Wildlife - LaPlata County model)
- Fire hazards (Archuleta County)
- Riparian areas - floodways and stream buffers
- Scenic viewshed
- Slope > 20%

Prime farmland and soil erosion hazards (generated from USDA soils data) were not used because of incomplete coverage throughout Archuleta County.

Each grid was overlaid and added to other open space layers to score a value for each pixel. For example, if one grid pixel had a slope of over 20% and fell within a riparian area, a value of two is assigned. The result is Map 13 in Chapter 4, divided into 3 classes, of highest, high, and medium priorities.

#### Critical Habitat Model

The most complex open space grid input into the model is Critical Habitat. A model developed by the Department of Wildlife for LaPlata County was applied here and run by Greenways Incorporated. The model description, from the DOW, is provided on the following page. For further information about this process, please contact Chris Kloster at DOW/Durango (970) 375-6747.

# LAPLATA COUNTY HABITAT RANKING MODEL

*(Modified for Use in Archuleta County)*

**Purpose:** Provided originally to LaPlata County  
Document a process to create a GIS model to aid LaPlata County with ranking habitat.

**Original Creation Date:** 11/22/04

**Created by:** M. Cowardin (michelle.cowardin@state.co.us), LaPlata County

## Data Section

- 1) Parcel Data
  - a. Obtained Parcel Ownership Data from Archuleta County
- 2) Roads
  - a. Obtained a roads data layer from Archuleta County
- 3) Land Ownership
  - a. Obtained a land ownership layer from Archuleta County
  - b. Buffered public lands with a 1mile buffer and rank lands within this buffer higher than surrounding lands.
- 4) Vegetation
  - a. Used the Colorado Vegetation Classification Project data
  - b. Referred to document created by Scott Wait (lposc wildlife scorecard.xls) to identify which veg types to include in the analysis.

Riparian	Sagebrush
Pinyon-juniper	Aspen
Ponderosa pine	Mountain shrub
Exclude Spruce and Fir	

- 5) Wildlife Data
  - a. Used the following Natural Diversity Information Source (NDIS) data – download thru <http://ndis.nrel.colostate.edu/>

Mule deer	winter concentration
Elk	winter concentration
Black bear	fall concentration
Bald eagle	winter concentration & nest sites

- b. These layers will be merged into one shapefile

*(Model Description Continued)***Methodology Section**1) *Ranking Datasets*

## a. Archuleta Parcels

Parcel data received from Archuleta County was broken into 5 classes based on the GISModel\_Scorecard.xls that was modified from S. Wait's original document (size of parcel). There are 5 classes and a NoData class.

ACRES CLASS	RANK
NoData	0
<35 acres	1
35 – 60 acres	2
60 – 120 acres	3
120 – 640 acres	4
> 640 acres	5

## b. Vegetation (Basinwide)

Colorado Vegetation Classification Project was used. The Spatial Analysis Extension was used to Clip and Reclassify. Vegetation was clipped to the privately owned parcels from the ownership layer

The Spatial Analysis Reclassify option was used to reclass the vegetation classes. Using the table below for different vegetation data in LaPlata County, vegetation classes in the Colorado Vegetation Classification Project data were broken out and ranked as such:

P Pine/Gamble Oak mix - 2  
 P Pine/Douglas Fir mix - 2  
 Mesic Mtn shrub - 2  
 Sagebrush community - 4  
 Pinon-juniper - 2  
 PJ-Oak mix - 2  
 PJ-sagebrush mix - 3  
 PJ-Mountain shrub mix - 3  
 Aspen - 4  
 Ponderosa Pine - 3  
 Ponderosa Pine/Aspen - 2  
 Douglas Fir/Aspen - 2  
 Sagebrush/grass - 4  
 Cottonwood - 4  
 Forested Riparian - 4  
 Shrub Riparian - 4  
 Willow - 4  
 Riparian - 5

Original Table Used In Laplata County:

CLASS	GRID VALUE	RANKED VALUE
Undesirable classes	0	0
Agland	4	2
Sagebrush Comm	22	4
Sagebrush/Grass	33	4
Pinon Juniper	43	2
PJ oak-mix	53	2
PJ-sagebrush	54	3
PJ MtnShrubMix	55	3
Aspen	62	4
Ponderosa Pine	65	3
PPine/aspen	83	2
Doug.Fir/Aspen	84	2
Riparian	104	5

c. Wildlife Activities

The following activities were merged into one layer and given the appropriate code.

SPECIES	ACTIVITY	RANK
NoData		0
Mule Deer	Winter Concentration	3
Elk	Winter Concentration	3
Black Bear	Fall Concentration	3
Bald Eagle	Nest Sites	4
Bald Eagle	Winter Concentration	3

The ranked shapefile was clipped to private lands in Archuleta County

d. Proximity to Public Lands

Public lands greater than 500 acres in size were buffered. The Multiple Ring Buffer tools were used to buffer the polygons at 0.25, 0.5 and 1 mile. (Multiple Ring Buffer tool is located in ArcToolbox under Analysis Tools)

A ranking field was added for each sized buffer.

Buffer	Rank
Nodata	0
0.25 miles	5
0.5 miles	4
1 mile	3

*(Model Description Continued)*

## 2) Weighting Grids

The ranked point grids created above for wildlife, vegetation, parcel size, and proximity to public lands (weight\_1 .. 5) were multiplied using the Raster Calculator in the Spatial Analysis Extension.

Private Parcel Size rank \* weight\_4 = wt\_ps

Vegetation rank \* weight\_5 = wt\_veg

Wildlife rank \* weight\_3 = wt\_wld

Public Lands Buffer rank\*weight\_3 = wt\_pubbuf

The final step used the Raster Calculator and added the weighted grids together:

$Os\_overall = wt\_wld + wt\_ps + wt\_veg + wt\_pubbuf$



